PRIVATE/PUBLIC PARTNERSHIP FOR
LOW-COST HOUSING IN DEVELOPING
COUNTRIES

by

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Submitted to the Department of
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ABSTRACT

It has long been assumed that the private sector cannot make an effective contribution towards housing low-income urban households in developing countries. This view has been changing as government is limiting expenditure allocations to the housing sector in favor of supporting export-earning sectors, leaving room for private sector involvement in a once government-dominated area.

This thesis presents an overview of the housing process and explores specific areas of private sector participation. Housing finance is one area of paramount importance and this study will explore policy initiatives within which private financial institutions could be incorporated into the low-cost housing process. This thesis will further develop around the notion that many governments in Third World countries can effectively pursue policy guidelines for involving the private sector into a private/public cooperative with the aim that government, the formal private sector, and low-income households benefit from such a scheme.
ACKNOWLEDGEMENTS

I wish to express my warmest thanks to Karen Polenske, my academic advisor, for the direction, insight, and understanding that she extended towards me throughout my program at MIT. Her dedication to truth and peace will always inspire me.

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Finally, for his unwavering moral support and tireless encouragement, I give my deepest thanks and love to Paul Joyner, my husband and friend. I dedicate this thesis to him.

Thesis Supervisor: Dr. Bishwapriya Sanyal
Title: Assistant Professor, Department of Urban Studies and Planning, MIT.
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CHAPTER I

INTRODUCTION

Purpose of Study

To discuss all aspects of private/public cooperation in all developing countries and to evaluate them according to various policy criteria would obviously be an immense task, and far beyond the scope of this thesis. Instead, the attempt here will be to give some indications of the ways the private sector can contribute to low-cost urban housing within a framework of analysis which local housing planners can fruitfully approach specific issues of private sector participation as they arise in particular contexts. This study, therefore, is addressed to laying out the patterns and trends in private sector participation in the low-cost housing process and extracting those salient features that will have an impact on the approach to housing low-income households. This study will further recommend policy initiatives that can be followed to bring government and the private sector into a formal cooperative aimed at accomplishing desirable results for those low-income earners who are able to pay for housing but who have been limited in their efforts to gain access to credit.
Evolution of Private Sector Participation

For a long time within government it has been assumed that the private sector in many developing countries does not play an important role in housing the urban poor nor has it been considered to have much potential in this area. The reasons given for this assumption are centered around the theory held by government that the private sector is unwilling to provide social goods because the nature of the provision of such goods does not allow for profit maximization which is the raison d'être of private enterprise.

Profit maximization is that activity usually followed by a private entrepreneur wherein which all production and sale of goods are geared towards gaining the widest profit margin that the market would allow. Failure to realize profits would lead to the cessation in the supply of goods or services.

The term "social good" is generally used to refer to a good or service, such as transportation routes or national defense, that cannot be financed by individuals through the market. The precise use of the term is used to justify intervention into a lot of situations that are not strictly "social good" situations but are "externality" activities whereby the price system cannot
register all the benefits and the costs associated with the production and consumption of these goods and services. It is believed that the overall urban society benefits from a "social good" situation such as slum clearance or squatter upgrading as diseases and crime may decrease as adequate housing is provided to overcrowded, substandard dwelling areas.

Whether a private entrepreneur can maximise profits by providing housing to low-income families or not, is not the critical issue of the following discussion, but it is important to highlight because for too long the government sector has used this basic premise to hinder private sector involvement. There are areas within the housing process where the private sector can (and does) significantly contribute to providing shelter for low-income earners without ever having to confront the theoretical question of profit maximization and social goods.

As the approaches to low-cost housing have taken on different forms since the halcyon of government intervention in the 1950s and 1960s, the shift has been towards greater private sector participation, particularly in the areas of design and construction, and housing finance. Table 1 represents a characterization of
the evolution of the formal low-cost housing process in the developing world. This is a generalization of a pattern that has emerged and may be more specific to certain geographical areas than others. It is not intended to be an analytical tool for assessing the development of the housing process, although it could fulfil this role.

TABLE 1. EVOLUTION OF FORMAL HOUSING PROGRAMS IN DEVELOPING COUNTRIES, c. 1950-?*

<table>
<thead>
<tr>
<th>Stages of the housing process</th>
<th>Government Intervention (c. 1950-65)</th>
<th>Self-help &amp; Upgrading (c. 1966-75)</th>
<th>Private sector (c. 1976-?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land acquisition</td>
<td>G</td>
<td>G</td>
<td>G</td>
</tr>
<tr>
<td>Procurement of building materials</td>
<td>G</td>
<td>G</td>
<td>G</td>
</tr>
<tr>
<td>Design and construction</td>
<td>G</td>
<td>g/p</td>
<td>g/p</td>
</tr>
<tr>
<td>Housing finance</td>
<td>G</td>
<td>G</td>
<td>g/p</td>
</tr>
</tbody>
</table>

G  total government participation

g/p  partial government and private participation (areas of transition)

*  Illustrative example with dates categorized to show approximate period of different types of approaches to housing low-income earners

Since the early 1950s, the approach to housing low-income families may be categorized in three ways: government intervention, self-help and squatter upgrading, and
private participation. Within each approach there were certain implementation difficulties and each succeeding approach was an attempt at improving over the preceding one. As Table 1 illustrates, there has developed a more participatory role by the private sector within certain areas of the housing process.

Government Intervention
In the 1950s many countries in the less developed world were coming out of a colonial era and one of the immediate urban problems facing these newly independent nations was that of providing adequate shelter for low-income families who, being attracted to employment opportunities in the manufacturing industries, were arriving in the primary cities in vast numbers. With the supply of basic housing out of their affordable reach, these migrants not only settled in dilapidated center city tenements but also on any available land on the cities' peripheries. Government feared that these areas would foster epidemics, crime, and social unrest because they were not serviced by basic utilities such as water and sewerage and were overcrowded. This fear has since been found to be based on the false assumption that squatter settlements breed such illwill towards the rest of urban society. "Squatter settlements were not a problem to be solved, but an extremely functional and rational solution (from the point of view of the squatter) to the need for well-located
inexpensive housing, access to jobs, information, social services, and networks of kinship" (Perlman, 1981, p. 169).

However, in response to their initial fear of the burgeoning growth of squatter settlements, government intervened by instituting squatter eradication programs that involved some form of resettlement in blocks of public housing constructed according to strict building codes. Often these codes were relics from the colonial era when high standards were set governing the construction of housing units and corresponding services for water, sewerage, and roads. The cost of such government ventures was very high and in order to make housing affordable to the target population, government resorted to heavily subsidizing the cost of housing. However well-meaning this program of government intervention was, there were three serious outcomes.

1. The heavy subsidization of public housing led to a rapid depletion of the existing stock of capital, which, in turn, expressed itself in low levels of maintenance of the costly services required by these programs.

2. There was no effective payment collection system in place so that residents could make payments quickly without too many bureaucratic details. This situation brought about delays in monthly installments and led to a very low rate of cost recovery.
3. Public housing targeted for low-income earners was largely consumed by median-income groups because the housing needs of this group were not being met. The net result was that public intervention was extremely costly to the government both in terms of unrealized cost recovery and misdirected policies. Developing country housing analysts then faced a dilemma: how to provide affordable shelter for low-income families amidst problems of capital shortage and high standards of building regulations.

**Self-Help and Upgrading**

By the late 1960s the logic of public intervention in the low-income housing market was being questioned by certain housing analysts. In *Freedom to Build* (1972), John Turner focussed on challenging the efficacy of public intervention in low-cost housing by pointing out one basic truth about urban low-income squatters: they wanted to actively contribute towards the construction and management of their own housing.

When dwellers control the major decisions and are free to make their own contribution to the design, construction or management of their housing, both the process and the environment produced stimulate individual and social well-being. When people have no control over, nor responsibility for, key decisions in the housing process, on the other hand, dwelling environments may instead become a barrier to personal fulfillment and a burden on the economy.


12.
Knowing that squatters made rational economic decisions about their own housing, the idea was developed that formalizing these self-help efforts would make adequate housing more accessible to a wider target population than was available in public housing.


1. Accessible to 24th income percentile while public housing rarely reach below the 60th percentile.

2. Willingness of families to pay for housing assistance and services received.

3. Innovative design of land use, plot sizes, and type of structure to accommodate more socio-economic uses per unit area.

4. Involved community participation that contributed towards social and organizational cohesiveness and control over decisions affecting the community at large.

In squatter upgrading programs individuals, small-scale and large-scale private contractors were involved in the design and construction stages of low-cost housing development. This allowed government to focus on laying out infrastructure or "servicing" the sites with
facilities for water, drainage, sewerage, and other necessities. This activity sealed the beginning of a government/private sector cooperation in low-cost housing. Government benefitted by having less responsibility (and thereby less costs) in providing dwelling units, while the private sector contractors expanded into a growing market furnished by housing needs of low-income families. Often these families received loans or grants through international funding agencies that were to be used for house improvement. The fact that many of these earners hired labor to carry out at least part of the construction work points out that the opportunity cost of their time was high. In Kenya's Dandora self-help project, as with many other similar projects, most families contracted small-scale builders to complete housing units (World Bank, 1981). The self-help squatter upgrading approach to low-cost housing had certain difficulties in implementation. The major problem was in recovering costs through monthly installments. The World Bank found that over 80 percent of the households in its Sites-and-Services projects were at least three months behind in services charges and loan repayments (World Bank, 1981). This problem resulted more from ineffective collection mechanisms and lack of political support than from an inability to pay.
Private Sector Participation

In their report on housing finance in Zambia, Colston and Newton (1977) observed that government debt collection systems were inadequate (sometimes as low as 52 percent of total arrears and rents due) because of problems of shortage of qualified staff, the use of outdated accounting systems, and the heavy bureaucratic requirements for payment procedures. These problems can be generalized for most government housing authorities in developing countries and in an effort to resolve these situations, many housing analysts have recommended that government relinquish its credit financing and management responsibilities and allow private sector organizations to absorb some of these duties. This recommendation forms the basis for the development of the discussion in the second chapter of this paper and serves to identify the areas of the low-cost housing process that are becoming the focus of a transition from government to private sector responsibilities. If we can cap a date on to this transition, one can see the beginnings of a "new" approach to housing low-income earners in the period from the late 1970s to early 1980s as was illustrated in Table 1.

But inadequacy of government is not the only problem. On a macro-economic level many developing (and developed) countries are presently facing a serious fiscal crisis.
Following two consecutive oil shocks of 1974 and 1979, many countries are experiencing high inflation, rising energy costs, sluggish growth of export markets, deteriorating terms of trade, and high current account deficits. Governments have responded to this situation by adopting austerity measures aimed at cutting down on social expenditures while developing its productive export-oriented sectors. A clear example of this trend is illustrated in government expenditure patterns in the Dominican Republic in the following chart.

FIGURE 1. CENTRAL GOVERNMENT EXPENDITURE BY FUNCTION: DOMINICAN REPUBLIC, 1976-1981

[Graph with lines for Economic Services, Education, Health, and Housing expenditures from 1976 to 1981]

Figure 1 evokes the expenditure patterns of a small developing country in the Caribbean region. The housing sector, having to compete with other sectors, has received decreasing priority from the government in spite of the increasingly high rates of urban population growth and consequently increasing demand for housing particularly for low-income earners (see Table 2).

TABLE 2. ESTIMATED HOUSING DEMAND BY INCOME GROUP: DOMINICAN REPUBLIC, 1977-1990

<table>
<thead>
<tr>
<th>Income group (monthly)</th>
<th>% Households 1977</th>
<th>Estimated Demand (%) 1980-85</th>
<th>Estimated Demand (%) 1985-90</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-100</td>
<td>32</td>
<td>33</td>
<td>31</td>
</tr>
<tr>
<td>101-300</td>
<td>49</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>301-600</td>
<td>13</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>600+</td>
<td>6</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


In the following chapter one aspect of the housing process -- credit financing -- will be discussed as an area of greater private sector participation with government housing programs in order to deliver housing to low-income households. This is not to imply that government should (or can) leave the provision of housing entirely up to the private market but rather that government should begin to
explore alternative avenues towards delivering housing to low-income households. As Table 1 illustrated, the government's responsibility, through effective policies, in the procurement of land and building materials is important to the housing process. These policy guidelines will also be outlined in Chapter 2.
CHAPTER II  
THE HOUSING PROCESS

Relationship Between Government and Private Sector

On closer examination of the housing process, one finds that private/public participation in specific areas take on several different forms whereby government may be dominant in one area and the private sector in another, or where a close relationship between the state and private activity can bring about desirable results in the delivery of housing to families below the median income. In the following discussion each aspect of the housing process will be presented for analysis within the context of examining those areas where an expanded role of the private sector is both desirable and necessary given the economic constraints that face housing ministries and departments in developing countries. As with all categorization of any continuous process, the distinctive stages identified in the housing process are interdependent, relating to one another in different ways. Figure 2 simplifies the complex relationship among three major actors in the housing process: government, low-income households, and the private sector which, for the purposes of this paper, will be divided into financial institutions and small-scale contractors. Two basic premises apply to this relationship. First, granting land tenure to low-income families is both desirable from their
FIGURE 2. RELATIONSHIP BETWEEN GOVERNMENT AND THE PRIVATE SECTOR IN THE LOW-COST HOUSING PROCESS

SOURCE: contributed by author
standpoint as well as it unleashes large amounts of capital and labor investment into housing and services upgrading. Second, low-income earners are not a monolithic group but consist of a wide range of income categories, from basic subsistence earners to skilled employees that possess some propensity to save. The policy recommendations in this study will not address all low-income earners but the author recognizes that there is a large, not yet fully identified group of households in developing countries that has demonstrated a willingness to invest in housing with security of tenure. The following discussion will focus on the provision of housing for these households.

For the convenience of tracing private activity in once government-dominated areas, it is necessary to distinguish the following four stages of the process of low-cost housing from acquisition of land for project development to financial arrangements for housing.

**Land Acquisition**

The 1976 United Nations *Housing Policy Guidelines for Developing Countries* outlined a general policy framework for land aimed at alleviating the problems of urbanization and, in particular, housing. The major problem that was found was that the price of urban land rose faster than incomes due to high rates of population growth, the
inelastic supply of land, high inflation rates, and high levels of land speculation by private interests. This problem continues to be evident today as land provides security against inflation and fiscal uncertainty and is relatively risk-free as an investment commodity in many developing countries where the scope for investment in stocks, bonds, or other economic ventures, is narrow.

Land acquisition, as an aspect of the housing process, is predominantly a government concern as low-income housing projects should ideally be located close to urban services and centers of employment. A survey of squatters in Kuala Lumpur revealed that access to local employment opportunities was among the chief factors in the persistence of squatter life (Yeh and Laquian, 1979). In acquiring land for low-cost housing development close to centers of employment, government must compete with those interests that have the ability to outbid the public sector for prime real estate. In order to receive high returns on its investment in land, the private sector may not be attracted to developing low-cost housing and would rather use the land for activities such as commercial or luxury housing development.

Government land acquisition policies are usually expressed through the procurement by eminent domain of the needed areas for housing development. It has been recommended
that housing authorities should be given pre-emption rights to acquire land in special development zones (United Nations, 1976). This would enable government to have priority in buying urban land that is available for sale with compensation being based on an adjusted estimated value that would take into account subsequent capital improvements on the land. Within such a policy framework, government would be able to acquire land gradually according to its planning and financial capacity. With housing development, government may want to parcel out land enabling low-income households to own and to use this as collateral on loans for neighborhood improvement through building houses and maintaining services.

Within this policy arrangement, a private/public cooperation exists whereby the private sector is compensated for its land given to government that, in turn, benefits from having land available for needed socio-economic development. The prerequisites for implementation of such an arrangement are careful forecasting for land use zoning, an efficient land use planning authority that is responsible to both private sector and low-income household interests, as well as a close interaction between those who organize and make decisions about land development and those who plan and implement these procedures.
Procurement of Building Materials

As with land acquisition, this stage in the process of low-cost housing is predominantly a government concern particularly with outlining policy guidelines for assuring the supply of building materials. In many developing countries, the construction industry is heavily dependent on imported materials such as steel girders and joints and cement. Construction materials comprise the largest building cost component, sometimes accounting for 60 to 70 percent of the total (Drakakis-Smith, 1980). With limited foreign exchange reserves, imports of construction materials are discouraged by government forcing many developing countries to develop local raw material resources and related processing industries. However, most of these resources are not fully exploited to the extent of adequately supplying the housing industry.

At the same time, many indigenous materials are sometimes shunned by housing authorities that have high and restrictive building standards. The end result is a contradictory situation that restricts imported raw materials while limiting the formal use of local building materials. This situation discourages entrepreneurial activities that seek to develop alternative materials from domestic resources and therefore limit the private sector involvement in low-cost housing sector because priority will be placed in other areas of construction, such as
commercial development that would bring quick and high returns on building costs.

In ensuring the supply of building materials to the construction sector, some governments have followed two guidelines. First, in the sponsorship of research facilities aimed at exploring local and traditional building materials as alternatives or as supplements to imported materials. For example, in July 1983 the Government of Jamaica set up the Building Construction Institute which has been responsible for research and development in the utilization of locally available materials of appropriate technology (Planning Institute of Jamaica, 1983). Potential alternatives to the imported materials were found in a soil/cement mixture, stone deposits, and clay sediments.

A second approach to securing building materials is through the pursuit of fiscal policies governing the devaluation of local currency that significantly raises the price of imported building materials. Table 3 presents and overview of the price increases of imported materials in the Jamaican construction industry.
<table>
<thead>
<tr>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumber</td>
<td>170.93</td>
<td>167.30</td>
<td>217.07</td>
<td>27</td>
</tr>
<tr>
<td>Steel</td>
<td>1162.44</td>
<td>1337.91</td>
<td>1508.90</td>
<td>30</td>
</tr>
<tr>
<td>Cement</td>
<td>7.11</td>
<td>10.78</td>
<td>13.30</td>
<td>87</td>
</tr>
<tr>
<td>Paint</td>
<td>34.50</td>
<td>40.00</td>
<td>55.21</td>
<td>60</td>
</tr>
<tr>
<td>Zinc sheets</td>
<td>17.85</td>
<td>19.64</td>
<td>...</td>
<td>10*</td>
</tr>
<tr>
<td>Galvernized pipes</td>
<td>19.86</td>
<td>28.84</td>
<td>36.12</td>
<td>82</td>
</tr>
</tbody>
</table>

* percentage increase of 1982 over 1981 prices.


During the 1981 to 1983 period there was a decline in the amount of materials imported in Jamaica despite high price increases, as much as 87 percent for cement, over the same period. The devaluation of the Jamaican currency significantly contributed towards the price increases which consequently severely hindered the performance of the construction sector during the same period.

**Design and Construction**

Sites and service projects had emphasized government entrepreneurship in providing the sites, services, and some core construction, with private, individual self-help efforts devoted to housing construction. The use of private enterprise to lay out self-help projects on privately owned land had not been a desirable policy of many developing countries (World Bank, 1978). The reason
given had been the assumption by government that private entrepreneurs who subdivide their land for sale or lease do not have the proper incentive or capacity to provide sound planning and services such as good physical layout of sites, water supply, sewerage, electricity, and other services according to government regulations.

But this assumption has had to be placed aside in light of limited government resources to carry out all design and construction of low-cost housing developments. One way to do this is to facilitate servicing of land at the private landowners' expense with the resulting increase in land value as the incentive to provide the services (World Bank, 1978). This is a familiar development in the United States where private subdividers are often responsible for the provision of most on-site infrastructure such as transportation routes, utilities, public recreation areas, and even schools and health care centers. In developing countries, this private subdivision process might become an acceptable substitute for public land development where population growth has overwhelmed the government's capacities for servicing land. This scheme was followed in Korea beginning in the 1950s where the process of land readjustment was voluntarily organized by landowners who were responsible for all the steps, including installation of infrastructure, performed by government (World Bank, 1978).
The private sector contains far more potential for low-cost housing construction than is generally acknowledged. Not all private construction is undertaken by large-scale firms using modern capital-intensive techniques and in the business for large profits. In fact, the majority of private construction operations consist of relatively few workers who build houses on direct commission from the owner or architect rather than on speculation (Drakakis-Smith, 1979). Many countries have large numbers of unregistered builders organized by foremen who are legitimately employed to build houses that comply with legal and social standards. These "moonlighter" construction specialists, who apply their formal experience to job requests from friends and relatives initially, continue to build up their own reputations to go out on their own.

Within the process of housing low-income households, the area of design and construction continues to absorb more private sector participation. Important to this emerging pattern is the identification of the target population for increased private sector production. It is unlikely that private firms could or would produce housing for the most destitute of the urban poor, but there might be a ready market amongst the higher low-income earners who have some stable employment, rising aspirations, and an ability to
accumulate savings (Drakakis-Smith, 1979). Because profit margins on individual units are small and not attractive to large developers who require an extensive market, smaller producers may be content with a less lucrative output. The size of the target population depends on the price households can afford to pay, the cost of producing the units, and the profit margins permitted (Drakakis-Smith, 1979). These three terms can be brought closer together by a reduction in building materials and cheaper, more efficient credit facilities for housing construction.

Housing Finance

In summarizing the characteristics of low-income earners who lived in squatter settlements and public housing projects, Janice Perlman (1977) showed that legalization of status and security of tenure through homeownership have very high priorities for these households. They comprise the "third tier" of Bertrand Renaud's three-tier market structure: (1) a high to middle-income "legal" private sector, (2) a heavily subsidized, mostly middle-income public sector, and (3) a large, growing low-income "informal" private sector which is far from disorganized forming residential zones developed at high density without infrastructure or community facilities (Renaud, 1982).
The relatively high proportion of housing that is built in the low-income "informal" private sector without relying on formal institutional finance raises several issues for the development of housing finance policies, including an understanding of the dynamics of housing investment of the informal sector. Investment in housing is drawn from loans from relatives, indigenous saving schemes among communities and religious organizations, remittances from family in another part of the country or abroad, in renting part of the dwelling unit to other individuals or families, and many other areas. These factors not only highlight the importance of homeownership, but also the ability for some low-income earners to save and invest in their own housing.

The mobilization of individual savings and making credit facilities available for house purchase is a complex problem. The major drawback is that in most developing countries the availability of credit is very restricted. Credit facilities tend to be short-term, expensive, and require large equity deposits to be made by the borrower. In Southeast Asia for example, typical commercial terms advance 80 percent of the overall price of a house at an annual rate of 10 percent over ten to twelve years (Drakakis-Smith, 1980). It is unfortunate that as the greatest default risks occur in the poorest cities, the
most needy urban populations suffer the most stringent loan conditions. These conditions exclude the urban poor from the housing credit system and restrict loans to higher-income groups or to those employed in government occupations that operate their own credit schemes. It is recommended that a more equitable credit system should operate a sliding scale of loans and repayments in which low-income households receive loans on more favorable terms such as smaller equities, lower interest rates and a longer repayment period related to the full working life of the borrower (Drakakis-Smith, 1980).

The problem of shortage of favorable mortgage funds and terms is not so much one of housing as of development of the financial sector (Grimes, 1978). Housing finance institutions are needed in developing countries because their growth has a positive impact on the quality and amount of urban development, on mobilization of resources, on market efficiency, and on homeownership. The encouragement of the development of local credit unions, building societies, savings and loans associations, through public policy guidelines is necessary to channel the savings of low-income families into housing finance. Initiatives have been taken by some of these financial institutions. In Paraguay, the Banco Nacional de Vivienda (National Housing Bank) developed its capacity to provide low-income shelter through cooperative and other local
associations. Initially the National Housing Bank carried out a pilot program with CREDICOOP, a national private sector cooperative. The program expanded the availability for low-income housing credit with eight participating co-ops attracting large numbers of people to their membership and increasing their capital bases and positions in their respective communities. This particular program was an immense success both in implementation of the project's objectives and in the responses from low-income families as funds were soon consumed with many new requests being turned down implying that there is a ready market for credit financing to low-income earners (USAID, 1982a).

Private sector credit unions also play an important role in housing finance for low-income households. In 1982, a USAID Housing Guarantee loan was provided to the Government of Belize aimed at increasing the capacity of credit unions to become involved in shelter financing. The implementation of this program was handled through the Development Finance Corporation (DFC) and the Belize Credit Union League (BCUL) and its members. The major tasks of the members of the BCUL were to develop a general allocation/disbursement mechanism, administer mortgages and loan contracts through member credit unions, and make repayments to the DFC through which the international funding was disbursed. The program stipulated that local
credit unions deal with individual borrowers to verify their income and eligibility, arrange disbursements, inspect construction, and receive and forward to the BCUL monthly repayments. The concept behind this program has the following advantages:

1. existing local financial institutions are used to channel international funds, thereby eliminating the need to create or increase the burden of an existing government department to handle financial arrangements;

2. the institutions receive extra financial support from international agencies through government channels and incentive to explore innovative techniques in shelter financing for low-income earners;

3. beneficiaries of the program are able to establish credit with formal financial operations.

As much as the area of private credit financing is beginning to be incorporated in the low-cost housing sector, there are certain problems that arise from the mismatch between the financial services that the private sector can provide on the one hand, and the equity base and borrowing capacity of low-income households on the other. The limitations to low-income earners are the prerequisites of an adequate level of income, employment stability, and collateral in the form of conventional
marketable assets. There has been little systematic research into ways in which these constraints can be overcome. However, present studies on international development projects have shown that private savings need to be mobilized and channelled into national housing banks or trusts (Renaud, 1982). It is in this recommendation that private/public cooperation is vital to expanding credit facilities to low-income households. As government safeguards savings by indexing against inflation and by acting as guarantor on housing loans, then savings will be encouraged and private financial institutions may be more willing to extend credit to low-income earners. Also, granting freehold agreements to residents of upgraded sites ensures ownership as well as raising the value of land through servicing would provide collateral needed for housing construction.

Further private/public cooperation through vigorous government support of financial innovations also lends itself to the development of a housing finance system that is expected to accomplish a number of things including:

1. mobilize household savings into mortgage and home improvements loan markets;
2. provide best possible incentives for increasing the amount of financial savings into the economy;
3. allocate the supply for loans among households;
4. extend financial services to self-employed and
lower income households; and

5. improve the financial and commercial evaluation of projects.

(After Bertrand Renaud. 1982. Housing and Financial Institutions in Developing Countries. pp. 74-75.)

A successful housing finance system presently exists in Brazil that began with the Banco Nacional da Habitacao (BNH) as the lead agency. The BNH financed local public executing agencies as well as supervised private institutional financial activities in Federal and States Savings Banks, Real Estate Credit Companies, and Savings and Loans Associations known as the Sistema Brasilevio de Emprestino e Poupanca (SBEP). The BNH is responsible for receiving a share of the social security funds that the SBEP has mobilized from households, thus providing credit for home mortgages drawn from compulsory savings. The Brazilian housing finance system is a dynamic and powerful structure in the banking area both mobilizing resources directly from households and solving credit problems through a social security fund system (Renaud, 1982).

The establishment of a successful housing finance system, such as the one that exists in Brazil, requires a central public financial authority that is both sensitive to national economic factors as well as to the forecast of financial needs assessment of some categories of
low-income households. It requires a strong and continuous political system within which median-term goals can be realized. To involve private financial institutions in low-cost housing finance requires an understanding of the financial market and its dependence on a favorable macro-economic climate. It is here that government/private sector joint venture programs could be established in order to formulate policies imperative to meeting the demand of land, building materials, credit accessibility, and housing. These recommendations must further be placed within the context of the need for massive structural reforms, such as land reform, tax reform, income redistribution, and policies for job-creation that would increase the incentive to save and thereby to invest in housing.
Within the process of low-cost housing, the area of greatest private sector participation is in credit financing. The demand exists among higher low-income earners for access to credit for house construction and neighborhood development. For such a participation, two conditions apply.

1. **Broadening of the equity base of low-income earners**
   This can largely be accomplished through land reform aimed at granting freehold tenure to the target population. Legalization of status and infrastructural development of squatter settlements, increases the value of individual property. Through ownership of property, the borrowing capacity of low-income households can be increased.

2. **Mobilization of household savings into home loan markets**
   Understanding the relatively high propensity to save and spend on housing among some low-income earners can contribute towards the growth and development of local financial institutions thereby providing avenues for the mobilization of savings towards home improvement.
Within the context of these two conditions, the framework for policy development centers around the basic premise of security of land tenure. Low-income households are willing to pay for housing on land that is accessible to employment, social services, information, and social interaction. As government exercises its right to eminent domain, it can acquire land for low-cost housing development. It is not, however, a simple task but requires careful forecasting of land use zoning that would estimate the demand on land in the future.

The relationship between government and the private sector in the area of low-cost housing is a complex one. As the demand for housing grows, pressure is placed on government to supply land for housing development. But efforts towards such development is limited as Third World governments continue to face a serious fiscal crisis and are therefore focussing more on those productive sectors that have the ability to earn foreign exchange.

The recommendations for a policy framework is based on the notion that government should use its comparative advantage of eminent domain in the area of land acquisition to grant security of tenure to low-income households. It is what they want and what they are willing to pay for.
Further government/private sector cooperation exists in the area of government support of financial innovations particularly in the development of a housing finance system that will seek incentives for increasing savings in the economy. Two ways that this can be accomplished are through safeguarding savings by indexing against inflation and by acting as a guarantor on housing loans offered to eligible low-income earners through local private financial institutions.

In developing countries that pursue (or intend to pursue) a cooperative agreement with private sector interests, a central planning committee comprising both sectors need to be established. The aim should be to identify the target population that would benefit from such a cooperative as well as find out what their needs are and their ability to pay for housing. Because low-income earners do not make up a monolithic group, research into income levels below the median needs to be conducted. This is an important consideration particularly with the following working hypotheses that Jorgensen (1977) so neatly summarized.

1. The proportion of income the low-income households are prepared to for housing is high to their relative earnings.

2. Households are prepared to pay more than their present rent for something better than their
present accommodations.

3. Households are prepared to invest funds into housing upon being granted security of tenure.

4. The main constraints in the private low-income sector are lack of serviced plots and lack of credit facilities.
BIBLIOGRAPHY


Renaud, Bertrand. 1982. Housing and Financial Institutions in Developing Countries. World Bank: Washington, DC.


USAID. 1982a. Paraguay Operational Program Grant. Prepared for USAID by the Cooperative Housing Foundation: Washington, DC.


