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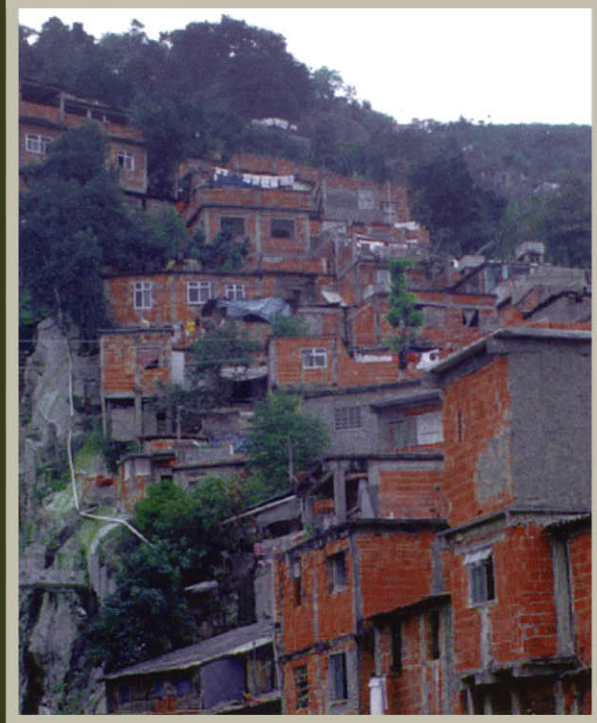
CITIESFORALL

RECENT EXPERIENCES WITH NEIGHBORHOOD UPGRADING PROGRAMS



JOSÉ BRAKARZ

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MARGARITA GREENE

AND EDUARDO ROJAS

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INTRODUCTION

Urban growth in the last century has led to substantial advances in the economic productivity of nations. At the same time, however, it has generated social problems of extraordinary proportions—particularly for developing countries. In Latin America, specifically, growth in employment and urban infrastructure has not kept pace with demographic growth. This has created a gap that has been filled by the informal sector, both in its economic and urban dimensions.

Operating at the margin of formal urban development regulations, the informal city houses between 20 and 50 percent of the population of Latin America's major cities. Living conditions in these areas are deplorable. They concentrate the poorest segment of the population, display the worst environmental conditions, and harbor a high proportion of the cities' marginal activity. The informal areas are the most visible manifestation of a city's social inequalities: they emphatically highlight and pinpoint urban poverty problems. This visibility is at once a problem and an opportunity, as it makes very clear the sectors where social needs are greatest and helps to identify them.

A model that has proven effective in addressing the problem of informal urban development has evolved in recent years. This model consists of integrated public interventions through neighborhood upgrading programs, which combine infrastructure improvements in informal settlements with the introduction of social services. This methodology of comprehensive action, which addresses urban planning matters while helping to meet the most urgent needs of vulnerable groups, has proven to be an important tool in social policy and poverty reduction initiatives.

The positive results achieved in recent neighborhood upgrading programs in the region have triggered a great deal of interest among governments and technical experts in the social and urban sectors, who have been searching for information on the methodology used in these programs related to their design, implementation arrangements and impact assessment. The preparation of this book was therefore motivated primarily by the need to respond to this growing interest and to disseminate information on the basic concepts and practical lessons derived from the experience acquired in the implementation of these projects. This review of the advantages and positive impacts of the model of integrated operations focusing on poor neighborhoods is also a mechanism to promote this paradigm as an instrument to fight poverty and reduce social inequalities.

The book describes informal urban development in Latin America and the strategies that have been used to address the problem. It also focuses on the different alternatives in the design and execution of neighborhood upgrading programs, including their most important components, factors involved in organizing

project execution, criteria for selection of neighborhoods, methods of promoting community participation, impacts to be expected, and other important elements. Finally, it provides a series of recommendations for long-term program sustainability and lessons derived from recent experiences in project execution.

The book includes seven case studies involving projects financed by the Inter-American Development Bank to facilitate the work of those interested or involved in the design of this type of program.

Carlos M. Jarque, Manager
Sustainable Development Department

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CHAPTER 1

CITIES DIVIDED

INFORMAL URBAN DEVELOPMENT

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URBANIZATION AND POVERTY

Growth in urban population

Latin America's well-known population increase has been accompanied by an accelerated process of urbanization that has made it the world's most urbanized developing region and conferred substantial economic and demographic importance upon its cities. In 2000, Latin American cities accounted for 75 percent of the region's population of 507 million and generated 80 percent of growth in gross domestic product (United Nations Centre for Human Settlements, 2001).

At the beginning of the twentieth century, only one out of every four persons in the region lived in cities (defined as settlements having a population of 2,000 or more). By the dawn of the twenty-first century, this proportion had increased to three out of every four. In 1900, none of the region's cities had a population of one million, while in 2000 there were 49 such cities—four of which were among the 10 largest cities in the world. The process of growth in cities has accelerated during the past 50 years, as shown by the data on the increase in the urban population and stagnation in the rural population (see Table 1.1).

The concentration of the population in cities can be attributed to the greater opportunities for personal development and higher quality of life that cities offer—a trend that is expected to continue. It is estimated that, by 2025, 85 percent of Latin America's population will be living in cities. By then, the population of countries with more advanced urbanization processes (such as Argentina, Chile, Uruguay, and Venezuela) will be more than 90 percent urban. Even in countries now at less advanced stages of urban transition (such as Costa Rica, Guatemala, Haiti, and Honduras), more than half of the population will live in cities by that time, as compared with the present level of just over 40 percent. In the more populous countries (Brazil and Mexico), as well as in others now in full urban transition (Colombia, Peru, and Cuba) more than 80 percent of the population will be concentrated in cities, while this proportion will reach 70 percent in countries now registering moderate levels of urbanization (Bolivia, Ecuador, Dominican Republic, El Salvador, and Nicaragua) (ECLAC, 2000) (see Table 1.2).

A second change that occurred during the twentieth century is the profound transformation in the structure of urban centers in the region. At the beginning of the century, the urban configuration of most countries was characterized by one main city (none of which exceeded population levels of one million) that served as the seat for the national government and key services for productive activities, and a group of small cities supporting agriculture or exporting raw materials. Exceptions to this rule were Brazil (with two main cities) and Colombia (with three). The region included seven cities with

Table 1.1. Urbanization in Latin America, 1970-2010

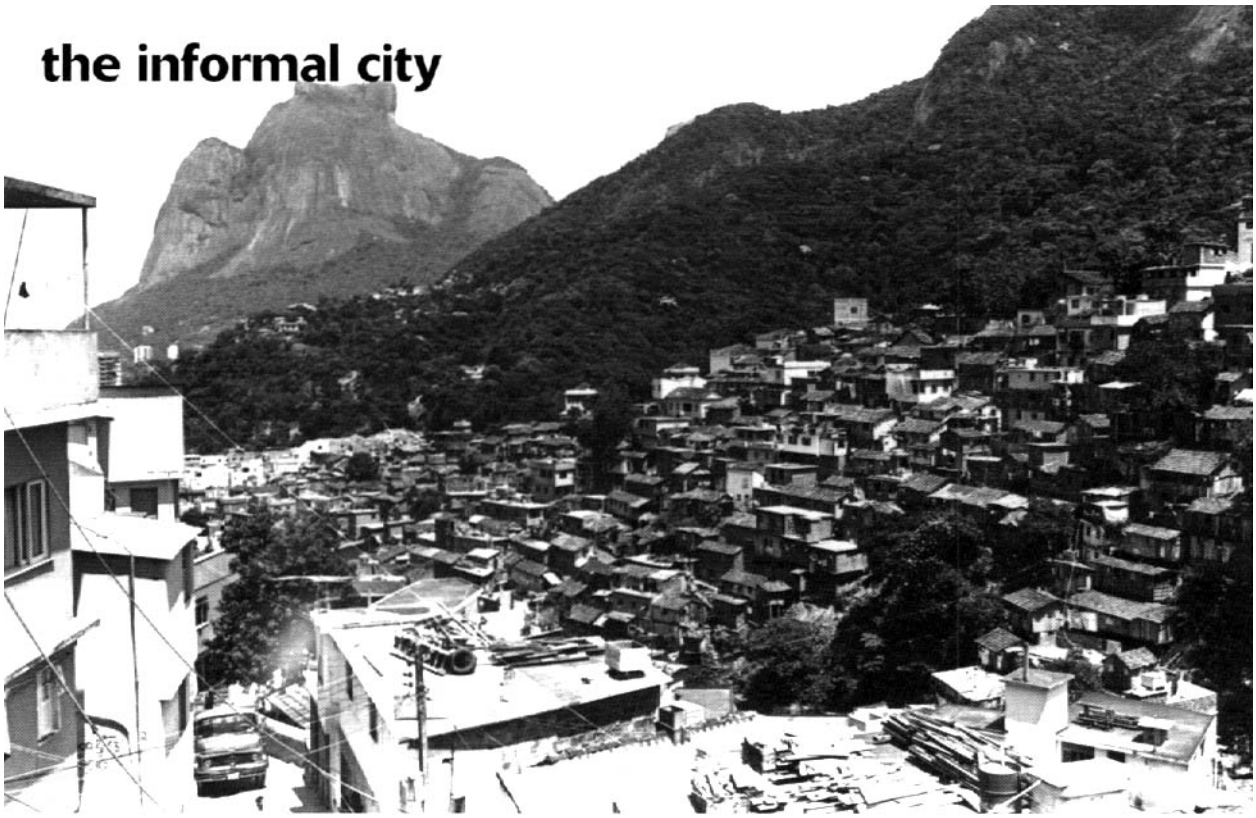
Population	1970	1980	1990	2000	2010
Total	276,146,849	351,677,799	429,775,378	507,932,044	583,699,449
Urban population	158,557,829	229,537,489	305,251,509	382,631,107	457,709,699
Percentage urban	57.4%	65.3%	71.0%	75.3%	78.4%
Rural population	117,589,019	122,140,309	124,523,868	125,300,936	125,989,749
Percentage rural	42.6%	34.7%	29.0%	24.7%	21.6%

Source: Economic Commission for Latin America and the Caribbean—ECLAC (1999).

Table 1.2. Latin America and the Caribbean: Percentage urban population by country, 1970–2020

Countries by stage of urban transition	Year							
Advanced stage	1970	1980	1990	2000	2005	2010	2015	2020
Argentina	78.4	83.0	86.9	89.6	90.6	91.4	92.0	92.5
Bahamas	71.8	75.1	83.6	88.5	90.0	90.9	91.5	92.0
Barbados	37.1	40.2	44.8	50.0	52.8	55.6	58.4	61.1
Chile	73.0	79.0	82.8	85.7	86.9	87.9	88.8	89.6
Jamaica	41.5	46.8	51.5	56.1	58.5	61.0	63.5	65.9
Uruguay	82.0	86.1	90.5	92.6	93.1	93.7	93.9	94.0
Venezuela	71.8	78.9	83.9	87.4	88.8	89.9	90.8	91.5
Full urban transition	1970	1980	1990	2000	2005	2010	2015	2020
Brazil	55.6	67.3	74.7	79.9	81.7	83.1	84.2	85.0
Colombia	57.7	64.4	69.4	74.5	76.6	78.4	80.0	81.4
Cuba	60.1	68.0	74.8	79.9	81.9	83.4	84.7	85.7
Mexico	58.9	65.5	71.4	75.4	77.2	78.8	80.2	81.3
Peru	58.1	64.2	68.7	72.3	73.5	74.6	75.5	76.3
Trinidad and Tobago	63.0	63.1	69.1	74.1	76.1	77.8	79.3	80.7
Moderate urban transition	1970	1980	1990	2000	2005	2010	2015	2020
Bolivia	36.2	45.4	55.6	64.6	68.2	71.0	73.1	74.8
Dominican Republic	39.7	49.9	53.7	60.2	62.9	65.3	67.4	69.1
Ecuador	39.5	47.1	55.4	62.7	65.8	68.5	70.7	72.5
El Salvador	39.0	44.1	49.8	55.2	57.8	60.3	62.6	64.7
Nicaragua	46.8	50.1	52.5	55.3	56.7	58.1	59.4	60.6
Panama	47.6	49.7	53.8	57.6	59.5	61.2	62.9	64.5
Paraguay	37.1	41.6	48.6	56.1	59.6	62.9	65.7	68.2
Delayed urban transition	1970	1980	1990	2000	2005	2010	2015	2020
Costa Rica	38.8	43.1	46.7	50.4	52.3	54.2	56.1	57.9
Guatemala	36.2	37.2	38.0	39.4	39.9	40.5	41.2	41.8
Haiti	19.7	24.5	30.5	38.1	41.8	45.3	48.4	51.3
Honduras	29.0	35.0	40.8	48.2	52.1	55.9	59.5	62.7

Source: ECLAC (2000).



populations of more than one million in 1950; in 2000, it had 49. The population of the same cities increased from 16.8 million to 164.9 million. As we have indicated, Latin America houses four of the world's 15 megacities: Mexico City, with a population of 16.6 million; São Paulo with 16.5 million; Buenos Aires with 11.6 million; and Rio de Janeiro with 10.2 million; and a further 45 cities with populations of more than one million—some of which exceed five million (Bogotá, Lima, and Santiago). This transformation is indicative of a more balanced urban system in the region, although the accelerated rate at which it has occurred has ostensibly exceeded the capacity of local governments to expand the supply of infrastructure and services required by an ever-growing population.

Informal development in the cities

This process of urbanization has led to substantial improvements in the quality of life for Latin Americans, as population concentration increases the productivity of the labor force and lowers the cost of providing basic services. Key areas of progress are increased coverage of basic services such as sanitation, health, and education. In many countries, coverage of drinking water services reached more than 90 percent of the population by the end of the 1990s. However, a clear urban bias is noticeable, as the percentage of houses without access to drinking water in rural areas is generally double that in urban areas. Sewer service coverage is substantially lower—less than 50 percent in many coun-

tries—and is also found to have the same urban bias (ECLAC, 2000).

While urbanization has fostered relative progress in terms of meeting the population's basic needs, it has not led to any elimination or substantial reduction in poverty. While public services are more abundant in the cities, the cost of living is higher than it is in rural areas. This leads to what is now known as "economic" poverty, characterized by income insufficient to survive in the urban environment (Arriagada, 2000), and is attributed primarily to the informalization of the labor market, resulting in part from the mismatch between the increase in supply of formal employment and the increase in the economically active population in the cities.

The informal sector—predominant in service activities, accounting for 73 percent of jobs in cities—is where the most growth is registered in the region. According to data from the International Labour Organization (ILO, 1999), during the 1990s, 60 percent of the new jobs in the cities were generated in the informal sector. It is estimated that, in 2000, 48 percent of the urban workers were employed in the informal sector, which indicates that this is not a transient phenomenon, but is instead a structural characteristic of the Latin American economy. The majority (66 percent) of these informal workers are engaged in subsistence activities (50 percent are self-employed unskilled workers and 16 percent engage in domestic work). In addition, only 33 percent are employed by microenterprises, which comprise the most productive and highest-income component of the informal sector (ILO, 1999).

For the urban population, which does not have access to the formal labor market, the informal sector represents an "escape valve." The main challenge is to incorporate this labor into the formal economy, where the levels of pay, social protection, and productivity are higher. Informal activities should therefore be modernized by increasing the proportion of formal jobs in the more productive, higher-income components of the sector (ILO, 1999). With regard to women, whose mass-level incorporation into the urban labor market has been a characteristic of evolution in urban employment, the aim is to improve working conditions and equal their wages with those earned by men.

Urbanization of poverty

During the last quarter of a century, Latin America has undergone a process of urbanization of poverty. The urban poor now broadly exceed the number of rural poor, although in relative terms rural poverty affects a greater proportion of the population.

While the number of poor has almost tripled during the past three decades (from 44.2 million in 1970 to 125.8 million in 1997), the number of rural poor has remained stable at approximately 78 million (see Table 1.3). This process is attributed to the displacement of the poor from rural areas as well as the impoverishment of the urban population in the wake of the economic crisis of the 1980s. According to estimates by ECLAC (2001), approximately 30 percent of the Latin American urban population lives in poverty and approximately 10 percent is indigent.

Arriagada (2000) indicates that the poor households are generally extended (they include more than one generation) and complex (they include members outside of the nuclear family); they also include a greater proportion of female-headed households than the average urban population. More than half of poor households

Table 1.3. Trends in urban poverty in Latin America, 1970-1997 (in thousands of inhabitants)

	1970	1980	1990	1997
		Poor population		
Total	119,800	135,900	200,000	204,000
Urban	44,200	62,900	121,700	125,800
Rural	75,600	73,000	78,500	78,200
Percent urban	36.9	46.3	60.8	61.7
		Percentage of poor households		
Total households	45	35	41	36
Urban	29	25	35	30
Rural	67	54	58	54

Note: Percentage of poor households (100 = total households by location).

Source: Arriagada (2000).

have substantially fewer than the 10 years of education considered necessary to minimize the risk of poverty, while the outlook for overcoming poverty is severely limited owing to income inequality, which, according to the World Bank (1997), is higher in Latin America than anywhere else in the world.[1]

Studies conducted in different countries considered by Arriagada (2000) indicate that the relative incidence of poverty in medium-sized urban centers is greater than it is in major cities. This may be attributed to the more dynamic demographic performance registered recently in these cities (the key destinations of rural migratory flows) and to the greater incidence of informal employment in their economies.

Poverty and urban space

Policies aiming to solve the problems of informal settlements—a key theme of this book—are set against the backdrop of more general efforts to overcome poverty conditions in the cities. The design of these policies has been influenced by the way the approach, conceptualization and measurement of the general phenomenon of poverty has evolved. Fiori et al. (2000) identify two key trends in conceptualization of the problem—one focusing on individual dimensions and the other on the structural ones.

From the standpoint of individual causes, poverty results from the interaction between personal characteristics (such as the level of education) and the social environment in which humans move. The alternative approach explains poverty in terms of the functioning of the social and economic system and identifies its causes in the cultural and value structure as well as in employment and distribution of as-

[1] On average in the region, the lowest quintile of the population's income accounts for 5 percent of national income, while the highest quintile accounts for 50 percent (World Bank, 1997).

sets among social groups. Fiori argues that these two explanations do not reflect the many dimensions of this complex problem, given that poverty—particularly urban poverty—cannot be defined merely as a lack of income in the urban population. To gain an adequate understanding of the issue, we must consider the complex social processes that affect members of the poor population differently depending on their age, gender, and ethnic origin.

The methods used to measure poverty have changed. The most traditional method consists of estimating the population's income and consumption capacity with relation to the level of consumption considered necessary to guarantee a basic standard of well-being. The income necessary to purchase a minimum basket of goods defines the line that separates the poor from the nonpoor. This is a way to measure "income poverty" that provides relatively simple estimates of the number of poor in a country during a given period of time. This methodology, however, has been criticized for failing to reflect differences in the cost of living from country to country, and the assessment of the assets of the poor and their nonmonetary income sources.

Another more advanced method is based on using social indicators to attempt to identify the multiple dimensions of poverty and their complex interactions. This approach has led to the development of poverty indices that entail weighted factors such as life expectancy at birth, infant mortality, food consumption, illiteracy rates, and access to sanitation services. The human poverty index (HPI) developed by the United Nations is one of the many that substantially broaden the perspective from which poverty is analyzed for a better reflection of its many dimensions.

A similar approach can be found with indicators of the satisfaction of basic needs. While differences are observed with relation to the variables and minimum provision levels considered satisfactory in different circumstances, unmet basic needs (UBN) indicators are normally considered an integral package that includes social and material living conditions. Variables include the infant mortality rate, school attendance level (school-aged children attending school), income of heads of household, dependency rate (number of persons per employed worker), access to public services (drinking water, sewerage, health, and education), housing usage density (number of persons per dwelling), type of housing construction (materials, floors, and roofing), availability of sanitary facilities, etc.

To the extent that this approach underscores the importance of housing and the quality of human settlements among the many factors that characterize poverty, it classifies as poor members of households facing housing shortages or living in settlements without access to basic services. This approach recognizes the quality of human housing as a basic necessity.

Analyses based on the UBN index have shown that urban poverty tends to be concentrated spatially in the belts of new settlements surrounding major cities. Many of the poor have access to household public services, most frequently on an informal or irregular basis, through clandestine connections, private water delivery services, and other arrangements. As long as the coverage levels for public services and basic social services such as education and health continue to be low, increased income alone will not solve the most problematic situations of unmet basic needs, particularly for vulnerable groups such as single mothers, street children, and the aged.

The discussion of trends in conceptualization and the process of measuring urban pov-

erty, as well as progress made in explaining its causes, make it possible to conclude that the nature of poverty is quite heterogeneous and complex. An effective approach in breaking the poverty cycle therefore requires coordinated multisector actions to solve housing shortages and environmental problems and to meet the specific social needs of the most vulnerable groups.

The integrated approach to the relationship between poverty and habitat attributes particular importance to the topic of territorial focus in the design and execution of poverty alleviation programs. Accordingly, more recent urban and social policies are focused not only on housing production, but also on integrated solutions to the multiple shortages with which the poor must cope. This approach also adds a spatial dimension to social programs through the territorial orientation of their operations. As we shall observe below, this approach increases the efficiency and focus of programs.

INFORMAL URBAN DEVELOPMENT: A RESPONSE FROM THE POOR

Extent of informal urban development

The discussion on poverty has brought to light the role of informal economic activity in providing employment and sustenance for the poor population of cities. Informal housing solutions also play an important role in the search for solutions to this population's housing problems. The proliferation of informal housing solutions in the region results from a combination of factors in which the high relative cost of land and housing as compared with the income of many residents of the cities excludes them from the formal market. Lower income groups have frequently responded by occupying vacant public or private land or by purchasing lots in illegal subdivisions, in order to build their own homes. This situation results in informal settlements that are in permanent expansion in the region. In different national contexts, then, housing generated by the informal sector is growing at a rate that matches, if not exceeds, the growth rate in conventional housing (ECLAC, 1996).

Informal urban development in Latin America's poor sectors has many manifestations and takes on different names depending on the country. *Favela, callampa, barriada, asentamiento, villa miseria, toma, tugurio,* and *urbanización pirata* are some of the more common terms for informal settlements. Despite the wide variety of types of informal urbanization, in terms of origin, instability, and habitability conditions, all of these settlements theoretically involve two basic forms of noncompliance: the first involves ownership and the absence of a title to the occupied land or building; and the second involves a process of urbanization entailing noncompliance with the regulations governing land division and urban construction. Of all types of informal development, the acquisition of lots in illegal, irregular, or clandestine subdivisions from landowners or "promoters" is the most widespread form in Latin America. While occupation of vacant public land in the inner cities is possibly the most visible form of the problem, it is proportionally smaller when compared with these irregular settlements. Even if it is difficult to determine the extent of informal urban development, it clearly affects most dimensions of the habitat of the poor. Some examples may be useful to illustrate the magnitude of these informal activities (see Box 1.1).

Informal urbanization as a market failure

The phenomenon of informal settlements can be interpreted as a market failure or as the formal sector's inability to meet the demand for land and housing of a substantial segment of the population (Gilbert, 1998). The informal market constitutes an alternative that provides solutions for

Box 1.1. Informal urban development in Latin American cities

- In Brazil, informal development has reached substantial proportions in the larger cities and in the country's metropolitan areas. In Rio de Janeiro and Belo Horizonte, 22-25 percent of the population lives in squatter settlements, or *favelas;* and this level is 21-22 percent in São Paulo, Salvador, and Fortaleza. These figures do not reflect residents of informal subdivisions on the periphery of these metropolitan areas (Mello Bueno, 1999). In São Paulo, an estimated 2.4 million persons lived in 2,600 irregular subdivisions in 1990 (Mello Bueno, 1999).
- In Bogota, clandestine subdivisions date back to the 1950s. During the 1970s, 54 percent of the population lived in this type of settlement, while this figure for the 1990s amounted to 59 percent (Clichevsky, 1991; Mello Bueno, 1999).
- In Caracas, the proportion of persons living in informal settlements increased from 20 percent at the beginning of the 1960s to 50 percent during the 1970s—a figure that remained constant until the early 1990s (Clichevsky, 1998a).
- In Mexico City, it is calculated that 40 percent of the city's households are located in informal areas or in illegal subdivisions (Clichevsky, 1999).
- In Peru, from 1981-1993, the rate of growth in improvised housing exceeded 11 times the average growth rate in the total housing stock. In Lima, the number of squatter settlements, or *pueblos jóvenes,* increased from 432 in 1979 to 691 in 1985. The proportion of persons living in different types of illegal situations increased from 15 percent at the end of the 1950s to 35 percent during the 1990s. Estimates for 1999 indicate that more than 40 percent, and as much as 50 percent, of the city's residents were living in informal housing (Riofrío, 1999; Mello Bueno, 1999).
- In Quito, approximately 50 percent of the settlements are illegal and occupy more than 4,000 hectares of the city. These neighborhoods have increased rapidly in number and in size. In 1981, there were 87 settlements on 2,498 hectares; in 1985, there were 134 squatter settlements, or *barriadas,* occupying 4,575 hectares; and in 1991, 202 informal settlements occupied 3,979 hectares (Clichevsky, 1998b).
- In San Salvador, the informally settled population represents 41 percent of total housing; of this total, 32 percent lives in tenements, or *mesones,* and 9 percent in inner city slums, or *tugurios* (Fundasal, 1993).

shelter—even if they are not always adequate—for the lower segment of the housing market. Insufficient supply of housing solutions (i.e., land with infrastructure or housing) at prices and in locations compatible with the payment capacity of low-income consumers is the result of the specific features of urban land and the characteristics of the market on which it is traded.

Land is bought and sold in a highly imperfect market that lacks transparency, operates with incomplete information, presents severe barriers to entry, and is substantially regulated (by land use restrictions). Price formation is therefore dependent on factors beyond the control of the owners. Some of these factors can work against them—which is the case for restrictive land use regulations; while other can work in their favor—such as public investments that enhance the value of the properties and are made at no cost to the owners. In Latin America, how-

Table 1.4. Land prices in the formal and informal markets

City	Price (US$/m²)	
	Legal land	**Non-legalized land**
Lima	54.2 - 113 (w/i)	20 - 30 (n/i)
Buenos Aires	12 - 50 (n/i – w/i)	8 (n/i)
Rio de Janeiro	50 - 120 (w/i)	14 - 90 (n/i – w/i)
Quito	20 - 60 (w/i)	3 - 20 (n/i)

w/i: with infrastructure; *n/i:* without infrastructure.

Source: Clichevsky (1999).

ever, the scarcity of land available for urban uses is endemic, primarily owing to limited investment in infrastructure, which tends to bid up land prices in urban areas.

Residential land with a regularized title is generally costly in the region, owing to its scarcity, as discussed above, and in part to the high costs of complying with strict urban planning regulations that impose high standards for infrastructure and service to legalize subdivisions. This situation has led to a flourishing informal market for unregularized land marketed among the poorest population sectors, for which the prices vary excessively when compared with land in the formal market (see Table 1.4).

Informal production of urbanized land occurs through the division of lots located on the periphery of the city, or through occupation of vacant inner city lots. This irregular market includes a variety of participants ranging from illegal occupants and owners of the land to clandestine developers, and can involve agents working in the formal market (see Box 1.2). Prices are relatively lower than in the legal market, reflecting the absence of formally required urbanization works, low quality and insufficient access to the land, and fundamentally to the lack of legal security. For the poor sectors, the illegal status of real estate operations, and possibly also the questionable ownership of the seller, do not represent substantial obstacles in acquiring a property. Surveys conducted among illegal occupants indicate that they value more than anything the security of being able to remain on the land permanently, regardless of how their ownership may be guaranteed.

Regulatory gaps that contribute to informal urban development

Government policies addressing the urban land market are defined by the legal and institutional framework regulating the process of subdivision and occupation of the land. Regulations governing subdivision, land use, and construction in Latin America since the mid-twentieth century have had a significant, but generally limited impact on the central zones of the cities and outlying areas that accommodate formal real estate projects. By the end of the 1960s, Latin America's largest cities already had urban planning instruments (see Box 1.3). This process expanded sig-

Box 1.2. The informal land market

An example of how informal transactions are processed is the common practice in Colombia of pirate subdivisions, or *"loteos piratas"*. The developer arranges individual meetings with the future occupants of the land. The negotiation includes a document (offer of sale, or *promesa de compraventa*) that establishes the payment conditions for the lot. This process is frequently supported by the local political authorities, who are implicated in pirate urbanization and who operate as intermediaries vis-à-vis the authorities to prevent residents being evicted from their homes.

In other cases, such as agricultural cooperatives in Quito, the "promoter" leads the process of subdividing the land and frequently organizes squatting on public land. Once the land is occupied, the promoter begins a process of pressuring the local authorities to construct basic infrastructure and legalize ownership of the properties.

nificantly based on the decentralization initiatives that began during the 1980s, under which nearly all Latin American countries began to transfer authority for planning and oversight of urban development to the municipalities. These instruments include preparation and implementation of regulations on land subdivision and use. The fact that the legal systems in almost all countries vest a key function in urban land management in the municipalities means that they play a critical role in solving the problems associated with informal urban development.

Municipal regulations to meet the needs for housing and urban services of the poorest population are, however, clearly inadequate. There are generally very stringent and inflexible regulations governing land division, which determines the minimum size for lots, width and quality of the pavement for public streets, and reserves for public areas; and the minimum infrastructure requirements that set conditions for approval of subdivisions and regulations with regard to construction, maximum occupation of lots and urban land use. Very high standards increase urban development costs and ultimately serve as barriers to the legalization of irregular properties.

The complex bureaucracy involved in the process of approving land division, construction permits, and legalization of buildings by the municipalities adds to the problems. All of these processes entail additional costs and pose serious obstacles against legalization, particularly for buildings at the lower end of the value scale. In short, inadequate regulations and bureaucratic procedures contribute to the high degree of informal housing development in Latin American cities. Reform and greater flexibility in this connection would eliminate significant barriers preventing the poor from accessing legal habitation solutions.

Box 1.3. Regulation of land division and use in Latin America

- Chile began to establish standards for land use and subdivision in the 1930s. During the mid-1950s, legislation was adopted to eliminate illegal land subdivision. In an attempt to liberalize land markets, during the 1970s, state intervention was limited and regulations on private ownership were curtailed when considered to constitute impediments to the marketing of the land. Urban limits were extended and incorporation into urban areas of agricultural land situated on the periphery of the cities was legalized, while zoning and construction regulations within urban areas were eased. Land prices did not decline and the incorporation of agricultural land for urban uses accelerated. Many land regulations were reinstituted during the early 1990s (Green, 2000).
- In Mexico, the first law on land division dates back to 1958 (although the most important one is the Human Settlements Law of 1976) and arose at a time of land-related conflicts as the result of the communal land situation. While the law states that its aim is to regulate the market, it established no tangible mechanisms—such as instruments for intervention in connection with private property—for that purpose. In 1983, the Mexican government began the progressive social subdivision of land under which the purchasers could gradually build urbanization facilities, and the government supported self-construction of housing. The laws, plans, and programs included in the National Urban Planning System (SNPU) contain strategies and guidelines for urban land, primarily in the area of land use control and regulation, establishment of territorial reserves, and regularization of land tenure. The legislation, however, lacks the legal instruments required to influence the market to improve access of low-income sectors (Schteingart, 1993).
- In Argentina, given the federal regime, the laws on urban land may be national or provincial. Regulation of land subdivision and use come under the provincial jurisdiction and are delegated to the municipal authorities. Provincial legislation is asystematic and often responds to *ad hoc*, urgent requirements. Until the 1970s, policies on urban land serving and subdivision applied minimal restrictions. This situation changed in 1977 when the Province of Buenos Aires applied Decree-Law 8.912 establishing urbanization standards. Many municipalities and provinces have adopted similar regulations since that time (Green, 2000).
- In Brazil, regulation of land use is the responsibility of the municipal government. Since 1979, however, Federal Law 6.766 has defined parameters to be adopted under municipal legislation, such as minimum areas for lots applicable to the general population (300 m2) and special requirements for the "low-income sectors" (125 m2). The municipalities, however, have autonomy to legislate within these parameters and to establish exceptions in cases of social interest. A more recent law (Law 9.786 of 1999) enabled the municipalities to establish the percentages of areas designated for the road system, social facilities, and other community uses. Law 10.257 of 2001, known as the city statute, establishes a broad normative framework for urban policy—including acquisition of ownership after five years of occupation—and the requirement on construction and use of urban land, concession of rights of use *in rem* and entitlements to land surface, among other innovations (Green, 2000).
- In Venezuela, city limits and land uses are established through zoning, and construction standards apply only to physical features (Clichevsky, 1990). The urban planning authorities (national executive and municipalities) are required to establish public urban land reserves, to be created with cooperative land, wasteland, or with their own lots acquired by expropriation. Local governments may establish their own tax structure (Green, 2000).
- In Nicaragua, there are laws that refer to the municipal powers and authority: the Tenancy Law (1979 and 1981); Law on Expropriation of Urban Wasteland (1981); Law on Land Use in Areas of Human Settlement Development (1983), and the Law on Regulation, Coding, and Issue of Titles for Spontaneous Human Settlements—national legislation designed to facilitate regularization of such settlements by the municipal authorities (Green, 2000).
- In Quito, Ecuador, land could be subdivided without infrastructure until the 1990s. The ordinance regulating production of infrastructure in subdivisions was established in Guayaquil in 1996, followed by local ordinances in other municipalities (Green, 2000).

IMPACT OF INFORMAL URBAN DEVELOPMENT

Informal development has serious urban repercussions, at the environmental, economic, and social levels that affect residents of irregular settlements as well as those in their immediate vicinity. Depending on the degree of informal development, these repercussions can affect broad areas of the city. Some problems, such as lack of legal security, are common to all types of informal development; while others, such as environmental issues related to illegal occupation of areas that are excessively steep or prone to flooding, are specific to each settlement.

Effects on the urban environment

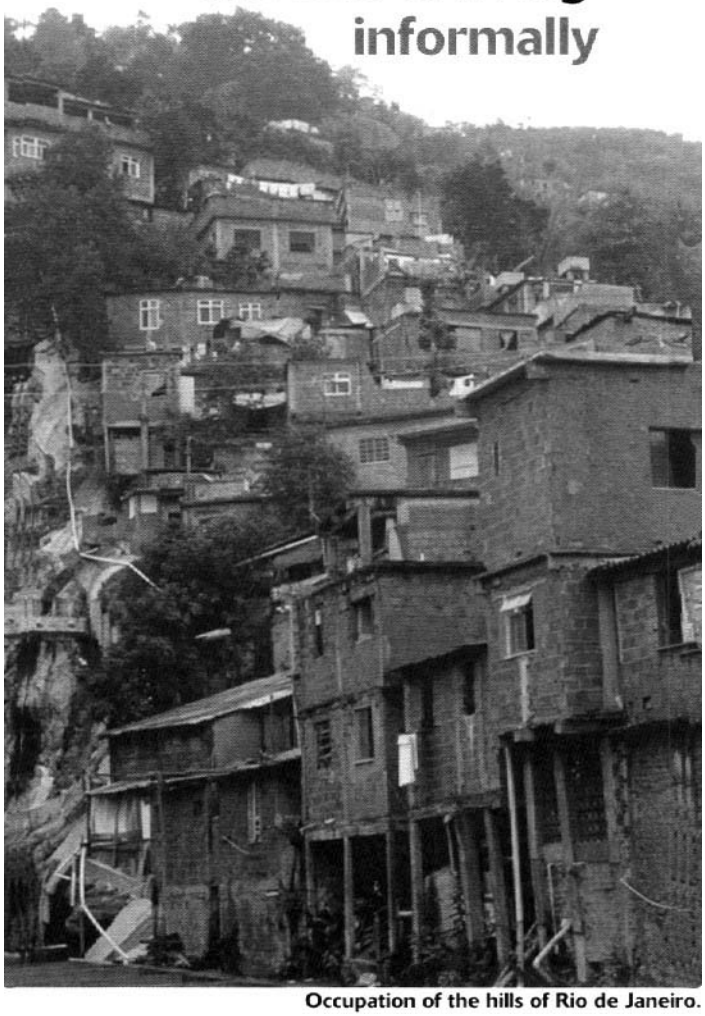
With a keen sense of pragmatism, particularly towards minimizing the possibility of eviction, poor people engaged in illegal occupation normally look for land that is of little commercial interest or that is restricted under urban legislation. Illegal developers use the less suitable land for illegal subdivisions, and reserve the better properties for real estate developments targeting the formal market. The former are normally subject to environmental restrictions and present risks for residential use, such as steep slopes, flooding, contaminated soil, proximity to dumps, riverbeds, etc. The poor also occupy land intended for public works programs that have not been executed, land earmarked for environmental conservation or ecological reserves, or land that has been set aside for public facilities or occupied by infrastructure in disuse, such as railroad or port yards.

In many cases, particularly when the land is located in the inner city, the form of occupation, in terms of density, organization of subdivisions, and types of construction, exacerbates the problems and environmental risks. For example, the dangers posed by a settlement situated in an adverse natural environmental setting are magnified by unstable construction, dense land occupation, and insufficient protective elements (such as retaining walls) and infrastructure. Unplanned growth and high densities lead to the virtual nonexistence of open areas and create serious traffic problems within most settlements. This complicates activities such as trash collection and emergency services (entry of ambulances or fire trucks). In clandestine subdivisions located in peripheral areas of cities far from urbanized areas and where there is low occupation density, provision of public services such as drinking water, sewerage and social services is difficult and costly. In both cases, the irregular situation directly affects the quality of life of the population and makes improvements difficult and costly.

Effects on social conditions

As a result of their isolation from the formal city, social marginality, and irregular land occupation,

the risk of living informally



Occupation of the hills of Rio de Janeiro.

informal settlements tend to house a greater concentration of social problems. This is reflected in poverty and social indicators consistently higher than those of the average urban population (See Table 1.5). This situation particularly affects the more vulnerable sectors (single mothers, female heads of household, disabled persons, high-risk youth, and, particularly, children and adolescents) who do not have the support services provided by the formal city.

The socioeconomic and domestic instability of these groups multiplies the risks to which they are exposed, and has a strong negative impact on their human and social development. Poor hygienic conditions for babies and children, abandonment and dropping out of school, early pregnancy, domestic violence, and drug trafficking are cause and consequence of deficient social and urban conditions. The formal unemployment indices are also higher in settlements where in-

Table 1.5. Comparative poverty indicators—Rio de Janeiro, 1991

INDICATOR	City (%)	Squatter settlements (%)
Heads of household illiterate	7.3	20
Heads of household with income of less than 1 minimum wage	5	40
Households without access to water	4.7	25
Households without access to sewer service	8	35

Source: Superintendency of the City of Rio de Janeiro. Urban indicators produced by the Urban Planning Institute (IPLAN-RIO) (1997).

formal employment and underemployment are prevalent. These conditions, which affect an increasing percentage of the urban population, make irregular settlements a priority focus of urban social interventions.

Costs to the city

The costs of informal housing to the city are substantial, including an increased number of hospital patients, the need to install infrastructure and establish public utilities in inadequate areas, and environmental impacts and pollution. Settlements generate negative effects, or externalities, on their surrounding areas, causing depreciation, and ultimately deterioration, in the neighboring properties. The costs of reclaiming these areas for regular urban use are normally high when compared with the costs of settlements located in normally occupied sites. In some cases, all or most illegal occupants may have to be relocated, precisely because of the serious environmental problems at hand, which can be quite costly to alleviate.

The existence of substantial pockets of urban poverty has negative repercussions on a city's economy, reduces its attraction as a business location, and decreases its competitive position vis-à-vis other cities. In addition, the situation of illegality entails a high cost of living for the occupants themselves. In this connection, payments for sewer, water, and electricity service, as well as the cost of transportation to the workplace—which represent a substantial share of occupants' scarce incomes—are generally higher, while lower in quality, than these services provided on a normal basis.

Citizenship and legal insecurity

The insecurity involved in not possessing a title to property and the resulting risk of eviction generate a feeling of insecurity that is as serious as the effects of poor physical and social living conditions. Persons in this situation normally feel marginalized from society and deprived of the rights that other citizens enjoy. In addition, they are frequently associated with illegal and criminal activity, even though evidence on this linkage is quite tenuous, and entail substantial social stigma.

The occupants of these properties forgo investing in their homes or using them as guar-

antees for loans and other commercial transactions. The lack of formalization of their properties, which is quite common in developing countries, is indeed one of the factors that differentiate these countries from developed economies. According to De Soto (2000), the issue of titles is one of the greatest forgone opportunities on the part of poor countries, as the motor of their economies, since ownership titles and other forms of "capital representation" are the pillars of the capital markets in developed countries.

The absence of legal proof of ownership generates insecurity and social stigma that diminish the sense of citizenship among residents of illegal settlements, who feel that they are second-class citizens, without the same rights and responsibilities as other citizens. From the lack of basic services, absence of ownership documents, to home addresses, this situation creates physical and social marginality that characterizes cities divided (Ventura, 1998). In other words, cities divided between normal citizens and those who find themselves physically, socially, and economically segregated.

THE PUBLIC RESPONSE: A MULTIDIMENSIONAL CHALLENGE

Social policies on housing and settlements

In keeping with the growing consensus on the role of housing in poverty alleviation, most governments in the region have promoted policies and programs designed to provide housing solutions to the poorest sectors of the population. In the early stages, these policies promoted construction and direct distribution of such housing by the government. During the 1960s, Latin American governments focused their efforts on establishing national housing institutions and on financing mass finished housing projects. The results sometimes fell short of expectations, and in many cases, excessively bureaucratic and inefficient institutions were created, resulting in housing that was costly and required substantial subsidies to be accessible to the poorest sectors. Further, subsidy schemes did not reach the target population, as ambiguous rules and the absence of market solutions meant that middle-income households displaced poor ones in the use of social housing.

In light of these results and the concern to urgently meet the basic needs of the poorest sectors of the population, during the mid-1970s, the focus of public programs shifted toward the supply of urbanized lots equipped with sanitation services and minimal housing solutions. The aim was to provide beneficiaries with urbanized land, equipped with basic services, to enable them to build their homes gradually, through self-construction or mutual assistance. Despite the substantial reduction in costs and more effective targeting of public resources, these programs generally did not achieve the mass results that had been expected. The volume of resources required to meet the needs involved was quite high, many families could not mobilize sufficient resources to finish their houses, and most programs required households to be relocated to areas far from the working and service centers (where land is less expensive), which negatively impacted the living conditions of the beneficiaries.

During the 1980s, and quite markedly in the 1990s, governments adopted a more realistic position with respect to the housing problem. The dominant approach now views the housing problem as not only a lack of houses. Instead, it acknowledges that the situations of social and housing shortages are interconnected, and that not all urban housing problems can be solved with public resources alone. This change of approach to the problem of housing and settlement of the population was the centerpiece of resolutions of the United Nations Conference on Human Settlements in Istanbul in 1995. The focus was on integrated policies to improve settlements, and the incorporation of approaches to facilitate the functioning of the housing markets.

This approach was originally proposed by the United Nations in its *Global Shelter Strat-*

egy towards the Year 2000 (United Nations, 1988), and was ultimately incorporated by the World Bank into its Housing Policy Paper (World Bank, 1993) and actively promoted by the Inter-American Development Bank in its loans in support of the housing sector (IDB, 1995).

The enabling approach to housing markets aims to enhance overall efficiency of the housing sector through measures to foster operation of markets for urbanized land, housing, and housing finance, with a view to expanding the private sector's capacity to build and finance housing solutions for different socioeconomic sectors. In addition, mindful of the limitations of the housing markets in terms of offering such alternatives to the lowest income levels, the need was acknowledged to promote public programs to finance housing solutions for the poorest segments of the population. Public resources and microcredit, in addition to household saving, can be used to provide urbanized land and evolutive core housing units that the beneficiaries can expand and improve over time.

Last, the need was also acknowledged for investment to resolve the urgent problem of irregular settlements and prevent growth in the cities from following the current informal development patterns. The focus on this problem is reflected in the priority given to investments to improve the physical and social conditions in these areas. Preventive actions include reforms of land regulation systems to facilitate legal access to low-income housing on urbanized land, combined with private production incentives aimed at the requirements of all sectors of the population. This approach is leading to significant change in focus and language: concern for housing has been replaced with a concern for the quality of human settlements, while the priority of social housing has shifted to integral housing solutions. This new approach is spreading throughout the region. Countries such as Brazil, Colombia, Costa Rica, Chile, Ecuador, Guatemala, Panama, and Uruguay are now in various phases of implementing this approach and executing the required action programs.

Moving toward integral urbanization policies

This evolution in housing policies provides the framework for changes in strategies for dealing with irregular settlements. In light of the chronic and worsening situation of subnormal, irregular housing, the attitude of Latin American governments has gone through various phases that generally coincide with changes in housing policy and the approach to alleviating urban poverty.

In the first phase, in which urban marginality was viewed as an interim situation, there was an optimistic approach that expected to solve the problems with public construction of completed housing. Authorities ignored the existence of irregular settlements that, at that time, were fundamentally illegal occupations of vacant urban lots situated in the inner city. In the absence of government policies to discipline their growth, the settlements evolved with their own dynamics and were occasionally subjected to represion, but their existence and importance was often ignored or not fully understood. Official maps of some cities still do not show irregular settlements, which is indicative that this attitude is still present today.

The second phase occurred when the negative impacts of irregular settlements on the formal city became perceptible. This moment coincides generally with the shift in housing poli-

cies from providing low-cost housing solutions to more basic solutions of sites and services. The reaction was to promote eradication of irregular settlements by resettling the population on the outskirts of the city, to serviced lots, or to finished housing complexes. This strategy proved to have high social costs to the occupants of the settlements, who lost their investment in improving their initial homes, as well as their social support systems. The new locations were less favorable in terms of access to urban services and workplaces.

The third phase is the current one, which is characterized by an acknowledgement of the problem of informal settlements as an inevitable reality and a serious social issue in the cities. Its significant magnitude has assured it a prominent place on political agendas and in government urban development programs. As a result of accumulated experience from these programs, a consensus has been developed on the fact that strategies based on settling populations in the areas that they already occupy provide the most socially and economically desirable solution. Various program approaches have been used, ranging from those limited to regularizing ownership of irregularly occupied properties to integrated neighborhood upgrading programs. The characteristics of these forms of intervention are provided below, while the approach of integrated neighborhood upgrading programs will be addressed in subsequent chapters.

Ownership regularization programs

In many countries, programs are under way to regularize ownership of the land on which informal settlements are built, concurrently with actions aimed at providing urban infrastructure and housing. For the population benefiting from these programs, regularization means acknowledgement of their ownership and the investments that they have made in the property, as well as the security of permanence. Titled ownership also represents a marketable asset enabling the owner to enter the land and housing market (Calderón, 1997). The complex manifestations of informal development, the multiple actors involved, and the lack of transparency as to the ownership of the land, however, constitute serious difficulties in implementing these efforts.

Regularization has two basic facets: legal and urban. Legal regularization implies legalization of ownership, recognition of the right to occupy the property for specific periods, and the sale or donation of land to its occupants. Depending on the type of regularization, the objectives of the governments, and the financial possibilities, solutions range from giving land away for free to sale at near market value to their occupants.

Legal regularization incorporates irregular lots into the land register and local tax collection systems. These programs generally do not address other problems affecting irregular settlements, although they do open the possibility of a gradual solution to incorporating urbanized land into the formal sector of the city.

Urban regularization refers to the process of recognizing irregularly occupied subdivisions as regular urban zones (that will in turn be serviced and pay taxes as the rest of the city). In virtually all cases, this regularization requires exceptions to urban planning standards or the use of special standards applicable to the particular situation. This is necessary because the streets and lots are usually smaller than the usual standards, because the required infrastructure is not available, or because these properties are located in areas not designated for residential use. Such exceptions are justified on the basis of social interest and apply to neighborhoods that have already been consolidated. Such regulariza-

Box 1.4. Regularization

- In Lima, between 1982 and 1996, the municipality granted 134,000 titles that, combined with those issued in the past, covered 55 percent of all persons living in the squatter settlements, or *barriadas,* in 1981. Later, between July 1996 and July 1997, approximately 170,000 property titles were issued. Registration problems, however, have arisen with 90 percent of the titles issued prior to 1995, and many of the new documents are only revised versions of the earlier ones (Calderón, 1999).
- In Recife, between 1987 and 1991 under the *Suelo y Techo* housing and land program, 48,000 titles covering 20 percent of the total population living in squatter settlements, or *favelas,* were issued (Clichevsky, 1999).
- In Managua, between 1982 and 1989, the Sandinista National Liberation Front declared 502.42 hectares of public utility and renewed 22 informal settlements, or *tomas* (4,320 lots and 22,631 residents), created 72 progressive organizations (15,904 lots and 85,086 residents), and supervised 62,932 distributions under considerations of social use (Clichevsky, 1999).
- In Chile, approximately 370,000 titles to properties occupied by the poor were issued between 1978 and 1984.

tions are frequently accompanied by investments to improve streets, sanitation infrastructure, etc., so that neighborhood consolidation can be made under minimum acceptable urban conditions.

Legal regularization programs are more costly when the occupied land must be purchased or expropriated. In general, the more successful ownership regularization programs have been preceded by the establishment of special statutes granting authorities legal power to proceed with expropriation, sale or giving of the land to the occupants (see Box 1.4). In the absence of such powers, the process of acquisition through legal action requires the government to pay market price for the land, which frequently is a slow, costly judicial process. When possible, it is preferable to execute purchases by mutual agreement, or for the occupants themselves to acquire the land with assistance from the government.

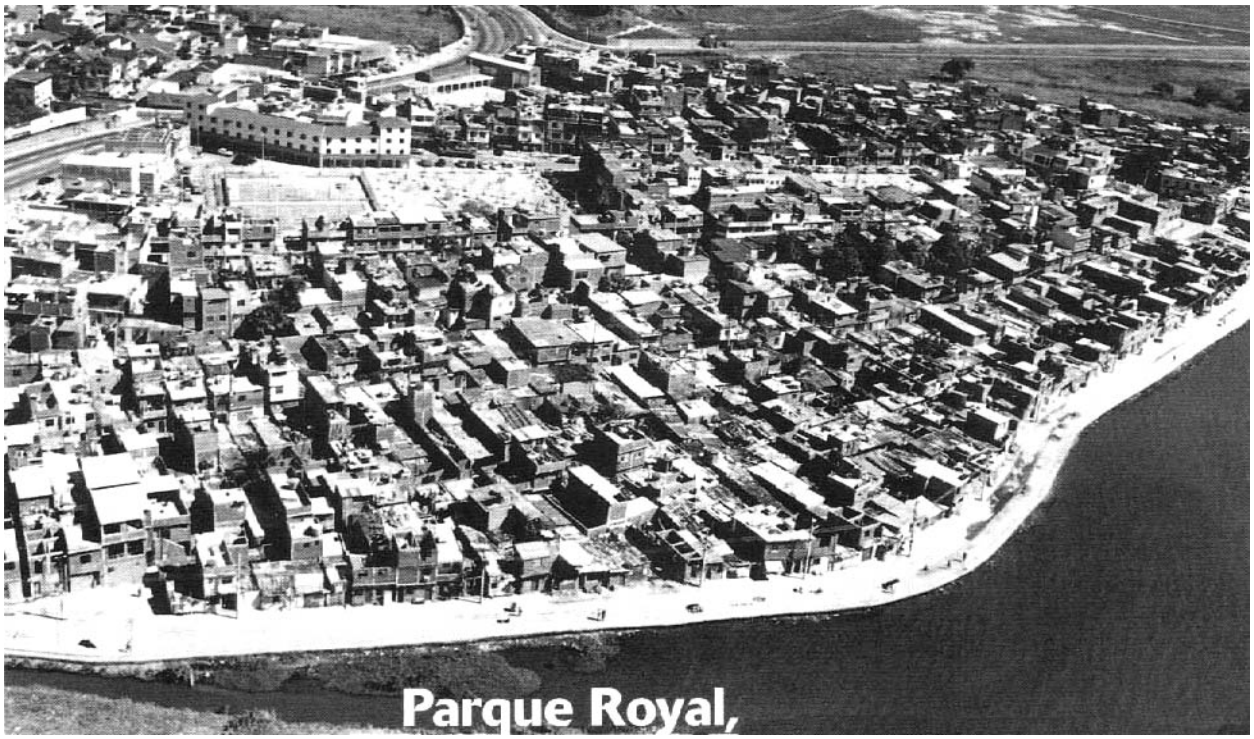
Regularization programs imply leaving the residents on the sites they presently occupy. Depending on the location within the urban area, and the density of the settlements, relocation of some residents may be inevitable—owing to location in high-risk areas, or excessive density. If the land is found to have serious environmental problems, however, it is advisable to conduct a careful cost analysis to determine if a relocation solution is more effective.

Integrated neighborhood upgrading programs

The predominant approach to informal urbanization is part of a more realistic approach to the complexity of urban poverty, as discussed above. Irregular settlements are accepted as an urban reality that cannot be eradicated, and as a part of the process of growth in cities. In this connection, the following steps must be taken to reduce the more negative effects of such settlements:

- Progressing beyond regularization of lot ownership, to promote full incorporation of irregular settlements into the city;

change is possible:



before and after the project

- Incorporating investments to improve infrastructure and urban facilities in neighborhoods; and
- Developing programs designed to alleviate the main social problems of the communities and improve their quality of life as a whole.

Such an approach reflects a broader view of urban development and is based on more integral housing policies that, as we have discussed, aim at reform of the housing sector to provide solutions within reach of the households of all income levels. The approach of consolidating poor households in their present settlements and their full incorporation into the city minimizes the economic, social, and political cost of solving the problem, while taking advantage of the improvements that the residents have made. Public policies are more meaningful when their goal is to give citizenship to a significant portion of the urban population, which contributes fundamentally to promoting social justice among the residents of the cities.

The following chapters provide a detailed discussion of this type of program, its impact, and the lessons learned from experiences in the design and implementation of projects supported by the Inter-American Development Bank.

CHAPTER II

NEIGHBORHOOD UPGRADING PROGRAMS (NUPs)

CONCEPT AND EXECUTION

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NEIGHBORHOOD UPGRADING PROGRAMS AS INTEGRAL OPERATIONS

Neighborhood upgrading programs (NUPs) are becoming a strategy of choice for local governments to address the complex problems of urban poverty. Physical, social, and economic integration of informal settlements into the city has proven to be an effective way to improve living conditions for the occupants of the settlements, most of whom are poor, and to give them more options to improve their livelihoods. Field coordination in the settlements of an integrated set of social programs—the centerpiece of these efforts—enhances efficiency in providing social services as well as their impact on specific beneficiary groups and populations.

NUPs represent a change in the approach to and action taken in addressing the problem of informal urban development. They are in situ urbanization programs that take advantage of the investments the residents have already made in their housing solutions, and emphasize community participation in the execution of public operations. Neighborhood upgrading programs were initially aimed at providing urban services and infrastructure to offer minimum conditions of hygiene and to regularize land tenure. These programs now include components that address the most urgent social needs (services targeting vulnerable groups, childcare centers, etc.), as they have become mechanisms for establishment of different social action strategies. This evolution has led to the definition of the present characteristics of these programs, which include:

- Integration of the informal city into the formal one by balancing the level of services between rich and poor neighborhoods; this implies providing a minimum package of infrastructure investments enabling a qualitative leap to be made in urban conditions of the neighborhood;
- Provision of social services targeting the most vulnerable groups with flexible combinations adapted to the needs of the communities;
- Integral operations, which must cover the most urgent needs of the various sectors of the beneficiary populations; and integrated, coordinated execution of the various components involved;
- Community participation in all phases of the project: project design and execution, as well as maintenance of services.

Latin America and the Caribbean have nearly 20 years of experience in formulation, execution, and assessment of neighborhood upgrading programs, and the IDB has accompanied this evolution from the beginning. In the process, the Bank has acquired privileged knowledge of these programs and their execution, some of which is summarized in this book. The lessons discussed here are derived precisely from experience in design and execution of programs financed by the Bank, which began in Chile during the early 1980s, and continued in Colombia,

Brazil, Argentina, and Bolivia, among other countries. It is opportune to share this experience at a time when acknowledgement of the virtues of NUPs has incited world interest, as evidenced in the fact that elimination of irregular settlements has become the focus of the urban strategy defined by the United Nations Centre for Human Settlements (Habitat), which, along with the World Bank, has launched a global campaign entitled "Cities without Slums."

Rationality of neighborhood upgrading programs

The change in approach to the problems of informal settlements from which NUPs are derived results from the discovery that these problems are substantially multi-sectoral and that, accordingly, their solution requires coordinated operations among a number of spheres of public action. Earmarking of public funds to finance the various investments and programs required in this connection can be justified from three complementary and mutually supporting perspectives. Neighborhood upgrading programs can be viewed as: a) components of strategies to fight poverty; b) urban development instruments; and c) important components of housing policies.

As components of strategies to fight poverty, NUPs target a specific territory to reduce inequalities in infrastructure, services, and ownership faced by households located in informal settlements. Most of these households belong to the poorest sectors of society and include many individuals in the most vulnerable groups (children, women heads of household, single mothers, and unemployed youth). All investments executed in NUPs significantly impact the well-being and quality of life of these groups. These positive impacts lead to improved health conditions for the population through investments in sanitation, better access to social services through installation of public services such as health centers, schools, childcare centers, and care centers for vulnerable groups in these neighborhoods. They also increase household wealth owing to the issue of regularized property titles.

NUPs promote an efficient supply of services and effective use of synergies existing between them through coordination in time and space of social programs to reduce poverty (such as health and education) and environmental and social vulnerability (such as urban public safety, prevention of drug use, etc.). The Bank's experience indicates that the results of these integrated operations are virtually immediate and are reflected in improved health indicators; better housing through the resident's own efforts or mutual assistance among households; and reduced vulnerability of the beneficiary population. The high spatial concentration of poor households in informal settlements is a factor in making NUPs effective instruments in targeting public social expenditure towards populations having the greatest needs. In summary, these programs constitute a practical form of addressing this aspect of the problem of poverty, which affects a substantial proportion of the urban population in the region.

As urban development instruments, NUPs help solve problems relating to the physical and social segregation faced by residents of informal settlements, such as the discontinuity of street systems and urban services. These programs therefore aim to reduce inequalities in the availability of services between different areas of the city—or to integrate the informal city into the formal one through expansion of

transportation systems, street systems, and urban services such as public lighting and waste collection. This integration has positive effects on the entire city, manifested in increased coverage of basic urban services and greater access to social services. This leads not only to reduced urban maintenance expenditure—it also increases the value of properties adjoining the informal settlements, enhances public safety, and improves health and other indicators. For this reason, NUPs are becoming an increasing priority for urban development agencies in many cities that are not satisfied with great social and infrastructure inequality in their jurisdiction.

As important elements of housing policy, NUPs complement public actions to promote housing solutions accessible to the lowest-income households. The concern is to improve living conditions of families already established in the cities, despite the infrastructure deficits and insecure tenure that they face. In the context of a broad, coherent housing finance system, NUPs help improve the available housing solutions, and particularly, those used by poorer households that do not have access to credit for formal housing. The water, sanitation, street, and public lighting infrastructure provided by NUPs is part of the package of housing services that households could not access on their own. These investments, combined with support for regularization of land tenure, are both complementary and promote investments made by households to improve their homes. In terms of expenditure efficiency, public subsidies for provision of infrastructure and regularization of land tenure leverage the investments made by the beneficiary households, expanding the total resources invested in the social housing sector.

Objectives of neighborhood upgrading programs

The central objectives of NUPs have varied over time, reflecting changes in the focus of solutions to the problems of marginality described above, and the learning process derived from program execution. Change has occurred as the objectives pursued in the process of solving the problems of informal settlements have become more ambitious and integral, as we shall observe in the annex to this book, which summarizes case studies of programs financed by the Bank in Chile, Colombia, Argentina, Brazil, and Bolivia.

NUPs initially focused on solving issues such as basic sanitation and land tenure (as in the initial programs financed in Chile during the 1980s), and gradually began to stress the integral improvement of the living conditions of the beneficiaries, community participation in definition of investments, and improved management of local urban services. Argentina's program, for example, uses the process of design, execution, and implementation of the physical works for improving the settlements as an opportunity to promote the organization of the community, its participation in collective efforts, and its integration into government social action.

An important landmark in this process has been the incorporation of social services into NUPs, as is true for Brazil's programs. Their objectives include improving the urban environment by increasing the supply of basic infrastructure—making social services available to the population living in informal settlements and irregular subdivisions. This approach aims to transform the urban landscape, alleviate the effects of poverty, democratize access to basic services, and reduce the problems of urban marginality. To the extent that it aims to implement

Table 2.1. Components of neighborhood upgrading programs

PROGRAM COMPONENTS	Chile NUP (1990-95)	Colombia MVE (1995)	Argentina PROMEBA (1996)	Brazil PROAP (1995)	Brazil PBV (1996)	Brazil HBB (1998)	Bolivia SMB (1998)	Brazil PROAP II (2000)
INFRASTRUCTURE								
Drinking water	■	■	■	■	■	■	■	■
Sewerage	■	■	■	■	■	■	■	■
Storm drainage			■	■	■	■		■
Street system	■	■	■	■	■	■	■	■
Public lighting	■		■	■	■	■		■
Electricity	■	■	■				■	
URBAN SERVICES								
Trash collection				■	■	■		■
HOUSING SOLUTIONS								
Sanitary modules or units	■	■	■				■	
Improvement of housing		■						
Resettlement				■	■	■	■	■
SOCIAL FACILITIES AND SERVICES								
Community areas and services			■	■	■	■	■	■
Public plazas and sports fields			■	■	■	■	■	■
Health centers			■	■	■	■		■
Services for vulnerable groups (*)				■	■	■		■
Health posts			■	■	■	■		■
Job creation and income generation			■	■	■	■		■
ENVIRONMENT								
Replanting of trees and forestation			■	■			■	■
Recycling and environmental mitigation			■				■	■
REGULARIZATION OF PROPERTIES								
Codification of land use				■				■
Regularization/issue of titles	■	■	■	■			■	■
COMMUNITY DEVELOPMENT								
Hygiene and environmental education			■	■	■			■
Promotion of community organization			■		■	■	■	

(*) Miscellaneous social services defined on the basis of needs expressed by the community.

Abbreviations:

NUP: Neighborhood upgrading programs, Chile.
MVE: Program to improve housing and environment – social protection network, Colombia.
PROAP I and II: Favela-Bairro Program to regularize popular settlements, phases I and II, Río de Janeiro, Brazil.
PROMEBA: National neighborhood upgrading program, Argentina.
PBV: Baixada Viva/Nova Baixada program, state government, Brazil.
SMB: Housing sector reform program, neighborhood upgrading subprogram, Bolivia.
HBB: Habitar Brasil program, federal government, Brazil.

innovative, participative processes involving the beneficiaries as well as the local authorities, efficient management of urban services also constitutes an increasing concern.

Accordingly, the *Baixada Viva/Nova Baixada* program introduced a decentralized urban management model, with greater community participation in the supervision of public services. The objectives and implementation methods of the more recent programs (such as *Favela-Bairro II*) aim to integrate the informal city with the formal one to meet the needs of vulnerable groups, and to promote income-generating initiatives. These additional goals arose from consultations with the beneficiary population during the first phase of the program, and constituted an important lesson on the priorities of the communities in marginal settlements.

The evolution of NUP objectives can be observed in the diversification of their components, as shown in Table 2.1.

WHERE SHOULD RESOURCES BE INVESTED?

In keeping with the many objectives pursued under NUPs, project resources are earmarked for three types of investment:

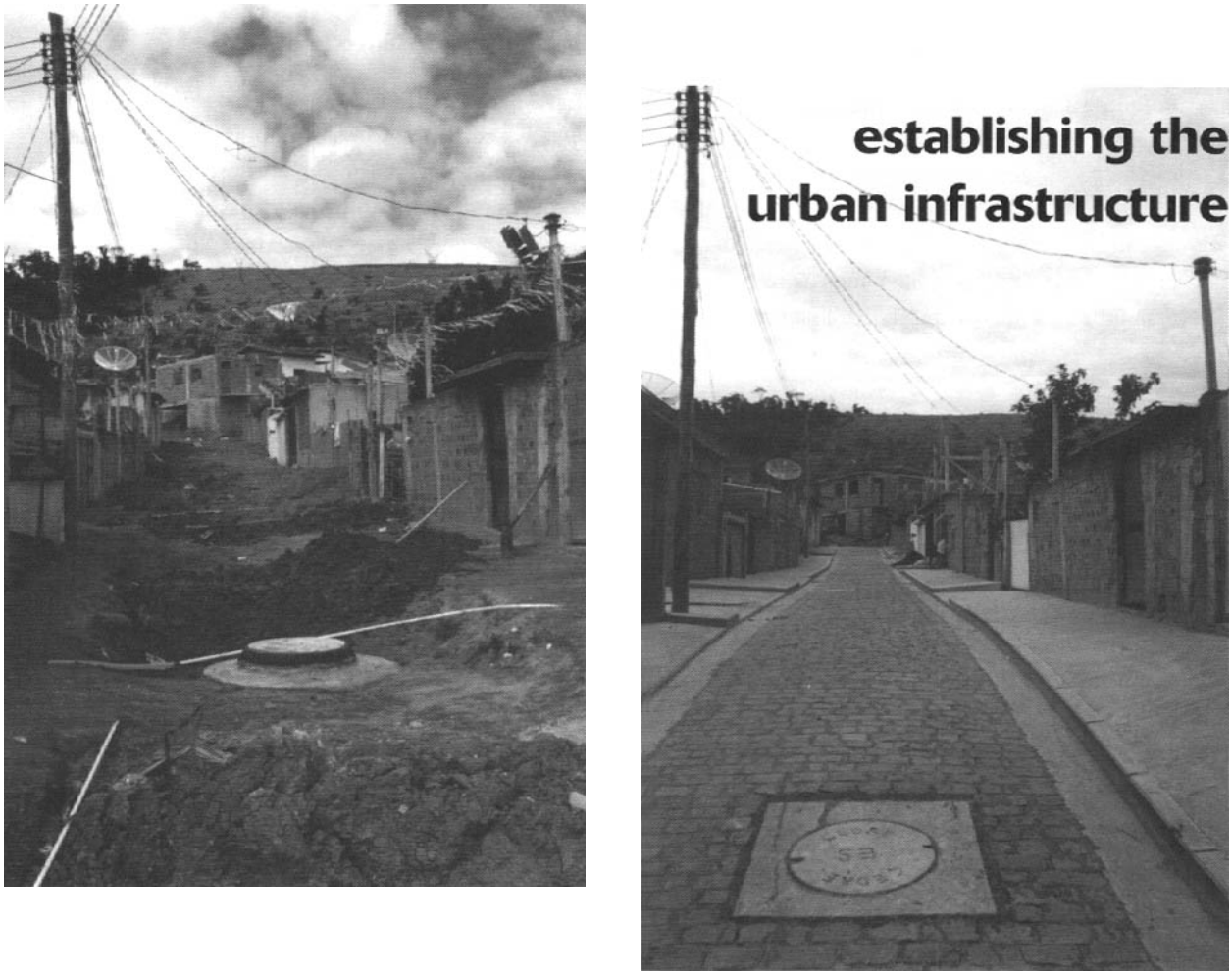
- Facilities and services designed to improve the living conditions of the beneficiary population, including the sanitary infrastructure (drinking water and wastewater disposal), storm drainage, public roads, lighting, and electrification;
- Social services that complement physical investment to meet the needs of the most vulnerable population groups in the settlements, including social infrastructure such as childcare centers, health centers, primary schools, and social centers; and social programs (occupational training, rehabilitation, disease prevention, birth control, support for single mothers, etc.);
- Actions to support execution of programs designed to improve effectiveness and ensure sustainability over time, including preventive activities in informal settlements, institution building in the executing agencies, preparation of urbanization projects in the areas of engineering and architecture, and communication and extension campaigns for projects.

Below is a discussion of the most prominent features of the key components of these programs, so that lessons can be drawn from analysis of project execution.

Infrastructure facilities

Infrastructure facilities are the most tangible operations that NUPs entail, and require the most investment resources. A basic package of facilities applicable to all projects in a program is used as a point of departure to define a package of works for each neighborhood, with the objective of guaranteeing an equitable minimum level of benefits for all neighborhoods. This package is defined with reference to the urban facilities and infrastructure that would be required to legalize the division of the property. Since urban planning standards generally require substantial investments in infrastructure (for example, streets suitable for all types of vehicle traffic), less stringent urban development standards, adapted to the socioeconomic characteristics of the neighborhood, should be agreed upon with the regulatory authority. Such arrangements, for example, could permit narrower transit roads, smaller lots and less space reserved for public spaces, etc.

The function of the minimum package is to ensure an equitable distribution of benefits by establishing a minimum quality of urbanization as cost parameters similar in all neighborhoods benefiting from the program. The package normally includes a) **potable water systems**; b) **wastewater disposal systems** (ranging from individual solutions to construction of sewer systems and their connection to wastewater treatment systems, depending on conditions in



Mato Alto, before and after.

the neighborhood); c) **storm drainage** (ranging from surface systems to regular networks); d) **street works** (ranging from the construction of drainage channels and gutters to sidewalks, steps, and paving of roadways); e) **electrification** (generally regularization of clandestine connections); f) **public lighting**; and g) **parks for recreation and sports.** Depending on the needs, other infrastructure facilities are added, particularly with a view to reducing environmental risks to which the settlements are exposed.

Some projects require complementary investments that make the construction of infrastructure in the neighborhoods possible, though they are executed outside of the neighborhood and benefit the surrounding areas as well. Examples of such investments are wastewater collectors; pumping and treatment stations that remove wastewater from the neighborhood and adjacent areas; expansion of treatment plants, storage ponds, and trunk systems to distribute potable water to upgrade the supply to the settlement and to other sectors; access ways to neighborhoods to facilitate urbanization of intermediate areas; and health facilities with capacity to service larger communities. Maintenance of investments in potable water and wastewater removal facilities are the responsibility of the appropriate utility companies. To ensure that the facilities are maintained in an

Box 2.1. Trash collection system for the Favela-Bairro program

In Rio de Janeiro, urban services provided in the favelas have been adapted to their special topography and access conditions. Trash is collected using mini plastic containers easily transported from areas near the residences to collection centers located at strategic points in the communities. These points are equipped with compacters, which are replaced every two to three days by the municipal urban waste management company.

Residents of the favelas collect trash under contract with the community association. This contracting model could be adapted to activities such as community reforestation, street cleaning, park maintenance, and in general, urban maintenance services that require unskilled labor and minimal supervision.

adequate and timely manner, agreements must be signed with these companies specifying the conditions for the handover of the infrastructure financed by the programs, and the operation and maintenance responsibilities that they will assume.

The specific mix of infrastructure components is generally defined with participation of the community, subject to a cost limit per beneficiary household. These limits are determined on the basis of a cost-benefit analysis and the budget restrictions to which the programs are subject. In the IDB's experience, the community's contribution has been important in defining the location of community facilities and recreation areas, and the size and plan of public streets, which require adjustments to the limits of the properties, and some resettlement of households.

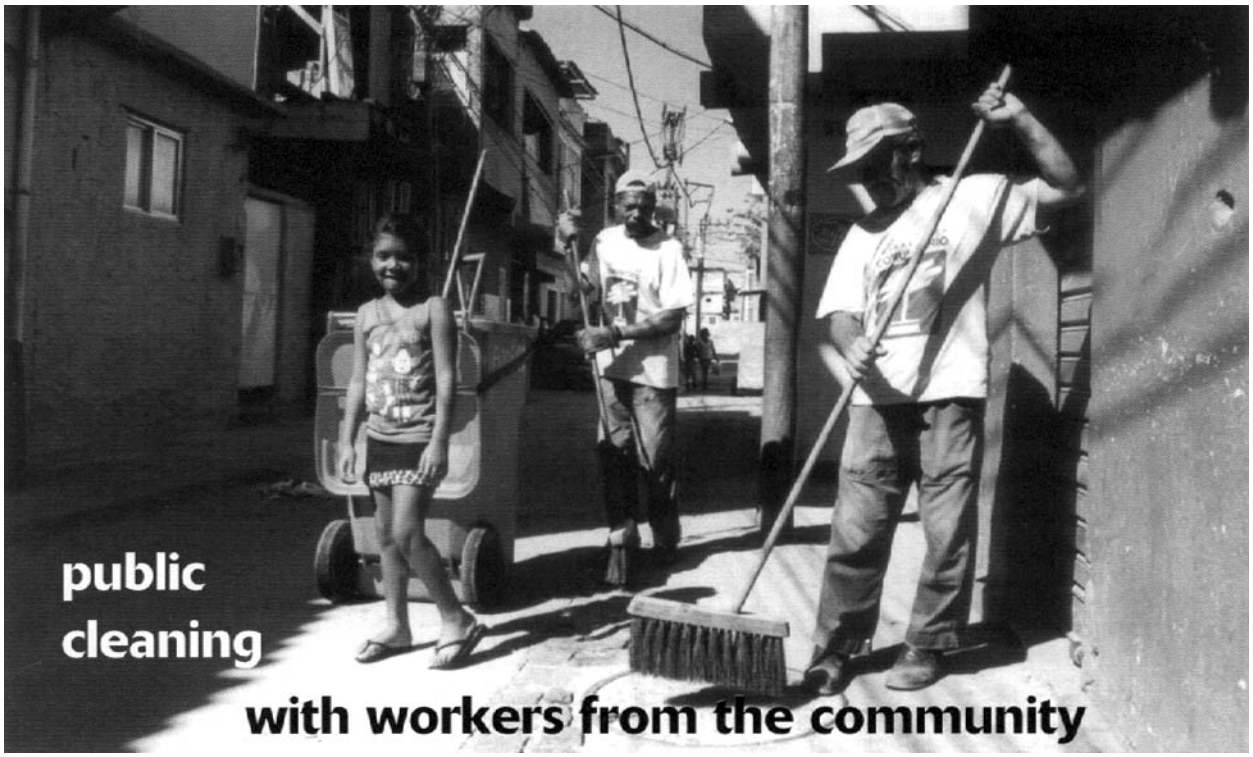
Urban services

The most critical urban service is, without doubt, collection of solid waste—a recurrent problem in informal settlements. NUPs generally finance construction of works for solid waste collection, such as trash collection areas and accumulation containers, from which waste will be periodically removed. Collection systems must frequently be adapted to special accessibility problems of the settlements (see Table 2.1). Establishment of regular collection must also be accompanied by environmental education activities conducted with active community participation. A crucial factor in safeguarding the benefits derived from NUP investments is the municipal capacity to maintain the completed facilities (such as streets, drainage facilities, plazas, and gardens).

Social facilities and services

Incorporation of social facilities and services into NUPs has been an important step in the process of becoming integral programs consistent with the needs of the communities. There is no predefined package of facilities, and the decision on those to be included in a project will be made according to the specific needs of each settlement, in consultation with the community. There are typically three types of services:

Services designed to address special problems or to meet the needs of specific groups. These services may include construction or refurbishment of the premises required to provide them. Services are provided for vulnerable groups such as infants and children, including early infancy care, childcare centers, and other alternative ap-



Ladeira dos Funcionarios, Rio de Janeiro.

proaches to serving children, youth, and adolescents; school retention and support (through food incentives, family promotion, and sports) and prevention of early pregnancy; for the handicapped; for high-risk families; and for women and other groups at extreme risk, with programs to prevent drug addiction, prostitution, domestic violence, etc. Experience with programs supported by the Bank shows that contracting the civil society organizations and supplementing their own financing with resources from the regular budget of the responsible government agencies is an effective approach to providing these services.

Social and community facilities normally include childcare centers, community centers, athletic fields, public plazas, recreational parks, primary health facilities (clinics or emergency facilities), and schools. A basic concern in connection with the inclusion of community facilities is to ensure that they are properly operated and maintained (see Chapter III).

Generation of employment and income. This category includes initiatives designed to enhance community income through programs such as occupational training and development and support of small enterprises and businesses. Programs that have produced the best results include specialized training, scholarships for specific job-training, technical assistance for self-employed professionals and microentrepreneurs; management support (and eventually credit) for microproducers or productive units; and enhanced education with supplementary adult programs designed to complete formal education, thereby facilitating access to the labor market.

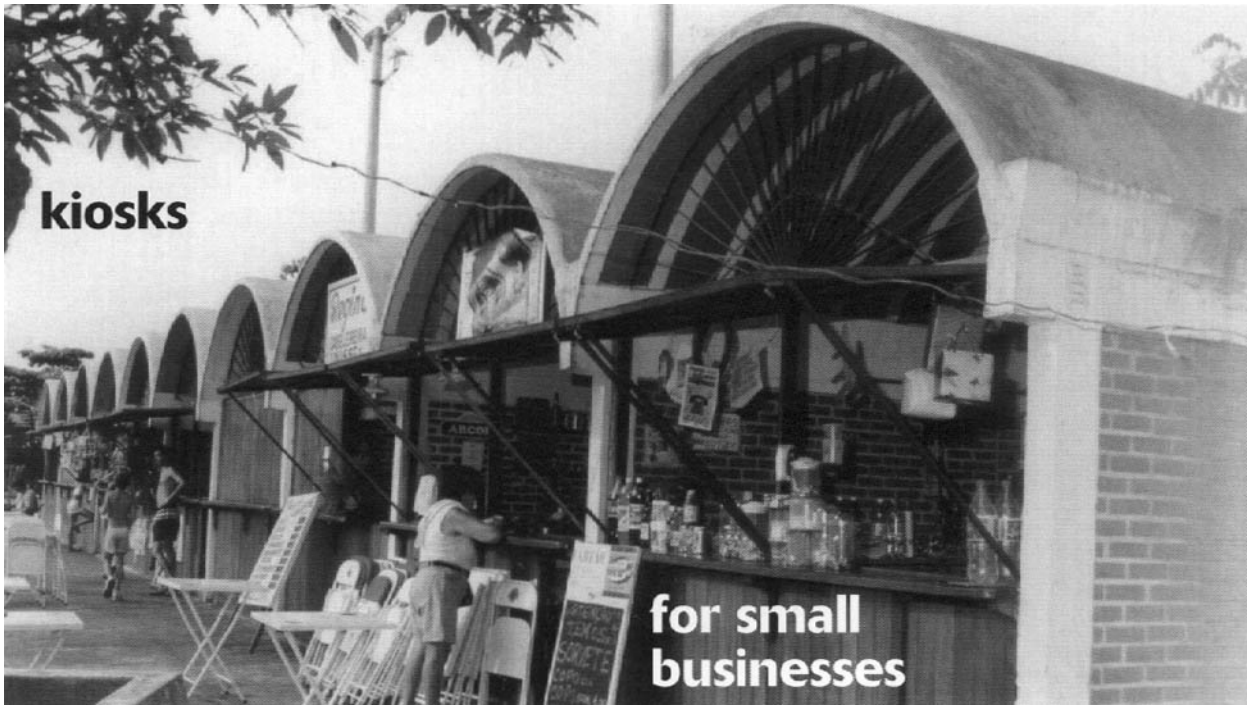
Childcare center, Morro Congonhas.

Community development activities

NUPs place special emphasis on community mobilization and organization, with a view to guaranteeing access to information and education, and active participation in decisions and activities carried out under the program. To promote community participation, programs have community development components, with activities that may include a) community organization through establishment of street and neighborhood committees; b) hygiene and environmental education; and c) training of community leaders and organizations to participate in providing and maintaining the urban and social services introduced into the neighborhoods. Community development is an integral part of the popular participation strategy—a factor that promotes implementation of NUPs and gives them a solid base for sustainability (see discussion below on participative execution strategies).

Providing housing and population resettlement

While the ultimate objective of NUPs is to improve the quality of the environment in which the families live, most programs include activities only partially or indirectly related to supplying new housing. Some programs cover construction of sanitary modules or units to ensure adequate use of potable water services and sanitary wastewater disposal. These structures, with an area of 10 and 20

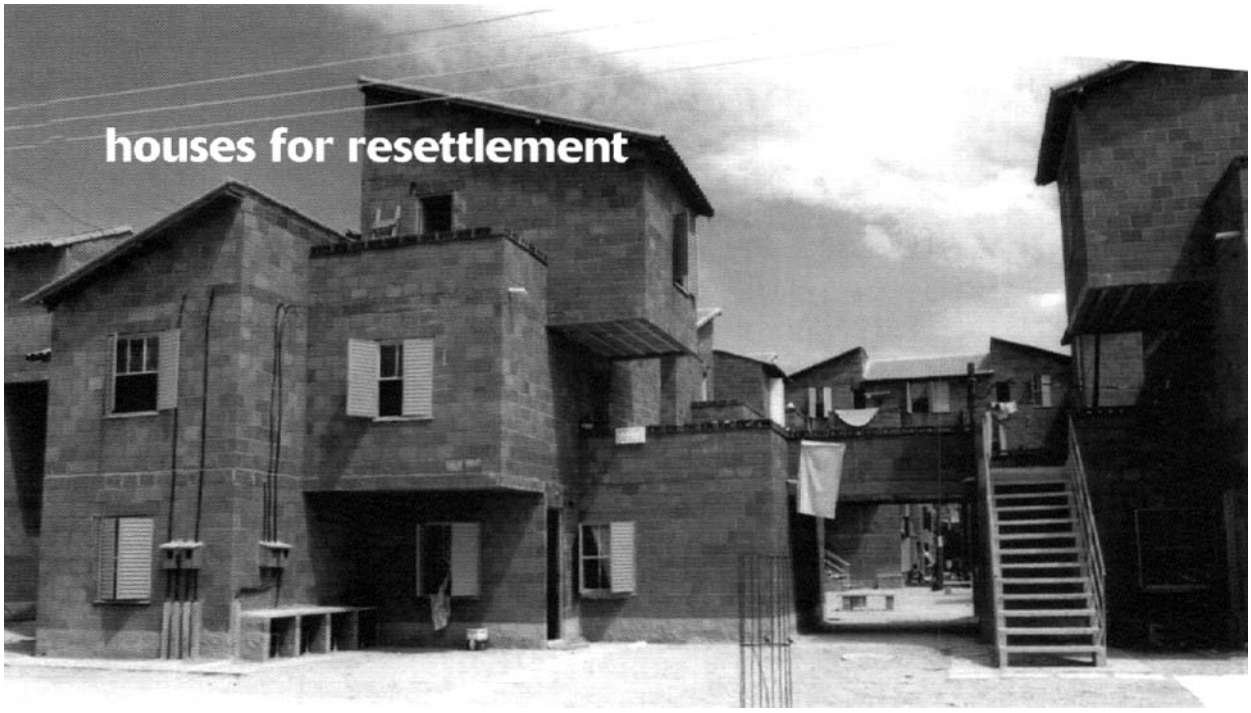


Fernão Cardim, Rio de Janeiro.

square meters, contain a bathroom, sanitary fittings, and connections for kitchen equipment. Other efforts involve technical support and microcredit for gradual home improvement. Construction of new housing, however, is normally a required component to accommodate families who need to be relocated—because their homes must be demolished to expand street facilities or install infrastructure, or because they are located in high-risk areas where alleviation is impossible or costly.

Program design must reflect the fact that the number of households to be relocated has substantial effects on project costs, as the investment for each resettled household far exceeds the investments required for homes receiving an in situ solution. To resettle displaced families, investment is required in construction of minimum housing or acquiring available housing in the same settlement. For cost considerations and to maintain the neighborhood upgrading character of the programs, limits to the number of resettlements involved are commonly established. In programs financed by the IDB, this limit has varied in the range of 5-15 percent of the households in each neighborhood, depending on housing costs and the physical characteristics of the land on which the settlement is located. This limitation promotes the search for more economical urban design solutions, dimensioning of public streets, or use of lots and land in the settlements as homes for existing households.

In Chile's case, for example, it was observed that, to the extent that the NUP progressed in eliminating irregular settlements, the proportion of families resettled increased from less than 5 percent during the initial phases to just under 30 percent in the most recent projects. This increase can be attributed to the fact that the housing of the families assisted in the more recent programs was in considerably worse condition than in the earlier phases, and therefore more relocations were required.



Nova Holanda, Rio de Janeiro.

The resettlement process is a complex one. It is advisable to involve the community directly in identifying and negotiating with the families to be relocated to minimize social tension created in these processes. In addition, for considerations of equity and social protection, the possibility should be considered of offering the families housing solutions in the new location that are better than or equal to their present situations. [2]

Alleviating environmental risks

As a result of the location of informal settlements (sloped areas, riverbanks, or areas prone to flooding), the negative impact they have often had on the environment (contamination of waterways with solid and liquid waste, destruction of vegetation, and erosion) and the risks that such environmental impacts create for the occupants, environmental protection and mitigation activities are often required. These activities include stabilization and forestation of hillsides to prevent landslides, construction of antiflooding structures, and treatment of sanitary landfills and dumps in disuse. Investments to mitigate risks receive high priority and generate extremely positive effects on the environment. As in the case of resettlements, however, neighborhood upgrading programs must define limits for investment in environmental prevention and mitigation, as the costs involved can be quite high. The aim is to earmark sufficient resources to complete the required works, without making them the main focus or goal of the resources. The eligibility criteria are adjusted to reflect the budget restrictions involved, so that the settlements selected for improvement and consolidation are economically feasible. As explained

[2] The Inter-American Development Bank has a specific policy and operational guidelines applicable to cases that cause involuntary resettlement (Document IND96-101, December 1996).

below, while it is always technically possible to solve the most difficult situations, there is a specific expenditure limit per beneficiary that determines the point to which it is economical and socially feasible to carry out the project.

Regularization of ownership

Although regularization of ownership is a central component of NUPs, it is also one of the most difficult to execute. Technical and legal assistance are generally provided under the programs to regularize the land on which the neighborhood is located, followed by registration and legalization of the individual lots in the name of the beneficiaries. The complexity of the task varies depending on the specific situation of each neighborhood. It normally includes some or all of the following stages, depending on the case: a) title search on the property; b) acquisition of the property if it is not owned by the municipality or another agency related to the program that is prepared to transfer ownership to the beneficiaries; c) preparation of land cadastral plans, urban planning documents, and other technical instruments required to subdivide the land; d) preparation and approval of the subdivision project, including definition of public areas (streets and plazas), transfer of land for community facilities, and definition of individual lots; e) obtaining individual records to identify the lots for property register and tax purposes; f) issue of individual property titles in the name of the beneficiaries; and g) recording of the titles with the appropriate ownership entitlement registers.

Many of these phases can entail obstacles that extend the period required to execute this project component. For example, when settlements to be established occupy publicly owned property, in many cases a request must be filed with the legislative branch to approve the transfer to the beneficiaries. When the land is privately owned, the executing agencies frequently must acquire the land under eminent domain, which can lengthen the time required to gain possession of the land, and can also bid up the price.

Preventing proliferation of informal settlements

The central focus of physical improvement—delivery of services and regularization of land tenure in the neighborhoods involved—should be complemented with policies and interventions designed to effectively prevent proliferation of informal settlements. The potential risk that solving the problems of such settlements will stimulate occupation of land and development of illegal subdivisions in other parts of the city is always present (see Box 3.4). This is true because the official solution to infrastructure and service deficits, as well as the issue of ownership titles, may encourage other communities to consider illegal subdivision and land occupation as a strategy to solve their housing problems.

Activities aimed at preventing establishment of irregular settlements can vary substantially and involve many institutional players. The best preventive mechanism is an effective housing sector that offers solutions affordable to families at all income levels. Housing sector reform to achieve these objectives is a complex process that requires action on many fronts and generally takes substantial time. Restrictions impeding the financial markets and preventing public housing agencies from efficiently providing the financing that households need in order to acquire or improve their dwellings must be removed.

Table 2.2 Strategies to prevent irregular settlements—Uruguay

Objectives	Measures
Increase supply of land suitable for urbanization	- Revise municipal territorial organization plans - Adopt special legislation for low-income subdivisions
Reduce land and construction costs	- Simplify municipal procedures - Increase efficiency and competitiveness of the construction industry
Increase supply of low-cost housing solutions	- Expand social housing policy (subsidies for neighborhood improvement) - Intensify construction of evolutive basic units (Núcleos Básicos Evolutivos)

It follows that there is a need to design and execute measures to activate the various subcomponents of the housing market, including the rental market, and to provide incentives to offer new housing to the low-income population. One of the necessary conditions to achieve such a housing sector is the fluid operation of land markets through which land required for different urban activities is offered at reasonable prices.

One of the restrictions to the supply of land at prices affordable to poor households is the scarcity of legally urbanizable land, as a result of the absence of sanitation and street infrastructure, or owing to the existence of regulations on use and occupation that apply excessive restrictions or that bid up the price of available land that is duly legalized. For this reason, measures to prevent informal settlements include investments in public infrastructure that promote expansion of areas suitable for urbanization, as well as the revision of national and local legislation governing use and subdivision of urban land, to ease the standards for land division and allow the gradual provision of urban services and infrastructure in subdivisions for residential use.

As discussed in the preceding chapter, if we consider the problem of informal urbanization as an imbalance between supply and demand for land and housing for the low-income population, we must look for mechanisms to lower the barriers to entry to the formal market for such properties. The following goals and measures are commonly adopted to that end:

- Increase supply and decrease costs of urban land and housing (through investment in trunk infrastructure and revision of laws on land use and urban zone limits, as well as increased financing for low-income housing);
- Adapt standards and simplify procedures for land development (through less stringent requirements for approval of land division, streamlined procedures for approval of subdivisions, and legalization of irregularly subdivided land);
- Reduce construction costs (through less stringent construction requirements and by stimulating competition among urban developers).

Most recent neighborhood upgrading programs have included measures designed to address the problem of proliferation of informal settlements, including actions to relax standards, and strategic investments to increase the

Box 2.2. PEMAS-Brazil

One of the most innovative components of the Habitar Brasil housing program is preparation of municipal strategic plans for subnormal settlements (PEMAS). PEMAS are the instrument used by Habitar Brasil BID (HBB) to encourage municipalities to focus their concerns on urban policy matters related to the problem of informal settlements in their jurisdiction. PEMAS include the following elements:

- Preparation of a diagnostic study of the municipality's institutional capacity in the urban sector;
- Preparation of a matrix that contains urban and housing policies and programs, particularly addressing informal settlements; a planning and management module in which informal settlements in the municipality are ranked and a strategy is defined to address them; and urban planning regulation measures including urbanization and construction standards to promote the supply of low-cost housing;
- Definition of development activities to achieve the objectives and goals provided under the PEMAS: coordination of municipal activities, changes in policies and programs, simplification of procedures, and implementation of control and oversight mechanisms.

supply of housing solutions for low-income households (see Table 2.2).

In most countries, the municipal governments have the authority and the regulatory instruments at their disposal to achieve most of these objectives. Under the integral focus, then, an urban and social development strategy must be established at the grassroots level, with a long-term horizon that includes revision of legal instruments and bureaucratic procedures, along with a program of investments in neighborhood upgrading projects.

Some programs supported by the Bank include preparation of strategic municipal plans for a broad, coherent approach to the problem of informal settlements (see Box 2.2). Formulation of these strategic plans requires a diagnosis of the local situation to orient more effective strategies and mechanisms to prevent expansion of irregular settlements. Possible options include modernization of urban planning instruments as discussed above, as well as training and strengthening of municipal technical staff in areas related to urban management and oversight to avoid proliferation of irregular subdivisions and new irregular settlements.

Monitoring and assessment

The monitoring of results achieved in implementing specific projects is an important mechanism of feedback for decision making during the process itself. To that end, physical and financial monitoring systems must be implemented to generate information on each project being executed.

Program *assessment* aims to determine the cost-benefit ratio, social impact, and sustainability of the actions carried out under the programs. To that end, field surveys among the beneficiaries are used before and after implementation of projects in each settlement. Comparisons are ideally made with the situation in areas not benefiting from the project in order to assess comparative impacts.)

The most common impact and process indicators measure satisfaction of users and residents with the services; accessibility to urban and community services; labor market reintegration rates; success of training programs designed to generate income; and school retention and performance for children benefiting from social programs.

ALLOCATION OF RESOURCES AND SELECTION OF NEIGHBORHOODS

The origin of resources: problems of efficiency and equity

As we shall discuss below in the section on the organization of NUPs, the municipalities play a central role in effective project execution. It is frequently the municipalities that finance the investments, while in other cases they receive resources from other levels of government to finance all or part of the programs. The origin of resources and procedures used to transfer them to the executing agencies generate different types of incentives that impact the efficiency and equity with which they are invested.

When municipalities finance neighborhood improvement investments with their own resources, there is strong incentive to use them efficiently, as they aim to assist as many families as possible with local, and generally limited, funds. Cost-efficiency analysis and economic cost-benefit analysis of projects enable the authorities to determine the optimal amounts of investments per beneficiary. The other problem consists of defining investment priorities—the order in which the settlements in the locality will be addressed, as there will never be sufficient resources to solve the problem in the short term. As we shall observe below, this exercise in prioritization requires the use of technical criteria to select the settlements, reflecting factors such as urgency of needs, number of beneficiary families per project (cost efficiency of the investment) and the effort of the community itself in contributing to project execution.

The problem of allocation becomes more complex when all or part of the financing comes from other levels of government. Mindful of the effectiveness of NUPs in alleviating poverty problems, many national or subnational administrations are interested in financing these projects through municipalities or specialized agencies. Transfers between levels of government are justified as effective mechanisms in offsetting horizontal imbalances in resources resulting from the spatial concentration of poor households in certain municipalities, and as effective mechanisms to encourage municipalities to earmark their own resources to this type of program. The former case involves specifically targeted transfers that generally finance all investments; the latter case involves transfers contingent on allocation of counterpart funds by the beneficiary municipality. In both cases, resources must be allocated among competitive projects as efficiently and equitably as possible.

Where should the investments be made?

The end objective of an NUP is to completely solve the informal settlement problems of a given territorial jurisdiction. Priorities must be defined,

however, in light of limited resources. From the standpoint of equity, the central objective of the distribution of funds and selection of beneficiary neighborhoods for a program is to target low-income households. There are different ways to reach this objective, depending on whether national or municipal programs are involved. Where national programs are concerned, the regional allocation of resources is the decision through which NUPs help reduce territorial inequalities. When financing with contingent transfers is involved, an additional objective for resource allocation is to maximize leverage of local funds, which involves adopting incentives for cofinancing of investments. These considerations do not apply to municipal programs, in which urban development strategy and community participation incentives decisively influence the allocation of funds.

Resource allocation criteria are intended to direct resources to the poorest regions, to the lowest-income populations within them, and to neighborhoods where infrastructure and service shortages are greatest. Regardless of the criteria used, and to balance the benefits among the participants in the same program, resource allocation methods must result in equivalent allocations per capita or per beneficiary household for all neighborhoods.

The IDB's widely varied experience in resource distribution under NUPs can be broken down as follows, depending on the level of government financing the programs:

Allocation of resources among regions or municipalities. As indicated above, distribution of funds among the various regions or municipalities that are potentially eligible is one of the most important strategic decisions to be taken in programs financed by the national or regional level. For this level of government, the considerations in terms of horizontal equity—the distribution of funds in proportion to the relative poverty of each region—are quite important. Another equally critical factor is to encourage local efforts to finance programs, making it possible to expand the pool of available resources and to reach more beneficiaries. For that purpose, two types of resource allocation methods—by formula and by competition—have been used. These approaches can be combined to achieve the objectives of equity and local mobilization of resources.

- Allocation by *formula* aims to incorporate factors reflecting the situation of the region or municipality according to poverty indicators (such as the percentage of the population with unmet basic needs) and with relation to the other regions (see Box 2.3). The formula is used to identify the amount allocated to each region or department, within which specific neighborhoods are then selected. This selection can be made using criteria on poverty and infrastructure deficits as indicated below.
- In *competitive allocation*—in which the eligible neighborhoods presented by their regional or municipal governments compete for resources—the key factor is local effort. This effort may be expressed in terms of counterpart resources for the project provided by the community or local government. In such competitive processes, the minimum eligibility criteria (such as minimum income level, infrastructure deficits, etc.) must first be established as a basis for preparing profiles on the projects that will be competing. It is therefore essential for the program to be widely publicized and for the selection process to be

Box 2.3. Distribution of funds by formula

The formula adopted by Bolivia's Neighborhood Upgrading Program to allocate funds among the country's nine departments substantially weights the most needy population in each department (population with unmet basic needs-UBN) against the country's population with UBN, and compares this proportion with the percentage of the national population living in the department. The following formula is used:

$$CD_i = \left(\frac{PUBN_i}{PUBN_i} + \frac{PUBN_i}{PD_i}\right) / \Sigma \left(\frac{PUBNI_i}{PUBN_i} + \frac{PUBN}{PD_i}\right)$$

in which Cd_i designates funds located to Department i; PUBN designates the total population of the department with UBN; $PUBNI_i$ designates the total population of the country with UBN; PD_i designates the total population of the department; and UBN designates unmet basic needs.

transparent, to ensure that all participants have equal access to the programs.

Local allocation/Hierarchy of settlements. When addressing demands for scarce resources within the same city, technical criteria must be established along with a transparent process for selecting the neighborhoods to be targeted by the investments. The most commonly used criteria are those that establish linkages between needs (relative poverty) and the efficiency of the investment as a function of costs. The criterion of need or poverty reflects the social situation of households in each settlement. The best indicators are those with the highest coverage of the population, allowing for greater precision in the identification of low-income groups. These include indicators generated through household censuses or surveys. Among the most widely used indicators used as proxies for poverty are the percentage of mothers who are heads of household and the proportion of households living in dwellings that are unstable or that are found to have high overcrowding indices. While household income or unmet basic needs indicators—possibly the most objective data to reflect poverty situations—are useful, they are hardly available at a level of disaggregation needed at the neighborhood level. The criterion of efficiency reflects the number of families benefited per unit of investment. In this case, the resource allocation criterion gives priority to settlements where the cost per household is lower in order to maximize the number of beneficiary households. To apply this criterion, project promoters must prepare reliable estimates on the investment resources required to execute the minimum package of facilities and services covered in the program, for specific neighborhoods, and use surveys to determine the number of beneficiary families.

A combination of poverty targeting and cost-efficiency criteria are used to devise a rating system to assist in defining priorities. These figures should be computed for all eligible settlements to establish each settlement's position in the hierarchy of priorities. There is an inverse relationship between these factors, since neighborhoods with higher poverty indices generally require higher investment costs per family for improvement. This is true because the poorest

Box 2.4. Resource allocation in national programs

- The management model for Colombia's Social Solidarity Network uses two types of targeting criteria: geography and population. The geographic targeting assigns budget ceilings at the departmental and municipal levels based on the population in poverty (assessed using unmet basic needs) and the vulnerable population (age, gender, and other characteristics). This information by municipality is used to distribute 70 percent of the program resources, and the remaining 30 percent is left to address special cases. The population targeting identifies neighborhoods, communities, families, and/or beneficiaries of network programs, depending on the features of each project.
- In Argentina's case, provincial executing agencies identify projects with technical support from the national control unit, in consultation with the beneficiary communities. In this case, it is important to point out that federal government resources cover 70 percent of project costs (non-reimbursable transfers to the provinces) and the remaining 30 percent must be paid by the provinces.
- In Bolivia's case, resources are distributed annually with the establishment of departmental quotas using a formula that favors regions with higher UBN levels and gives priority to departments with substantial numbers or percentages of the population with unmet basic needs.

settlements are unfavorably situated and require more investments than older settlements in relatively better condition.

How should the neighborhoods to be urbanized be selected?

The assignment of resources to jurisdictions and the prioritization of neighborhoods are only a part of the process of identifying the neighborhood to be included in a program.

The selection of settlements to be urbanized, among the many that are potentially eligible and that appear to be equally lacking in support, is a crucial factor in designing NUPs. A transparent selection process, based on technical criteria clearly understood by all interested parties, must be used. In formulating these criteria, it is important to consider, in the beginning, that urbanization is not feasible in all informal neighborhoods. In some situations, establishment of settlements at the sites where they developed is not feasible—for environmental, economic, legal, or other reasons. It is important to bear in mind that programs have specific objectives—related to fighting poverty, urban development, reducing violence, or other factors—and that these aims will affect the weight assigned to the adopted selection criteria.

For a systematic approach to this issue, it is useful to develop *technical eligibility criteria* that define the preconditions to be met by settlements in order to participate in the programs. The main function of these criteria is to protect the principles of social targeting of the programs and to ensure that a high-quality technical solution is implemented. Both types of requirements aim to guarantee proper use of resources—in terms of the feasibility of the interventions and the quality of the technical solutions used for each investment component. The dimensions to be reflected in the technical eligibility criteria for projects are specified below.

Social targeting involves criteria that identify the socioeconomic features of the resident households in the settlements or the physical characteristics that identify them as deficient. The most common criterion is to establish a maximum income level applicable to most households in the settlements. As these data are normally difficult to obtain, proxy variables such as the neighborhood's sanitary infrastructure deficit or other poverty indicators are generally used. This eligibility criterion aims to direct investments, and the subsidies that they entail, to the populations that live in the worst conditions within the universe of eligible neighborhoods.

Environmental factors. Environmental eligibility criteria serve a number of purposes. First, they ensure that the investments made do not adversely affect the environment (for example, by increasing levels of untreated wastewater discharged into saturated waterways). Second, they ensure that there will be no environmental risks to neighborhood residents after the investments have been made. It is necessary to ensure that the neighborhoods to be regularized are not located in critical natural risk areas (such as those prone to landslides or flooding), or, if such risks are present, that they can be mitigated by the project. A third function of the criteria is to ensure that the cost of alleviating environmental vulnerability is the minimum essential level and falls within the cost parameters defined per family. Neighborhoods should not be located in zones having completely incompatible uses, such as archeological areas, cultural or tourist reserves, industrial areas, ecological or forest preserves, or cultural preservation areas. Relocation should be considered for neighborhoods located in these type of areas.

Legal elegibility criteria. These criteria aim to ensure feasibility with regard to obtaining legal possession of the land and the ultimate transfer of ownership of the lots to the beneficiary households. From this standpoint, it should be verified that the neighborhood is not located in disputed areas. Should this be the case, the problem must be solved by negotiation with the owners before the physical investments are made. In most cases, however, such settlements are located on public land, or on land that has been occupied for many years without opposition from the owners, or are unfinished, informal tenure subdivisions. Such situations can be solved through regularization activities carried out with program financing. In any case, the municipality must approve a plan to urbanize the neighborhood before the works are executed, to ensure that the areas in question are officially acknowledged as public or community use areas.

Urban development. Urban criteria are intended to ensure that neighborhoods can be fully incorporated into the local urban system. Urban development considerations recommend the exclusion of settlements located too far from existing water, sewer, and electricity systems. Otherwise, a local solution to provide water and wastewater treatment services at a reasonable cost per beneficiary household must exist. Another important factor is the demographic density of the neighborhoods, measured by the percentage of occupied lots. This factor is used as a selection criterion to give priority to the most consolidated areas, where the investments generate the greater social impact. Cases of settlements located in land zoned as unsuitable for construction, areas reserved for community use or public facilities, and settlements too isolated from the existing urban fabric whose regularization would promote dis-

deteriorated areas

can be reclaimed

Parque Royal, before and after.

continuous growth in the city, should be restricted, as they entail higher operating costs for the urban system. All of these urban considerations have either the purpose of preserving the common interest (avoiding occupation of areas earmarked for community use) or a technical reason, since the consolidation of settlements in very isolated or inadequate areas increases the costs of investments and maintenance for public services.

Criteria to be used in project design

Technical criteria to be observed by project designers should be adequately defined to ensure that projects reflect the best design practices, the technical requirements of public utilities, and the appropriate urban planning standards.

Technical criteria. The use of strict project design criteria ensure that the proposals reflect the best practices in terms of road engineering, appropriate solutions for sanitation, drainage, etc. The aim is to design projects that meet the standards of public utilities so that, when the works are completed, there are no obstacles for them to taking over the provision of the services and maintenance of the infrastructure. To that end, it is important to require neighborhood upgrading programs to obtain construction permits for the systems prior to the approval of the projects, and to ensure that the public utilities assume responsibility for inspections and final acceptance of the works. Projects must also meet municipal urban planning standards, adapted to the special situation of the settlements involved, to facilitate legalization of subdivisions and regularization of ownership. The spontaneous occupation of the land in such settlements frequently makes full compliance with municipal urban planning standards difficult, requiring negotiation of special standards for neighborhood improvement projects. Commonly, less stringent urban planning specifications—such as narrower streets, irregular layouts, or even footpaths to access residences—are employed, provided that they allow secure access for the residents. Another example is the design of sewer lines running in the back of houses, which characterizes a system known as a "condominium sewer." These are, above all, design criteria intended to orient projects toward minimum cost solutions designed to provide basic quality levels. They are normally included in the methodological guidelines for project preparation, which are an integral part of the execution instruments of a neighborhood upgrading project.

Investment cost per family. It should be made clear to the persons responsible for project design that solutions must entail the minimum cost necessary to meet program requirements. For this reason, technical analysis of projects is always closely linked to the economic feasibility analysis used to determine whether or not the proposed investments yield adequate social returns. Every program establishes average investment parameters per household (or per lot, depending on the case) to ensure an equitable distribution of resources among all neighborhoods and to maximize the number of beneficiaries. The amount of investment is normally calculated on the basis of values determined in initial projects or pilot experiments.[3] Establish-

[3] These costs per household should not include works executed outside of the settlements (required to connect them to existing service systems or transportation systems), which are considered "complementary." These works must be proposed separately, as they also benefit the neighboring settlements.

Table 2.3. Costs of investment per solution (family or lot): example of investment costs per unit adopted in some IDB projects

Country	Program	Maximum cost (in 1998 US dollars)
Colombia	MVE	1,948
Chile	PMB	3,900
Bolivia	SMB	4,200
Argentina	PROMEBA	6,500
Brazil	PROAP	4,500
	HBB	4,000
		Sanitary Module 1,500
	PBV	3,600
Uruguay	PIAI	7,000

ing a maximum cost per household or lot serviced is a sound budget restriction for project designers. This cost is generally determined based on the analysis of the social and economic profitability of the investments to establish the minimum level of investment required to generate the desired social benefits.

Limit on expenditure for relocations. The main objective of neighborhood upgrading programs is to settle households on the land that they occupy. This objective, however, cannot always be achieved for all households in a settlement. In these circumstances, some households must be transferred from their original locations in order to remove them from areas that present environmental risks that cannot be alleviated, to reduce the land occupation density, or to permit construction of infrastructure, community facilities, and public spaces required to incorporate the neighborhood into the formal city. The number of resettlements should be limited as much as possible, as they are socially disruptive and costly. Eligibility criteria commonly include maximum percentages for relocations—generally 5-10 percent of the dwellings in a given settlement. These limits effectively constitute parameters that restrict project design (street width and park areas), given that relocations arise fundamentally from the need to expand internal public areas and reduce environmental risks.

PROGRAM EXECUTION

The integrated and multisectoral nature of NUPs makes their execution one of the greatest challenges. The need to coordinate construction of various types of infrastructure with the provision of social services and community development activities entails complex management problems. It also requires people with diversified technical expertise and significant field coordination efforts. As the work must be carried out in densely occupied neighborhoods, solid relations must be forged with the community to avoid conflicts.

The customary execution period for each NUP is one to two years. Project execution agencies frequently implement a number of projects concurrently, which complicates oversight and monitoring. Last, to fully meet project objectives, interventions are required after the works have been completed, which entails long-term monitoring. All of these activities require solid management capacity on the part of the executing agencies. In this section, we shall discuss some key principles of organization and management, the adoption of which has been an important success factor in neighborhood upgrading projects.

Organization and location of executing units

The institutional location of the units responsible for executing neighborhood upgrading projects and their links with other units—which is a key factor in project design—depends on whether the program is promoted and financed at the national, provincial, or local level. Programs financed at the national or provincial levels help compensate regional inequalities and promote social objectives that are difficult for local governments to finance with their own funds. Owing, however, to the substantially local nature of neighborhood upgrading activities—which range from land use control and other urban development matters to the operation of various urban and social services included in the programs—participation of municipal governments is a basic requirement for program execution. The considerations involved in organizing programs at different levels are presented below.[4]

National programs. Programs financed by the national level of government require an agency to take charge of overall management, which includes allocation of resources among municipalities and technical supervision—but not necessarily in connection with physical execution. The nature and institutional linkages of such agencies tend to vary from country to

[4] The discussion is limited to programs carried out by public sector agencies, as there is little experience with large-scale programs executed entirely by agencies of civil society. While this approach should not be ruled out, as it can generate savings in contracting works and mobilizing resources from the community, incorporation of organizations of civil society is more common for execution of specific project components, and particularly those in the social area.

country, and they are typically situated within a housing, public works, or planning ministry, or within special secretariats or social funds. There are two major themes in programs promoted by agencies of the national government: local participation and intersectoral coordination of investments. It is beneficial for NUP design to use the principle of subsidiarity, which indicates that it is efficient to assign to each level of government the functions for which it has the greatest advantages (in terms of contact with the beneficiaries and economies of scale) while avoiding duplication of tasks carried out at other levels. Accordingly, the national agencies should engage in strategic functions such as distribution and control of funds, technical supervision, and coordination among national and local agencies. Direct project execution (contracting and supervision of works and services) is generally more effectively executed by the local level of government, which is closer to the beneficiaries. When the local government has insufficient technical capacity to carry out some phases or components of a given project, these gaps can be filled through joint action with national or provincial agencies. This approach, however, complicates coordination, since project execution must be integrated at the level of each settlement. The national agencies responsible for the programs must have sufficient authority to ensure coordination.

State or provincial programs. Depending on the size of the country and the government structure (federal or central), the provinces or states may have certain advantages in executing neighborhood upgrading programs requiring direct contact with the communities. In most countries, however, responsibility for urban regulation, local public services (such as urban cleaning) and some of the most relevant social services fall within the realm of the municipal authorities. In this connection, while a program may be managed and financed at the state or provincial level, its execution should also include participation of the municipalities. Joint execution arrangements have proven efficient when the provincial governments are responsible for overall financial and administrative management of programs, while the contracting of works and direct services are optimally handled by the municipalities. This division of tasks can vary depending on the technical capacity of the municipalities. The existing local capacity is often supplemented with technical assistance. Joint execution between a central and local agency is normally formalized in an agreement, where the responsibilities of both parties must be clearly defined. Such agreements establish the financial and technical conditions for submitting and executing projects, counterpart contributions from the municipalities (for example, land for resettlement), their formal obligations in terms of expeditious approval of urbanization plans for the neighborhoods, revision of land use and urbanization policies, conditions for operation of services under their authority, maintenance, etc.

Municipal programs. In programs executed entirely by municipalities, which have responsibility for all (or most) project components, the task of coordination and execution becomes simpler. The management challenges are no less daunting, however, since execution of physical works must be coordinated with social services (functions normally assigned to different units of the municipal structure) and services outside of the municipal scope (such as water and sewerage). The best results have been achieved

when one municipal unit has key responsibility for execution and full control of the program budget. For better coordination among project components, it is advisable to establish technical coordination committees to harmonize the work plans of the different areas involved in project execution.With respect to coordination with external agencies responsible for services included in municipal NUPs, the best practice is to establish joint technical analysis procedures with these entities to faciliate processing of the projects. Such procedures must be formalized through inter-institutional agreements that specify the financial and technical conditions for program execution. In projects carried out by municipalities, a typical example is an agreement between the municipality and the water and sewerage utility company, to establish their responsibilities for project assessment and monitoring, participation in the contracting process, monitoring of the works, and final integration of the works into their systems.

Execution cycle

Execution of a neighborhood upgrading project follows a common general scheme or project cycle (see Box 2.5). This process defines the functions and requirements in terms of organizational resources needed by the executing agencies. These functions can be divided generically into two types: coordination and general administration; and project execution or implementation. Analysis of these functions makes it possible to assess the complexity of the tasks and the technical requirements involved in structuring a program of this type, as we shall observe below.

Coordination functions

Coordination and general supervision includes management of programs and involves securing resources, approval of annual operating plans, preparing progress reports, and overall investment programming. Coordination and general supervision also include external coordination with other public and private agencies in executing complementary components such as social services and other activities not financed directly by the program.

- *Financial administration* encompasses accounting and financial management activities, including account auditing, financial and budget programming, and payment of contractors. For programs financed by the Inter-American Development Bank, this also includes justifying expenditures and funding disbursement requests.
- *Technical analysis of projects.* Projects prepared by specialists from project promoting agencies or consulting firms in architecture and engineering must be assessed by the program's technical unit to ensure that they meet the following requirements: technical (engineering and architecture); finance (works budget, cost per beneficiary); social (design of components, procedures involving the community); environmental; legal (land ownership, urban planning legalization); institutional (technical execution capacity); and economic (cost-benefit analysis). It follows that the executing agency requires specialists in these areas, including among others, sanitary or municipal engineers; urban planners; sociologists; social development experts; and economists. Alternatively, these services may be contracted with consulting firms that take charge of some or all of these tasks under a project management contract.

Box 2.5. The project cycle

a. **Promotion** of the program among eligible communities and municipalities.
b. **Selection of neighborhoods** by formula, competition, or a rating system.
c. **Formulation of preliminary projects**, i.e., contracting of neighborhood urbanization plans to consulting firms.
d. **Community development**, which consists of mobilizing the community and strengthening local leadership and organizations.
e. **Discussion of projects** with the community to select alternatives for design and social services.
f. **Technical analysis and approval** of projects for financing, based on approved preliminary projects.
g. **Execution of projects:**
   - Preparation of final engineering designs;
   - Call for tenders for works and/or supply of goods and consulting services required for project execution;
   - Awarding of contracts for works, supply of goods, and consulting services;
   - Execution of community development and environmental and hygiene education activities;
   - Start of activities to regularize ownership.
h. **Supervision and oversight** of works.
i. **Operation and maintenance** of the completed works and services:
   - **Public services:** transfer of operation and maintenance of public services to concession enterprises;
   - **Municipal services:** urban cleaning and maintenance of drainage and urban streets taken over by the municipalities.
   - **Social services:** operation and maintenance of community works or services, which may be delegated to organizations in the nongovernmental or civil society sectors.
j. **Assessment** carried out during the program (as works are completed in each neighborhood) and after it is finished.
k. **Post-works monitoring**, which consists of monitoring and technical support for residents during the ownership regularization process; urban planning orientation; etc.

Project execution functions

Preparation of project interventions. This involves the development of projects to urbanize and subdivide neighborhoods, including street works, basic sanitation, drainage systems, public lighting, plazas and sports areas, and other components of the integral urbanization plan.

- *Social promotion.* Includes activities to promote community participation in project design and execution, and monitoring of community development activities. These activities require staff with expertise in the dynamics of community work, either to carry these tasks out directly or to prepare the terms of reference and supervise contracting of specialized services.
- *Contracting and supervision of engineering works.* Includes preparation of bidding documents and technical specifications; analysis and assessment of proposals; awarding and issue of contracts; and monitoring the works

and services involved. While supervision of works is frequently contracted to specialized firms, oversight and certification of progress are internal tasks.

- *Transfer of urban and social services to agencies responsible for operation and maintenance.* These tasks should be undertaken by the executing agency, ensuring that the infrastructure works have been executed according to the technical specifications for the services, that the inspections and tests required by the regulations have been carried out, and that the public utilities companies have accepted the works. Orderly transfer of these works to the utilities ensures that they will be adequately operated and maintained. Occasionally special or alternative community operation schemes are required.[5] In many cases, it has been deemed useful to establish inter-institutional arrangements between neighborhood upgrading projects and the utilities defining the utility operators' responsibilities for approval of technical projects, supervision of works, and operation of the services. When the services are quite specialized or fall outside of traditional operating schemes of the utilities, alternative systems must be established for operation and maintenance. Experience has shown that systems involving contracts with members of the communities—individually or organized as microenterprises— produce the best results.
- *Monitoring and assessment.* These tasks allow assessing progress in project execution as well as their results. Monitoring of works and services is a permanent function that involves technical oversight as well as verification of progress in contract performance, to which payments to contractors are tied. Supervision of works is generally contracted to specialized firms. Assessment activities measure the results and overall impacts of the programs based on benchmarks defined at the beginning. To that end, a system is required to collect data from surveys conducted before, during, and after the intervention in each neighborhood (generally employing sampling techniques). In addition to measuring effective completion of the works and installation of services, the assessment measures the impact on the quality of life of the beneficiaries. This task commonly entails satisfaction surveys of beneficiaries, as well as external or independent verification of the results.
- *Post-works follow-up.* The project does not end when the works are completed. In light of the social characteristics of the settlement, and considering that its full incorporation into the city takes time, accompanying social activities must also be carried out after the works are completed. These activities include completing the legalization of ownership, organization of maintenance systems for services that involve community participation, provision of urban and social services, promotion of sports activities, etc. To ensure continuity in these follow-up activities, they should be carried out by regular municipal agencies and not by contractors. Some specialized activities, such as regularization of ownership, however, begin and end with the projects, and to that end, they may be contracted out to external providers. The physical presence of the government in the

[5] The municipal authorities are generally responsible for trash collection and public lighting services, as well as maintenance of streets, storm drainage systems, plazas, and other sports and recreational spaces. In many Latin American countries, the provincial or national authorities are responsible for water and sewer services.

Box 2.6. Urban planning and social orientation posts (POUSO)—Rio de Janeiro

Urban Planning and Social Orientation Posts (POUSO) are an innovation introduced by the municipality of Rio de Janeiro in the framework of the Favela-Bairro program. These municipal posts are established in the settlements upon conclusion of the urban improvement works of the program to guide the communities in the process of regularizing their properties and obtaining home improvement loans. They also provide logistic support for different municipal services and programs established in the neighborhoods, and support oversight activities. The aim is to avoid construction beyond the limits of the urbanized area, in public spaces, and in environmental conservation or risk areas. These posts guarantee the presence of the municipal government when the works are completed.

The most strategic function of POUSOs is to coordinate the various public agencies providing services in the area. In areas where these posts exist, urban services are already routinely provided, even when services dependent on other government authorities are involved. As POUSOs serve an interim function, they must be withdrawn when the neighborhoods have been consolidated and the urban services have been incorporated into the regular service networks of the appropriate municipal or state agencies.

improved settlements, through municipal staff in the neighborhood (see Box 2.6), and through ongoing social activities initiated in connection with NUPs, is an important factor in achieving program objectives, and particularly those related to promotion of citizenship among the beneficiaries.

Project management

Initial projects

Execution of programs as complex as NUPs is, in essence, a continous learning process. An important strategy to ensure adequate technical performance and test the implementation schemes is to begin with pilot projects that serve to define the technical parameters to be adopted throughout the program, and to verify the administrative capacity of the agencies involved in project execution. During the formulation phase, the neighborhood's problems must be identified in detail, the expectations of the community understood, effective execution strategies defined, the costs of the investments carefully estimated, and the benefits assessed. This approach includes implementation of some projects that are representative of the different urban and social situations that will need to be addressed. To determine this representative sample, an overall diagnostic study must be conducted of the problems of the informal settlements to be addressed, in order to establish a typology specifying the number of residents affected, their geographic distribution, and their most relevant socioeconomic characteristics. Projects in the pilot sample must be prepared in full detail to obtain reliable data on the type of investments required and their costs.

This preliminary phase of program formulation entails definition of the criteria that determine which projects are worthwhile to finance, average investment costs, and other technical, economic, legal, environmental, and institutional criteria. Determination of criteria for selecting the neighborhoods and distribution

of resources, as well as the definition of eligibility guidelines, are decisions that should be taken on the basis of technical studies benefiting from the results obtained in preparing the pilot projects. This preparatory process also provides an opportunity to design the required institutional mechanisms and to train executing agencies to perform the various management tasks involved in these projects.

Management strategies

The various alternatives adopted to organize the executing agencies of NUPs have brought to light management principles that have proven to be the key factors in approaching the challenge of simultaneously executing a number of projects and adequately coordinating their multiple components.

Management by project. Experience in programs financed by the IDB shows the advantage of organizing execution of programs by project, with a monitoring system designed to cover all operations in the same neighborhood. This approach ensures adequate supervision and oversight of execution during the process. It also enables centralization of information and decision-making responsibility, while facilitating relations between public works contractors and those executing other components, such as community relations. For this management scheme to operate smoothly, information systems adapted to individual project monitoring are required, and project managers responsible for the entire cycle of an operation, with authority to take decisions on its execution, must be appointed.

Single contracting of works. Field coordination for the execution of sanitation, street works, drainage, and other components is one of the challenges involved in integrated programs. If contracted with different construction companies, problems of coordination in time and space may arise in the execution of public works. To overcome this problem, NUPs have adopted the general practice of contracting physical works with only one builder in each settlement. Execution of sanitation, drainage, and street infrastructure works, including construction of sanitary units, when relevant, is contracted with an construction company selected by public bidding procedure. In exceptional cases, there may be components (such as containment of streams or construction of sewage treatment plants) that require contracting of more specialized firms. Urbanization work, however, normally is not extremely complex from the technical standpoint.

Coordination among components of urbanization works and social programs. It is also important to ensure adequate coordination between physical works and social operations. To synchronize efforts in these areas, the design of social components must form an integral part of integrated plans through which interventions financed by NUPs are programmed. This coordination is the essence of the integral project approach and sets the conditions for proper execution in a framework of good relations with the community. In effect, coordinated work also impacts favorably the sustainability of the social processes initiated in the projects (see Box 2.7).

Participative execution strategy

Experience has shown that community participation in all phases of development and execution of NUPs makes it possible to align project opera-

Box 2.7. Coordination of program components

An effective strategy to coordinate the social components, and to coordinate between these components and the physical investments, has been adopted in the Favela-Bairro Program through Integrated Social Action Plans (PASI). PASIs arose from the need to coordinate the activities of three different secretariats within the Municipality of Rio de Janeiro, two of which belonged to the social area and participated in the execution of program activities in each neighborhood. In each community, broad consultations and diagnostic studies, coordinated among the three key areas of action (social development, labor, and urbanization), were conducted to identify the key social requirements and demands. This information served as a basis for formulating a work plan defining a community development strategy, specific social projects and their budgets, a timetable of activities, and monitoring mechanisms to be used during project execution. PASIs have facilitated coordination of the activities carried out by the secretariats involved—particularly between social tasks and the execution of urbanization works.

tions more effectively with the community's objectives, and facilitates the process of completing the works by minimizing conflicts and helping consolidate the benefits. Formulation and execution of successful neighborhood upgrading projects are enhanced by using participative methodologies in preparing urbanization plans, and by emphasizing community organization and hygiene and environmental education activities implemented before, during and after the works are completed.

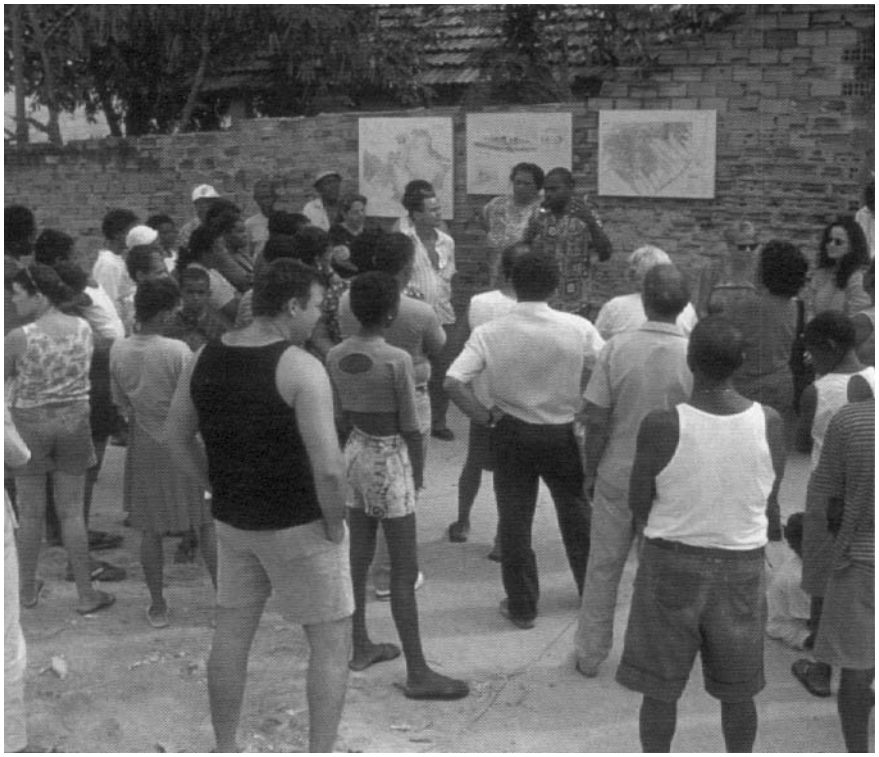
Neighborhood urbanization plans

The participative program strategy begins with the strengthening of community organizations to enable them to participate in the process of preparing and discussing the integrated urbanization plans for each neighborhood. As we have discussed, these plans include the urban intervention project in the neighborhood (design of street systems and infrastructure networks, location of parks, etc.) and definition of social and community services to be provided. With timely incorporation of the community's opinion into the process of preparing these plans, project design can be adjusted to reflect the needs and priorities of the beneficiaries. As the preparation of these plans is generally contracted with architectural and/or engineering firms, the technical teams should include experts in social and community work, in addition to engineering and architecture professionals. The community should participate in all three basic phases of the process—mobilization of the community, discussion of proposals, and their implementation.

- *Mobilization of the community.* The mobilization process generally begins with assemblies held to present the program to the beneficiary communities. At these meetings, the proposed works and the general thrust of the program are explained and the community provides its initial input. This process complements the social and economic analysis of the local population, and the environmental characterization of the area, which, as we have observed, are the first technical steps in identifying and qualifying the physical investments. This activity also facilitates preparation of the social studies and surveys required to detect the needs of the population.
- *Discussion of proposals.* During the development of plans, it is a common practice to

Vicente de Carvalho, Rio de Janeiro.

community consultation meetings



Morro do Sapê, Rio de Janeiro.

hold workshops with the community to discuss topics related to investments in infrastructure, solutions to environmental problems, and options for social services. The information collected at these workshops is used as an input in preparing proposals for urban interventions. These proposals are presented and discussed with the community. It is advantageous to obtain approval of the final version of the plan, which specifies all of the interventions to be carried out in the neighborhood.

- *Execution.* When the work has begun and throughout the process of project implementation, periodic information and follow-up meetings must be held with the community. Communication channels can operate through elected representatives and through meetings with groups organized by street, area, or topic (urban cleaning, for example) requiring special attention. At these meetings, difficulties in execution are discussed and the required adjustments are planned. Solutions to the issues at hand often involve minor changes in project design or resolving complaints from the people.

Experience with community participation in NUPs has been quite productive. Residents make suggestions that effectively enrich the projects, collaborate in supervision, and can even facilitate coordination among the various public agencies and non-governmental organizations operating in the area. An important factor is that in situations of conflict (such as the need for resettlement) or potential violence, the participative process creates a communication channel that makes it easier to find a solution. Participation helps create a community spirit and sense of citizens' rights so that the people feel less vulnerable in the absence of formal public authority—which is common in irregular settlements. Social participation may be considered the essence of citizenship building.

Community development and environmental and sanitary education

Investment in community development plays an important role in social development strategies of NUPs, in which the strategic objective is to change the residents' behavior patterns in relation to the space in which they live, while improving the residents' understanding and participation in the process of transformation generated by the program. It also includes sanitary and environmental education components and an urban and social education effort.

The participative approach methods aim to involve the entire community by identifying representatives of streets in the neighborhood and training them to serve as extension workers and multipliers for social work. Information activities held in the schools have proven to be quite useful as children can promote change in behavior within their families. The best methodology consists of working with different levels of participation (ranging form general assemblies to meetings by street or block) and with specific groups (such as mothers, youth with low levels of education, etc.). Mobilization of these groups should continue throughout the project execution process, and after completion of the physical works, during which the community should be involved in maintenance and environmental conservation activities.

HOW MUCH SHOULD BE SPENT ON PROJECTS?

Determining the appropriate levels of investment is no trivial task. First, this exercise depends on the political willingness to invest public resources in neighborhood upgrading, given the benefits that they generate for all of society. This decision, adopted during each budget cycle at the level of government where the investments are made, establishes the financing framework within which the programs must be carried out. A second level of analysis, however, is required to determine the amount of resources that is socially productive to invest—defining whether the benefits generated in each project exceed the investment costs. This is the essence of socioeconomic project analysis that determine whether the investment is feasible, and indicates the expenditure limits per family to be applied in the programs, so that they benefit as many eligible settlements as possible.

Methods of economic analysis

The main objective of economic analysis of NUPs is to determine the adequate level of scarce public resources to be earmarked for this type of investment. The analysis makes it possible to quantify the economic benefits that society derives from project execution. Such benefits may be identified for each individual component, which makes it possible to identify which investments generate benefits most efficiently. An essential function of economic analysis is to establish criteria for allocating scarce resources among competitive projects and identifying those with highest social returns. It is also useful in facilitating the proper dimensioning of projects. While it is desirable to meet all the needs of the families in each settlement (which requires higher costs per family), there is always an investment level beyond which the social returns do not justify the investments. Economic analysis makes it possible to identify those limits and to allocate the available resources to cover as many families as possible.

Depending on the type of operations involved and the availability of information to prepare the analysis, two methodologies are used: cost-benefit analysis and cost-efficiency analysis.

Whichever method is used, a base activity is to identify the cost. Cost valuation is a relatively simple and objective task. To that end, engineering studies are carried out to identify the investment required to meet the minimum basic infrastructure requirements established for the program. Appropriate design solutions must reflect regional variations, topographic situations, and other specific features. This task is generally carried out for the pilot projects used to design the programs, and the conclusions are applied to all projects to be financed. The cost of social components is more complex, as this entails consideration of investment in physical infrastructure for social facilities as well as their operation and maintenance.

Three methodologies were used to obtain the proxy values for the benefits likely to be generated by the programs. Two of these methodologies involve calculation of aggregate project benefits: the study of property appreciation and analysis of the willingness of the beneficiaries to pay. The third methodology assesses the benefits generated individually by each key project component (water, sewer, drainage, etc.) and the sum of these components comprises the aggregate benefits.

- *Property appreciation.* This methodology consists of measuring the increase in market prices of real estate as the result of the investments financed by NUPs. If appreciation occurs, the increase is considered to reflect the market's economic valuation of the improvements, and therefore constitutes a good estimate of the benefits generated. The method requires identification of market prices for real estate in the settlements before and after the projects. This requires local research to establish prices paid in transactions, both formal and informal, that have occurred in the settlements prior to the projects, so that they can be compared later with property prices in neighboring areas or those with comparable conditions having the same infrastructure and services to be built. This task is facilitated if upgrading investments have been made in neighborhoods of the same or comparable cities. The methodology in question also takes into consideration the indirect benefits of the investments in properties surrounding the beneficiary neighborhoods. To that end, the accounting of benefits includes appreciation of properties neighboring the settlements within a reasonable radius of influence (100-200 meters, depending on the physical conditions of the area).
- *Willingness to pay.* The benefits generated by the investments are estimated based on the amount of money users are prepared to pay to obtain access to the different types of infrastructure reflected in the project (water, sewerage, streets, drainage, etc.). If the total values that the beneficiaries are prepared to pay (calculated as the present value of a flow of monthly payments) for the services or facilities provided under the project exceed its cost, it is considered economically feasible. Willingness to pay is measured using the contingent valuation methodology, which is based on structured surveys conducted with a sample of beneficiaries who are asked how much they would be prepared to pay for different levels of service. Working with hypothetical payments in different amounts, econometric techniques are used to define curves reflecting the willingness to pay for investments in monetary amounts. This method of estimating benefits is methodologically complex and requires experience in design and application of surveys as well as skill in using sophisticated econometric analysis tools. There is ample literature on this subject that discusses the pros and cons of the methodology, which has been widely used in analysis of environmental problems.
- *Edonic pricing study.* Another methodology to estimate benefits generated by individual components of NUPs consists of calculating the price differential in properties as the result of the presence or absence of a given feature. To that end, prices of properties substantially similar in quality and location are compared, although with one different feature (for example, one has sewer service and the other does not; or one has land tenure security through legal property titles, and the

Table 2.4. Estimated benefits through property appreciation: Favela-Bairro II Program (thousands of US$)

Settlement	Area of the project		Surrounding area	Total
	Appreciation	>Built area	appreciation	
Complexo Lins	3,082	280	4,130	7,492
Pq. Silva Vale	533	48	714	1,295
Morro Macacos	1,625	147	2,177	3,949
Pau Bandeira	2,274	206	3,047	5,527
Pq. Vila Isabel	2,599	236	3,483	6,318
Vila do Céu	4,115	374	5,512	10,001
Jacaré	3,177	288	4,258	7,723
Vila S. Jorge	1,369	124	1,835	3,328
Total	18,774	1,703	25,156	45,633

Note: This table assesses impacts in terms of property appreciation in informal settlements benefiting from the program. We observe a 97 percent increase in value per square meter for buildings in the beneficiary areas as compared with equivalent unimproved properties. We also observe an average estimated increase in constructed area of 2.5 m^2, corresponding to a net increase of US$260 per home. As for the appreciation of the areas surrounding the settlements benefiting from the programs, appreciation of 20 percent was attributed to the urbanization of neighboring settlements. Property appreciation in all cases exceeded the investments in the settlements involved.

other does not). The difference in price between the properties measures appreciation in the property as the result of the feature in question. This monetary value is used as a proxy measurement for the benefits generated by investment to add that feature of the beneficiary property.

- *Cost-efficiency analysis.* There are investments for which there is broad consensus on their need and social relevance. This is true, for example, for schools and childcare centers, potable water systems, and sanitary sewage systems. In such cases, economic analysis can be used primarily to maximize efficiency of the investments. To that end, cost-efficiency analysis is used—which consists substantially of determining the least-cost technical design alternative required to meet the needs in question, and in estimating the investment costs required for implementation. The costs determined using this procedure are converted into unit efficiency costs (cost per household serviced, cost per child benefited in school, etc.). These figures are used to guide the design and establish financing limits for similar projects, although departures from this average cost to address special situations are considered acceptable.

Cost-efficiency calculations used in NUPs are generally based on analysis of pilot projects for which the costs of establishing the infrastructure and services in question are computed to reflect different alternative technical situations that may occur in a large-scale program. These figures are used to define the cost efficiency of indi-

vidual projects, and the sum of the components included in each operation is used to determine the amount of investment, i.e., a value per household or lot to be used as a reference in undertaking the investments. The calculation should include the cost of constructing infrastructure and buildings as well as recurrent costs of operating the service. For social services, these costs may be derived from existing services similar to the ones to be financed under the program. The unit costs calculated using this procedure serve as a basis for analysis and approval of projects during the course of a program.

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CHAPTER III

IMPACTS, SUSTAINABILITY AND LESSONS LEARNED

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MULTIPLE IMPACTS OF PROGRAMS

Experience accumulated in execution of NUPs shows that they are more than simply tools to fight poverty and social inequality. Their multiple impacts on cities make them suitable instruments to approach complex urban integration problems and to eliminate the negative externalities that hamper development in areas of the city where informal settlements are concentrated. Although many investments are aimed at urban infrastructure, the evolution of the intervention model—which integrates social components with urban services—characterizes these programs as integral urban development strategies that could benefit a broad range of urban areas and many aspects of community life.

Neighborhood upgrading programs generate specific impacts on the groups that benefit directly from the services financed, as well as general impacts contributing to the well being of the entire urban community. It is possible to argue that NUPs have positive impacts on the spatial, economic, and social structure of the city that can be perceived in relatively short periods of time. This gives them a special role in strategies to fight urban poverty, particularly when good targeting and immediate impact on populations living in very difficult conditions are required.

In this chapter, we shall discuss the various effects observed in the neighborhood upgrading programs analyzed. We shall also present success factors that offer useful lessons in the design and execution of this type of program. Special emphasis will be placed on factors impacting the long-term sustainability of the programs to ensure that they can cover all the informal settlements within the jurisdiction of the executing agencies.

General benefits derived from synergy between components

The main result of NUPs, among other benefits, is an improved quality of life in the beneficiary population, as reflected in better health indicators resulting from improved sanitation; greater availability of urban services; and better housing conditions and access to workplaces as a result of investments in streets. As such projects involve integrated, complementary activities taking place simultaneously, synergies are also created between the different components, producing a greater impact than would be expected from execution of each activity on an individual basis.

The result of this coordination of activities is that each action amplifies the effects of the others. Improved potable water and sewerage systems have a much more significant impact when executed in conjunction with street works (which help preserve the installed networks), improved trash collection, and environ-

mental education. Similarly, social assistance programs aimed at vulnerable groups (young people, single mothers, etc.) yield more effective results as a part of integral activities to improve sanitation in the neighborhood, and when associated with programs to strengthen community organizations. Regularization of land tenure and other activities to incorporate the neighborhoods into the formal city have positive repercussions on the self-esteem of the beneficiaries, which in turn contributes to the success of social assistance programs targeting vulnerable groups.

This synergy effect is the ultimate justification for adopting the integral action model that characterizes NUPs, even if they are more complex to execute than sectoral programs. Assessments of completed programs—particularly interviews with the beneficiaries—confirm the importance of integrated interventions in terms of satisfaction with results and impacts on the beneficiary community and individuals. The fact that interventions financed by the programs are decided upon with community participation has significant repercussions on the high level of satisfaction observed. Such results contrast with the frequent lack of satisfaction observed following execution of partial or sectoral programs that, while they meet their objectives (installation of sanitation systems, improvement in health services, benefits for single mothers, etc.), do not achieve the broader objective of significantly improving living conditions of the communities, as the persistence of other deficiencies reduces the impact of the improvements. To the extent that they simultaneously address different needs in the recipient households, coordinated and integrated actions have greater chances of achieving the central objective of alleviating poverty, while increasing the human and physical capital of the beneficiaries, thus helping to break the cycle of intergenerational transmission of poverty.

Social impacts

Poverty reduction

The initial situation of informal urban settlements has all the characteristics associated with the habitat of poorer households: lack of infrastructure, deficient basic urban services, and limited access to social, health and education services. These deficiencies are reflected in the high indices of unmet basic needs (UBN) observed in these settlements. NUPs help reduce these poverty indicators by financing infrastructure and improving access to social services. Further, support provided by social programs targeting specific vulnerable groups (poor children, adolescents not in school, and women heads of household) helps reduce the high risk of perpetuating these poverty conditions. An additional positive effect is the increase in poor households' assets as a result of the neighborhood improvement works and regularization of the land tenure situation that provides residents with individual titles of ownership.

Improved health and sanitary conditions

NUPs have had particularly visible effects on the general sanitary conditions of the communities, reflected in better health indicators in the beneficiary neighborhoods. This improvement results from better environmental conditions (removal of trash and wastewater) and hygiene (availability of potable water) achieved with interventions financed by the programs. According to survey data and testimonies from doctors working in the settlements, there has been a clear

Box 3.1. Neighborhood upgrading program in Chile: Impacts on health and the quality of housing

In 1992, an ex post assessment was conducted on phase one of Chile's Neighborhood Upgrading Program to evaluate accomplishments of interventions partially financed by the Inter-American Development Bank under IDB loan 115/IC-CH. In 1997, phases two and three of the same program under IDB loans 223/IC-CH and 577/OC-CH were assessed. The main objective was to determine the results obtained in application of the program throughout the country, and to detect problems arising in its execution.

To study the impact of the program, a sample of beneficiary settlements distributed in different areas of the country was selected and subjected to a survey and interviews with qualified reporting parties. Also, a detailed survey of the characteristics of settlements and a sample of housing units was undertaken, to document the urban context and the process of housing improvement made by the beneficiaries themselves. To assess progress in health, a control sample of selected settlements without sanitation but having similar characteristics to the beneficiary settlements, was given a survey focusing on health issues.

Comparative assessment of health indicators clearly showed a positive impact from the program, which produced a substantial reduction in settlements of infectious diseases, and particularly their seriousness. The observed reduction by 50 percent in the risk of contracting diarrhea in areas where phase one of the program was conducted merits special mention owing to its significance. The number of detected episodes declined from approximately 62 percent in settlements without sanitation to approximately 19 percent in settlements benefiting from stages two and three of NUPs. It is also important to point out that, for the first time, health centers serving the beneficiary settlements reported that cutaneous and stomach infections ceased to be the main reason for consultations, replaced by respiratory disease, accidents, and chronic disease as the focuses of health concerns, indicating a significant improvement in levels of public health.

The construction of sanitary units (which include a bath and water facilities for cooking) provided strong incentives to consolidate and improve housing. Five to eight years after the introduction of sanitary units, most dwellings built by owner beneficiaries have a greater average constructed area than housing units produced by traditional social housing programs. The greatest deficiencies are attributable to materials, which are not always adequate. Most beneficiaries, however, assessed the housing situation to be good and indicated that they were satisfied or very satisfied with the program.

In summary, the study concluded that a) the NUPs achieved the basic objective of improving the living and health conditions of the low-income population; b) the level of satisfaction with the program among residents is quite high; and c) the process of consolidating the settlements and housing units has received significant impetus, particularly in guaranteeing land tenure for the beneficiaries.

reduction in cases of disease spread by carriers, livestock, and inadequate sanitation conditions. Systematic information for a precise analysis of these impacts, however, is not available. For this reason, systems established to monitor results should include specific health indicators.

Impacts on vulnerable groups

The specific impacts on the situation of each target group benefited by the programs vary depending on the services the programs include. In cases where interventions place priority on care for children, childcare centers will give mothers more time to work outside the home and result in better education for the beneficiary children. Introduction of preventive health services will lead to reduced disease in the population, while education and occupational training programs will improve the beneficiaries' skills (particularly in young people), enhancing their employment op-

tions, and contributing to household income. As indicated above, NUPs offer two advantages in terms of attention to vulnerable groups: they strengthen synergies existing between social services to increase their impact, and they ensure that those services will reach the groups that need them most, leading in turn to more effective targeting of public expenditure.

Improved security

According to the residents of the communities themselves, another important social impact is the improvement in public security conditions in neighborhoods where NUPs have been implemented. This result is generally attributed to alleviation of the physical isolation of the settlements owing to the opening of new access ways (facilitating entry of firefighting, ambulance, and police services), installation of public lighting, and enhanced social oversight that the communities themselves exercise over the public space as a result of improved physical conditions and enhanced community organization.

Another factor that helps increase security in the settlements is construction of sports facilities and recreational areas for young people, which are more effective when combined with orientation provided by local community agents. NUPs frequently include occupational training components, as well as job search assistance targeting youth, to offer alternatives to an age group that is particularly vulnerable to fall into crime. The combined effect of these activities is to reduce levels of juvenile delinquency and to reduce illegal activities in general. For this reason, NUPs make an important contribution to programs to prevent violence and improve public safety for those living in the cities.

Urban impacts

Urban integration

The most significant urban impact produced by NUPs is integration of informal settlements into the formal city in its various dimensions. From the physical standpoint, improved access to these communities, and their better connection with the adjacent areas, is a clear improvement. In terms of equipment, infrastructure and urban facilities, NUPs reduce the inequity between neighborhoods with and without such public facilities. This makes it possible to bring garbage collection, mass transport, and urban maintenance services in general to the unserved population, raising urban quality levels throughout the city. In social terms, this improvement tends to break barriers between poor and rich neighborhoods as a result of the change in the social status of the community, and its incorporation into the "formal" urban community. From the legal standpoint, regularization of land tenure introduces the beneficiaries to the formal city as owners responsible for contributing to the financing of services through payment of taxes and user fees as other property owners do. This effect of equalizing urban conditions is an important social policy objective for the neighborhoods, which at the same time has positive effects on the city itself.

Regularization and expansion of urban services

Expansion of coverage and regularization of basic urban utilities and services—water, electricity, sewers, and urban cleaning—through NUPs helps balance service conditions throughout the city. The areas where marginal neighborhoods are located usually pose the biggest logistical, economic, and technical problems in expanding public services. Accordingly, public utilities

improving sanitary conditions
and building an urban environment

Morro do Telégrafos, Rio de Janeiro.

have no incentive to expand coverage to these neighborhoods, as the return on investment tends to be low. NUPs represent a subsidy to families to allow them to have access to these services. Utilities that operate and maintain services—even though they may not always be financially profitable—benefit from an expanded customer base and regularization of illegal connections (particularly water and electricity) that are quite common in informal settlements and entail substantial losses.

Improved housing conditions

NUPs unleash initiative and savings that households invest in improving their homes. It has been found in various projects that when the infrastructure works have been completed and land tenure assured, intense home improvement activity takes place. Although they do not invest directly in homes, NUPs have a positive impact on household living conditions, as they encourage residents to make improvements with their own resources. For this reason, NUPs should form an integral part of housing policies, as they supplement activities to support construction of new housing units for low-income households, for which access to credit is difficult and whose housing needs may be met partially with investments in neighborhood infrastructure.

Economic and financial impacts

Property appreciation

Property appreciation is one of the most objective ways to measure the success of NUPs. The benefits also include positive effects on the value of properties adjacent to the informal settlements. Improved accessibility, solution of sanitation problems, alleviation of environmental risks, provision of urban facilities, and improved social relations in the communities benefiting from NUPs (reflected by better security conditions) directly affect the quality of and demand for real estate in these neighborhoods and immediate vicinities. In addition, regularization of ownership means that the properties can be traded on the formal market, which substantially increases their value.

In different countries, neighborhoods benefiting from these programs have registered increases in property values exceeding 100 percent, while on average such increases tend to be more conservative at approximately 30-60 percent. This outcome is an important benefit for homeowners in such settlements, whose higher assets acquire market values.[6] The data from economic assessments conducted in Rio de Janeiro, Uruguay, and Rosario (Argentina) indicate appreciation of 20-60 percent in the market price of housing in the surrounding areas (depending on proximity and pre-existing conditions).

Economic activity

Better access and integration into the city encourages new economic activities in the settlements benefiting from these operations. Such activities—small-scale businesses, repair shops, small-scale production, etc.—are generally based in the homes. Their markets are composed of people in the settlements as well as surrounding neighborhoods where residents usually have higher incomes. Realization of these impacts and demand for space to house

[6] This involves a relatively minor risk of project objective slippage. Experience has shown that, in the short term, there have been no substantial gentrification movements (in which people with money repair and take over run-down urban neighborhoods, forcing the poor residents out) in finished projects. Substantial investment activity among residents to improve their homes was generally observed.

Box 3.2. NUPs: Good for business?

In Rio de Janeiro, the Municipal Secretariat of Labor in 1998 coordinated a survey of eight communities that had benefited from the Favela-Bairro program. The results of the survey revealed the existence of just under 400 small businesses in these settlements, which employed approximately 700 persons. Approximately 45 percent of these businesses had emerged since the program began operations—a proportion that was as high as 50 percent in some communities. Approximately 78 percent of the owners of these businesses stated that they were optimistic and were considering investing in their business.

these activities has led some NUPs to incorporate into their projects construction of space for shops, kiosks, and microproduction associations and cooperatives. These initiatives have been highly successful (See Box 3.2).

Local finance

As program beneficiaries become legal homeowners, they begin to pay property taxes and utility charges. This leads to increased revenue for municipalities and utility companies. This has positive repercussions on municipal finance and helps recover project investment and utility maintenance costs. Poor neighborhoods, however, frequently benefit from tax exemptions owing to their prior marginality and poverty. Assessment of the beneficiary population's capacity to pay taxes and utility fees is an important factor in feasibility analysis for neighborhood upgrading projects. This analysis makes it possible to identify homes that, owing to their incomes, are temporarily unable to cover all these costs, and that would benefit from temporary subsidies until they can improve their situation. These subsidies should be programmed into municipal budgets or those of social assistance agencies so that when the projects have been completed, resources will be available to maintain the services in the locality without requiring the poorest households to make payments they cannot afford.

SUSTAINABILITY OF NEIGHBORHOOD UPGRADING PROGRAMS

To attain the fundamental objective of improving the quality of life of the entire population living in irregular settlements and facing environmental and social problems, investments promoted by NUPs must be sustainable over time. This has a number of policy implications. Effective measures must be adopted to reduce, and where possible eliminate, proliferation of informal settlements. Further, special attention is required to ensure that efforts begun under these programs—those for which the public authorities are responsible and those for which the beneficiary community itself is responsible—continue.

Key concerns in terms of sustainability of NUPs involve adequate maintenance of public services, infrastructure and facilities, continuity of community organization activities and social services, and continuity of the strategy to address the problem of irregular settlements by responsible governments.

Sustainability of urban services, facilities, and infrastructure

Construction of water, sewerage, and drainage systems, which frequently use nontraditional methods in areas of difficult access, or with less than optimal urbanization conditions (such as "condominium" sewer systems), are only the initial challenge involved in informal urbanization projects. Perhaps the most difficult task is to achieve adequate operation and maintenance of the systems. The key measures to ensure sustainability, as demonstrated by experience in implementation of neighborhood upgrading programs, are discussed below.

- *Ensure that services are integrated into existing systems.* The appropriate public utilities must be involved in the design and formal approval of the projects. They must also participate in supervision of the works and inspections prior to final acceptance of the systems. Experience shows that, to ensure full participation of the public utilities from the beginning of the process, the best strategy is to sign formal agreements with them establishing conditions for transfer of services and systems, and if relevant, special rate policies. Programming of works in the neighborhoods jointly with public utility companies is essential for the timely identification of additional investment requirements (pumping stations, water tanks, local sewage treatment plants, etc.) necessary to make service in the new areas feasible. These works should be included in the NUP budget.
- *Establish taxes, user fees or tariffs.* This is a key measure to ensure adequate resources to operate and maintain the installed services even when rates or charges adjusted to the income level of the beneficiary community are used. Payment of real estate taxes and

Box 3.3. NUPs and privatized or concession services

With the progress in privatizing local service sectors, an increasingly relevant aspect of NUPs is the conditions for transfer of water, sewer, and other services financed by such programs to private operators. It is important to consider that the neighborhoods selected for improvement projects are generally the most poor, and services operating there are less attractive. From the financial standpoint, they are not a priority in the expansion plans of concession holders. However, transfer of networks built, or their legalization, does generate further income or saving on prior losses, in addition to providing a capital contribution or advance on investments to be made by concession holders under their concession arrangements.

In light of these considerations, the strategy adopted by NUPs consists of fully financing these networks and facilities, and carrying out a negotiated, conditional transfer to private operators. Such conditions are easier to apply to service concession holders than to private suppliers. It is important for the program to be executed by the agency issuing the concession, which has authority to negotiate. It is unrealistic for private enterprises to expect financial compensation for investments made beyond assistance in repaying any loans undertaken to finance construction.

In extreme cases in which it is desirable to provide minimum levels of service even though the system is not economically feasible, subsidy schemes for the poorer population's consumption must be negotiated with the concession holders. For drinking water, differentiated rates are frequently used to favor low-consumption households, offset by larger consumers. Another practice found to be effective is to determine a maximum level of water consumption per household to be subsidized by the government. Prices applied for consumption exceeding these levels compensate the company for the other subscribers. The government agrees to pay these bills from its general revenue, as a social objective is at stake. This approach guarantees a minimum level of drinking water consumption required to ensure household sanitary conditions with a transparent approach to the subsidy required to that end.

charges for water, garbage collection and other services gives residents a new sense of citizenship. It also makes them feel more secure with the ownership of their properties (representing substantial progress for those who only a short time ago were considered marginal or illegal) and their rights as citizens. Regular tax payments supported by community development work are key factors in creating a new relationship between the residents and the municipality, so that they can begin to work together to maintain the services and call attention of the local authorities when deterioration may occur.

- *Consider alternative operation and maintenance systems.* This approach is advisable when the topography or urbanization pattern of the neighborhoods prevents services from being provided through traditional systems. Such problems occur when the street layout resulting from regularization of the neighborhood impedes entry of trash collection vehicles or when there is insufficient space for the entry of equipment to clean drainpipes or septic tanks. Such cases require alternative solutions. Experience acquired in NUPs show the advantage of using systems involving community participation, by contracting persons or microenterprises created to operate such services (social services, urban cleaning, etc.). Above all, this approach requires public service enterprises to change

their usual procedures, which generally is not an easy matter.

Sustainability of community development activities

Successful neighborhood upgrading requires the community to remain mobilized and motivated during the design and execution process, and to keep the neighborhood in good condition after the works are completed. As discussed above, community based systems to maintain urban facilities have proven effective and sustainable. Further, continued mobilization of the community helps maintain the political support required for keeping the levels of funding for maintaining the urban services established in the neighborhoods, particularly social services for vulnerable groups.

Effective mobilization of the community begins with the consultation process during the project design phase, leading to participation in decisions on community facilities and social components to be included. The process continues with community contributions to social services provision and monitoring of works during and after construction, and should be maintained during the operation and maintenance phase. Community development and environmental education components that establish direct communication with the population are key factors in achieving these goals. The strategy of establishing resident committees to monitor urban services (trash collection, in particular), strengthens community organization in the neighborhoods. Contracting of specific services with community organizations helps to consolidate and legitimize them as representatives of the residents. These efforts are essential for the community to develop a sense of ownership in the projects, to assess results, and to help maintain equipment and services. This social sustainability is both a goal and an indicator of the success of NUPs.

- *Services provided by nongovernmental organizations and community organizations.* The provision of social services by nongovernmental entities or community organizations always involves a risk in terms of long-term financing. Agencies that support projects must ensure financing for consolidation and operation of these entities, including rehabilitation of the premises in which they operate, acquisition of equipment, and management training. Projects normally provide approximately two years of financing for these services, which is insufficient and should be extended with measures to ensure that the services continue as long as demand for them exists.

The magnitude of this challenge varies depending on the type of service involved. For services required on an ongoing basis (such as childcare facilities), the challenge is to ensure that the appropriate level of government allocates sufficient resources to the activities on an annual basis. For this reason project assessments must include the impact of new services on the current expenditures of the responsible agencies so as to ensure the continuous provision of the services. For interim or temporary services intended to address special situations (such as care for single mothers or occupational training), the challenge consists in ensuring sustainability of the service provider and its capacity to raise funds from the private sector. One of the strategies to encourage civil society organizations to find their own funding has been to gradually

taper off government support for these agencies, and to give them time and assistance to find alternative financing. NUPs frequently include NGO training activities while advising local governments on mechanisms to raise private funds for philanthropic activities or social services carried out by such organizations.[7] Civil society pressure is essential in demanding continued local government support for these social services.

Continuity of policies to legalize settlements and for preventive activities

NUPs are public policy instruments whose key objective is fostering an effective solution to urban marginality. Sustainability concerns must, in this case, reflect the extent to which initiatives financed through NUPs—which may be considered pilot projects for a systematic policy of consolidating irregular settlements—are assured continuity. To that end, an adequate level of financing must be provided from national or local budgets. Loans from multilateral institutions provide, at best, supplementary resources, help launch programs, share relevant experiences, and provide stability in changes in government administration.

Two of the most effective strategies to guarantee sustainability of NUPs are:

- Incorporate neighborhood improvement efforts into national or municipal housing policies, so that they are not viewed as emergency programs, but as a permanent public policy. Experience has shown that the greatest housing problem is not one of quantity, but of quality, added to the lack of infrastructure in areas where most of the poor population already lives. When the infrastructure is in place and ownership is regularized, the residents respond by investing in improving their homes. Housing policies including subsidies for urban infrastructure in poor neighborhoods would lead to a substantial increase in the number of beneficiaries as compared with the same investment made to subsidize housing itself (a higher subsidy per household), with equivalent results in terms of housing quality.
- Emphasize promotion or social marketing of projects to ensure that local public opinion supports the investments. Public approval of investments targeting the poorer populations is, after all, the factor that will most influence the continuity and expansion of such policies. This is one of the best mechanisms to guarantee that the resources required for a sustained effort to service marginal neighborhoods will be provided.

Supplementary policies

An essential condition to solve the problem of informal settlements is to avoid their proliferation. Informal urban development, as we have observed, is the result of failures in the real estate market that constrain the provision of housing at prices affordable to low-income households; and to shortcomings in public housing policies, which have no capacity to correct or offset the market imperfections. In these circumstances, households solve their housing problems by invading public land or by purchasing land in ille-

[7] For example, the Child and Adolescent Fund was established by the municipality of Rio de Janeiro to receive donations from persons and enterprises for NGO activities in support of these groups. Such contributions are tax deductible.

Box 3.4. Do neighborhood upgrading programs promote squatting?

A frequent concern in the area of NUPs is that initiatives to consolidate informal settlements might be interpreted as incentives for new squatting activities. While this is clearly a danger to be considered, experience has shown that this effect is quite limited, as most families do not take such a decision knowing that they are invading a property. They come to the decision because they have no better options. Programs therefore should be designed in the context of policies that aim to provide more housing alternatives to families through the supply of land and housing solutions. At the same time, they must limit their activities to the most consolidated settlements. While the risk of encouraging squatting is certainly present, it is amply compensated by the social benefits generated by the programs.

gal subdivisions. As indicated above, attempting to solve the problems of such settlements without addressing the shortage of housing for poor households entails the risk that squatting or informal subdivisions will become the mechanism by which such households gain access to housing. One way to ensure sustainability of neighborhood upgrading programs, and to complement investment efforts, is to introduce reforms into urban and housing policies to ensure that housing solutions are produced in sufficient quantities and at prices that low-income households can afford.

To approach the problem of an insufficient supply of land at prices compatible with the payment capacity and preferences of most low-income households, reforms must be promoted in municipal urban policies. Such efforts include reforms of urban planning standards to simplify them and reduce requirements involving the minimum size of lots, width of streets, etc., so that land may be subdivided legally at lower costs. This approach should facilitate regularization of areas already informally urbanized, through promulgation of special standards designed to facilitate legal and urban legalization. Particular attention should be given to illegal subdivisions where residents have acquired their properties on the informal market and not occupied them irregularly.

Similarly, local and regional tax instruments (depending on the location and use of the land) must be established in order to: (a) discourage speculative holdings of urbanized land; (b) promote the development of urbanized land that is vacant, has been abandoned, or is underutilized; and (c) discourage discontinuous growth in urban areas, as this bids up the public costs to establish and maintain infrastructure in such areas, as well as private transportation costs for the users.

These measures involve reforms to urban and housing policies aimed at fostering production of housing solutions targeting low-income households. There is a consensus that policies that facilitate the operation of housing markets have better chances of stimulating production of housing solutions than policies involving direct production by the public sector. This is reflected in the introduction of mechanisms to stimulate the private market to finance housing for low-income families supplemented with public resources for demand-side subsidies.

This strategy, which has been adopted in a number of countries, has led to a significant increase in production of homes and to a more effective targeting of public resources earmarked to solve housing problems.

This approach to housing promotion and production, however, has its limitations for meeting the needs of low-income households. These households, even with direct subsidies, cannot access supplementary financing to pay for finished housing. As a result, new home financing must be supplemented with financing for progressive housing, adapted to the payment and savings capacity of the poorest households. To that end, provision of low-cost urbanized land (or infrastructure constructed on already occupied land) and mechanisms for microcredit and technical assistance for progressive housing are appropriate strategies. Considered as a whole, these financing and subsidy strategies for housing and urban infrastructure—including NUPs—offer a more effective response to the challenges of the lack of adequate housing solutions in cities. Continuation of these efforts is key to solving problems of informal urbanization in developing countries.

LESSONS DERIVED FROM NEIGHBORHOOD UPGRADING PROGRAMS

Applicability of neighborhood upgrading programs

Governments prepared to invest in social programs have a wide variety of options. Targeted, integrated programs—those that focus on a specific population group and that combine activities in different sectors to address a complex range of situations—constitute an alternative to achieve substantial, sustainable impacts in a short period of time. This strategy is clearly contrasted with horizontal or sector programs, whose coverage is broader but objectives more limited.

As we observed in Chapter I, all developing countries face the problem of informal urban settlements. They concentrate low-income households that face a wide variety of problems requiring multisector solutions adapted to the specific situations of each community. Further, the deficiencies accompanying informal urbanization demand rapid solutions, as the populations are exposed to imminent social and environmental risks.

Neighborhood upgrading programs are particularly suited to address this type of reality. Infrastructure investment provides essential urban services and guarantees basic hygiene and quality of life to the neighborhoods. At the same time, these projects incorporate social services tailored to the requirements of each community and that address the main problems faced by different groups or residents.

As a result of these features, neighborhood upgrading programs now exceed the scope of their initial objectives as infrastructure and land tenure regularization programs, and have become an integral part of *poverty alleviation strategies*. This type of operation is appropriate when the aim is to improve, in the short term, the living conditions of low-income urban households. The programs are also an important component of public housing policies, as they meet the needs of households that do not have regular access to credit markets but who have accessed land through informal channels and have invested in their homes. They are also *urban policy* instruments, as they fight problems of uneven urbanization that affect the rest of the city through the negative externalities that they generate. Last, they also serve as a social development mechanism, as they actively incorporate the residents into the effort to solve their housing problems by promoting community development and social capital formation in poor communities.

Investments in neighborhood upgrading programs are justified through their urban, environmental, social, and economic impacts. Economic assessment of these programs has indicated that they are an efficient use of public resources, and that they effectively reach the poorest groups of society. This type of program implies a redistributive expenditure with equity goals, and it should be used fundamentally to

address problems of poverty in medium and large cities.

Recommendations based on lessons from neighborhood upgrading programs

The experience that the IDB has acquired in recent years in the design and execution of neighborhood upgrading programs has brought to light some important factors critical for its success. These range from political preconditions to technical and organizational aspects of project execution, as well as the need to address the causes of informal urbanization. Some of these recommendations appear in other sections of this book, although we have included them in this section for special emphasis.

Political variable

The decision to undertake neighborhood upgrading programs involves the willingness of the political authorities to earmark public resources to subsidize specific groups of the population. Such subsidies may be financed with resources from the municipalities. In this case, the decision is strictly local. The situation may be different when the decision to devote resources for neighborhood upgrading programs comes from the state or national level of government and project execution involves participation of municipal governments. In this case problems may emerge that could jeopardize the execution of NUPs. One of the lessons derived from experiences in program design is that the greatest difficulties result from sharp political differences between the central government and the municipalities, particularly when this involves governments of the capital cities. These differences often block the inter-institutional relationships required for adequate program execution. In most cases, national governments have greater financial capacity to make large investments. *Participation of the municipalities, however, is vital in carrying out neighborhood investment programs,* owing to their competence in regulating urban land use and their responsibility to provide and maintain local urban services. The Bank's experience is that the best results have been obtained in programs implemented directly by the municipality or with its direct participation. This interdependency requires cohabitation that is not always politically convenient, and requires compromises on both sides in order to function. The best solution is to seek agreement on technical grounds and use flexible implementation schemes in which the national or provincial governments provide coordination and general technical supervision for the programs while the municipalities take responsibility for execution of specific projects in their jurisdictions.

Technical capacity

Neighborhood upgrading programs are complex operations that involve simultaneous execution of a number of different components, multiple operations in the field, integration between the social and physical works, and other characteristic features of these operations. Accordingly, they require substantial technical and management capacity on the part of the agencies responsible for their execution, as well as human and financial resources commensurate with this complexity. Design and implementation of these programs must therefore pay particular attention to technical capacity and the organization of the executing agents. Prerequisites of such programs are for the project executing agencies to have sufficient capacity for the technical as-

sessment of engineering designs, and for monitoring of social components; a relative degree of autonomy to manage financial resources and engage in the necessary contracting activities; and to have the capacity to supervise the projects. Administrative and financial systems should also be dimensioned to handle the volume of investments to be made. The absence of this capacity can pose major impediments to effective program implementation.

Integrated execution

The success of neighborhood upgrading projects depends on adequate coordination of physical investments, which can only be efficient with an integrated approach to executing the works, under the authority of one executing party. The infrastructure works should be entrusted to one contractor to facilitate supervision, reduce costs, and avoid problems of coordination among different executing agents. The works should also be coordinated with community and social development activities to maximize community information and participation and to avoid the problems that can be expected to arise with construction operations in densely populated settlements.

Maximum cost principle

Observance of the limits to the maximum cost of investment per household or per lot is an important technical and psychological imperative. Maximum costs per household must be defined on technical bases, reflecting design and cost parameters that strike a balance between the technical requirements to solve the problems, and the equity requirements arising from the need to assist as many beneficiaries as possible. Maintaining these parameters throughout a program involving numerous settlements ensures an equitable distribution of benefits and consistent project design features. In addition, the definition of maximum costs offsets the pressures that normally can be expected to increase investment to meet the demands of the communities.

Functioning of urban services

Installation of public service networks, particularly water and sewer systems and trash collection, should be planned in close cooperation with the agencies that provide these services. The capacity of the utilities to service the settlements added to their service area (although in most cases the settlements receive such services on an informal basis), the need to construct complementary works, the feasibility of operation and maintenance of the systems, and other technical matters should be agreed on in advance with the sectoral entities. When possible and necessary, programs should earmark resources for interconnecting the neighborhood with the existing network, ensuring immediate operation of the services installed in the neighborhoods. Charging rates and tariffs for such services that cover operating costs must be a basic guideline for ensuring adequate operation and maintenance.

Maintenance and follow-up activities

Completion of works in a settlement should not mean the end of the government's concern for that community. The objectives of urban and social integration can only be achieved in the medium term with continued social actions and adequate operation and maintenance of the urban services and infrastructure, particularly potable water, drainage, sewerage, and trash collection systems. As these urban integration and maintenance activities are the responsibility of municipalities and other agencies responsible for public services, their participation in all stages of project formulation

and execution is essential. Since some of these activities also rely on community participation, the need for special attention to community promotion and development and environmental education activities is essential.

Regularization of tenure

Regularization of land tenure and the issue of individual property titles to the beneficiaries is one of the most complex aspects of the programs. These activities are generally assigned lower priority by the executing agents, since the execution cycle is lengthy and does not always generate immediate political pay-offs (although there are some known cases of political events when title issues filled entire soccer stadiums). It is important to provide adequate financing and to ensure that the authorities support this key program component, given its social and economic impact, and its contribution to the citizenship goals of neighborhood upgrading operations.

Addressing the causes

As indicated in the preceding section, for neighborhood upgrading programs to provide effective, long-term solutions, measures designed to address the structural causes of informal urban development must be implemented. Of course, low levels of income in the resident population of informal settlements are the underlying cause of the problem. However, there are other factors that promote informal development. Experience indicates that deficiencies in urban development legislation and housing policies, as well as the obstacles and costs involved in legalizing land titles, aggravate the problem by preventing the poor from accessing formal housing. For this reason, it is essential to consider, concurrently with neighborhood upgrading programs themselves, public policy reforms to reduce the causes of informal development, as discussed in the preceding chapter.

Enforcement

In addressing the causes, programs should aim to prevent growth in informal settlements in the medium and long terms through an increased supply of housing and urbanizable land affordable for low-income households. It is also important, however, to define strategies to prevent proliferation of informal settlements and irregular land occupation, and put them immediately into effect. These strategies include the proper enforcement of regulations preventing the illegal occupation of land, the expansion of existing settlements, and the creation of irregular subdivisions by the public authorities. This enforcement effort is better accepted by public opinion when accompanied by positive action and promotion of solutions for existing settlements.

THE FUTURE

The analysis of the urban development process in Latin America and the Caribbean, and of recent experiences in execution of neighborhood upgrading programs, can provide a perspective on what the future might hold for the problem in the region.

Urbanization and poverty

More than a promise, neighborhood upgrading programs represent a reality that is changing the lives of thousands of families throughout the world. Urban growth, however, is far from reaching its peak, which means that infrastructure deficits, informal urbanization, and urban poverty will continue to be among the most serious problems on the social agenda of virtually all developing countries. Since urbanization and poverty seem to be inevitably interrelated, poverty reduction strategies must increasingly address urban poverty. In this connection, programs focusing on informal urbanization must include social strategies to fight poverty and reduce income inequalities.

Integrated solutions

The Bank's experience with neighborhood upgrading programs shows the advantages of integrated, multisector actions in alleviating the most dramatic consequences of urban poverty and offering poor households a physical platform from which they can take advantage of social programs that help increase their human capital and develop the social capital of the communities. The holistic approach that characterizes neighborhood upgrading programs has greater potential to offer effective solutions than a single sector response, which tends to address only specific aspects of the social issues at hand. The challenge, however, is efficient coordination and execution of integrated programs. The methodology of neighborhood upgrading programs presents an alternative of relatively manageable complexity that yields effective results in poverty alleviation.

The IDB: Demand and role

Owing to the success achieved in the cities that have adopted neighborhood upgrading programs, this intervention model is an alternative of great interest to countries of the region. The Bank and other financial institutions operating in this area must continue to support this model, whether applied as urban development initiatives or as part of operations to address urban poverty. The neighborhood upgrading model, in fact, is an intervention methodology in physical, social, and community relations that has proven adequate for a wide variety of social situations and problems, and is applicable to different types of projects such as sanitation and housing. There is also a natural trend to incorporate neighborhood upgrading methods into programs designed to reduce violence and assist vulnerable groups, among many others. Accordingly, it is hoped, that such pro-

Box 3.5. The power of good practices

A good example of a positive response from public opinion to a successful experience is the case of Rio de Janeiro. During the early 1990s, the municipality decided to change its approach to the problem of informal settlements from ignoring them or removing them to consolidating them and equipping them with basic services. This approach began with a modest program in which a small group of municipal officials installed minor sanitation and street works and contracted members of the communities to help with the work.

In light of the positive results, the municipality decided to broaden the scale of the effort and applied the integrated methodology to approximately 60 favelas and 20 irregular subdivisions. The Favela-Bairro program, financed partially by IDB, was executed in four years, and its results were greatly appreciated by the beneficiary population as well as by the general public. The subsequent municipal governments continued to support the program, extending it to other favelas and irregular subdivisions, so that it had benefited approximately half of the population of settlements in the city (approximately 500,000 persons). The program has also served as a model for other cities and national programs in Brazil and other countries.

The main lesson from this experience is that the efforts of a small group of architects and engineers who started with a basic task can generate a massive program with international repercussions—provided that it meets real demand and gains support of local public opinion on the basis of its technical merits as well as the tangible benefits that it generates.

grams will continue to receive support and that national and local governments in the region will continue to be motivated to adopt the model. Initiatives supported by the Bank, however, are limited by the scale of financing and shall be considered only as examples of possible forms of intervention for the countries; only their own efforts to mobilize local resources and technical capacities and to promote active participation of civil society can guarantee the support for these investments and the continuation of the pilot efforts financed by the Bank.

Broaden the scale

Cities without slums or squatter settlements—is this possible? What can be done to multiply and broaden the scale of projects from one neighborhood to the level of cities and countries? Adoption of the neighborhood upgrading program methodology on a broad scale depends essentially on acknowledging it as a legitimate form of intervention and as a cost-effective public policy, particularly in reducing poverty. Such acknowledgement also requires efforts to publicize the results of successful experiences that serve as examples of what can be done. Good practices play an important role in this connection. It is therefore essential to incorporate neighborhood upgrading programs into country sector strategies as a component of poverty alleviation, social housing, and urban development strategy.

Dissemination of good practices is one of the most effective ways to gain acceptance of the concepts of integrated social operations (see Box 3.5). Promotion and extension of successful experiences lends credibility to this type of initiative and provides tangible evidence of the possibilities and impacts of such programs. Good practices demonstrate operational, technical, and institutional factors that contribute to the design of similar operations. They also help gain politi-

cal support for these initiatives as specific examples of the social and urban benefits produced. Successful examples such as programs in Rio de Janeiro (Favela-Bairro), Chile, and other countries that have been broadly publicized have served as models for many other programs in these countries and elsewhere. The vision of an urbanized neighborhood is striking, and requires no technical assessment to demonstrate the validity and benefits of the investment. In cities where progress has been made in carrying out neighborhood upgrading programs, circulation of information on the success of the initial operations has been a decisive factor in forging political consensus on the adoption of the neighborhood upgrading model on a large scale.

Annex

CASE STUDIES

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NEIGHBORHOOD UPGRADING PROGRAMS SUPPORTED BY THE IDB

Since the mid-1980s, the Inter-American Development Bank has supported at least 17 projects related to neighborhood upgrading, with a total investment of approximately US$2.6 billion. This performance positions the Bank as a leader in the development and adoption of this action model as one of the solutions to the problem of informal human settlements. The integral focus of urban and social problem solving—the essence of neighborhood upgrading programs—is, in fact, a concept incorporated into programs in various sectors such as basic sanitation, violence prevention, and social investment funds, among others.

Neighborhood upgrading programs supported by the IDB have evolved in their conception and design. The programs initially addressed only sanitation, although they did include the principle of settling the population without relocation. In the second phase, sanitation programs broadened to include neighborhood infrastructure and participative and community development components. In the third stage, programs began to include urban infrastructure, attention to vulnerable groups, income generation, education, health, and other social activities. This is how integral programs came to be.

The cases presented in this annex reflect this evolution and illustrate different aspects of design, organization, and execution. Cases representing a variety of institutional contexts and situations have been included to highlight the contrasts between programs organized at the national and local levels. While some programs are in the early phases of execution, most have shown successful results, and they provide a diverse view of the experience acquired so far in this area.

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CHILE: CONSOLIDATION OF THE URBAN PERIPHERY

Background

Chilean neighborhood upgrading programs provide an example of the first stage as previously discussed, and can therefore be classified as extended sanitation projects. The Chilean experience is significant, as it represents the application of a consistent government policy aimed at addressing housing and overcrowding problems among the poorest population. Continuation of this policy through neighborhood upgrading and other housing subsidy-based programs has drastically reduced the problem throughout the country.

Neighborhood upgrading programs in Chile date back to the 1970s when, in an effort to solve health issues for residents of a poor urban peripheral area, a pilot basic sanitation experiment was developed with the construction of sanitary units (which include bath and kitchen facilities connected to utilities). This experience led to improved basic health indicators and generated spontaneous consolidation and growth in housing. As a result of this experience, in 1982, the first of four stages of NUPs began with support from IDB loans. The activities aimed at settling residents facing marginal sanitary situations, and providing them with minimum urban services as well as property tenure. Only in cases where settlement was not possible owing to the physical characteristics or the location of the properties were resettlement projects carried out with construction of new urban developments with serviced lots. As a result of the success of this experience, the Chilean government later decided to implement an innovative program that began in 1998, financed exclusively with national funds: the Programa Chile Barrio.

Characteristics

The first effort, known as the serviced lots program, focused on basic sanitation and legalization of land ownership. From the beginning, it was found that the implementation of this project had an important constructive effect on the beneficiaries: in most cases, with the security of tenure and receiving something they could not build on their own (basic service networks and street paving), the residents expanded, improved, and consolidated their homes.

These characteristics prevailed during the first three phases of the program. Poverty reduction objectives that went beyond improving the physical infrastructure of a settlement were not introduced until the fourth phase of Programa Chile Barrio. To that end, financing for community facilities and the requirement for the municipalities to provide land and manage childcare, health, and education centers were incorporated.

Project eligibility

Allocation of resources for neighborhood upgrading projects involves competition between settlements rather than between individual applicants. As the aim is to identify marginal settle-

Table A.1. Chile: Requirements for project eligibility

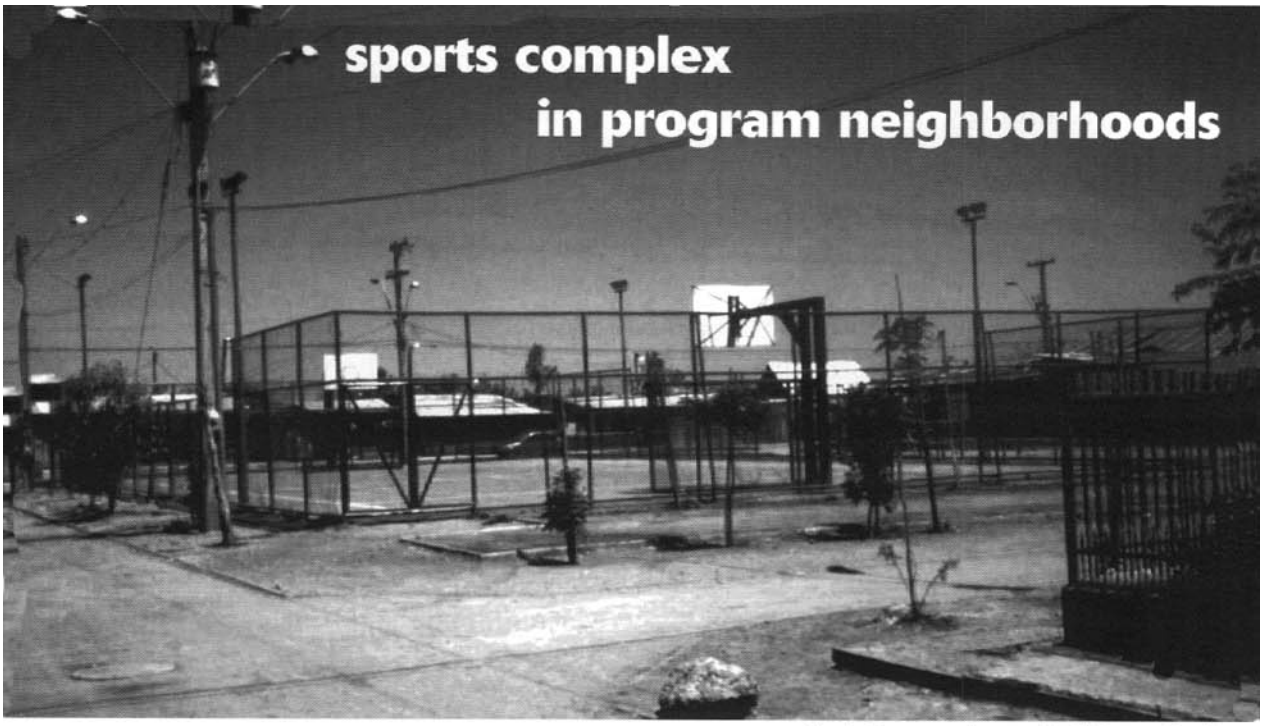
Criterion	Phase one	Phase two	Phase three	Phase four
Focus	At least 80 percent of the households classified with CAS indices of 1, 2, and 3		At least 80 percent of the households having less than 600 CAS index points	
Location	In cities with populations exceeding 50,000	Assist populations or locations in communities with populations of at least 3,000		
Public services	Consider availability of drinking water supply and capacity of collectors.		Demonstrate feasibility of the public services involved.	
Equipment	The project area must have childcare, primary education, and health services; and appropriate street access. Alternatively, the municipality must agree to arrange for the services within a maximum of one year after the works have been completed.			
Cost	Total cost of the solution not to exceed US$3,000.	Total cost of the solution not to exceed US$2,240. In justified cases, SEREMI may authorize an additional 30 percent.		
Payment limited for mortgage debt	Monthly payments not to exceed 30 percent of household income. Maximum subsidy of 75 percent of the value of the works.		Maximum subsidy of 75 percent.	

ments in urban and sanitary terms, the eligibility requirements are linked to territorial factors (location, lack of infrastructure). Programs have undergone different phases, in which some criteria have been changed or added, requirements have been eliminated, and assessment tools adjusted (see Table A.1).

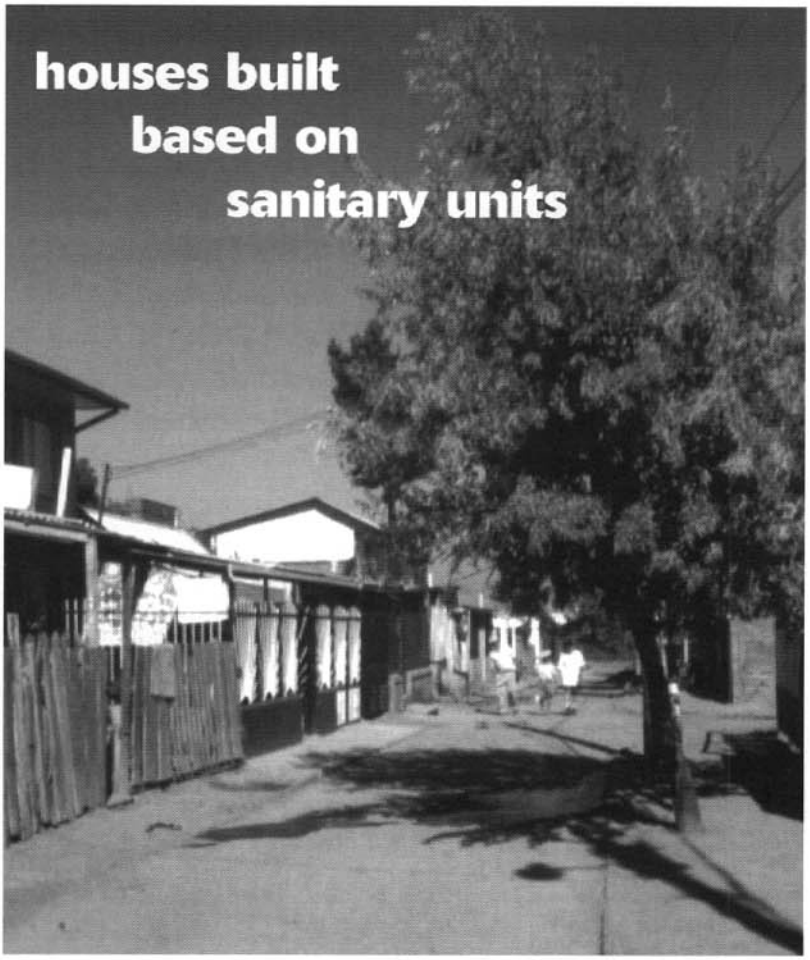
Implementation of neighborhood upgrading programs includes the following phases: a) preparation of investment projects by the Regional Control Unit of the Office of the Deputy Secretary of Regional Development (SUBDERE) and remittance of the Ministry of Finance for budget consideration; b) allocation by the Ministry of Finance of the annual amounts per region; c) identification of needs and preparation of projects for neighborhoods considered as priorities by the municipalities; d) socioeconomic and technical assessment of projects presented to the regional planning secretariats (SERPLAC) and submission to regional superintendents, who make proposals to the Regional Council on the distribution of resources among the projects presented; and e) execution of approved projects by the municipalities.

Results and interest of the case

Chile's case illustrates a process during which the neighborhood upgrading program philosophy has been used as a systematic approach to deal with the poor living conditions of the low-income urban population. Through the four neighborhood upgrading programs that have been implemented, 149,632 basic solutions and urbanized lots were constructed, corresponding to a beneficiary population of approximately



Barrio Progreso Aurora, La Cisterna, Santiago.



Yungay-Los Colonos, Lo Prado, Santiago.

600,000 households. These households were among the lowest income households in the country, and accordingly, their living conditions were extremely precarious. The program proved to be an efficient instrument for targeting such a population within the scope of a broad social policy.

Similarly, this case can illustrate the evolution of the strategy to support servicing already occupied lots with neighborhood infrastructure as a housing solution. This process began as a sanitation program and became Chile Barrio, which includes social and community components characteristic of the more complete integrated urbanization programs. Consolidation of this relatively low-cost strategy acknowledges its merits of fostering housing solutions at relatively low costs and mobilizing household savings and self assistance to supplement government programs.

Although financed at the national level, the program has managed to avoid bureaucratic obstacles and problems with fund transfers and resource allocation initiatives that normally affect such efforts. This was achieved through the use of transparent fund allocation formulas and adequate decentralization of project execution tasks to the municipalities. Chile's four programs were helped by the fact that they entail only a few components—particularly social ones—which simplifies implementation.

COLOMBIA: IMPROVED HOUSING AND ENVIRONMENT

Background

Since the establishment of the National Institute of Social Housing and Urban Reform (INURBE) in 1991, housing policy in Colombia has been transformed from providing finished housing solutions into a system of demand subsidies. Households are granted subsidies to facilitate their access to housing, which constitute a substantial share of the initial downpayment for their housing purchase. Owing to expectations associated with public housing programs in terms of generating employment and stimulating economic activity, in recent years most resources have been earmarked to building new housing, with few resources devoted to upgrading programs. This earmarking of resources to construction of new housing does not reflect the structure of the country's housing deficit, since the bulk of the problem relates to the poor quality of existing housing sites and the lack of services and infrastructure.

In light of this situation, emphasis has been placed in recent years on state efforts to meet demand for resources to improve housing and the environment in marginal areas. In the framework of the Social Solidarity Network (RSS), the central agency for government assistance in social programs, the Housing and Environment Improvement Program (MVE) was established in 1994. This program complements other housing support initiatives, including a program to finance new basic housing units.

The MVE has the key features of neighborhood upgrading programs developed in other countries in terms of its integral approach to the problems of urbanization and its emphasis on community participation. Its particular feature is its management model, which tries to decentralize activities and to combine efforts of different programs, agencies, and levels of government in the local operations.

Characteristics and objectives

The MVE targets the poorest sectors of the population by financing improvements in individual housing units and in their urban surroundings, in addition to contributing to street works, community facilities and public services. It also supports regularization of ownership and delivery of basic residential units or urbanized lots with sanitary facilities. These lots include a multiple-use area with bath, kitchen, and washing facilities. The program aims to develop community participation and to involve local governments in cofinancing their own institutional development and the projects.

As an affiliate program of the Social Solidarity Network, which has implemented 13 programs for housing, income, and social promotion, a key feature of the MVE is to be part of the overall poverty reduction strategy.

Another interesting characteristic is that the home improvement subsidy is supplemented with resources from the municipalities and na-

tional cofinancing funds. The aim is to promote simultaneous actions in the areas of housing (through individual subsidies) and the neighborhood environment (through community development funds). This approach has been used to coordinate activities of a number of agencies and programs. In addition, the regulations require beneficiaries of subsidies to contribute, in the form of money or in-kind labor, at least 5 percent of the value of any type of solution implemented by the program.

Program operation

In the process of allocating resources, the network establishes indicative quotas by department (the second tier administrative division in Colombia) and program. Criteria used for distribution of funds include geographic allocation, through which budget ceilings are established at the national and department levels on the basis of the population living in poverty (according to UBN and vulnerable population indicators); and through social criteria, based on the social characteristics of the population. The second parameter is used to identify the neighborhoods, communities, and families to benefit from RSS programs. Housing deficit criteria such as structural instability, lack of sanitary services, and quality of construction are added in selecting families as MVE beneficiaries.

With some additional special features, the MVE component is situated in the context of the RSS management model, which aims to coordinate and integrate various institutions and levels of government with projects entailing high levels of community participation. Network operations respect the role of each national executing agency, while acting in coordination with regional and municipal governments. While maintaining its national structure, the network decentralizes functions through units created at the departmental and municipal levels. These include, at the national level, the National Solidarity Forum (Mesa Nacional de Solidaridad), national sectoral technical committees, and advisory committees. The departmental level includes departmental solidarity forums, technical committees, and collegiate management offices. The municipal level includes municipal solidarity forums and technical committees.

In this management model, the MVE falls under the responsibility of INURBE, which manages the program and disburses subsidy funds to the beneficiaries. If the municipalities or other contracting agencies agree, the MVE can be directly responsible for contract execution and supervision of works.

The municipality, with resources from the Urban Infrastructure Fund (for infrastructure and land preparation) and the Social Investment Fund (for social facilities), is responsible for street and pedestrian access to the settlements, public service networks, major works to alleviate environmental risks, and the recovery of parks and other public spaces and community facilities in the area. The RRS has the additional function of supporting the plan through the construction of parks (through the "Recrear" program), topographical surveying and the financing of environmental impact studies.

Subsidies granted through the housing and environment program totaled US$2,992 per family. Most funds were used to improve housing, while complementary infrastructure was financed through parallel programs or municipal counterparts funds.

Results and interest of the case

Between 1994 and 1998, the MVE program financed housing improvement for some 259,000 families, with 775,000 complementary infra-

Table A.2. Cycle of a Housing and Environment Improvement Program (MVE)

Stage	Responsible authority
Identification and diagnostic studies	• The RSS files a proposal for resources and territorial coverage with the Higher Council for Urban Development, Drinking Water, and Social Housing, and communicates it to the Departmental Technical Committee (CTD). • The CTD files the proposal with the departmental solidarity forum, which determines the municipalities where the operation will be implemented. Priorities are defined and municipal budget ceilings assigned. • The municipal solidarity forum validates the selection of beneficiaries, ensures that the network's programs are incorporated into the municipal development plan, and supports establishment of supervision units. • The municipality identifies problems with the housing units, in terms of public services and urban facilities. The municipal administration arranges the diagnostic study through a private contractor or nongovernmental organization.
Programming	• The municipal program operating committee prepares the schedule of activities, the flow of investment funds, and the bidding agency that will make the presentation to INURBE, authorities responsible for execution, technical assistance, and coordination and supervision entities.
Execution	• Construction of physical works with participation of the private sector and advisory and monitoring services of INURBE.
Implementation	• Implementation of programs that are the responsibility of the community and the public and private agencies involved.

structure works. This represents a significant result in a short time period for a decentralized program of national scope.

In contrast with other neighborhood upgrading programs, this one concentrates primarily on individual housing, generating, on the basis of the deficit observed, components involving the urban environment, social services, and facilities. This approach has the advantage of an individualized focus on the poorest families and households. However, it entails the danger of excessive fragmentation of resources, which can diminish its social and urban impacts.

The methodology for coordinating activities of various agencies, funds, and levels of government is another important innovative factor. While it is always a challenge to achieve this level of coordination, the network programming model has facilitated this effort. The lesson in this case is that local programs—such as neighborhood and family assistance—must be organized from the bottom up: demand is generated in the neighborhood, which is organized by the municipalities, and only then the regional and national agencies, with their specific programs, come into play.

The MVE uses the concept of family housing subsidies, and subsidies to the municipality to carry out complementary neighborhood infrastructure and services. This system is a precursor to those now being developed in housing programs, which involve collective subsidies for neighborhood improvement projects that can be calculated by family and granted to the community.

BRAZIL: FROM SQUATTER SETTLEMENTS TO NEIGHBORHOODS

Background

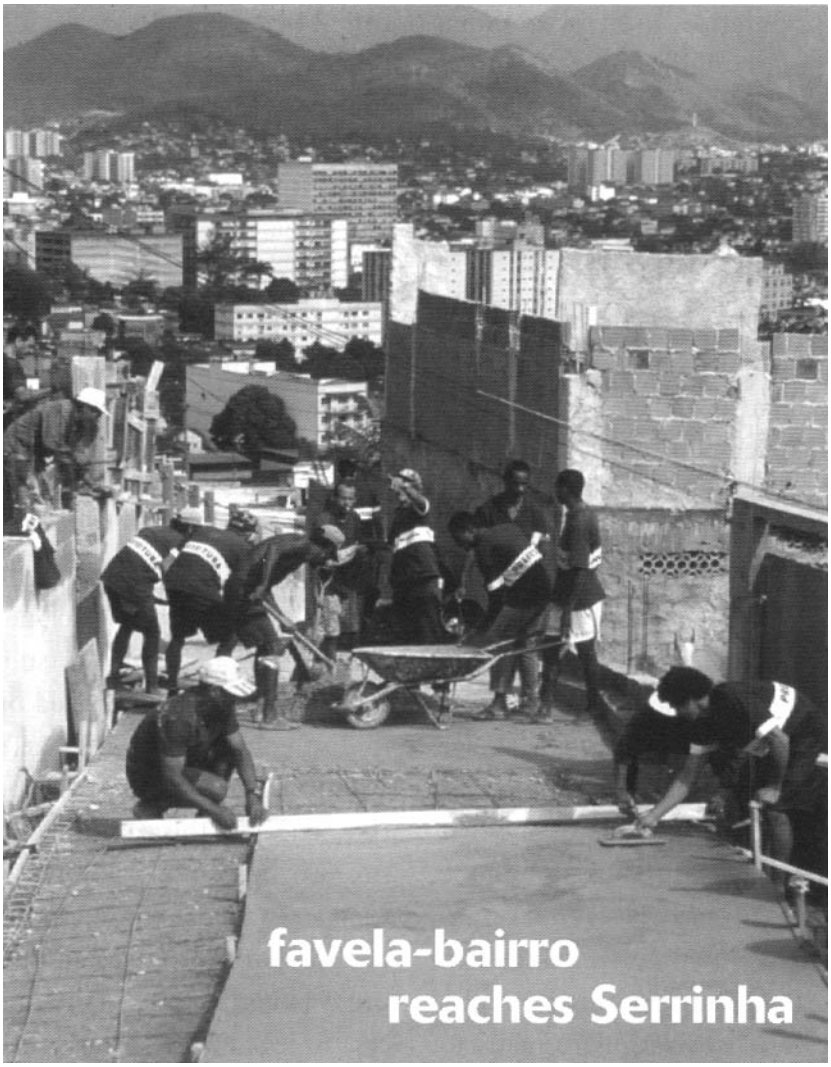
In Brazil, three neighborhood upgrading programs since 1995 have approached the issue of informal settlements with similar philosophies but very different mechanisms of execution. These projects include one example of a federal program—"Programa Habitar Brasil" (HBB); one carried out at the state level—"Programa Baixada Viva or Nova Baixada" (PBV/PNB) by the Government of the State of Rio de Janeiro; and one municipal program—"Programa de Asentamientos Populares I & II" (PROAP), also known as Favela-Bairro, by the municipality of Rio de Janeiro. These programs share the common features of a more modern philosophy of operation, in which social services and infrastructure works are carried out in a simultaneous and coordinated manner. Each program, however, presents special features according to the problems addressed and the level of government through which it is executed, which determines their particular criteria for allocation of funds, selection of neighborhoods, forms of organization, etc.

In Brazil, there are two traditional forms of subnormal settlements, depending on their origin, location, and ownership features. Squatter settlements (favelas) are the product of squatting on public or private land, which generally occurs in the inner city areas, which means the residents do not hold ownership titles. Irregular subdivisions are formal, in the sense that they may be authorized by local authorities, but residents still do not have titles because developers never completed the required infrastructure to allow their legalization. These are generally located in peripheral or suburban areas. The official data indicate that these settlements account for 30-40 percent of Brazil's total permanent homes, representing 8-11 million dwellings and affecting 30-40 million persons.

Favela-Bairro I and II:
A seemingly impossible problem

Favela-Bairro has been considered a paradigm for recent neighborhood upgrading operations. The program is the best example of effective incorporation of integrated urban operations involving infrastructure and social services, with a high level of community participation. Its scale and impact in urban and poverty terms are visible and substantial. Favela-Bairro has been visited by representatives from cities throughout the world and has inspired several similar programs. Its greatest contribution might be that the program demonstrated possibilities and benefits of a well-executed urban operation that has also achieved a social and political scale amply exceeding any goals that may have been devised at its modest beginning.

With a population of just under six million, Rio de Janeiro exhibits urban characteristics typical of dual cities in developing countries,



aggravated by its topography, which has promoted proximity and cohabitation of rich and poor neighborhoods. The formal city grew and developed in the valleys located among the hills that characterize the area's topography, and along the coast. At the same time, the informal city produced by squatting—irregular subdivisions and squatter settlements—grew on the hillsides, fueled by migration of people from the country's interior and other states attracted by the prospect of employment in the big city.

In 1995, the year the Urbanization Program for Popular Settlements of Rio de Janeiro (PROAP) began, the city housed an estimated 800 squatter settlements with approximately one million inhabitants, and about 600 irregular subdivisions with a population of some 400,000. This indicates that nearly 25 percent of Rio de

Janeiro's urban population lived in squatter settlements or irregular subdivisions at the time. Resolving this situation seemed impossible, owing to the scale of the problem and the number of previous attempts that failed.

Features and components

PROAP, better known as Favela-Bairro, originated with a program to urbanize squatter settlements based on self help, in which municipal technical staff arranged sanitation and street works by contacting labor from the communities themselves. This program had the merit of making the municipality acknowledge the existence of squatter settlements in Rio, resulting in development of a policy to address the problem, as well as the relevant working methodologies.

The municipal policy toward irregular settlements was formalized in a 10-year plan introduced in 1990, which admitted, for the first time, the reality of informal urbanization in the city, and formulated a strategy based not on removing the settlements, but on urbanizing them and providing social assistance for their populations. The plan created special instruments to enable the municipality to issue special urban planning ordinances with more flexible standards for neighborhoods deemed of social interest. Under this plan, the municipality began the systematic task of identifying the settlements and directing social services to these areas. A program of investment in urbanization works was also begun for the squatter settlements and irregular subdivisions, supported by the IDB since 1995.

The Favela-Bairro program had innovative features for its time. Its typical intervention began with an urban planning project chosen by a design competition (later replaced with a tender process) for the squatter settlement, which was discussed at length with the community. This process served as a basis for deciding infrastructure projects (water supply, sewerage, street systems, storm drainage, stabilization of hills, public lighting, parks, and recreational facilities); social services (limited in this phase to construction of childcare centers); and employment-generating components to be included in the project. It also included components addressing community development, hygiene and environmental education, and support for land titling. To resettle the few families who had to be relocated out of risk areas, the program generally included construction of apartment buildings in the same area or near the beneficiary settlement.

The program also included a component to support irregular subdivisions, which had initially been approved by the municipality but could not be regularized owing to the absence of the minimum required infrastructure. Through this component, basic infrastructure works were carried out and technical and legal assistance provided (research on land tenure, preparation of alignment and parceling projects, and legal assistance for individual owners) to legalize these subdivisions under more flexible standards issued by the municipality itself. Although they constituted a less "visible" problem than the squatter settlements, the irregular subdivisions were included in the program to send a clear signal that the city's policy on informal urbanization would give equivalent treatment to the two manifestations of informal urban development: irregular subdivisions on the periphery and squatter settlements in the inner city.

Selection of squatter settlements and irregular subdivisions

The selection of squatter settlements and irregular subdivisions for PROAP I and II used a rating sys-

Table A.3. PROAP-Favela Bairro: Criteria for selecting squatter settlements and irregular subdivisions

Neighborhood selection criteria

Squatter settlements

- Percentage of households lacking sewerage and drinking water service (cost efficiency indicator);
- Percentage of children 0-4 years of age, women heads of household earning less than one minimum wage, and illiterate heads of household (composite poverty indicator);
- Location in relation to other planned activities in the area (strategic indicator).

Irregular subdivisions

- Order of enrollment in the municipality's Irregular Subdivision Regularization Program;
- Number of families to benefit;
- Percentage of occupation of lots;
- Overall estimated cost of works;
- Age of the subdivision.

Project eligibility criteria

- Unit costs not to exceed a maximum of US$4,500 and an average of US$3,500 per household for squatter settlements; and a maximum of US$3,500 and an average of US$2,000 per family for irregular subdivisions;
- The land ownership situation at the work site must be duly resolved before each project begins.

Resettlements

- New residences must have a good construction layout and a minimum area of 36 square meters; residents may be offered financial compensation for housing affected or housing acquired in the same settlement. For leaseholders, compensation will be equivalent to three months' rent and assistance in finding a new residence; compensation for owners will be equivalent to the value of the properties.

tem based on poverty indicators (related to the socioeconomic condition of families in each squatter settlement) and the cost efficiency of the investment (cost of works required or infrastructure deficit in terms of sanitation and drainage). An additional criterion was to combine operations in squatter settlements in the same geographic area to enhance the urban impact of the program. Application of these technical selection criteria from the beginning of the program avoided political interference throughout its execution.

Table A.3 provides a summary of the technical criteria applicable to the projects.

Evolution in phases I and II

Phase I of the Favela-Bairro program began in 1995, and, during the first four years, it addressed approximately 55 squatter settlements and eight irregular subdivisions. The second operation began in 2000 with the aim of upgrading another 52 squatter settlements or approximately 25,000 people and an additional 23,000 persons in ir-

regular subdivisions. The second phase entailed few but significant modifications to the first. Based on surveys of the beneficiaries, who indicated that more diversified social services were needed, support services for vulnerable groups (children not in school, single mothers, and the elderly, among others) were introduced according to a menu defined for each squatter settlement, plus initiatives on income generation and support for occupational training (specialized courses and first and second level diplomas for adults).

During the process, linkages with other sectors of the municipality were strengthened and mechanisms of community consultation and participation—factors considered key to ensuring program sustainability—were refined.

Results and interest of the case

The two phases of the Favela-Bairro program represented an investment in excess of US$600 million and benefited a population of approximately 500,000. This was a massive program with a substantial impact on the city through its effects on the quality of life of a significant proportion of the population, as well as the urban improvements that it entailed. The program gained public approval as an example of an effort undertaken according to priorities clearly assigned by society. It also illustrates how such programs can expand in scope from a pilot experiment to an effort that represents the city's reply to one of its most serious social problems.

One of the key factors in Favela-Bairro's success is that it is fully financed and executed by the municipality. This approach simplifies execution, as there are fewer decision-making authorities and the lines of authority and responsibility are clearer than in other programs involving more than one level of government. Although the municipality was required to establish intersectoral coordination schemes—a technical committee to approve and monitor projects and a coordination committee for the various secretariats involved—these activities occurred within the municipality itself under the single authority of the mayor.

Another important factor was adoption of professional management methodologies, essential in a program that at any given time might be engaged in 40 or 50 simultaneous operations at various stages of execution. The key was implementation of a management model in which managers were fully responsible for monitoring each neighborhood, assisted by an information system used to report the development and execution status of the different projects.

The mechanisms for community participation in decisions on the design of operations and functioning of local services (for example, trash collection and community reforestation contracted with persons in the community through the neighborhood association) were important factors in making the work possible under difficult conditions, and in the communities' ownership of the projects and their interest in maintaining and preserving them.

Using these methods, seemingly impossible problems were resolved with a proper philosophy, technical focus, and popular support. These features assured the programs continuity through a number of different municipal administrations.

Baixada Viva/Nova Baixada: PRIORITY TO URBAN MANAGEMENT

The Baixada Viva program (PBV), later renamed the Nova Baixada program, aimed to meet the urbanization needs of poor neighborhoods located in the region of Baixada Fluminense, in the metropolitan area of Rio de Janeiro. Most of Baixada's

population of almost 3.5 million is low-income (more than 50 percent are below the poverty level of US$104 per person per month) and the region is characterized by tremendous deficiencies in infrastructure and urban and basic social services. The program's target population is composed of approximately 400,000 direct beneficiaries.

A special feature of the PBV is that it is an urban development program in which the state government finances and executes operations in the framework of a cooperation agreement with the municipalities. Its key aims are to a) alleviate the effects of urban poverty in some municipalities; and b) improve the sanitary environmental conditions of the lowest-income neighborhoods, as most are built on areas prone to flooding.

The program includes traditional urbanization components (streets, sanitation, drainage, etc.), and others specifically intended to improve health conditions (regional hospitals and neighborhood health centers, among others). Owing to the characteristics of the selected neighborhoods, and particularly since large areas were involved, a complementary infrastructure and services component was included. Although located outside of the neighborhoods themselves, this component was essential for the systems installed within the neighborhoods to operate adequately. The complementary infrastructure included purification plants and wastewater collection pipes that supplemented the water supply systems (pumping stations, tanks, and distribution systems) and similar works. It also included an institution-building component for the municipalities, with special emphasis on land registers, financial systems, decentralized neighborhood management, and organization of garbage collection services.

One characteristic of the design of these projects is the neighborhood management component. As a result of the serious problem of urban maintenance in the region as a result of the weakness of the municipalities in providing neighborhoodservices,thePBV a dopted two strategies: decentralization of municipal administration and introduction of neighborhood management committees. The aim of the decentralization effort was to encourage the municipalities to focus more on the problems of each neighborhood, with allocation of annual budget resources to maintenance. With these committees—comprised of representatives from the community responsible for overseeing key municipal services provided in the neighborhood—the aim was to guarantee accountability and social oversight in terms of the quality of services. Garbage collection, street maintenance, and health services generated the most interest in the community and therefore benefited most from its supervision.

Agreement between the state and municipalities

Relations between the state and municipal governments in the framework of the program, and in particular in terms of conditions for the free transfer of works and maintenance obligations, as well as neighborhood management responsibilities, are covered in agreements stating the following conditions:

On the part of the municipality:

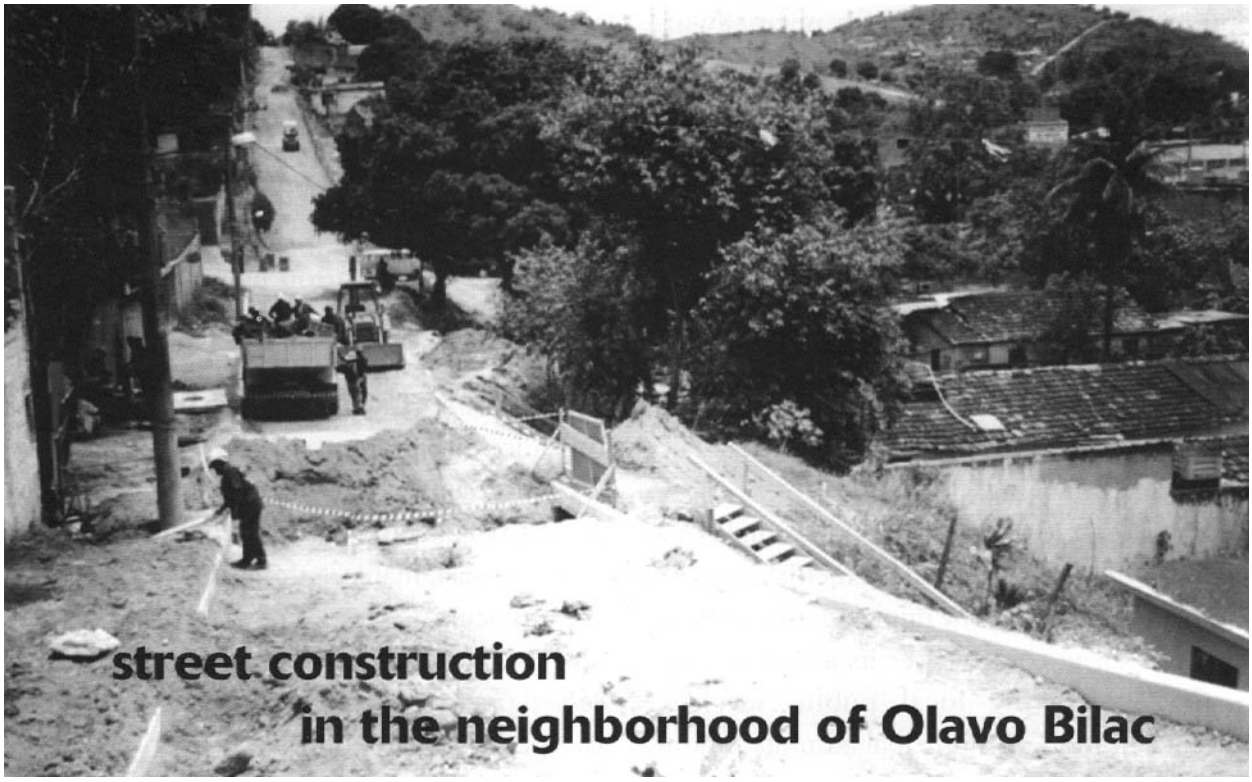
- Establishment of specific *decentralized management* units for each neighborhood to be addressed by the program. These units must have their own administrator, staff, and equipment, as well as the necessary authority over the services provided in their jurisdictions;

Chatuba, Nova Baixada program.

- Allocation in the annual municipal budgets of funds to maintain the urban and social services improved or introduced under the program;
- Revision of property values in the beneficiary areas upon completion of the projects to update the municipal land register in order to have an updated base for tax assessment. Revenue generated through these taxes will be used to finance municipal services in the same neighborhoods from which the taxes were collected.

On the part of the state government:

- Provide investment resources for the program and its unreimbursed transfer to the municipalities (the state will issue contracts directly for work on infrastructure, regional hospitals, and citizen service centers);
- Guarantee financing and technical assistance for partial implementation of subprograms for solid waste collection, childcare centers, and health care services.



Nova Baixada program, Rio de Janeiro.

Selection of neighborhoods and project analysis criteria

Neighborhoods were selected for the PBV substantially as a function of the sanitary infrastructure deficit and location with respect to the region's hydrographic basin.[1] Minimum population density (exceeding 8,000 per km^2) and average income of heads of household (less than three minimum wages) were also used as criteria. This process was used to identify and rank 14 neighborhoods with populations in the range of 10,000-25,000 as eligible for the program.

The main technical criteria used in project analysis are listed below:

- Average unit costs per household not to exceed US$3,600;
- Use of the lowest-cost technical solution, with a positive cost-benefit ratio;
- Projects were required to meet the relevant standards established by specialized agencies and include measures for adequate operation and maintenance of works and services financed by the program;
- Land tenure should be legal in areas where the works were to take place, including approval of boundaries and subdivision plans.

Results and interest of the case

The Nova Baixada program provided a total investment of US$300 million. Its implementation was slow, particularly in periods of administrative transition in the state and

[1] As a supplement and/or follow-up to the macrosanitation operations in progress in connection with the Polution Control Program for the Guanabara Bay.

municipal governments, which normally affects execution of this type of effort. These changes, in particular, affected political relations between the two levels of government. The fact that the program is supported with an external loan, however, helped reduce the problems, owing to the existence of clear rules on execution (determined in the operating regulations), definition, in advance, of the neighborhoods to benefit from the program (a variable always subject to political tensions), and stable financing.

This case provides a good example of a situation in which government inefficiency was successfully addressed by implementing mechanisms of social control over its activities, particularly involving local public services. Decentralization of municipal administrations and establishment of neighborhood management committees were highly positive strategies in improving performance and demanding more accountability on the part of the municipal authorities in terms of adequate provision of these services.

Another important aspect of this program is the example that it sets in the area of intergovernmental relations in the urban and social areas. This case illustrates a situation in which the state government intervenes to solve a crisis involving a chronic deficit of services in the region by using its financial capacity to complement municipal urbanization works and services. The concern for effective urban management, technical assistance in the area of health, garbage collection, and land registers, among other state activities, indicates a healthy relationship of intergovernmental support in which the functions and responsibilities of each level are respected.

Habitar Brasil: Strategic Plans for Subnormal Settlements (PEMAS)

The Habitar Brasil BID program (HBB), supported by the IDB, is an initiative of the Brazilian federal government to improve the quality of life of the population living in subnormal neighborhoods located in capital cities, conurbations, and metropolitan areas. It is an example of a national program financing typically local urban interventions that attempts to focus its resources on the neediest areas and promote strategies and changes in municipal policies for a sustainable, autonomous approach to the problem.

This program was modeled after the successful operations in Rio de Janeiro, replicating its integral intervention methods in neighborhood upgrading and passing them on to other municipalities. As a national program, however, it places special emphasis on the process of selecting municipalities—based on a fund distribution formula—and on the requirement for the municipalities to develop a strategy to address the problem of informal settlements in their jurisdictions. This approach promotes the formulation or revision of policies and of relevant municipal legislation, which is the most innovative aspect of HBB.

Strategic Plans for Subnormal Settlements (PEMAS) are designed to encourage municipalities to formulate strategies to address the problems of informal settlements. They include commitments and goals to be met in their execution, such as updating urban regulatory instruments, implementing policies and programs to enhance the supply of low-cost housing, refining and simplifying urban management and planning instruments, and prioritizing operations to be carried out in subnormal neighborhoods.

Characteristics

HBB finances execution of integrated neighborhood upgrading projects that include infrastructure and social service components and also strengthen community organizations by training neighborhood and resident leaders. Three mechanisms are used to that end: training to consolidate organizations, workshops to introduce and prepare participative assessments of projects, and organization of a community social fund. A further component is the institutional development of participating municipalities in areas relating to urban management practices and instruments (particularly to address the issue of informal urban development), and the conducting of studies on urban and housing policy in Brazil.

This program aims to stimulate convergence between federal and municipal investments to improve low-income neighborhoods. It also aims to provide incentives for the municipalities to invest in integrated neighborhood upgrading projects and in updating and improving urban management instruments, through a counterpart grant mechanism.

For the initial distribution of HBB resources with a total projected investment of US$417 million, a group of 12 states was selected on the basis of their project preparation capacity and geographic representativeness. Sixty percent of the program resources were distributed among these states. Priority was given to states that, in absolute terms, had a substantial number of substandard urban dwellings and proportion of such dwellings in relation to all urban dwellings in the state. The remaining 40 percent of the funds was reserved for these states for a two-year period. Unallocated funds remained available to the municipalities that had completed their initial projects in order to provide incentives for a second operation.

Eligible municipalities must be situated in a metropolitan region, conurbation, and/or capital of the selected states. They must also meet the eligibility requirements in reference to the relative incidence of substandard housing, combined with the income level of heads of household.

Specific neighborhood upgrading projects were selected using a two-phase procedure. During Phase I, the degree of difficulty in execution, such as the land tenure regularization situation and environmental conditions, among others, were used. When resources were available in the state, according to the allocations made, projects were analyzed in Phase II according to the technical requirements from the legal, environmental, social, economic, and financial standpoints (See Table A.4).

Execution

The agency responsible for coordination and supervision of program execution is the Special Secretariat of Urban Development (SEDU), an agency of the federal government. The Federal Economic Bank (CEF), a federal bank, is the technical and financial agent for the program. CEF analyzes project eligibility; approves and supervises contracts for the transfer of funds to the municipalities; verifies counterpart contributions, and; monitors execution of works and community participation in the formulation, design, and execution of projects. The municipalities are responsible for preparing and executing PEMAS and for contracting works under the projects. There are also provisions for participation of specialized consulting firms to support the municipalities in preparing and supervising projects and the PEMAS.

In addition, the municipalities must file an institutional development proposal that includes at least a diagnostic study of the munici-

Table A.4. HBB project eligibility criteria

	Phase I	Phase II
Legal	Neighborhoods located on public land or acquired by residents in full regularization process (or to be concluded in Phase II).	Regular land tenure situation or guarantee that the title issue process can be completed.
Environmental	The neighborhood must not be located in a high-risk area in connection with natural processes of cost mitigation, in risk areas for the population, or in environmental or cultural preservation areas.	• Environmental permit issued by the competent agency; • Environmental management plan; • Public disclosure of environmental studies.
Social	• 50 percent or more of the beneficiary population must have incomes less than or equal to three minimum wage units; • Households must be residents in the neighborhood for at least five years.	• Accompanying social program in progress; • Relocation plan approved by the beneficiaries; • Approval of the project design by at least 80 percent of the households.
Technical and economic	• Neighborhoods located within urban limits with permanently transitable access; • Sanitation services (water, trash collection, and sewerage) must be feasible; • In the absence of health and education facilities, the state or municipality must guarantee availability; • At least 50 percent of the population must be in a basic services deficit situation; • The cost of special works (treatment plants, macrodrainage, etc.) must not exceed 25 percent of the investment.	• Minimum cost solutions justified by effective demand; • Compliance with cost limits for the program; • At least 50 percent of the beneficiaries must declare sufficient income to cover fees and taxes related to the new housing status; • Coordination with income-generating programs for the beneficiary neighborhood.
Institutional	Diagnostic study of the urban and municipal situation and work plan to prepare the PEMAS.	• Approved PEMAS and definition of indicators for Phase I; • Agreements in connection with the earlier stage must be met; • Agreement on transfer of resources signed with the state and municipality, covering the supplementary contribution, among other matters.

pal situation and a preliminary draft of its PEMAS, providing a ranking of subnormal settlements with policy goals and indicators. When the proposal and goals for execution of the PEMAS have been approved, the municipality must start executing Phase I of the institutional actions before obtaining further resources for the slum upgrading component. Accordingly, contracts for transfer of resources for works are contingent on execution of institutional development activities.

Results and interest of the case

HBB confronted major difficulties in the beginning, attributable primarily to the complexity of its operating mechanisms. The execution process requires participation of three levels of government and a federal bank. This overall scheme multiplies the bureaucratic steps involved, which are a factor in the delayed execution. The lesson from this effort is that neighborhood upgrading programs are eminently local activities, and therefore the execution mechanisms should be designed to facilitate access to resources for eligible municipalities.

As this is a federal program, criteria for distribution of funds had to be established that, while based on technical factors, necessarily exclude at least half of the states in the country, many of which comprised a number of cities and neighborhoods with great social needs and potential to use resources quite efficiently. This inability to address the problem in its entirety is a substantial drawback found in national programs. In other words, such initiatives should be continuous in time and their key function should be to circulate concepts and generate incentives to leverage local counterpart resources to be invested in support of the desired objectives.

ARGENTINA: EMPHASIS ON COMMUNITY DEVELOPMENT

The neighborhood upgrading program (PROMEBA) of the Argentine federal government was conceived as a social program that would use the improvement of housing as a mechanism to promote integration of communities affected by various forms of social exclusion. PROMEBA is characterized primarily by its decentralized execution—the source of some of its problems—and by its emphasis on social development of beneficiary communities.

Context and background

Argentina's total population in 2000 was estimated at just over 36 million, most (85 percent) of whom live in urban centers with populations exceeding 2,000. During recent decades, the country's housing stock has not increased commensurately with population growth. As a result, some families are crowded into existing dwellings or lodged in informal settlements that lack basic services.

The reforms introduced in federal housing finance mechanisms during the 1990s improved the outlook for production of new housing and for renewal of the obsolete housing stock. The expected increase in production, however, has been disappointing owing to the economic problems the country has experienced in recent years. The present system is based on private financing, loans from the National Mortgage Bank and programs by provincial housing institutions that receive approximately US$800 million per annum from the national housing fund (FONVI). These resources, however, are not effectively used, and almost all of these institutions have management problems and are still engaged in direct production of housing rather than housing finance.

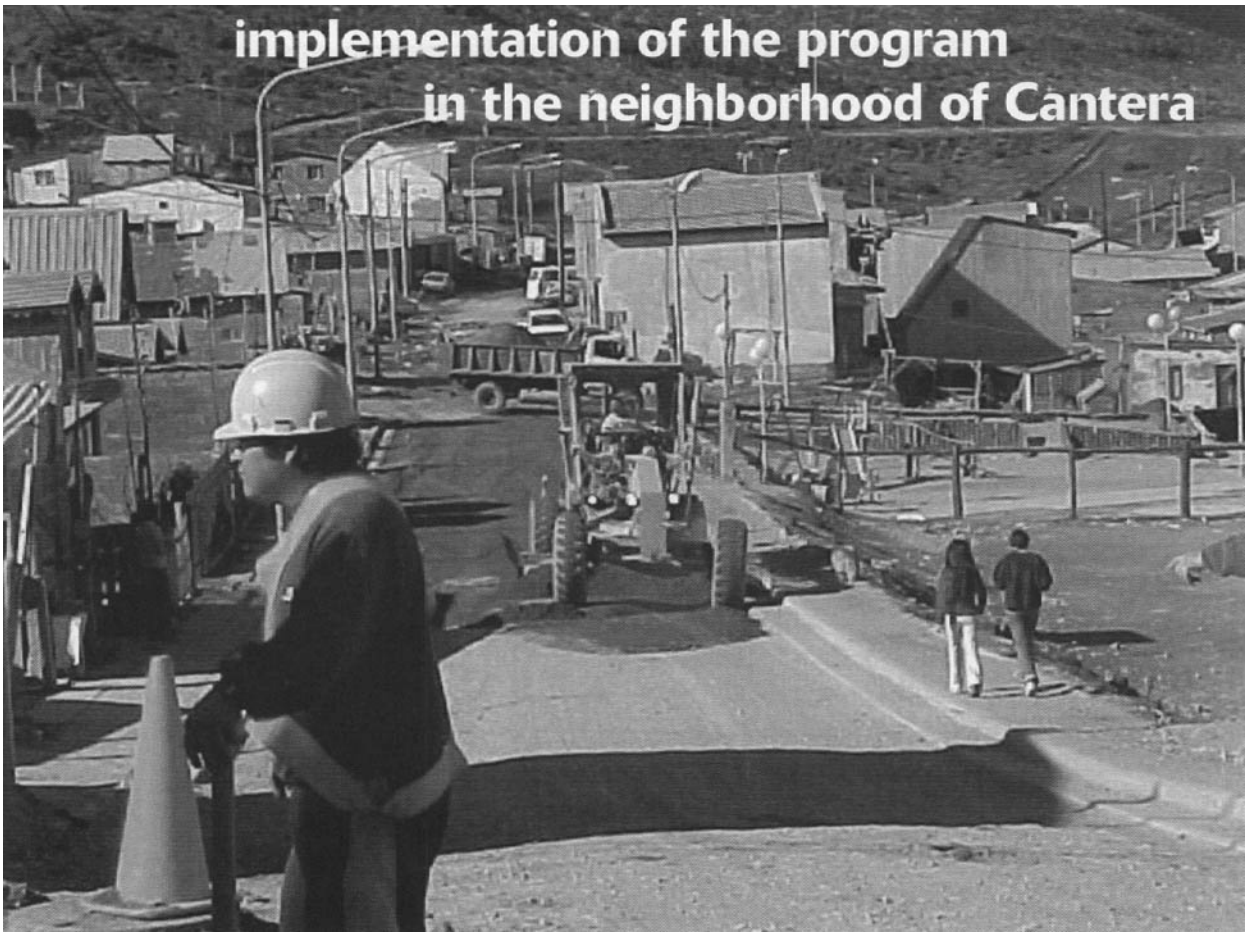
It was estimated that, in 1996, 5 percent of the housing stock lacked regularized tenure and basic services. Recent estimates indicate an increase in the number of housing units in this situation (now approximately 10 percent). This housing includes a concentration of very low-income residents without the capacity to improve their housing without government support. To assist this population and improve their quality of life, the federal government, through the Ministry of Social Development and Environment, designed PROMEBA, the main characteristics of which are summarized below.

Characteristics of the program

The objective of PROMEBA is to improve the quality of life for the population with unmet basic needs living in neighborhoods insufficiently equipped with basic infrastructure and exhibiting environmental and ownership regularization problems. Design, execution and implementation of physical works can be used advantageously to promote community organization, participation in collective action, and integration into the local government's activities.

Table A.5. PROMEBA: Project eligibility requirements

	Phase I	Phase II
Social	• 75 percent of the population must have UBN; • Residents must have lived in the settlement for two years; • 70 percent of the households must be capable of paying loans with 25 percent of their income.	• Accompanying social program in progress; • Relocation plan approved by the beneficiaries; • Stated agreement of 75 percent of the residents with project design.
Legal	• Neighborhoods must be located on land that is publicly owned or that has been acquired by the occupants.	• Ownership situation of land legalized to permit the process of issuing individual titles.
Environmental	• The neighborhood must not be highly vulnerable to natural or anthropological problems and must not compromise ecologically valuable areas.	• Environmental data sheet and environmental management plan approved. • Evidence that environmental studies have been published.
Technical and economic	• Neighborhoods must be located within the urban boundary and connected to the urban center by means transitable at all times; it must be feasible to equip the neighborhoods with drinking water, electricity, and sanitary solutions; • The number of lots urbanized by the program must not exceed 10 percent of the number of families living in the neighborhood.	• Investment costs must not exceed the following limits per lot: (a) Total investment US$6,500 (b) Water and sewer systems US$1,700 (c) Street and drainage system US$2,300
Institutional and financial	• Fund transfer agreement with the province.	• Agreement with the province on project cofinancing and execution; supplementary funds must be provided for housing solutions in connection with relocated families; • Agreement to transfer services to providers and commitment by the latter to take over operation and maintenance.



Tierra del Fuego, Argentina.

PROMEBA has two main components: *social promotion* through which activities to promote community organizations, community leadership training, and monitoring of community activities are financed; and *physical works investments* that finance complete neighborhood infrastructure and property regularization activities. When necessary, works within the homes are included (a sanitary unit consisting of a complete bathroom and cooking connections) to ensure that the public infrastructure works are used. It also provides technical assistance in formulating the engineering project, social and environmental monitoring, and supervision of the works.

Program financing includes federal government resources from the IDB loan. These resources cover 70 percent of the costs of each project and are transferred to the provinces on a nonreimbursable basis. The remaining 30 percent is passed as a loan from the federal government to the provinces financed under the same conditions as the IDB loan. One of the problems the program has experienced has been the lenghty procedure to be used to obtain these loans, which require approval from the provincial legislature. This has substantially delayed the beginning of the program in a number of provinces that have indebtedness capacity despite their high concentrations of poor population. The provinces or

municipalities also finance housing solutions for families that require resettlement.

Project eligibility criteria

The program targets neighborhoods having at least 50 minimum-income families with unmet basic needs who have lived in the settlement for two years or more, situated in localities with populations of more than 20,000 (with the exception of Buenos Aires and Greater Buenos Aires) and that meet the conditions described in Table A.5. The eligibility conditions must be met in two phases: (1) preliminary project for commitment of federal funds; and (2) final design for contracting the works.

Execution

PROMEBA is managed by the Ministry of Social Development and Environment of the federal government, through a national control unit (UCN) that supervises disbursements of federal resources and is responsible for financial and technical administration of the program. Execution is decentralized, and the provincial governments, in association with the municipalities and organizations of civil society, are responsible for project design and execution.

Projects are identified at the provincial level in consultation with the municipalities and with the beneficiary communities. This process involves two phases. Phase I (identification) focuses on ensuring that the projects benefit eligible families based in sites with a clear ownership situation (ownership of the beneficiaries, municipalities, or provinces) and for which urbanization will not be impeded by major environmental problems. Phase II (execution) involves development of the integral final design, invitations to tender for works, and supervision of execution.

Throughout both phases, and for a period of up to two years after the works are completed, the program provides financing for social activities to facilitate the community's participation in the project design and execution, and to train members of the community to take over community services. Social follow-up activities also involve conducting a survey of beneficiaries to reduce the risk of squatting prior to announcement of program operations, and to facilitate the process of relocation when required.

Results and interest of the case

PROMEBA made slow progress in the beginning as a result of its complex operational scheme and the requirement for the provinces to obtain legislative authorization to contract subloans to cover their counterpart financing. In light of the socioeconomic features of the assisted population and the availability of nonreimbursable transfer funds for the housing sector, it may be argued that a program of this type might have been carried out through subsidies, as is the case of many others of its kind. This approach would simplify execution tremendously, while enhancing social relevance, promoting horizontal equity among the provinces through the transfers made on the basis of need.

When the initial obstacles were overcome, the pace of program execution became more regular. The most positive aspects of the program include the important role of community participation. As a result of program efforts in this connection, the beneficiary communities were effectively mobilized to participate in oversight and support in execution of works and services, and became involved in neighborhood maintenance activities. These results were most notable when the municipal governments became more directly involved in project execu-

tion, and particularly in community development activities.

From the beginning, the intended effects of the program involved extension of the integrated urban operation model among subnational governments. It was hoped, in particular, that the provinces would be motivated to shift the emphasis of their housing policies and supplement them with neighborhood infrastructure programs. This result is becoming evident in regard to new initiatives in the housing sector, and it is expected to be broadened as PROMEBA executes more projects, demonstrating the feasibility and positive impacts of neighborhood upgrading programs.

BOLIVIA: HOUSING POLICY PROGRAM

Context and background

Approximately one third of the houses or dwellings built each year in Bolivia are informal and are generally located in irregular neighborhoods. This situation is the result of the urgent need for shelter among migrant families, who lack the purchasing power and income stability, coupled with insufficient response in terms of supply from the formal financial and real estate markets. Much of the urban expansion in the country is in fact characterized by irregular subdivisions and urbanization, low-quality construction, and lack of public community space and adequate urban services.

As a result of the abundant supply of unserviced land and local construction capacity in Bolivia, quality is the greatest housing problem. Data from the 1992 census indicate that 25 percent of urban housing consists of improvised dwellings, shanties, or improvised houses; 19 percent did not have access to water; 58 percent had no running water inside the dwelling; and 37 percent had no sanitary service.

Unlike other Latin American countries, urban lots in Bolivia have generally been acquired through regular sales and not by illegal squatting. The missing factor is generally regularization of the neighborhood with the municipality and official registration of the transaction to normalize property ownership, even though it has already been agreed to by the parties. In addition, dwellings occupied by the low-income population are built with relatively solid, adequate materials—primarily brick or adobe. Although they present serious deficiencies, particularly from the sanitation standpoint, it is feasible to formalize most settlements and incorporate them into the formal city.

Program characteristics

The neighborhood upgrading subprogram (SMB) is a component of the Housing Sector Support Program (PROVIVIENDA) intended for reform of Bolivia's housing finance sector. The subprogram is an integral part of the new system, the key features of which are described below:

- Reform of the legal and institutional framework for the sector, including standards on rent, registration of properties, execution of guarantees, foreclosures, etc.; municipal legislation to provide for adoption of urban planning and construction standards; and procedures intended to reduce the costs of formal housing, and increase coverage of land registers, as well as their coordination with property registers.
- Reorganization of the housing finance system by: a) closing the national housing fund and using labor and employer contributions of 1 percent and 2 percent of wages, respectively, in individual savings accounts; and

b) establishing a secondary mortgage market to channel long-term resources from pension fund administrators and other investors into housing finance, through securitization of mortgages.

- Establishment of the national housing subsidy fund (PNSV) to support low-income groups by granting direct individual subsidies to supplement bank loans for acquisition of housing. In addition, the neighborhood upgrading subprogram was created within the PNSV to finance collective subsidies to family groups to cover costs of neighborhood infrastructure.

To maintain its integral nature and ensure a proper focus, the subprogram only applies to projects that include at least the following four elements: sanitary sewerage, sanitary modules, ownership regularization, and community development. It also finances technical and financial support for participating municipalities for urban planning legislation (development plans, urban control unit, and ordinances on construction, land use, and subdivisions), and training for municipal executing units (UEM) in promotion, preparation of profiles, preinvestment studies, and monitoring of project execution.

Allocation of resources and project eligibility criteria

It is estimated that available resources (US$41 million) make it possible to improve approximately 23,000 housing solutions. These funds are distributed with a combined system of formulas and competitive processes. Departmental quotas are assigned annually, using the following formula:

$$DQ_i = [(UBN_i / UBNI_t) + (UBN_i / PD_i)] / \Sigma [(UBN_i / UBNI_t) + (UBN_i / PD_i)]$$

Where:
DQi: departmental quota determination factor
UBNi: population of department i with UBN
UBNIt: total population of the country with UBN
PDI: Total population of department i.

The PROVIVIENDA program is the responsibility of the Ministry of Housing and Basic Services (MVSB), and execution of the subprogram is the responsibility of the National Fund for Regional Development, through the Neighborhood Upgrading Subprogram Unit. SMB execution can be summarized in the following phases:

- Promotion: The neighborhood upgrading component is promoted and circulated among eligible municipal governments. The National Fund for Regional Development prepares the documents to guide formulation, execution, and monitoring of projects and arranges meetings for presentation of requests for financing solutions based on the project profile.
- Preparation of project profiles: The municipality promotes neighborhood upgrading subprograms among community organizations and conducts support activities to help them. The municipalities prepare profiles, which should be prioritized by the municipal council.
- Design competitions: Competitions in which the municipalities present their project profiles are held semiannually. Selection is based on the counterpart arrangements presented, quality of the projects, and availability of funds by department.

Table A.6. SMB: Eligibility criteria (profile phase)

Social and urban

Maximum monthly family income of three minimum wage units per month; a minimum of 75 percent of the lots occupied with housing; a minimum of 80 percent of occupied lots must be owner occupied; a minimum of 75 percent of the lots must have sanitary sewer deficits.

Technical and economic

Population of the cities must exceed 8,000; minimum size of neighborhood: 100 lots; connection to drinking water, sewer, and electricity must be feasible or a solution possible; maximum cost per project: US$1,600,000; maximum total cost per solution: US$2,800 (in exceptional cases, the cost may be supplemented by 50 percent); street access or feasibility for vehicle access to the city.

Environmental

Not located in critical natural risk areas, or mitigation measures must be included in the project; not located in incompatible use areas (archeological areas, cultural reserves, etc.).

Legal

Not located in areas where ownership or public domain is in dispute or where there is a possibility of regularizing land tenure before conducting the project; the neighborhood must be acknowledged by the municipal government as part of the urban delineation or master plan (or in progress); the neighborhood must have a legally established community organization (or in progress); counterpart funds for project execution must be guaranteed by the municipality and priority issued by the municipal council.

- Preparation of the preliminary draft project and final design: When the profiles have been selected, financing is authorized for the final engineering designs contracted by the municipalities with advisory services from the National Fund for Regional Development.
- Project execution: The National Fund for Regional Development performs technical analysis of the designs. When they have been approved, the municipality conducts tender procedures for works, or contracts the consulting services required for the project, with assistance from the National Fund for Regional Development. The latter pays contractors directly.
- Operation and maintenance: Maintenance of works for public use not subject to direct charges (drainage and urban streets) is the responsibility of the municipality, while works for community use are the responsibility of the community organization.

Result and interest of the case

Bolivia's neighborhood upgrading subprogram is fundamentally an example of implementation of integral, advanced housing policy. This policy acknowledges the importance of addressing urban infrastructure deficits as an inseparable part of solving the urban habitat problem, and the relevance of social housing

policy reform. This acknowledgement has improved the outlook for sustainable efforts and a broadened scale of neighborhood upgrading programs in Bolivia.

The neighborhood upgrading subprogram has had a dynamic performance rate, servicing 87 neighborhoods in the departmental districts of Bolivia. Unlike some national programs in which performance problems were experienced as a result of excess steps and institutional requirements, the subprogram established direct relations between the central coordination unit and the beneficiary municipalities. This relationship was consolidated with technical support provided in preparation, presentation and execution of projects—even in the most complex tender processes—a task for which many municipalities lack the necessary capacity.

The subprogram was successful in its strategy to mobilize local resources through the project design competition system, which increased local counterpart contributions from 30 to 40 percent of the cost in the final process. This counterpart funding comes from municipal or departmental government resources, and almost always includes contributions in kind (in the form of work) from the communities. The saved resources have made it possible to extend the benefits to more families than initially provided for.

NEIGHBORHOOD UPGRADING

Pamphlet prepared by the Ministry of Housing and Basic Services, Bolivia

REFERENCES

Arriagada, C. 2000. Pobreza en América Latina: Nuevos escenarios y desafíos de políticas para el hábitat urbano. *Serie Medio Ambiente y Desarrollo* No. 27, Santiago, Chile, United Nations.

Calderón, J. 1999. Tierra Vacante: El caso de Lima Metropolitana, Informe de investigación. Lincoln Institute of Land Policy, Cambridge, MA.

——— . 1997. Políticas de Regularización y Mercado de América Latina, Informe de investigación. Lincoln Institute of Land Policy, Cambridge, MA.

Clichevsky, N. 1999. Urbanización informal: contexto, causas y posibles soluciones, Informe de consultoría. Inter-American Development Bank, Washington, D.C.

———. 1998a. Tierra vacante en ciudades latinoamericanas, Situación actual y propuestas para su utilización. Documento comparativo, informe de investigación. Lincoln Institute of Land Policy, Cambridge, MA.

———. 1998b. Mercado de tierras en Quito. Estudios de fortalecimiento institutional en el área de planificación urbana. Proyecto Laderas del Pichincha, Informe de consultoría. IDB/UNDP/Habitat /Metropolitan District of Quity—MDMQ/Project Ecu/97/028.

———.1991. Tierra fiscal y regularización urbana, Informe de Investigación. IDRC-IIED-AL-CONICET, Buenos Aires, Argentina.

Clichevsky, N., et al., 1990. *Construcción y administración de la ciudad latinoamericana*, Buenos Aires, Argentina: GEL-IIED-AL.

De Soto, H. 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else.* Oxford: Oxford University Press.

Economic Commission for Latin America and the Caribbean (ECLAC). 2001. El espacio regional: Hacia la consolidación de los asentamientos humanos en America Latina y el Caribe. ECLAC, Santiago, Chile.

———. 1999. Demographic Bulletin No. 64, July.

———. 1996. Situación de la vivienda en América Latina y el Caribe. ECLAC LC/L. 971, August 16, 1996, Santiago, Chile.

ECLAC Population Division, Latin American and Caribbean Development Centre (CELADE). 2000. Crecimiento, estructura y

distribución de la population. Informe conciso. ST/ESA/SER, A/181, New York.

Fiori, J., et al. 2000. Urban Poverty Alleviation Through Environmental Upgrading in Rio de Janeiro: Favela-Bairro, Research Report R7343, University College London, Development Planning Unit, March.

Fundación Salvadoreña de Desarrollo y Vivienda Mínima. 1993. Estadística básica de asentamientos populares urbanos del área metropolitana de San Salvador. San Salvador, El Salvador.

Gilbert, Roy. 1998. Asentamientos irregulares como falla del funcionamiento del mercado inmobiliario. Informe de Consultoría. Inter-American Development Bank, Washington, D.C.

Green, M. 2000a. Estudio de caso de programas de mejoramiento de barrios en Chile. Informe de consultoría. Inter-American Development Bank, Washington, D.C.

———. 2000b. Estudios de caso sobre la experiencia del BID en mejoramiento de barrios, Informe de consultoría. Inter-American Development Bank, Washington, D.C.

Inter-American Development Bank, 1995. Operational Policy on Urban Housing and Development (OP-751), IDB, Washington, D.C.

International Labour Organization (ILO). 1999. Síntesis del estudio económico 1998-1999. International Labour Organization, Internet: http://www.ilo.org.

Mello Bueno, L.M. 1999. Urban Policies for Favelas. Unpublished.

Riofrío, G, 1999. Informalidad en Lima. Unpublished.

Schteingart, M. 1993. México: Evaluación de las políticas nacionales del suelo urbano (evolución reciente y situación actual). In Habitat, *Evaluación de las políticas nacionales del suelo e instrumentos para mejorar el acceso y uso de la tierra urbana en América Latina.* Nairobi, Kenya: Habitat.

Municipality of the City of Rio de Janeiro. 1997. Urban indicators produced by the Planning Institute (IPLAN-RIO). Rio de Janeiro, Brazil.

United Nations. 1988. *A Global Shelter Strategy Towards the Year 2000.* Nairobi, Kenya: United Nations Centre for Human Settlements.

United Nations Centre for Human Settlement (Habitat). 2001. *Cities in a Globalizing World: Global Report on Human Settlements 2001.* London: Earthscan Publications.

Ventura, Z. 1998. *Cidade Partida.* Rio de Janeiro: Companhia das Letras.

World Bank, 1997. *World Development Report 1996/1997.* Washington D.C.: World Bank.

———. 1993. Housing: Enabling Markets to Work. Housing Policy Paper, Washington, D.C.: World Bank.

Informal settlements—known in different countries as *favelas, villas miseria, tugurios or barrios jóvenes*—provide shelter to more than 40 percent of the population in many large Latin American cities. The deplorable living conditions in these slum areas reflect all the major problems of urban poverty and social inequality.

Cities for All examines informal urbanization in Latin America as well as the methodologies being used to design and implement programs to upgrade these neighborhoods. Such efforts constitute a new approach to urban and social policy that combines infrastructure works with the delivery of social services and intensive community participation. The experiences reviewed in the book show that these programs have significantly improved the quality of life and have become an important tool in the fight against poverty, particularly for targeted pockets of marginality in cities. The results of neighborhood upgrading efforts presented in this book make it important reading for all those interested in such programs and involved in their design.

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