

**INSTITUTO BRASILEIRO DE ADMINISTRAÇÃO MUNICIPAL – IBAM**  
**ASSESSORIA INTERNACIONAL**  
**Projeto n.º 17.408**

**Estudo de Avaliação da Experiência Brasileira sobre Urbanização de  
Favelas e Regularização Fundiária**

**produto 6:**  
**SUMÁRIO EXECUTIVO – Versão em inglês**



Rio de Janeiro, outubro / 2002

## EXECUTIVE SUMMARY

The Assessment Study about the Brazilian Experience in Slum Upgrading and Land Tenure Regularization, conducted by the Brazilian Institute for Municipal Administration (IBAM), is part of the *Cities Alliance* action plan, an initiative of the United Nations Program for Human Settlements – UN-Habitat, in partnership with the World Bank.

*Cities Alliance*'s goal in commissioning this Study was to identify the lessons to be learned from the practice of urbanization and land tenure regularization in Brazilian slums to help to obtain support for the *Building an Enabling Strategy for Moving to Scale in Brazil* project. This project is being carried out by the World Bank in cooperation with the Institute for Applied Economic Research (IPEA), which is linked to the Brazilian government's Ministry of Planning and Management.

The specific objectives of the work are: (a) to analyze the Brazilian experience in urbanization and the regularization of land tenure in informal settlements implemented over the past ten years by local authorities, with the participation of the society at large and community organizations; and (b) to supply basic information to help *Cities Alliance* to build a database on urbanization and land tenure regularization projects and programs.

Ten cities were selected, all with ongoing projects to improve the living and housing conditions of poor populations in slums and to face the problems originating from urban informality. The goal of the programs selected was to promote effective changes in the physical, environmental, social, economic and legal aspects of the areas that were the subject of government intervention.

The cities and programs analyzed were: Belém – *Programa de Gestão de Rios Urbanos* (Urban Rivers Management Program); Belo Horizonte – *Programa Estrutural em Áreas de Risco* (Structural Program in Hazardous Areas); Goiânia – *Política Municipal de Habitação de Goiânia* (Municipal Housing Policy); Porto Alegre – *Programa de Regularização Fundiária* (Land Tenure Regularization Program); Recife – *Plano de Regularização das Zonas Especiais de Interesse Social – PREZEIS* (Special Social Interest Zones Legalization Plan); Rio de Janeiro – *Programa Favela-Bairro* (Slum - Neighborhood Program); Salvador – *Projeto Ribeira Azul* (Ribeira Azul Project); Santo André – *Programa Integrado de Inclusão Social* (Integrated Program for Social Inclusion); Teresina – *Programa Vila-Bairro* (Villa-Neighborhood Program); and Vitória – *Projeto Terra* (Land Project).

The Study demonstrated that the group of programs selected, with their different focuses — whether predominantly urbanization or priority action to legalize land — was quite diversified in terms of experiences, offering important input as to what is going on in the country.

The analyses performed were consolidated so as to stress the main characteristics, obstacles and risk factors common to the group of Programs, and the implications of government policies.

The expectation is that the *Cities Alliance*'s initiative to support this Study may contribute to the enhancement of the experiences, to overcome the obstacles and to minimize risk factors to long-term continuity and sustainability of these interventions, while also strengthening the programs' management bodies. It may also encourage similar initiatives around the country.

## **Report Structure**

The report is organized into two parts. The first is made up of a report of the activities carried out between the months of January and August 2002, according to the Terms of Reference determining the hiring and execution of this Study by the IBAM team. This part offers a general outline of the evolution of the Brazilian experience of slum upgrading over the last two decades and reports on the result of the analyses of each of the ten programs examined by the Study. The second part, relative to the consolidation of the results, is organized into three chapters. Chapter 1 discusses step-by-step the solution generally adopted, the main obstacles faced and the results achieved by the group of programs and their implication on public policies. Chapter 2 presents the conclusion that were reached, from the consolidated analysis, on the main issues raised by the experiences assessed. Chapter 3 offers some recommendations to *Cities Alliance* regarding the possible developments of the Study, in terms of formulating a national strategy to broaden the scale and the impacts of local initiatives in slum upgrading and land tenure regularization.

## **The National Context**

The Brazilian housing deficit, according to the latest available census data, is about 5 million residences. This estimate considers the following needs: (a) the supply of housing to accommodate the vegetative growth in population and the number of new families; (b) the amount required to replace precarious units; and (c) what is required to provide basic infrastructure services.

This situation is the result of the occurrence of various factors that have been affecting, year after year, the increase in new housing offers in order to satisfy social demand, particularly for the urban poor. Among these: the growth of urban poverty, the inability of low-income families to purchase adequate housing on the market, and the insufficient production of social-interest housing promoted by the State.

Consequently, the problems – housing, urban, environmental, and social (generated by the increase of land invasions and illegal occupation of urban areas) – worsened, triggering the emergence and development of informal settlements throughout the country. Although these settlements are concentrated in metropolitan regions, urban agglomerations, and state capitals, the phenomenon of growing urban informality is progressively reaching urban centers of all sizes.

## **The State of the Art**

The Brazilian experience on urbanization, urban plan regularization and land tenure regularization of informal settlements, developed over the last two decades — mostly as an initiative of the various city governments — is an important collection of lessons learned. It should be used as input in the definition of public policies involving federal, state, and city governments, and the respective Executive, Legislative and Judiciary powers. The expectation is of intensifying government actions throughout the country, designed to reduce urban informality and improve the living, housing and working conditions of the poorer population.

From the end of the 1970s, Brazil has seen a clear reversal in the confrontational trend between federal, state and city governments in dealing with urban and social problems caused by the expansion and growth of the slums (“*favelas*”) throughout the country. First seeking to eradicate the slums, they went on to favor the urbanization of areas through consolidated occupation.

More than a decade after the establishment of the National Housing Bank (BNH) and the Financial Housing System (SFH) in 1964, National Housing Policy was unable to broaden the offer of housing units to satisfy the demand of the low-income population in the manner, pace and scale necessary. The persistent deterioration of housing conditions for the poor and the growth of urban land invasions and occupations forced the government and society to acknowledge, in that aspect, the failure of the National Housing Policy.

Therefore, a political and social environment was created favoring the permanence of the slums. The *favela* residents, in fact, had attained through their own efforts and investment in the construction and improvement of their houses, the right to urbanization benefits. This acknowledgment, regardless of the current judicial and legal situation, amounted to the development of timely experiences of slum upgrading throughout the country.

Taking a relatively long time, the BNH started trying to create new financing programs for popular housing, within the scope of the National Plan for Popular Housing (PLANHAP), making loans available for the production of sites and services and the purchase of construction materials. Finally, in 1979, was created the Program for the Eradication of Sub-habitation Agglomerations (PROMORAR), which one was dedicated to financing slum upgrading projects.

The Program was very flexible, admitting the inclusion in its financing of all housing and infrastructure components, the project preparation, the payment for improvements compensation, the rendering of works and services and the maintenance of social teams, among other items. The only component that could not be financed was the expropriation or purchase of land, to be expensed by the state or city.

Countless slum upgrading projects were funded through PROMORAR in urban centers of various sizes — respecting the different types of proposals for state or city government intervention — in various regions of the country. It must be pointed out that, at the time, the compliance to urban legislation or regularization of land tenure of the settlements were not required for the concession of loans.

Changes in the political-institutional structure and the aggravation of the economic-financial instability of the SFH, which culminated in the extinction of the BNH in 1986, affected the continuity of the financing and maintenance of the PROMORAR Program. As a result of the new Federal Constitution, that was ratified in 1988, the initiatives at the state and city level have continued and great progress was achieved on the legal front, although the Federal government has kept the issue off its agenda of priorities.

During the 1990s, because of the new legal and institutional structure that began to govern environmental protection policies and actions, the issue of the slums acquired new shape since, usually, they occupy areas at environmental risk protected by state and federal legislation. During this period, programs were started for the cleanup of hydrographic basins, large-scale interventions with national matching funds and foreign loans from the World Bank and the Inter-American Development Bank (IDB). Many of these programs include investments intended for the solution of the illegal settlement problems, through the transfer and resettlement of the families or urbanization, when possible. The Program for the Cleanup of the Guarapiranga Basin in São Paulo, and the Program for the Cleanup of the Todos os Santos Bay in Salvador — both financed by the World Bank — are very important examples of this.

The re-democratization of the country, concluded with the promulgation of the Federal Constitution in 1988, broadened the field of popular participation in public administration and imposed on the Government the incorporation of community organizations in the process of urbanization and regularization of land tenure of slums and informal settlements.

It was only in 1995, when popular social movements for housing already had gathered force and presence on the national scene, that the issue of informal settlements again received attention from the government and organized society.

There was a propagation of federal programs dedicated to social-interest housing that, without being specific, could also be applied to slum upgrading. These programs were backed with resources from the General Budget of the Union (OGU), the Workers' Assistance Fund (FAT), and the FGTS – Worker Time of Service Fund (FGTS), operated by the Special Secretariat for Urban Development (SEDU), and by the Brazilian National Bank for Economic and Social Development (BNDES), and the Federal Savings and Loan Bank (*Caixa Econômica Federal - CEF*).

With the specific purpose of financing the upgrading of the *favelas*, during the 1995-1998 government, the Habitar-Brasil Program was established. The scope and methodology of this was reviewed by SEDU so that it would begin to operate with new funds supplied by the federal government from an IDB loan of US\$ 450 million, signed in 1999 and to be passed on to 138 selected cities. Since it does not require city government to become indebted, Habitar-Brasil/IDB — although it does require them to put up their own matching funds — became one of the main sources of funding for most of the slum upgrading and land tenure regularization projects and programs.

The experience and knowledge accumulated by the cities and towns along with local circumstances favorable to the review of municipal housing policies — such as in the case of Belo Horizonte and Goiânia — associated with the activities of the popular

social movements for the improvement of housing conditions, offered opportunities to create, consolidate, and/or broaden the range of slum upgrading and land tenure regularization projects and programs. On the other hand, the motivation of state and municipal leaders may have been due to the positive assessment of previous experiences (Teresina, Belo Horizonte, Recife, Vitória), or negative ones (in the case of the Belém lowlands). Or, possibly, it was due to adverse circumstances generated by the growth of urban violence (Rio de Janeiro) and social exclusion (Santo André) and their effects on urban economy and the general welfare.

The moment was proper to undertake a concentrated effort by all relevant social and political players to improve and expand local slum upgrading and land tenure regularization initiatives. The right to housing was finally recognized as one of the social rights assured under the Federal Constitution (2000); the City Statute (2001) established and regulated new instruments designed for the social function of property and of the city; the Public Prosecutor's Office reinforced inspection as a means to ensure compliance with environmental laws; and the local governments — under pressure by non-government and community organizations — were mobilized to perform their role of regulation and control of the use and occupation of urban land. Finally, the issue of social-interest housing became the subject of many housing policy proposals under discussion in Congress, by the CEF — with the World Bank's support — and was included in government programs presented by the presidential candidates.

### **Concept of the Programs and Projects**

Between the eradication and the “making sacred” of the rights of the poor people to remain in occupied areas outside the scope of the law, there is, in the group of programs analyzed, a tendency by the Public Sector to take a more balanced position, resulting in the evacuation of the risk and environmental protection areas and the urbanization of areas demonstrating greater technical and land rights feasibility, for short-term resolution. However, the respect of residents' rights was upheld in case it is necessary to transfer them from occupied areas, whether by means of compensation payments for the improvements carried out and/or the offer of alternative housing within the area of the settlement or in its environs.

To urbanization itself, understood as the execution of the housing and infrastructure works and facilities and services, were added other components in the form of social and environmental actions, thus giving way to integrated multi-sector programs that characterize — with the exception of the *Regularização Fundiária* Program from Porto Alegre — the group of experiences analyzed. Two concept models were observed among the cases studied: one gradual, in which the formatting of the program absorbed new social demands during the implementation process (Salvador and Santo André, for instance); and the other comprehensive, in which all necessary actions for the improvement of the living, housing and working conditions for the target population were considered since the beginning of the process (Teresina, for instance). Both models have their advantages, but the case of Santo André stands out to the extent that the gradual inclusion of new components took place through the mobilization of the various social programs already underway in the city. In fact, what occurs is an *a priori* appreciation of every trade-off in place between the ideal solution and the feasibility of execution of improvement works in view of the technical, institutional and financial

conditions present. But the option chosen always contains a strong political component (Rio de Janeiro, for instance).

The integration of an array of components and actions in well-defined spaces in the territory requires an institutional dialogue between many sectors and programs underway in the city. The incorporation of urbanized settlements in the formal city is still a challenge, imposing the need to establish a new pattern of relationships and cooperation through the negotiation of conflicts of interest and priorities, including intergovernmental cooperation, since the main sources of funding are federal in origin.

As to the institutional pattern, two basic trends can be noted regarding the management of the programs: (a) concentration in a single agency of the state or city direct or indirect administration, responsible for the inter-institutional dialogue and coordination of the diverse intervening agents and interested social actors; and (b) horizontality, in which management is shared by personnel accountable to different sectors of the appropriate local administration, their actions not subordinated to each other but rather convergent and synergetic. Apparently, horizontality is better suited to minimize risks in solving continuity due to periodic changes in the government. The Brazilian experience indicates that with each new city administration there is the emergence, at the very least, of new priorities in funding allocation and new ideas as to project concept (Diadema, for instance). This fact is confirmed by the study, since many of the programs were benefited by the reelection of the respective mayors (Vitória, Recife, Belém, Teresina, for instance).

In both cases, a matrix-type structure is adopted, seeking optimization in the use of the human and technical resources available, despite resistance from a few sectors in adopting the new format, rooted in the conventional form of organizing work based on functional hierarchy, a tradition in Brazilian government.

Although most management agencies interviewed indicated institutional dialogue as a success factor in the experiences studied, it was equally admitted that difficulties in implementing the programs were found in this kind of joint. In some cases they were overcome (Vitória, for instance), while in others the level of dialogue still is unsatisfactory (Recife and Porto Alegre, for instance).

The option for flexibility of current urban patterns as a technical and financial feasibility factor in the projects is a key issue of the concept of the programs, but its unraveling is still far from being consensual. On one hand, legislation governing the setting up of popular subdivisions is interpreted as a factor inducing the informal occupation of the urban space (Belo Horizonte and Goiânia, among other cities throughout the country). On the other hand, the objective of transforming *favelas* into popular neighborhood districts of the urban web of the formal city (expressed in some cases in the name of the programs themselves, such as the *Favela-Bairro* Program in Rio de Janeiro and the *Vila-Bairro* Program in Teresina) would be impaired. The limits in the deregulation of land use and occupation are under discussion, so that the gap between the formal and informal methods of production of the city is not sustained or even deepened.

The institution of Special Social Interest Areas or Zones has been the most popular instrument adopted to provide flexible legal support of the urban parameters and the technical standards of the public infrastructure services and facilities companies.

Established by municipal law in eight of the ten cities studied, (Recife was responsible for the pioneer, older and better known experience, followed by Porto Alegre. The experiences are distinguished by the concept of Special Social Interest Area (AEIS) or Special Social Interest Zone (ZEIS) adopted, by the emphasis placed on physical-urbanistic aspects (Rio de Janeiro, for instance) or the socioeconomic ones (Recife, for instance), and by the results achieved. Paradoxically, Recife and Porto Alegre engendered, proportionally, among the cases studied, the weakest results in terms of urbanization of these areas.

Though clearly from a common core – reduction of poverty and of the urban informality – and classified as integrated programs, they are differentiated by the greater or smaller relevance bestowed the physical-urban (Vitória), environmental (Belém), or social aspects (Santo André).

In all cases, with the purpose of achieving the greater objectives of reducing urban informality and improving living and housing conditions among the poor, the programs' concept includes, beyond the urbanization works, land tenure regularization and a set of social actions in the fields of education, job training, health and generation of jobs and income.

It can be noted that only in a few cases was there prime concern to conceive measures to ensure control of the population density of urbanized settlements, to avoid occupation of collective use public areas and to maintain the equipment, facilities and improvements that have been carried out.

Analyzing the results achieved, it can be seen that not all municipalities acknowledged the need to conceive and develop, in parallel with the land tenure regularization and urbanization programs, accessible housing alternatives for low-income segments in order to halt the informal production of the city (Belo Horizonte, for instance, acknowledges such a need).

The Brazilian experience indicates that the simultaneous merging and enlargement of corrective action – urbanization and land tenure regularization – and preventive ones – urban and environmental control and the offer of alternative housing and sites and services – tend to produce, over the long-term, more effective and sustainable results.

### **Mobilization of Resources**

Mobilization of resources was one of the critical points in each of the programs studied. Except for Rio de Janeiro, which from the start was successful in obtaining external resources through the IDB, thus ensuring the execution of two stages of the *Favela-Bairro* Program, all other cities to a greater or lesser degree, encountered difficulty in accessing sources of funding that were appropriate and consistent with their needs and expectations. In all ten programs, there was mobilization in a period not more than five years, varying from case to case as registered in the specific analyses, of resources amounting to US\$ 342,603.27<sup>1</sup>, benefiting 499.132 families.

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<sup>1</sup> All currency amounts in this document were converted from Brazilian reals to US dollars according to the mean exchange rate for the date 07/oct./2002: US\$1.00 = R\$3.69. Source: Central Bank of Brazil.

The strategies adopted and the ability to mobilize resources varied in each case analyzed, with very different results, regardless of each city's size and economic status. The following examples stand out in this regard: Rio de Janeiro, which concentrated its loan efforts with the IDB; Teresina and Belo Horizonte, which were able to mobilize the greatest number of federal programs and diversify their sources of funding; Porto Alegre and Recife, which used only resources from their own fiscal budgets, and Salvador, where the state government had the greatest political capacity to obtain national and international sources of funding.

The major sources of financing used in the group of programs analyzed and their relative participation in the total amount of resources mobilized were: (a) their own funds (38.91%), including from the Municipal Housing Funds; transfers from the General Budget of the Union (6.35%), including resources from Habitar-Brasil/IDB; loans from the FGTS and FAT (5.40%); external loans (46.83%), prominent among which, for being exceptional, the IDB loan to Rio de Janeiro; and donations from bilateral and multilateral cooperation agencies (1.21%).

It is important to point out that the task of obtaining funding – domestic and international as well as the financial management of the projects — was undertaken by state or city treasury, finance or planning departments, depending on the case, which became responsible for the planning, administration and control of public finances.

The management organizations and entities of the programs were responsible solely for supplying relevant information and providing the technical documentation required by the financing agencies. This institutional design, in many of the cases studied, resulted in duplication of command and control, inevitably causing an elongation of deadlines and slower disbursement of payment installments due, affecting the implementation of the scheduled actions.

Removed from the responsibility of managing the resources, it was verified that the programs' management bodies usually did not retain the financial information and data regarding the contracts in progress. This fact affected the control of costs, the review of the parameters adopted in the budgets of new projects and works and the economic-financial assessment of the programs. On the other hand, the data was of maximum importance for the planning and follow-up of costs recovery, an aspect that was little taken into account in the design of the programs, confirming the almost unanimous stance adopted by the financing and promotion agents of similar projects during the past two decades.

It should be registered that in all the cases, considering the constitutional competence of the three levels of government and particularly the federal government's control of public indebtedness, the intervention of all three levels is necessary — whether in the concession of loans and transfer of resources, or whether in the contracting and the execution and approval of sector projects, works, services and facilities within the scope of the state or city. Thus, fluid intergovernmental cooperation also is necessary for progress in the negotiations as to availability and use of financial resources.

The composition of average costs by component in the group of programs is even more difficult to access by the tenuous base of information available, which could only be overcome with extended research in each of the cities. A few of the management bodies

also alleged the additional difficulty of recovering the data required due to its being spread over two or more government administrations. The analysis of the data available shows Housing as the component absorbing the largest volume of resources (US\$ 2,241.31, on average, per family), followed by Infrastructure and Services and Facilities, with an average expenditure per family of US\$ 2,016.50.

The unit costs per family, in the group of programs analyzed, showed significant variations based on the technical solutions adopted, the housing alternatives, the scope of social actions and the price of land in each city. Still, it was possible to infer that, on average, the overall cost per family was about US\$ 1,611.58, a very reasonable figure. This number changes significantly for programs incorporating the financing of the construction of new housing units. Goiânia, for instance, reached an overall cost per family of US\$ 3,691.58, while Teresina invested, per family, only US\$ 811.58.

## **The Implementation Process**

### **Housing Solutions**

The totality of programs and projects analyzed, overcoming past practices, offers a multitude of housing alternatives, from the production of ready-made units, embryos, sites and services through to home improvements. The numerous solutions represent an attempt to move the supply closer to the socio-economic profile of the programs' target populations and, on the other hand, to render the housing investments compatible with available funds.

Although construction techniques and materials used were predominantly traditional, the method of production of the housing units varied on a case-by-case basis, considering the modalities of the project (self-construction and self-management) with significant differences in the respective unit costs. On average, the units contained 36.52m<sup>2</sup> and cost US\$ 3,202.14, including the (estimated) value of the land and the proportional portion of the implemented infrastructure.

In some examples, forced by spatial difficulties in building new isolated housing units, multifamily units were built — although past experiences show that adopting vertical typology does not produce good results, especially due to costs of maintenance of the common areas. The survival strategies of the poor population are often related to the form of housing — commercial activities, enlargements for room sale or rental, accumulation of recyclable materials for subsequent sale, etc. — activities that are impracticable in apartment blocks.

The offer of a new housing unit usually only occurred when there is a need to transfer families living in a hazardous area or areas scheduled for public works or for a lower density of land occupation.

Additionally, the programs stipulated other eligibility criteria for families to have access to some of the proposed housing solutions, such as: minimum stay in the area, monthly income of zero to five minimum wages (Belo Horizonte), mandatory participation in the school programs offered by the municipal government (Belém), access to the City's Participatory Budget (Santo André and Belo Horizonte), among other criteria.

In a few instances, the families were able to use housing credits to purchase materials for construction, enlargement or improvement of their homes.

In all cases, as a principle and guideline of the urban plan and design, relocation was avoided and, when indispensable for technical reasons, an attempt was made to relocate the families within the settlement itself or its environs.

In the case of relocation, families received a new home at no charge (Belém and Rio de Janeiro, for instance) or, alternately, financial compensation or reparations for improvements carried out through their own efforts (Goiânia and Rio de Janeiro). In the case of reparations or an indemnity, procedures varied from program to program: some required evidence of purchase of another legalized residence (Goiânia), others offered a lot where the family could rebuild its house (Salvador) or the reparations due were calculated as part of the payment for the new unit built by the government (Vitória).

### **Urban Services and Infrastructure**

The supply of the facilities and infrastructure services and networks is one of the major components in the slum upgrading programs, and the one representing the largest volume of public investments. The shortage of services and facilities, the difficulty to access the housing units and the circulation of pedestrians and vehicles, in fact, are some of the criteria adopted to characterize these settlements.

The interventions in the traffic and road systems tended to be quite homogenous, generally relating to the improvement of the existing traffic patterns and pedestrian accesses, with the execution of paving, superficial drainage and construction of stairways, small bridges and hillside containment works. But rarely was the road system modified to allow the circulation of vehicles within the area.

Since the *favelas* usually are located in areas unsuitable for occupation — marshes, flood-prone riverbanks or even river beds, steep hillsides or geologically unstable terrain — the solution of the infrastructure problems and the execution of engineering works represented a real challenge for technicians and contractors.

As to the installation of water and sewage networks, two institutional solutions were adopted: the task became the responsibility of the public or private facility companies, which developed the projects, executed and financed the works and services (Goiânia and Porto Alegre); or the responsibility was partially or fully borne by the programs' management bodies, which transferred the installed networks to the facility companies.

Three problems were noted: (a) the facility companies demanded that service standards and technical norms be respected and conventional technologies used — which often was incompatible with the physical situation of the settlements and the socio-economic condition of the future users; (b) difficulties occurred in relationships and negotiations with the facility companies; and (c) it was difficult to recover investment costs.

Recovery of costs at first must be obtained through social taxes that, even when there are no defaults, only cover part of the investment. It should be noted that since the

technical and commercial losses of the sanitation system are very high (about 40%, on average), the facility companies usually did not worry about maintaining specific financial controls over the services connected to residences located in slums.

However, when the municipal government made the investments, for various reasons their costs were not recovered by the city, although the facility companies received fixed capital represented by the installed networks and the financial results of operating the services. Still, with few exceptions (Belo Horizonte is a good example of cooperation between the municipal government and the state sanitation company COPASA), the facility companies were not flexible or interested in extending their services to the slum communities.

As to electric power supply and public lighting under the responsibility of public or private facility companies (Rio de Janeiro, Belém), the problems were easier to resolve. Though alternative, low-cost solutions were used only in Porto Alegre, the facility companies frequently charged social fees based on minimum standards of consumption practiced in poor communities, even in the case of privatized companies (Belém).

The exemplary performance of Light — previously a federal facility, now privatized — which maintains a Slum Coordination Department in the *favelas* of the city of Rio de Janeiro, is noteworthy. The creation of the Slum Electrification Program, under development for more than two decades in Rio de Janeiro, fostered a substantial reduction in revenue losses due to clandestine tapping of the electric power grid, the increase in number of connections (90% of the residences were connected in the 1980s), and for establishing universalization of services as its goal. All the other public facility companies could use the success of this experience as an example.

Garbage disposal was accomplished, in most of the cases studied, by extending regular city services to the urbanized areas. Not only contributing to the prevention of health and environmental hazards, the importance of this component in the generation of jobs for low-income communities also should be stressed — jobs in the form of community sweepers, selective garbage collection and materials recycling.

### **Land Tenure Regularization**

The granting of legal real right of use (*concessão de direito real de uso*) prevailed in the group of programs analyzed as an instrument for land tenure regularization (Belo Horizonte and Vitória, for instance, gave preference to or also used, according to the situation, property deeds).

Other alternatives were long-term lease of real property (Belém, eventually Teresina, and Salvador, probably) and the alternative in Goiânia of working with the concession of individual or collective deeds.

A lot of the settlements included in the programs analyzed were located on public land, mostly municipal land (Porto Alegre, with 70.16%; Goiânia, with 56.63%; and Vitória with 55%, are examples). On one hand, it was no coincidence that local governments adopted this condition as criterion for eligibility to access urbanization and land tenure regularization programs; on the other, invasion of the city's public land had been a

strategy of the population. The risk of removal is smaller and the probability of access to public services and facilities and the benefits of regularizing ownership are greater.

However, this situation could change in time. That was the case in Teresina, where successive Censuses of Villages and Slums (1993, 1996, and 1999) showed the gradual increase in invasion of private property due to the exhaustion of public “available” land. In many cities, for this reason, the slums were displaced to the outskirts or even to neighboring cities, in case of metropolitan regions (Rio de Janeiro, Belo Horizonte, and Porto Alegre, for instance). In Salvador, as well as in Belém or in Rio de Janeiro itself, the occupation of marshes and river banks reflected the struggle of the poor for land on solid ground.

In general, for settlements on private property, the alternatives to land tenure regularization are expropriation for social interest or urban prescriptive easement-adverse possession (*usucapião*) — individual or collective. It should be stressed that the acquisition of land, via expropriation for purposes of land tenure regularization cannot be financed by the majority of national and international financing agencies, and thus must receive local matching funds.

It should also be stressed that it is still quite early for the cities to use the instruments regulated through the City Statute, and the granting of legal real right of use (*concessão de direito real de uso*) and the urban prescriptive easement-adverse possession (*usucapião*) still have to comply with the provisions of the Civil Code. But with the probability of a new Civil Code and the provisions in the City Statute, the legal status should change, making land tenure regularization easier.

Two unique cases should be highlighted: in Santo André, the non-acquisition of land was the premise for implementation of the program, reflecting the ideological stance that acknowledged the right to the land for its effective occupants; in Recife, the first areas for the PREZEIS Program were private, being the subject of expropriation and acquisition by the families themselves, financed with funds from the program, a negotiated solution between the municipal government and the respective communities.

In view of the complexity of the legislation and the procedures necessary for effective ownership or possession of real estate, it is not surprising that the results reached on land tenure regularization actions, so far, have not been significant.

In quantitative terms, the most successful programs, so far, are those in Belo Horizonte (8.601 legalized lots) and Teresina (7.005), which are inserted into the respective cities’ social-interest housing policies. In the case of Rio de Janeiro, it should be noted that, although the *Morar Legal* Program — encompassing irregular and clandestine lot divisions — has advanced quite a lot, only a small number of the slums included in the first stage of the *Favela-Bairro* Program (five out of 51) saw the issuance of property deeds.

With the goal of overcoming real estate registry problems, a few of the cities studied have been able to establish cooperative agreements with land registrars and notaries public (Vitória) and state governments (Belém and Belo Horizonte), with the aim being to speed up the processes, reduce notary costs and obtain exemption from property transfer taxes.

Despite the benefits gained through receiving deeds, many families prefer to “sell” or transfer their property in the informal real estate market, choosing to use the capital realized for their survival or other purposes. It should be noted that there is no precise data on this phenomenon, since the cases are rare where there is follow-up or control of the situation. Generally, this substitution of families is not well accepted by the managers of the programs, who fear this could generate new problems of urban informality. Some of the municipalities studied, such as Belém, tried to ensure that families remained in the urbanized areas through agreements and social action. The case of Goiânia is notable: once a property deed is granted, the local government maintains through its Secretariat for Urban Inspection, a strict scrutiny policy in order to ensure that the property do not be transfer.

Still, the families generally tended to undervalue obtaining deeds. The experience in Belém illustrates this: of the 231 families in condition to start the title registration process, only 50 have done so. The hypothesis that entitlement would allow gaining credit and support investments in productive activities has not been backed by the Brazilian experience. This is so especially since the credit systems have found other, more expeditious forms of guarantees.

The case of Porto Alegre also is instructive. While in 1994 land tenure regularization was the first priority of the Participatory Budget, in more recent years this was not repeated. With the information available, it was possible to infer that the public investments in slums were sufficient for the communities to feel safe enough that they would not be relocated and, consequently, to transfer their main demands to other issues. In any case, they continued to operate in the informal real estate market as they always had, even without property deeds or valid ownership documents.

### **Urban Plan and Design Regularization**

Based on the unanimous understanding that urbanization standards must necessarily be flexible in order to enable slum upgrading projects, the declaration of special social interest areas or zones constituted the prevailing alternative in the programs studied. For each settlement, specific and appropriate urban and building standards were defined for the different situations.

In the ten experiences analyzed, two basic models of procedure can be identified. The first started with the delimitation, under specific legislation, of each settlement, urban zone or area as an AEIS, followed by the development of an urbanization project or plan, generally counting on community participation (Goiânia, Santo André, Belo Horizonte, and Porto Alegre). In the second model, the legislation itself creating the ZEIS and AEIS defined the criteria or general parameters to be followed (Vitória and Recife).

In some cases, the urbanization project preceded the declaration of the area as an AEIS (Rio de Janeiro and Santo André), with the technical, legal and financial feasibility of the intervention being examined *a priori*.

Vitória was notable for its approach to the issue of *favelas* as an urban development problem. The *Projeto Terra* emerged from the Strategic Plan for the City, and the Urban Development Plan for Vitória included, as Priority Public Intervention Zones, 15 urban areas – that could encompass two or more informal settlements — to be the subject of urbanization and land tenure regularization.

After the urbanization construction work was concluded, the urban design for the slums served as the basis for the respective land tenure regularization project. But this procedure has not been completed in all cases with the urban plan and design approval by law. Although it is a process necessary for its future development as an urban area integrated into the formal structure of the city.

In many cities, besides these concerns, the municipal governments adopted preventive measures to block reproduction of informal settlements, including: public production of new social-interest housing units (Belo Horizonte and Goiânia, which operate numerous housing programs); support of new forms of housing (Rio de Janeiro); and incentives for the formal production of residences by simplifying the processes and reducing deadlines and costs of permits for works and of occupation license (Vitória).

### **Mobilization and Community Participation**

The group of programs studied showed that the target populations participated in different ways in the formulation and implementation of the projects. It was recognized that such participation was strategic for the work carried out, though the success and intensity of popular mobilization varied in each case.

PREZEIS, in Recife, was one of the pioneers in this line of action, since the program itself was created by popular initiative. Besides stimulating the creation in each ZEIS of a Local Urbanization Municipal Commission — a prerequisite for the area to be included in the PREZEIS Program — the program itself was directed by a Forum of representatives of the city, of non-governmental organizations who were counseling the population and representatives from each ZEIS. In spite of the small number of ZEIS effectively urbanized, the communication channels that were created and maintained with the *favela* communities were considered the program's greatest success.

In Belo Horizonte, representatives from the communities acted in the Participatory Housing Budget and in the Works Inspection, Planning, and Follow-up Committees. In Vitória, committees of residents were considered to be major partners in the *Projeto Terra*, being co-responsible in various actions. Representatives from these committees also participated in the Sector Forum that organized poor communities and inhabitants of neighboring urban areas, opening up new possibilities for integration in the formal city and social inclusion. In Rio de Janeiro, the *Favela-Bairro* Program, after completion of the urbanization works, established Social and Urban Orientation Stations in each settlement.

Participation has been strengthened by social actions in education, job qualification, apprenticeship and the exercise of democratic planning and management practices. In Belém, the program determined that the set of social actions must be of an educational and participatory nature.

The example of Santo André is noteworthy, since social inclusion was one of the main objectives of its program. As a result, the community members overcame the condition of being mere spectators, to become major players in their own transformation.

In cities adopting the Participatory Budget, community insertion evolved from issues of specific, immediate interest to members to matters of collective, citywide interest. Thus, the conclusion in these cases is that the urbanization of informal settlements has been a laboratory for the development of new forms of participatory urban planning and management.

### **Post-Conclusion Stage**

The analysis of the last stage of project implementation — a stage referred to in this study as operation or post-conclusion (of works and services) stage — sought to identify the effective conditions and measures adopted to ensure: (a) the **continuity** of the actions aimed at the improvement of living and housing conditions in the settlements, their urban insertion in the formal city and social inclusion, and (b) the **sustainability** of the local development process initiated with the implementation of the programs.

In each program, the possible **risk factors** that could threaten this continuity and sustainability and the future of the urbanized settlements were identified.

The analyses indicated that the appropriate entities usually lacked the institutional mechanisms capable of inspecting and controlling population growth within the legalized settlements, caused by the population concentration enabled by: (a) the expansion of the building area in the housing units; (b) cohabitation; (c) construction of new units in the back of the lots or their being subdivided; and (d) new invasions of public areas of collective use or environmental protection.

In some cases when it was not possible to count only on local personnel, the projects sought to mobilize the community, its organizations and leaders to cooperate or even take on the functions of inspection and social control.

It should be noted, however, that there was a relative lack of concern regarding this topic in many of the cases analyzed, escalating the risk of loss of the investments made, degradation of the networks and equipment installed and deterioration of the environment. Nevertheless, past experience has exhaustively demonstrated that situations abound where it was necessary to execute, over time, successive recovery works in settlements already serviced and new urbanization projects.

Many of the cities analyzed – Goiânia, Teresina, Santo André and Belém – work with the hypothesis that the development and implementation of permanent monitoring and evaluation systems may be the management instrument most capable of minimizing the incidence of informal occupations. But it is still too early to confirm this hypothesis.

Another risk factor was the emergence of new invasions and informal occupations in the serviced areas or their environs (Salvador). Overcoming this risk basically depended on: (a) efficient inspection of the undue occupation of public lands of collective use or of

vacant or underused private property; (b) effective urban and environmental controls, as well as of building activities and of administrative and inspection mechanisms, establishing penalties for those responsible for non-compliance with legislation; and (c) increased offer of new sites and services, housing units and residential options compatible with the socio-economic conditions of the poor (Belo Horizonte and Goiânia).

Though legislation of special social interest areas or zones (AEISs or ZEISs) may restrict their physical expansion, it is essential for each area to have its own urban plan — and lot division project — approved by the proper authorities in order to regulate land use and to orient future development. This measure was adopted, although only partially, in almost every case (except for Salvador and Teresina).

Cases were rare in which there was control and regulation of construction activities performed by the residents themselves, whether to enlarge or improve their residences. Porto Alegre, Recife and Vitória are examples to be considered, as well as the strategy of using a pre-approved standard project for residential buildings, as in Santo André and Goiânia. However, it is still early to assess the effectiveness of these strategies.

The third risk factor concerns the continuance of residents in the area in view of the appreciation in real estate values and the families' strategies for survival. Acknowledging residents' rights to use their property as an important financial asset, available to leverage resources in order to improve their income and work conditions, is still a very controversial issue in Brazil — especially considering the public subsidies granted and the local authorities resistance to recovering costs.

The cases confirmed the Brazilian experience available for analysis — that is, that urban and housing improvements that were carried out and even the granting of property deeds have not been sufficient to ensure continuance of families in the areas.

Generally, two steps are adopted to minimize this problem: (a) acknowledging right of ownership through the granting of legal real right of use (*concessão de direito real de uso*) contracts, which prevent the sale of the property for the duration of the grant; and (b) ensuring continuity of a series of social actions and programs that broaden and consolidate the benefits to the families that remain in the area.

Financial problems that may represent risks for the continuity and sustainability of the program, include: (a) difficulties in accessing sources of funding; (b) guaranteed maintenance of the direct and indirect subsidies practiced, usually with state or city resources; and (c) lack of a strategy to recover costs.

Each of these problems deserved extensive discussion in the analyses. In most cases it was evident that the program financing plans, over the long-term, were not sufficient to ensure continuity of works and improvements in other slums or the sustained development of the communities, as planned.

With the understanding that the *favela* dwellers are unable to pay for the costs of the improvements and services and facilities received — and that it would be socially unfair to charge this segment for any contribution that could burden their family budget —

there was little interest on the part of either state or municipal authorities to work with the prospect of recovering costs.

As to the risk of the possible (even probable in the context of the Brazilian public management) discontinuity occurring, caused by political-administrative changes every four years, the public agencies worked with the expectation that active participation of the population, the support of social organizations and public acknowledgment of the results achieved could foster maintenance of the programs. In short, in order to face the risks involved, which are inherent to the democratic process, strategic instruments of democratic management are available to be used. This, by the way, was a lesson learned in the case of Recife: PREZEIS has managed to survive seven different municipal administrations.

A key issue for a successful and non-traumatic transition of the program, besides solid documentation and independent assessment of the results — but one that was not always present in the cases analyzed — is to properly consider the political timing in the implementation timetable. Ignoring it, as in the experiences analyzed, is to risk guaranteed continuity of planned actions and investments, which surpass the four years of each government term of office.

Changes in the country's macroeconomic policies may affect not only public finances and the local government's investment capacity but also the economic capacity of the families themselves. However, it is usually hard for local administrators to forecast such change, and it is equally difficult to adopt measures to prevent the resulting risks to a program's sustainability.

In part, these risks could be minimized by actions to promote the local economy and by a solid strategy to recover costs and to grant direct access to credit for residents. This would make it possible for the communities to have sustainable development and be less vulnerable to adverse economic conditions.

The evolution of the legal and judicial framework, which rules the social function of property and the city could bring about risks for the consolidation of the results expected for land tenure regularization. It is too early to predict what will be the practical effect of the City Statute, ratified only in 2001, and the efficiency of the new instruments it regulates or how they may influence the court decisions on urban property.

Since the cycle of works, services and facilities is usually concluded much before the effective land tenure regularization, in fact there were no guarantees in the programs studied that all resident families would receive the expected deed within a reasonable period of time. The incomplete land tenure regularization of the settlement may feed an entirely new process of illegal occupation of properties and their transaction outside the scope of the law.

It was observed that slum upgrading and land tenure regularization initiatives do not, in fact, replace urban and housing policies, in the three levels of public administration, offering effective means to reduce the housing, services and facilities deficit and to fight urban poverty.

To avoid the risk of new invasions and illegal occupations of public and private lands, among other appropriate measures of a judicial and administrative nature it is necessary to broaden the offer for settlement alternatives and housing options for those without access to the goods and products present in the formal real estate market.

But only in a few of the cases studied did the city have its own housing policy law, conferring the necessary priority to satisfying the demand for social-interest housing. The examples are Goiânia, Belo Horizonte and, partially, Rio de Janeiro.

The Brazilian experience available and the census data regarding housing deficit demonstrate that for decades the cities have coped with the problems of informal areas. With the exception of Teresina, all other cities included in this study have a more or less long history of trying to find a “definitive” solution. Often defeated in their intentions, city leaders and experts claim that “the *favela* is not a problem, but a solution,” as the programs try to prove.

Though it is a common argument around the country, by accepting it as truth there is the risk of not acknowledging the inability of federal, state and local governments to solve the problems generated by accelerated, spatially concentrate and socially excluding urbanization. This situation obviously reflects the low priority of the urban and housing issue on the government’s agenda.

## **Main Conclusions**

The analyses enabled the conclusion that, regardless of the different local contexts, scales of activity and political circumstances prevailing in each city, all the experiences researched contained points in common. The main characteristics, obstacles and risk factors common to most programs, detailed in Chapter 2 in volume II of the Report, are as follows.

The main common characteristics are: the extensive scale of intervention; ambitious objectives and goals; comprehensive scope; predominant physical-urban focus; supply or recovery of public collective use spaces; mismatched time between the conclusion of the urbanization and the land tenure regularization projects; few results in the formal acknowledgment of property; priority given to tangible, short-term benefits; mobilization of the participation of social and community leaders and organizations.

The main common obstacles that must be faced by the management bodies, to a greater or lesser degree, that affect the proper progress of the programs and the range of the results expected are of: a financial nature — difficulties in procuring, managing, and applying resources; a technical nature — difficulties in solving the technical problems presented by geological, topographical, and environmental characteristics and by the type of occupation of the settlements; an informational nature — lack of information collection, storage, and recovery systems and of a database to support the planning, management and monitoring of the programs; a judicial nature — a legal and regulatory structure with complex application, legal and registration procedures inappropriate for the solution of land tenure regularization problems; an institutional nature — difficulties derived from the sector and hierarchical configuration of the Public Administration and the large number of agencies and entities intervening in the programs; and of a political

nature — flaws in communication with society that affect the understanding and acceptance of the government's proposals and the dealing with conflicts of interest between the community leaderships and the target populations of the projects.

There are quite a few risk factors threatening the long-term continuity and sustainability of the programs. The most common refer to: the lack of an effective follow-up and control of the growth and expansion of urbanized settlements; the inefficient urbanistic and environmental controls of land use; the absence of reserves in sources of funds that are permanent, consistent and compatible with municipal finances and family budgets; the high volume of direct and indirect subsidies practiced without guaranteed long-term maintenance; the strong resistance to recovering costs by the government; the inherent incompatibility between the project or program maturity and political timing; changes in macroeconomic policies that may affect municipal finances, low family incomes, and the local economy.

The main implications for public policy were identified in order to adapt them to the objectives of improving living and housing conditions of poor families resident in slums and of reducing urban informality. The example of the ten cities leads to the conclusion that, in cooperation with other levels and spheres of government, changes or enhancements are necessary, detailed under Chapter 2 in volume II, regarding urban, land tenure regularization, housing, sanitation, funding and human resources development policies.

These are the main issues to be faced in order for slum upgrading and land tenure regularization programs to propagate throughout the country, progressively acquiring a scale compatible with the extent of the problem.

## **Recommendations**

In view of the conclusions mentioned, it is recommended that *Cities Alliance* examine the opportunity and feasibility of performing or supporting **independent assessments** of a few of the programs analyzed that, in the majority, were never the subject of evaluation.

It likewise is recommended that applied studies and consultation be undertaken that contribute to the overcoming of the obstacles that were encountered. Furthermore, there should be institutional strengthening of the municipal entities that manage the programs, in order to improve program performance and minimize risk factors to their long-term continuity, expansion and sustainability.

In order to serve the interests of the cities consulted, in the sense of knowing and discussing their respective experiences among themselves, it is recommended that *Cities Alliance* promote a meeting with the management bodies of the programs. This could represent the beginning of a permanent process of interchange and learning between the interested parties.

Regarding the proposal for a national slum upgrading and land tenure regularization strategy, it is recommended to *Cities Alliance* that a possible plan of action be created to take into consideration the need for cooperation between the federal, state and

municipal governments that allows them to confront, within their individual constitutional jurisdictions, the challenges to be overcome as detailed in Chapter 3 in volume II.