THE IDB IN LOW-COST HOUSING
THE FIRST THREE DECADES

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THE HOUSING PROBLEM IN LATIN AMERICA  
A CASE OF MARKET AND GOVERNMENT FAILURE 
THE CONTEXT OF BANK ACTIVITIES

Housing markets in Latin America do not supply fully serviced dwellings for all the population. The formal mechanisms of housing production and financing do not reach all segments of the population while informal mechanisms produce solutions that are either substandard or expensive. Government activities do not fully compensate for the market failure. As a result, an estimated 10 to 15 million households are living in substandard dwellings. Lack of sanitation services, overcrowding and insufficient environmental protections are the most pervasive problems while insufficient access to employment and services worsens the problem in most large cities. Poor housing strikes mostly low-income households. Urban areas concentrate the largest proportion of the population affected by the problem. However rural housing problems are as bad as urban problems yet concert less attention.

Low-income households face multiple constraints to access formal housing solutions. Insufficient income denies poor households access to formal housing markets while government regulations prevent them from solving the problem informally. Public housing programs are most of the time unable to compensate these problems and often introduce distortions that further impede efficient solutions. The problem is growing. Recent estimates suggest that 2.5 million dwellings would be required annually to satisfy the needs of new households and simultaneously improve the condition of households currently living in substandard dwellings. In contrast, less than 1.5 million new dwellings are added annually to the stock. In sum, in spite of the resources devoted to housing, that range from 2 to 8 percent of the Gross National Product depending on the country, Latin America still faces a mounting problem to safely house its population.

Public policies often worsen the situation for low-income households. Investment in trunk infrastructure, though opening land for urban uses, usually increases urban land prices preventing poor households from having access to serviced land. Subdivision regulations set service standards whose costs are often unaffordable for low-income families. In other words, government regulations disrupt the emergence of spontaneous settlements accessible to the urban poor requiring proper planning and servicing of the land before occupation. Housing finance mechanisms, when they exist, do not cater for the needs of the poor. Mortgage-backed loans with regular payments are but out of the reach for the vast majority. Community based housing improvement mechanisms not always receive support from governments.

Governments have attempted to deal with the situation through a variety of policies and direct interventions. The Bank has helped these efforts with several types of loans: (a) for improving the sanitary conditions of substandard settlements providing water, sewerage, drainage and other services, (b) for the construction of low-cost houses, and (c) for the integrated development of specific urban areas. The first part of this report will review the salient points of this experience and the challenges posed by housing in the late 1990's. Subsequent parts of the report will review the results obtained by two experiences of reforming the housing sector with Bank assistance, Chile and Uruguay.
Bank participation in housing show significant changes in policy and lending volume. The Bank expanded its housing loan portfolio in the 1960s, withdrew from the sector in the 1970s and lent again for housing in the 1980s but restricted to sites and services projects.

**Financing finished houses**

During the 1960s the Bank approved, on average, five housing loans per year. The projects followed the predominant approach of building finished dwellings for low-income families. Projects were executed by centralized government agencies and the houses assigned to beneficiaries with soft repayment conditions. This approach experienced several drawbacks. Targeting was poor. In spite of the significant direct and indirect subsidies included in the financial terms for the transfer of the houses, the high standards of the solutions placed them out of the reach of the households in the lower segments of the income distribution scale. The subsidized houses ended up benefiting middle income families that were willing to buy and could afford them. In cases where subsidies were increased to make the houses affordable for low-income families, the market value of the houses prompted the original beneficiaries to transfer them to higher income households.

The projects also faced institutional and financial difficulties. Cost recovery was poor. Irregular income of most beneficiaries prevented them from making the regular payments implied in transfer terms imposed by the executing agencies. Loan default was common as it proved difficult for public institutions to enforce payments. Subsidized interest rates, below the cost of funds, prevented full recovery of capital by the executing agencies. The seed capital supplied by the Bank loans exhausted itself rapidly preventing the reproduction of the projects. The Bank actually accepted the fact that the financial institutions involved in the projects will require regular replenishment of funds from the government budget.

**The minimum housing approach**

Reacting to the negative results of these projects, the IDB reduced significantly its involvement in housing in the 1970s. During that decade the Bank approved only three projects. Two of the projects were integrated urban development projects that included low-income housing among other components. Further, the Bank changed its approach to housing not financing finished houses and concentrated in sites and services operations. Under this approach, the Bank financed services for minimum size housing lots. Services included potable water, sanitary disposal of waste water, roads, drainage and electricity and domestic connections to the services. Beneficiaries build their dwellings on the serviced lots either through self-help, community-help or other mechanisms. This approach was consolidated in the 1985 Urban Development Policy (OP-751) that has guided Bank lending to this date.

A variant of the site and services projects are the settlement upgrading projects. Instead of subdividing and servicing raw land, the projects benefit existing substandard settlements. Originating in various informal mechanisms for obtaining access to land (illegal occupation by organized groups, illegal subdivisions) these settlements solved the pressing housing needs of households but without access to formal housing but lacked
essential services and secure tenure of the land. The upgrading projects rationalize land uses and provide secure land tenure, potable water, sanitary disposal of waste waters, drainage, electricity and access roads to the settlements including domestic connections to the services.

With the strategy of concentrating in sites and services and settlement upgrading projects, the Bank attempted to attain two objectives: improve targeting of public spending in housing and extend the capacity of public resources to reach a larger segment of the low income population. In the sites and services projects, targeting improved because of the low standard of the housing solution that discouraged higher income families from occupying the serviced lots. Targeting is usually good in settlement upgrading projects, a result of the high concentration of low-income households in substandard settlements. The low-cost of the incomplete solution provided by the sites and services projects allowed governments to increase the number of solutions provided.

Further, the mobilization of household resources prompted by the need to complete the shelter is another factor contributing to extend the reach of the programs. The Bank approved twelve housing projects of this type during the early and mid 1980s.

Market-based experiments

The mid-eighties witnessed the gradual consolidation of a different approach to low-cost housing and sector financing. Demand-driven ideas replaced the supply-driven approaches of the past. The approach relies on the private sector as the main supplier of houses and long-term mortgage-backed loans for households. The government plays a role as regulator and facilitator of the market. Under this scheme, low income households receive direct government subsidies for the purchase of market-transacted houses. Subsidies supplement the portion of the price of a minimum house that the families cannot finance with savings and a loan whose repayment would take a maximum of 25% of the household income. With varying degrees of consolidation, this is the approach pursued in several countries. The Bank is supporting three of these experiences (Uruguay, Chile and Paraguay) with projects whose approval required waivers to OP-751.

The last two sections of this document will review the ongoing results of the Uruguay and Chile experiences. The remainder of this chapter contains a review of the main conclusions of ex-post evaluations done in Bank housing projects of the 1970s and 1980s. The topics will be discussed: housing as part of integrated development projects, the approach of the 1970s; sites and services as a low-income housing solution, the approach of the 1980s and settlement upgrading, a high-impact project type initiated in the 1980s.

HOUSING AS PART OF INTEGRATED URBAN DEVELOPMENT PROJECTS: TWO EXPERIENCES IN COLOMBIA

The integrated urban development projects of PIDUZOB ("Programa Integrado de Desarrollo Urbano de la Zona Oriental de Bogotá") in Bogotá (1972) and of Buenaventura (1977) contained significant housing components based on the sites and services approach (Loans 344/SF-CO and 520/SF-CO). The housing
components emerged from the relocalization of families required to build a major urban road (PIDUZOB) and to solve environmental problems of low laying flooded areas in Buenaventura. According to the original designs, Bank financing contributed to the construction of serviced lots to house the displaced population. However, PIDUZOB also included other housing solutions of common usage in Colombia in the 1970s, specifically complete houses (70 and 60 square meters) that made 20% of all the solutions contemplated in the project but financed with counterpart funds. In the execution both projects had significant modifications to the original designs and time delays and cost overruns. However, they achieved most of their urban development objectives and physical targets. Apart from underscoring the complexity of integrated urban development projects, the experience allowed the Bank an insight into its approach to housing. The projects were the subject of ex-post evaluations by the Bank that detected several policy-relevant issues concerning housing. 4

Low-cost housing components were particularly inefficient in reaching the target population, although for different reasons. In Buenaventura, the location and low standard of the site and services projects offered did not attract the target families. Cultural and economic factors tied the target population to their location close to the sea and to the relatively large, though poorly serviced and feeble homes. Inland sites with only a sanitary unit did not fulfill their most basic needs hampering the relocation effort. The serviced lots built by the project were eventually used by newly arrived low-income families but not by the originally intended groups. In PIDUZOB, the serviced lots produced by the project, although well located in relation to user needs and preferences, were subject to the competition from the higher standard homes also built by the government in the area. Eventually few of the planned lots were executed as they were replaced by lots with core houses. As a result, beneficiaries came from different income groups than originally intended, mostly form low middle and middle income families. The replicability of the housing solutions was not an explicit concern in these projects. Both projects ended up providing higher that programed subsidies to beneficiaries and the executing units absorbed the cost with the resulting financial effect on the sustainability of the housing effort.

OEO recommendations emerging from these projects include that the Bank should make sure to concentrate its interventions where clearly demonstrated market imperfections require public intervention. Requisites for success include: a clear identification of the low-income target population lacking access to credit, proper application of affordability and beneficiary selection criteria and adequate housing pricing and financing procedures.

SITES AND SERVICES: THE CASE OF COSTA RICA

In 1984 the Bank approved a loan (762/SF-CR) to contribute to the financing of a sites and services program in Costa Rica. The objective of the project was to solve the housing problem of low-income families residing in four mid-sized cities: Puntarenas, Limon, Liberia and San Isidro. Bank resources financed the construction of 2,900 sites and services solutions for families earning less than 2.5 minimum wages. Each solution comprised a serviced housing plot of approximately 100 square meters with access roads, potable water, sewerage and electricity. The program financed the construction and equipment of a sanitary unit of
approximately 9 square meters connected to the public utilities. Further, the loan includes resources for providing beneficiaries with loans to buy construction materials for building a core unit of 14 square meters either by self-help or community help. Each subdivision had basic community facilities, day care and primary education and facilities for commercial activities. Beneficiaries were supposed to finance the solutions with a combination of subsidies (28%) and a loan (72%).

By early 1994, thirty-six months behind schedule and with 40% to 80% cost overruns, the project met its physical targets with the construction of 2,791 solutions. After 2.5 years of completion of the first group of lots, all solutions have been assigned and most of them have been occupied (73%). The results of an ex-post evaluation draw several conclusions of interest for housing policy. Targeting of the program is very good. Available information suggests that over 92% of beneficiaries have incomes below the 2.5 minimum salaries limit. Consolidation of the house was very fast. Within two years of occupancy over 70% of the houses have at least one bedroom and 50% have two bedrooms. House size fluctuates between 44 and 66 square meters. Most beneficiaries completed the houses through self-help or contracting labor. Beneficiaries did not use community help for building the houses. Financing for the expansion of the house came from savings (47%) and Housing Vouchers (40%)\(^6\).

From the initial implementation stages there were acceptability problems originating in the low standard of the solutions offered by the project. Households were reluctant to participate in spite of the shortages of housing in the cities. The partial housing solution offered by the projects is one explanation for the reluctance of households. The serviced lots did not allow immediate occupation requiring work by the beneficiaries to complete the basic shelter before moving in. A second reason originates in the parallel availability of other subsidized government programs offering solutions with better standards (like the Housing Voucher established in 1990). Occupancy improved once the housing solutions provided by the project were eligible for the other subsidies. Cost recovery has been poor so far. Effective subsidy levels reached 84% of the total cost of the solutions.

OEO drew several recommendations from this experience. There is a need for a sector approach to the design of low-income housing operations to avoid conflicts among competitive programs. The preferences of beneficiaries need careful analysis in the design of housing programs. Solutions need to respond to explicit beneficiaries preferences if they are to be effective. Particularly in that they should represent a solution from its inception and not requiring additional effort from the family to provide minimum shelter. In progressive housing models finance arrangements need to consider the effort that beneficiaries will make to complete the housing solution. This may lead to high levels of subsidies to ensure targeting on low-income households. The high level of subsidies is a concern when addressing the sustainability of this type of projects. Horizontal equity requires that sources of funds should be assured to sustain subsidies to benefit most of the target population.
UPGRADING SUBSTANDARD SETTLEMENTS:
THE CHILEAN EXPERIENCE

To solve a backlog of substandard settlements left by a mix of land invasions and incomplete government financed settlements, the government of Chile launched in 1983 a settlement upgrading program partially financed by the Bank (Loans 115/IC-CH of 1983, 223/IC-Ch of 1986, 577/OC-CH of 1990 and 771/OC-CH of 1993). The program has solved the problems of over 130,000 low-income families living in settlements lacking one or more of the basic sanitation services. Depending on the needs of the different settlements, the program provides resources to expand the supply of potable water, sewerage, drainage, electricity and access roads to the settlements. Each lot receives a sanitary unit with connections to the services. The program finances the regularization of land tenure when necessary. Financing takes the form of grants by the central government to municipalities that execute the projects. Originally municipalities were to recuperate 25% of the capital investments from the beneficiaries and apply the proceeds to investments in the same settlements.

The evaluation of the program results shows good targeting in low-income households and significant social benefits. Over 75% of the beneficiaries are low-income households, a result of the fact that in Chile, lack of domestic water supply, good drainage and reliable access roads are found almost exclusively in low-income neighborhoods. Benefits of the program are also evident. Beneficiary settlements showed dramatic reductions in infant mortality and incidence of water borne decease when compared with settlements not benefiting from the program.

Municipalities did not comply with cost recovery targets. Capital expenditure recovery of 25% was not attained leading the government to turn cost recovery into a voluntary feature that the municipalities will carry out according to local circumstances. However, beneficiaries pay for the operation and maintenance expenses of public utilities in the monthly utility bills. The program has proven to be sustainable thanks to the commitment of the government to supply the resources required. Since its inception in 1983, annual program targets are set according to the availability of resources coming from the central government budget. The Government expressed its commitment to allocate resources to the program to cover all substandard settlements in the country by 1999. This is a feasible forecast since there is no significant growth of the substandard settlements in Chile. This is in part the result of the government housing policies that offer subsidized housing solutions to low-income families and in part the strict implementation of land development controls.

The Chilean settlement upgrading program makes a good model to solve the housing problem posed by substandard settlements. However, this type of project is very demanding in both investment resources and institutional support. Solutions usually require high levels of subsidies and efficient executing agencies that can develop good relations with the communities.
ISSUES FOR BANK ACTION IN LOW-COST HOUSING

Bank experience in housing uncovers several issues that need to be considered in Bank operations, especially to ensure maximum impact over the housing conditions of low-income households. Some were considered in the design of recent housing projects (Paraguay, Uruguay, Chile). Others still need to be incorporated, as discussed in the review of the results of the Uruguay and Chile projects.

Low-income focus for Bank activities

Experience with housing projects shows the difficulties of establishing efficient and sustainable mechanisms to reach the poor. As discussed previously, many attempts have proven unsustainable and others lacked the capacity to reach the target population. Often success comes with a high financial and institutional price-tag for governments. However, IDB-8 mandates commit the Bank to emphasize lending for poverty alleviation projects, and housing lending can be very effective in solving poverty-related problems of households. Shelter and sanitation services provided by housing projects rank high in the priorities of households and governments. As it is discussed in the following chapters, the Chile and Uruguay housing systems are reaching effectively low-income households. Cautious adaptation of successful cases enables the Bank to effectively collaborate with governments in establishing low-income housing support mechanisms that are simultaneously, responsive the household needs and priorities and institutionally and financially sustainable.

Sector approach in project design.

Isolated housing projects have proven incapable of solving the housing problems of low income households. Housing projects financed by the Bank often were occupied by higher income groups and unsustainable. A major lesson from this experience is that to ensure targeting, Bank projects should be concerned with the operations of the housing submarkets serving households with incomes above and below the target group. This requires a sector approach to project design and implementation. Projects should be based on a diagnosis of the operations of the housing markets in which they operate, particularly of the constraints affecting the demand and supply of low-income housing. Bank projects should be efficiently inserted in the housing markets to ensure that solutions to the problems faced by the specific target population are a part of a coherent system that ensures solutions to the other demand groups. The Uruguay project was designed with this objective.

Public-private sector coordination

Bank resources will only represent a minor proportion of the resources required to solve a housing problem of the size of the one faced by Latin American countries. The solution will require the mobilization of a significant amount of local resources that can only be supplied by the households. Long-term saving instruments and mortgage lending are the financial instruments commonly used to help this process. Government resources often supplement the limited resources of low-income households. Efficient mobilization of the private and public resources requires a coordinated effort by public and private institutions and communities. The Bank
faces the challenge to promote efficient and sustainable mechanisms for achieving this coordination.

Intermediation of housing financing requires a well functioning financial sector. While resources may flow with relative efficiency to other sectors, they face specific problems in housing. Beyond the mechanics of collecting funds, keeping track of the transactions, servicing loans, etc., the management of the risks associated with long-term lending pose particular problems. Credit, liquidity, cash flow, agency, system and political risks emerge as areas to be addressed. Bank operations can help governments to adopt appropriate policies and provide the institutional environment required for private entities to meet the demand for financial intermediation, including the management of risks.

The supply of housing is largely in the hands of the private sector. Efficient developers backed by an efficient construction industry are essential to have competitive housing markets. Bank housing projects need to be aware of the constraints faced by the private sector to enter new housing markets and address the issues placed by the development of the construction and real estate development industries.

Coordination with developments in the financial sector

In well functioning housing markets, financial markets play a critical role in mobilizing private resources. By subsidizing low-income households, housing projects could introduce distortions in financial markets effecting the efficient allocation of resources in the economy. Housing project preparation need to identify financial market restrictions to housing markets and the effects over financial markets of housing financing activities. The development of the savings and lending mechanisms required for housing markets to function can only take place in the context of the whole financial market development. Therefore, Bank housing projects need to ensure proper coordination of housing financing activities with financial market development activities. There may be cases in which insufficiently developed financial markets will limit the scope of housing projects. In circumstances of macro-economic stability, housing projects may open the road to develop depth and breath in financial markets. The Bank is in a privileged position to promote projects that take full advantage of these synergies.

Urban impact of housing policies

Bank housing projects need to explicitly address urban development determinants of housing markets and housing policy impacts on urban development. Residential activities are the largest consumers of urban land and major users of urban infrastructure and services. Housing policies have significant impact over the peace and direction of urban development. Their impact on the behavior of developers and households determines, for instance, whether cities undergo horizontal expansion or engage in significant urban renewal activities taking place. The regulatory environment of housing markets, including land use, utilities and building regulations, may represent barriers of entry to the market or impose restrictions that prevent supply from efficiently meeting demand. The Bank is in a privileged position to promote an integrated approach that coordinates housing and urban development policy to increase the efficiency of housing markets.
In the 1961-1970 period, the Bank financed 43 housing projects disbursing approximately US$ 350 millions.


During the execution of the project, the Ministry of Housing inititated other housing programs for low-income families. Among them the Housing Voucher, a non refundable subsidy allowing beneficiaries to purchase a house in the market. Program beneficiaries were declared elegible for the vouchers that were used to complete the houses.

IEU. PUC "Estudio de evaluación ex-post de la primera etapa del programa de lotes con servicios". SUBDERE.MINTER. Santiago, Chile. 1992