

# Innovative financing for lowincome housing improvement: lessons from programmes in Central America

# Alfredo Stein with Luis Castillo

Alfredo Stein is an economist currently working with the Housing Development and Management Unit at Lund University. He worked as a programme officer at the Swedish Embassy in Honduras, and as Sida's senior consultant in the Local Development Programme (PRODEL) in Nicaragua, the Social **Housing Foundation** (FUPROVI) in Costa Rica and the Housing Ministry in Chile. Prior to that, he worked at the International Institute for Environment and Development (IIED-Latin America) in Argentina. He is a member of the United Nations Millennium Task Force Project on Improving the Lives of Slum Dwellers.

Address: HDM, Lund University, PO Box 118, 22100 Lund, Sweden; e-mail: alfredo.stein@hdm.lth.se

Luis Castillo is an economist and executive director of the Salvadoran Integral Assistance Foundation (FUSAI); he is also chair of the board of the microfinance lending institution "Integral" in El Salvador. He has worked as a consultant for Sida and other voluntary, bilateral and multilateral agencies in the design and implementation of lowincome housing programmes and micro-lending institutions in Latin America.

Address: luis.castillo@fusai.org.sv

SUMMARY: This paper discusses what has been learnt from housing and local development programmes in Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua supported and funded by the Swedish International Development Cooperation Agency (Sida) during the last 15 years. It identifies common financial mechanisms that have proven to be effective and affordable by the urban poor in their search for better housing. It also discusses the different policies and interventions by national and sub-national governments and the "non-market incentives" that were required to make low-income housing programmes feasible and affordable, and what these imply for the financial and institutional sustainability of such programmes. It ends with recommendations for other international donors and national institutions that are seeking to design new financial services for housing for low-income groups.

## I. INTRODUCTION

AROUND 900 MILLION urban dwellers worldwide live in settlements that can be characterized as "slums", and most of these are in low-income nations.(1) Their numbers have grown rapidly over the last 20 years, and will continue to do so unless the housing policies of governments and international agencies become far more effective. The urgency of addressing this is recognized by the Millennium Development Goals, which has as one of its main targets to improve significantly the lives of at least 100 million slum dwellers by 2020. The Millennium Project Task Force on Improving the Lives of Slum Dwellers has interpreted this to mean not only significantly improving the lives of 100 million slum dwellers but also putting in place the policies that provide alternatives to "slums" for all new urban dwellers. (2) Achieving this will require new ways of addressing such critical issues as access to land for housing, secure tenure, provision of basic services and improvements to housing for the urban poor. It will also mean supporting the incremental processes by which low-income households build, since this is how most dwellings are built or improved. Creative measures and new ways of financing these must be found.

This paper draws on the authors' own experience over the past 15 years in the design and implementation of low-income housing programmes in Central America, financed by Sida. It begins by describing the difficulties of financing low-income housing improvement programmes, and the main types of financial schemes and sub-markets for housing that are available

to the urban poor in low-income countries. It then describes the objectives and main characteristics of the low-income housing programmes that Sida financed in Central America, including issues of management of low-income housing loan portfolios, financial conditions – including the types of interest rate and collateral used – and other aspects that constitute the core of the financial housing schemes used by these programmes. The concluding recommendations emphasize that low-income housing improvement schemes cannot and should not be treated strictly as a regular type of market product offered by conventional or non-conventional housing financing and micro-lending institutions.

## II. HOUSING FINANCE FOR THE URBAN POOR

#### a. Introduction

IN MOST CITIES, low-income groups are accommodated in a wide and diverse range of housing sub-markets that respond to the multiplicity of their needs, resources and financial capacities. Organized land invasions, squatter settlements (often illegal and without any services), rental tenements and rental accommodation are some examples of these sub-markets. Most new housing is built outside any officially approved land development and housing construction process. For the majority of low-income households who organize the construction of their housing, this process is, by necessity, incremental and lengthy, as they cannot afford to build complete houses immediately<sup>(3)</sup> or cover the costs of purchasing a completed home. Recent studies suggest that low-income households use their savings, labour and other resources to build their houses over a period of between 5 and 15 years.<sup>(4)</sup> One of the reasons for this is that they lack access to private and public housing finance systems.

Housing finance sources in low- and middle-income countries can be classified into three categories. The first includes commercial private financial and banking institutions, which provide credit to upper-income groups at market interest rates upon proof of their income level and the provision of collateral and guarantees. These financial institutions usually avoid any involvement in housing finance for the poor because they lack solid collateral and sufficient, stable income. Other factors include inadequate land and housing registry systems, the perceived high risk of loan default with low-income households, and the high transaction and administrative costs of the relatively small loans that can be afforded by the poor. The costs of foreclosure are also generally very high relative to the value of the property, and there are low profit margins.<sup>(5)</sup>

The second source of finance for housing is the public sector, which usually provides subsidized funds for middle-income groups and civil servants through specialized or non-specialized housing intermediaries. However, such programmes in low-income countries usually fail to reach the poor. The eligible beneficiaries typically operate within the formal economy, possess basic home-ownership capacities, and have some (limited) access to capital. Public programmes attempting to target lower-income groups have usually been hampered by a lack of political will, a leakage of funds to non-eligible groups (often due to corruption) or a failure to take into account the socioeconomic and political dynamics of the circumstances within which the poor live and work. These programmes usually operate with "hidden" and subsidized rates of interest, although in recent

This paper is a condensed version of the original, which was published in Building Issues Vol 13, No 1 (2003), and we are grateful for permission to print it here. The original paper and other papers in the Building Issues series are available from www.hdm.lth.se/bi/network.asp

- 1. UN-Habitat (2003), Slums of the World: The Face of Urban Poverty in the New Millennium, UN-Habitat, Nairobi.
- 2. Millennium Development Goals Task Force 8 (2004), draft Final Report, November, United Nations.
- 3. Mitlin, Diana (2000), Reaching Low-income Groups with Housing Finance, Human Settlements Programme, IIED, London.
- 4. Ferguson, Bruce (1999), "Micro-finance of housing: a key to housing the low- or moderate-income majority?", Environment and Urbanization Vol 11, No 1, April, pages 185–200.
- 5. Center for Urban Development Studies (2001), "Housing Microfinance programmes: a synthesis", draft mimeo; also PM Global Infrastructure Inc (2003), "The global shelter facility: a proposed international guarantee facility for housing and municipal development: feasibility study: phase 1", submitted to UN–Habitat, Nairobi.

6. See reference 5, Center for Urban Development Studies (2001).

7. See reference 5, Center for Urban Development Studies (2001).

8. Daphnis, Franck (2002), "The housing micro-finance worldwide experience", mimeo, Sida, Stockholm.

years there has been a shift from subsidized interest rates to subsidies provided direct to households.<sup>(6)</sup>

The lower-middle, moderate and low-income households, most of which work in the informal economy, have with few exceptions been excluded from accessing capital from formal private or public financial institutions. These groups have consistently relied on informal sources, including savings, informal loans from friends and family, remittances from family members working abroad and the sale of whatever assets they have. In recent years, however, a growing number of non-traditional financial institutions have developed to serve these sectors with innovative financial schemes. These experiences show that the housing needs of the poor can be financed in a way that is economically viable, affordable and consistent with tested methods of delivering finance services to the poor. Some of these institutions and schemes have been supported by international donor agencies, including Sida.

### b. General considerations

Experiences in Central America confirm the growing evidence throughout the world that borrowers from the poorer social sectors are extremely responsible in meeting loan repayments for housing improvements and new housing. What are required are enabling environments, processes and institutions that improve the capacity of the poor to access viable social, technical and financial solutions and resources. The experiences show that revolving funds and non-traditional micro-lending institutions are becoming important financial instruments for the urban poor. They also illustrate the importance for external agencies of investing in institutional development in order to have strong programmes and organizations capable of carrying out the difficult task of working with the poor while ensuring financial sustainability.

There is a tension between making sure that funds are accessible to the poorer sectors and achieving financial sustainability for the programmes and institutions that execute them. There is an on going debate on the best ways to institutionalize and govern the programmes, to increase their social impact, to make significant interventions in the housing sector within the target population, and to secure the sustainability and growth of the revolving funds.

The experiences with housing finance systems for the urban poor in Central America suggest that it is unlikely that revolving funds for low-income housing will evolve into formal banking or financial institutions, as has been the case with the microfinance industry. But the alternative models that have been developed certainly address the housing problems faced by urban poor groups on a large scale and with limited external funding. The experiences show the important role that an external funding agency can have, namely to offer technical and financial assistance, especially where there are clearly identified national organizations to execute the programmes, and when national policies in the sector are not already well defined and functioning.

# III. MODELS OF FINANCING FOR LOW-INCOME HOUSING IN CENTRAL AMERICA

SINCE 1988, SIDA has financed housing and local development

programmes in Central America with total resources of US\$ 50 million. By the end of 2003, the programmes had helped about 80,000 low-income families, or about 400,000 people, in the main urban areas of the region to improve their living conditions. The resources from Sida have been channelled through different institutions and programmes, namely the Housing Promotion Foundation (FUPROVI) in Costa Rica, the Local Development Programme (PRODEL) in Nicaragua, the Salvadoran Integral Assistance Foundation (FUSAI) in El Salvador, the Urban and Rural Social Housing Development Foundation (FUNDEVI) in Honduras and the Local Development Trust Fund (FDLG) in Guatemala.

Despite the differences in these five countries, the model promoted by Sida was relatively simple. The programmes are based on lending to lowincome families to improve or expand their existing houses or to build new ones. Credits are provided directly by the institutions listed above, or through organizations that have specialized as financial intermediary institutions that give long-term and short-term loans. The credits are sometimes combined with subsidies from government, and are complemented by the family's own savings, self-help and labour efforts. (10) In some of the programmes, lines of credit or matching funds are given to municipalities to provide basic services in new and existing low-income settlements. In addition to financial assistance, these intermediary institutions also provide technical, social and legal assistance to help the participating families get secure land tenure, basic services and infrastructure, and appropriate designs to improve and expand their houses. All the programmes use an incremental and gradual housing process corresponding to the capacity of households to save, to repay loans and advances in-kind and to contribute money and labour.

In new formal settlements, the institutions are involved in planning the new settlement, providing infrastructure and basic services, assisting in land titling, lending to families, giving technical assistance for house construction through self-help, and resettling families into the new houses. In existing informal settlements, the steps can be reversed; lending can take place before building or improving the houses and before the provision of infrastructure and basic services. In some cases, only basic services are introduced, with few possibilities for lending given the income level of the target population. Thus, different approaches have been developed to work with both formal and informal settlements (Tables 1, 2 and 3).

Credits are given and interest is charged, but not necessarily at market rates. In the majority of the programmes, the interest rates reflect, but do not necessarily match, the market rates for mortgages in the formal sector. The programmes accept a wide variety of collateral and security from the households (especially mortgages, deposited objects and co-signer loans). The flexibility in the use of collateral has allowed the participation of low-income households in the programmes even if they have not fully resolved the legality of their land tenure.

Once the credits are recovered, the resources are reinvested into new loans to families of the same income strata. This has allowed the creation of various revolving and rotating funds. The basic principle that guides these funds is the maintenance of the value of the original seed capital so that it can be reinvested in the same target population over a relatively long period of time. Thus, the recovery of the funds and the maintenance of value become important tools for urban poverty alleviation.

9. Boman, Kristina and Lennart Peck (2003), Programas Integrados de Vivienda en America Central. Experiencias y Recomendaciones, URBAN/Inec, SIDA3162es, Sida, Stockholm.

10. Sida (2001), "Resumen de actividades: programas de vivienda popular y desarrollo local en Centroamérica apoyados por Asdi", Department for Infrastructure and Economic Cooperation, Stockholm.

Table 1: Basic characteristics of the low-income housing credit programmes financed by Sida in Central America				
Characteristics	Sites and services	New housing construction	Infrastructure and basic services	Microcredit for housing improvement
Description	Developed land with minimum basic services and land tenure legalization	Developed land, land tenure legalization, basic housing units with or without basic services	Introduction, improvement or expansion of basic services and infrastructure to existing neighbourhoods	Improvement or expansion of walls, rooms, roofs, floors and basic services
Main aspects and financial conditions	Revolving fund; medium- and long-term finance (4 to 10 years); maximum amount per loan US\$ 4,000; positive* and market interest rates over the outstanding loan; cost-recovery of operational and inflation costs; mortgage loans; needs a complementary subsidy from the state, especially for infrastructure and basic services	Revolving fund; medium- and long-term finance (5 to 10 years); maximum amount per loan US\$ 4,000; positive* and market interest rates over the outstanding loan; cost-recovery of operational and inflation costs; mortgage loans; needs a complementary subsidy from the state, especially for infrastructure and basic services	Revolving fund; long- term finance to families (5 to 10 years); positive* and market interest rates over the outstanding loan; cost- recovery of operational costs and inflation; collective collateral and mortgage loans; requires complementary subsidies from the state or from local governments	Revolving fund; short- and medium-term finance (2 to 5 years); loans of US\$ 200–1,500; positive* and market interest rates over the outstanding loan; different type of collateral: mortgage, pawn, and co-signers; no need for state subsidies
Role of families	Self-help and repayment of the loan	Participation in the design; self-help construction of the house and repayment of the loan	Design, administration, supervision, construction and repayment of the loan	Self-help, design, cash-flow management of the loan and repayment of the loan
Role of community- based organizations	Organizing the demand, and administration of resources	Organizing the demand, and administration of the funds	Organizing the demand, and administration of the funds	Organizing the demand
Role of local governments	Identification of sites and potential demand; in some cases, developers of sites and services, and resource administration	Identification of the potential demand and possible sites for execution of projects	Identification of the communities, and administrators of resources	Technical assistance to individual families, granting construction permits
Role of central government	Provision of long-term finance through subsidy schemes; in some cases, signing of specific agreement with Sida to allow project execution  Supervision and monitoring; in some cases, signing of specific agreement with Sida to allow project execution			monitoring; in some cases, signing of specific agreement with Sida to allow
Role of the external funding agency	rnal funding harmonisation with other donors to increase policy dialogue and secure urban poverty as part of the			
Role of the financial intermediary	Intermediaries of funds and technical assistance			
Target population	Poor families with monthly incomes between 0.5 and 4 minimum wages, and payment capacity	Poor families with monthly incomes between 2 and 6 minimum wages and payment capacity	Extreme poor families with monthly incomes between 0 and 5 minimum wages, and payment capacity	Poor families with monthly incomes between 1 and 5 minimum wages and, payment capacity

<sup>\*</sup> Positive rates are those that cover the administrative costs of managing the loan, the inflation rate and a risk percentage to cover possible defaults, but that do not consider a margin of profit for the intermediary institution.

SOURCE: Based on Castillo, Luis (2001), Primera aproximación comparativa a la experiencia de Asdi en Centroamérica y desafíos para el futuro, Sida/Asdi, San Salvador; also information and documents from the institutions.

	Characteristic America	s of the progra	ammes suppo	rted by Sida i	n Central
Characteristics	FUPROVI	PRODEL	FUSAI	FUNDEVI	FDGL
Country of operation	Costa Rica	Nicaragua	El Salvador	Honduras	Guatemala
Year programme started	1988	1994	1999	1999	1999
Type of organization	Originated as an NGO	Started as a government programme and has become an NGO	Originated as an NGO	Started as a government programme, then became a public foundation	Trust fund with government participation, working with NGOs
Type of programmes executed	New housing, including infrastructure and basic services, and housing improvement	Housing improvement, and infrastructure and basic services	New housing, including infrastructure and basic services, and housing improvement	New housing, including infrastructure and basic services, and housing improvement	Housing improvement, and infrastructure and basic services
Funds mediation	Loans are given directly to families by the institution; it works with both formal and informal settlements	Loans given via regulated and non-regulated microfinance institutions; usually in established low-income settlements; PRODEL acts as a second-tier institution	Loans are given directly to families; it works with both formal and informal settlements	Loans are given directly to families; it works with both formal and informal settlements	Loans given via regulated and non-regulated microfinance institutions in formal and informal settlements; FDGL acts as a second-tier financial institution
Commissions charged by the intermediary	10% for technical assistance in the construction phase; 2% for administrative fees; 2.5% for legal costs	10% for technical assistance for construction; 1% for legal fees and paperwork	2.5% per year on each payment, for administration; 2.5% on the total loan amount for transaction costs; 1% per year on each payment for life insurance on the amount of loan balance; 1% upfront for legal costs and mortgage fees	6% on the total cost of the housing solution	1.2% of the total cost of the housing solution; US\$ 6 for documentation costs
Interest rates	19% per year	18% per year	23% per year	20% per year	25% per year
Loan term	Up to 15 years for new construction, and up to 8 years for improvements	Maximum 4 years for housing improvements	Maximum 7 years	Maximum 10 years for new construction, and 5 years for home improvements	Maximum 4 years

SOURCE: Based on data from Daphnis, Franck (2002), The Housing Micro-finance Worldwide Experience, mimeo, Sida, Stockholm.

Sida's policy throughout the region has been that housing subsidies are primarily the responsibility of national governments, which act as counterparts to the international agency. That is why most of the funds allocated by Sida have been channelled to finance three main components of these programmes, namely loans (including micro-loans for housing improvements and new housing), technical assistance (to both executing agencies and the target population) and institutional development, especially of those institutions that manage the Swedish funds.

Characteristics	Costa Rica	Nicaragua	El Salvador	Honduras	Guatemala
GNP per capita (US\$) <sup>(a)</sup>	3,706	473	1,753	694	1,551
Urban population below poverty line <sup>(b)</sup>	26%	51%	48%	37%	52%
Sida-supported institution and programme	FUPROVI	PRODEL	FUSAI	FUNDEVI	FDGL
Type of organization	NGO	Governmental	NGO	Public foundation	Trust fund
Housing improvement costs (US\$) <sup>(c)</sup>					
Average cost for housing improvement	2,000	1,000	1,500	1,500	1,100
Average loan for housing improvement <sup>(d)</sup>	1,200	700	1,000	1,000	700
Average subsidy for housing improvement by state	600	200	350	350	300
Average self-help for housing improvement	200	100	150	150	100
Average cost of minimum basic services for housing improvement	500	300	400	400	400
Average cost of land for housing improvement	500	400	400	400	400
Average cost of land, services and housing improvement <sup>(e)</sup>	3,000	1,700	2,300	2,300	1,900
New housing costs (US\$) <sup>(f)</sup>					
Average cost of new housing	3,500	2,500	2,800	3,800	3,000
Average loan for new housing <sup>(g)</sup>	2,100	1,500	1,700	2,300	1,800
Average subsidy for new housing provided by state	1,000	700	800	1,100	900
Average self-help for new housing	400	400	300	400	300
Average cost of minimum basic services for new housing	1,400	1,100	1,200	1,100	1,500
Average cost of land for new housing	1,000	700	800	800	800
Average cost of land, services and new housing <sup>(h)</sup>	5,900	4,300	4,800	5,700	5,300

#### Notes:

- (a) ECLAC (2002), Statistical Yearbook for Latin America and the Caribbean 2001 (LC/G.2151-P), Santiago, Chile, United Nations Publications, sales no. E.02.11G.1 (in 1995 US\$).
- (b) For Costa Rica, Nicaragua, El Salvador and Honduras, data from Székely, Miguel et al. (2000), "Do we know how much poverty there is?" Inter American Development Bank Working Paper #437, Table 2.
- (c) In existing squatter or slum settlements where land regularization is possible, and with community and household participation.
- (d) Repayment period of 2-5 years, with non-subsidized interest rates.
- (e) Average direct costs for one household based on costs for 500 housing improvement solutions in existing settlements.
- (f) New settlements, including sites and services, plus core housing unit averaging 25 square metres, and with community participation.
- (g) Repayment period of 8-10 years, with non-subsidized interest rates.
- (h) Average direct costs for one household based on costs for 300 new houses in new settlements.

SOURCE: Based on data from the different institutions and from Castillo, Luis (2001), Primera aproximación comparativa a la experiencia de Asdi en Centroamérica y desafíos para el futuro, Sida/Asdi, San Salvador.

#### IV. LESSONS LEARNT

THE EXPERIENCE GAINED from these programmes and institutions over the last 15 years shows that a number of key issues have a decisive influence on the way poor families use their scarce income and resources to access affordable housing. These factors are common and have been addressed in all Sida-supported programmes. Understanding them can be significant in structuring housing policies that will reach poor families. They also help us to understand why the programmes have been successful.

## a. Housing policies

Incremental housing projects, squatter and slum upgrading programmes and credit lending for housing improvements have been influenced by two paradoxical processes that have taken place simultaneously in Central America in the last 20 years, namely the rapid increases in both the levels of urbanization and the levels of urban poverty. By 2001, 52 per cent of the population lived in urban areas and about 42 per cent of this urban population lived in "slums". The region's income distribution is also one of the most unequal in the entire world.<sup>(11)</sup>

In this rapidly changing context, conventional and official national policies and programmes proved ineffective. Insufficient financial resources were allocated and there was a lack of the necessary institutional capacities to meet the quantitative and qualitative housing backlog, in terms of both basic services and adequate shelter with security of tenure. Only recently has housing improvement emerged as a key element of urban poverty reduction strategies and of housing policies that try to address the qualitative housing deficit of the majority of the population. These improvement programmes are based on the real demands of low-income households and not only on the supply side of the housing solutions that conventional programmes offer. As such, small and micro-lending programmes have the potential to become significant instruments to support state housing policies. (12)

Sida's experiences in the region show that credit for low-income housing requires a delicate balance between addressing the needs of the target population and the political goals of the public administration. For instance, despite the quantitative impact of the programmes, only one national government gave these actions any priority. National governments usually see the backlog of housing deficit as a quantitative problem that needs to be addressed through the construction of new housing rather than as a qualitative problem requiring improvements in existing informal settlements. Thus, scarce national resources available for housing as subsidies usually go to new housing construction by conventional private building companies, with no significant impact on the problems of the poor.

This is one of the reasons why all Sida-supported programmes and institutions have developed strategies that allow some influence on shaping housing policies. In some of the programmes, the aim is to protect these innovative lending and financial housing schemes from political influence or outside pressures, but these efforts are still at an early stage of development and require more awareness and more lobbying on behalf of the cooperating institutions to achieve the necessary institutional reforms (Box 1).

11. See reference 1.

12. Angel, Shlomo (2002), Políticas de Vivienda en Honduras: Diagnostico y Guías de Acción, prepared for the government of Honduras and the IADB, New York.

# Box 1: Ensuring that the housing finance programmes survive political changes

In the past three years, the low-income housing lending programmes of FUNDEVI in Honduras have been subject to political pressure by members of Parliament. Before the elections, they tried to force the approval of loans to organized target groups, assisted by the institution. They were not interested in the negative economic repercussions on the sustainability of the programmes, nor in the continuation of lending operations to thousands of poor families.

In Costa Rica, the Minister for Housing changes every four years, and this affects FUPROVI's relationship with national government. Every four years, the institution is forced to redefine and renegotiate its relationship with government to maintain its independent status and be eligible for government subsidies for the poor. To a lesser degree, a similar situation exists with FUSAI in El Salvador where, sometimes, subsidies are not delivered on time as a result of the government's political priorities.

In Nicaragua, changes in national and municipal authorities every four years mean that PRODEL must inform candidates standing for election to public office about the programme's objectives and the scale and methods of its operations. These changes in government result in changes in technical staff in the municipalities and, as the technical staff are crucial for project implementation, the programme has to invest in training new personnel.

# b. Integrated interventions and the participation of multiple actors

Housing improvements and new housing construction by incremental methods require the participation of different actors in the provision and delivery of critical inputs, including access to land and land tenure legalization, management and mitigation of environmental risks and natural disaster hazards, introduction and maintenance of basic services, and improvement of household conditions and living space. This is why it has been important for Sida-supported projects to establish alliances with other institutions and actors. A clear division of functions and responsibilities is required between the institutions specialized in giving and recovering the loans, local governments and other governmental agencies that specialize in providing basic services, and the end users of the credit.

The design and implementation of these programmes has always recognized the linkages between housing improvement loans, new housing by incremental methods, social participation and financial sustainability. The programmes prove that an environment that enables the participation of different actors, especially the target communities, will increase the likelihood of successful implementation and good cost-recovery.

As different projects around the world show, participation through mutual aid and self-help methods increases the affordability of low-income housing to the urban poor in two ways. First, it eliminates the cash downpayment that formal financial housing institutions usually require. Second, incremental development by self-help methods costs less that formal housing construction.<sup>(13)</sup>

A key to ensuring a participatory process is the technical assistance provided to families and communities to help them manage their loans, and the technical and construction aspects of their shelter improvements and new housing solutions. Most programmes supported by Sida conceive of participation as a means of mobilizing resources, increasing community capacities and empowering families. Savings and self-help efforts contribute about 20 per cent for each dollar provided by an external agency. <sup>(14)</sup> In the case of PRODEL in Nicaragua, over a period of nine years the basic services and infrastructure component benefited 60,000 families in 193 poor neighbourhoods in eight cities. Local communities contributed 13 per cent of the costs, local governments 32 per cent and Sida 55 per cent. <sup>(15)</sup>

13. Bamberger, Michael, E Gonzalez and U Sae-Hau (1982), Evaluation of Sites and Services Projects: The Evidence from El Salvador, World Bank, Washington DC.

14. Stein, Alfredo (2001), "Participation and sustainability in social projects; the experience of the Local Development Programme (PRODEL) in Nicaragua", Working Paper 3, Poverty Reduction in Urban Areas Series, IIED, London.

15. INIFOM PRODEL (2003), "Fase III: Hacia la sostenibilidad, auspiciado por la cooperación sueca", mimeo, May, Managua.

This assistance has also helped to raise consciousness among participating families that they must repay the loan to the financial intermediary institutions. In this sense, it is not the microfinance lending per se, but the way the programmes create social inclusion, social justice and empowerment that complements the good results of the lending programmes.

### c. Subsidies

In the design and development of these programmes, there was always careful analysis of the possibilities and advantages of working with existing national subsidy schemes that were complementary to the loan schemes. This is important when trying to achieve the right balance between the financial sustainability of the programmes and the need to make the programmes accessible to families that are very poor. It is particularly important when the cost of the housing solution is more than US\$ 800.

Usually, the funds provided by the programmes as loans serve as bridging finance until the families are able to access funding from the national subsidy system. This is the case in Costa Rica, El Salvador and Honduras. Usually, the subsidy system is targeted at families that earn less than four times the monthly income of an unskilled construction labourer, and the poorer the household, the higher the level of subsidy that the family is entitled to receive. As a result, the bulk of the resources spent on the subsidy should go to the poorest families. The subsidy system also helps low-income people gain access to mortgage-based credit for their housing solution.

The organizations supported by Sida use the existing subsidy system in their respective countries in the following way. For example, let us assume that a new house costs US\$ 1,000. The family can only afford a US\$ 500 loan and can contribute another US\$ 100 from its own resources. Based on its income level, the family is entitled to a state subsidy, in this case, of US\$ 400. The Sida-supported organization will advance a US\$ 900 loan to the family, which, with their US\$ 100 contribution, will cover the cost of the house. Once the subsidy is received by the organization, it will deduct this amount from the loan, so the outstanding balance is only US\$ 500. The US\$ 400 recovered via the subsidy in a relatively short time will be used by the organization to cover its technical assistance costs and to provide a new loan to another family.

The experiences in these countries show that the subsidy system must be transparent and must focus on the demand side and not on the interest rates. It also shows that the subsidies must be ready and accessible when they are needed. If not, the cash flow and financial situations of the intermediary institutions that handle the loans will be seriously affected because they depend on these subsidies to recover part of their capital costs and to be able to continue providing further credits.

## d. Revolving funds

The housing loan programmes supported by Sida in Central America have been designed and managed as revolving funds and not necessarily as microfinance lending institutions. The main principle that guides the revolving funds is that the recovered funds should maintain their real value and should generate a small nominal capitalization of the fund in the medium and long term. (16) However, Sida insists that the revolving funds should always aim to serve the main target populations (17) and not families with higher incomes. Thus, the operational sustainability of the

<sup>16.</sup> Castillo, Luis (2001), Primera Aproximación Comparativa a la Experiencia de Asdi en Centroamérica y Desafíos para el Futuro, Sida/Asdi, San Salvador.

<sup>17.</sup> See reference 9.

18. See reference 5, PM Global Infrastructure Inc

19. See reference 9.

programmes is very much related to how the revolving funds are administered, how cost-recovery and reinvestment of the seed capital are undertaken, and how any liquid assets not in use for loans are managed and invested. In many cases, the earnings from reinvesting unused liquid assets generate additional resources that enable poorer target groups access to the programmes. Revolving funds remain sustainable only if macroeconomic conditions are stable. This means that if inflation is too high, or if structural adjustment policies affect the incomes of the families, it is more difficult to maintain the value of the fund in the long term.

One of the common problems for lending programmes is that the financial institutions, working with small/micro-lending for housing, face a long-term disparity between their assets and liabilities. The difficulty in obtaining medium-term capital is also a constraint;<sup>(18)</sup> however, the long-term support given by Sida (an average of nine years per programme) allows these institutions to access this medium-term capital.

The experiences also show that there is an important but often unrecognized difference between the operational sustainability and development of the housing programmes and revolving funds and the financial sustainability of the institutions responsible for the implementation of the programmes. Sida has stressed that the bookkeeping of the revolving funds should be kept separate from that of the implementing agency. Thus, the revolving funds have an independent financial balance and statement from that of the implementing institution. The legal property of the funds, their rules of operation, the costs that the revolving funds should cover and their final use is still a matter of debate. However, these are issues that are defined and negotiated between the executing agencies and Sida in the different project documents approved.<sup>(19)</sup>

## e. Mechanisms for channelling financial resources

Although there are still no conclusive findings, experience shows that there are different mechanisms to channel resources and to set up lines of credit for the target population, namely the direct creation and administration of loan portfolios, the sale of loan portfolios to microfinance institutions, the establishment of specialized entities to administer the revolving funds, and the availability of funds that are not recovered but serve as leverage to mobilize local resources. Different financial intermediary systems have been developed and combined, the particular mix depending on the approach and goals of each programme and institution.

If the approach is to make resources accessible to the target population, models of integrated support need to be developed to address the habitat problems of the urban poor. The case of PRODEL in Nicaragua illustrates this approach. An executing unit was established within a governmental institution and is now being transformed into a non-governmental foundation. PRODEL operates as a sort of "second-tier" institution. It started by establishing lines of microcredit for micro-entrepreneurs and for housing improvements through a formal bank, seeking to show that it was possible to "downscale" a bank to work with loans for the urban poor. Financial circumstances in Nicaragua forced the transfer of the loan portfolio from the bank to existing NGOs specializing in financing micro-enterprises and in housing improvement micro-lending schemes. The PRODEL experience showed that the process of converting an NGO that specialized in loans for micro-entrepreneurs to one that lends microcredits for housing improvements requires important adjustments, so that the institutions can assimi-

late into their procedures the different variables that affect the process of analysis, lending and recovery of a housing improvement loan. PRODEL also channels resources through local governments for basic services and infrastructure, but funds are not recovered.

If the objective of the programme is to expand and "go to scale", mobilize resources and increase the value of the capital, then institutional changes are critical. The case of FUSAI in El Salvador illustrates this approach. FUSAI has established a special private micro-lending institution called "Integral" to leverage and mobilize private capital and national savings and to be responsible for the lending and recovery of the housing loans identified in FUSAI's activities. Thus, FUSAI is trying to accomplish what, in the theoretical debate of micro-lending institutions, is called the "up-grading" of a non-conventional financial intermediary into a more formal type of financial institution.

In the case of FUPROVI in Costa Rica, support was given to consolidate a non-governmental institution as the direct financial intermediary of the funds. In Honduras, support started through a governmental programme that received financial and technical assistance from the German government's bilateral agency, KfW. This programme later became a public foundation, known today as FUNDEVI. In Guatemala, a trust fund was established: FDGL offers financial and technical assistance to NGOs that also offer microcredit to groups or individuals. Infrastructure projects are supported through loans to municipalities.

In the majority of the programmes, it has been difficult to involve banks and to convince the formal system to assume risks and manage the microlending schemes. It is possible to show that revolving funds can produce important revenues and profit margins. However, the small size of each individual loan, together with the huge volume of individual loans required to achieve a break-even point, and the difficulties and social risks that are common to the type of neighbourhoods where loans are given are some of the factors that inhibit the participation of the formal banking system in these schemes. In addition, in many of the countries of the region the formal financing system is precarious, and many financial institutions have gone bankrupt or are subject to government intervention. (20)

Thus, the tendency in Sida has been to support the creation and strengthening of micro-lending programmes for housing improvements through non-governmental intermediary institutions that specialize in the management of revolving funds. The exception has been FUSAI, which is transforming part of its operation into a specialized financial micro-lending institution. Sida will have to look carefully at its experience to see how microfinancing institutions are able to leverage private capital and national savings into their operations.

## f. Institutional development

Sida has helped each programme develop according to the diversity and differences found in the countries in the region. It recognized that the formula that enables success in one country does not guarantee success in another. It was forced to analyze the context and the institutional capacities of the organizations identified as the intermediaries and administrators of the funds in order to ensure the best possible organizational and institutional system to reach the target population and fulfil the social and financial goals. The limitations and weaknesses of the institutions should not hamper the development of housing improvement lending

20. IPC (2001), "Evaluación de las posibles alternativas institucionales para los Programas Integral de Mejoramiento Habitacional Urbano (PRIMHUR) y de Vivienda Mínima Rural (PVMR), mimeo, final version, International Project Consult GMBH.

programmes even in contexts that are quite adverse to these processes.

A good external follow-up on behalf of the funding agency, in this case by Sida, accompanied by solid leadership of the institution has secured good systems for handling funds. Nevertheless, the continuation of these programmes should be based on national and local capacities, and never be supplanted by external assistance. Thus, it is critical to the success of the housing improvement lending programmes that the funding agency provides technical and financial assistance for the institutional development of these organizations, and not only for the development of the programmes and the revolving funds. Sida is aware that these costs cannot be fully charged to the families and recovered through the loans. In this sense, the resources are a sort of subsidy for the institution. Nevertheless, they have allowed institutional learning and the development of models to make programmes more accessible to the urban poor.

## g. Credit characteristics and conditions

The analysis of a small housing improvement loan has certain basic principles that are universal to every loan analysis. However, there are some parameters that differ from those applied to micro-lending for production, services or trade activities. Housing micro-loans tend to be larger, and have longer terms and lower interest rates than loans for micro-enterprise.

Understanding the conditions for providing a housing improvement loan is vital. On the one hand, it is important to understand the processes and means by which low-income families improve their housing conditions, with or without the assistance of a loan. These are complex and long-term processes, through which the household mobilizes scarce savings from the nuclear and the extended family. These efforts are recognized and encouraged by the housing loan programmes, without trying to inhibit or replace them. The analysis done by the programme for a housing improvement loan takes into consideration the monthly family income as well as the household's monthly expenditure. This differs from the micro-enterprise loan analysis, in which a cash flow analysis is done on the economic activity of the business.

Different factors are considered in the analysis of the family income, which requires an assessment of all the household members who contribute to meeting the household's living costs (including the type of work done, whether the wages are temporary or stable and whether the person works in the informal or formal sector). An assessment of the family's assets (including non-monetary assets), number of years of living on the site, willingness and culture of payment, family stability, track record with other lending institutions, and even their involvement in the community are also important factors that are taken into account.

The programmes are also creative with regard to the type of collateral offered by the families and accepted by the financial intermediaries. In a few instances, families are willing to give their land title as a mortgage guarantee for amounts that are relatively small compared to the value of the land they occupy or own.

The experiences in Central America also show that interest rates are not the main obstacle to low-income families accessing housing finance, although obviously, the rates cannot be as high as in the case of loans to micro-entrepreneurs. The repayment periods, the loan amounts and the variety of guarantees accepted as collateral can be more important for effective access to credit. The case of PRODEL in Nicaragua shows that for

credits under US\$ 700, there are other types of collateral as effective as a mortgage for example, co-signers who could put up their properties for mortgage, valuable objects, and municipal certificates that show security of tenure although not necessarily land title. Only half of the more than 5,000 loans provided up to the year 2000 were mortgaged, and delinquency rates were still very low. The PRODEL experience also corroborates the difference between security of tenure and land ownership;<sup>(21)</sup> PRODEL gives loans to families that do not have full land ownership but are able to demonstrate security of tenure.

When giving a mortgage loan, it is important that the institution is able to verify that there are no legal impediments to secure tenure, although this does not mean that the land should be fully titled in favour of the borrower. Attempts to integrate informal markets, including land and housing markets, with the formal market economy, especially through large-scale titling programmes, are sometimes inefficient and can result in greater inequality in the distribution of wealth and resources. (22)

The loan contract between the lending institution and the client establishes the conditions of the loan, namely the interest rate, the amount, the fees, service charges and commissions that need to be paid, the period of repayment, and collateral and guarantees. There are usually three types of repayment: fixed monthly, decreasing monthly and increasing monthly. The example in Box 2 shows the importance of the repayment period and the affordability criteria in the micro-housing loan analysis. The analysis of these factors also depends on how the organization seeks to reach the delicate balance between not excluding poorer sectors from getting a loan with achieving good cost-recovery and therefore securing the possibility of making the revolving funds financially sustainable. Loan payments are usually increased or decreased when market interest rates change. In some programmes, such as PRODEL in Nicaragua, the loan given in the national currency takes into consideration its devaluation against the US dollar.

Usually, the way to calculate interest for a housing improvement loan is based on the declining balance method and not the flat method that is commonly used in the micro-enterprise industry. (23) However, the interest charged on loans is determined by what each institution intends with its programme. If the idea is to have a great impact and to leverage private capital and savings, then the institutional design assumes a logic that requires the establishment of market interest rates. If the idea is that the process is a social laboratory for the identification of innovative responses to the housing sector, then the way to determine costs and interest rates should be different.

New housing requires a combination of actors and a longer period of maturity, so the logic of the investments and the profit margins have to be considered in a longer-term perspective. The costs of a new housing project include land, basic services and technical assistance, also the financial costs during the construction period, building materials costs and the indirect costs of financing. In the new housing schemes developed by FUSAI in El Salvador, there are four distinct phases: pre-feasibility, buying of land, road and infrastructure development, and construction of new houses by self-help methods. The costs of the pre-feasibility stage include social promotion, surveys, identification of potential demand, social assessment of the projects and future clients. Usually, the process is done with funds from FUSAI. All costs are counted: technical assistance, paperwork, transport and other miscellaneous costs. The cost of land, plus taxes and the costs of land legalization are all included in the final cost of the house. The costs of

21. Durand-Lasserve, Alain (2003), "Land issues and security of tenure", Task Force Interim Report, provisional draft/outline of Paper 3, UN Millennium Project, Task Force 8 on Improving the Lives of Slum Dwellers, United Nations

22. See reference 21.

23. The declining balance method calculates interest as a percentage of the amount outstanding over the loan term. Interest calculated on the declining balance means that interest is charged only on the amount that the borrower still owes.

# Box 2: Affordability, interest rates and repayment periods

On a US\$ 1,000 loan to be repaid over five years, monthly repayments do not vary hugely if the interest rate increases, say by two points, from 16 to 18 per cent per annum on a declining balance method; the monthly repayment only changes from US\$ 24.32 to US\$ 25.39. However, if the borrower is able to afford 20 per cent of household monthly income to pay the loan, this means that the family requires a monthly income of US\$ 121.60 to cover the payment. If the borrower is able to afford 25 per cent of household monthly income, it requires a family income of US\$ 97.28. Thus, it is possible to see that over a relatively short period of time, the percentage of income required to pay the loan has a greater effect than the rate of interest. However, the lending institution should be very careful not to increase the loan size relative to household income in such a way that it can put at risk the recovery of the loan over the five-year period.

Interest rate (%)	16	16	18	18
Amount of the loan (US\$)	1,000	1,000	1,000	1,000
Repayment period (months)	60	60	60	60
Monthly repayment (US\$)	24.32	24.32	25.39	25.39
Affordability (client's capacity to pay as a proportion of household income) (%)	20	25	20	25
Monthly household income required to repay the loan (US\$)	121.60	97.28	126.95	101.56

The same loan of US\$ 1,000, with an interest rate of 16 per cent per annum established on a declining balance method, shows that the longer the repayment period, the smaller the monthly repayment. However, the longer the period, the greater the risk, as it is impossible to know whether the family, especially one belonging to the informal sector, will have a regular income over that period.

		Interest rate = 16% per annum		
Years to repay the loan	Monthly re- payment in US\$	Household income (if 20% is used to repay the loan)	Household income (if 25% is used to repay the loan)	
1	90.73	453.65	362.92	
2	48.96	244.80	195.84	
3	35.16	175.80	140.64	
4	28.34	141.70	113.36	
5	24.32	121.60	97.28	
6	21.69	108.45	86.76	
7	19.86	99.30	79.44	
8	18.53	92.65	74.12	
9	17.53	87.65	70.12	
10	16.75	83.75	67.00	

road and infrastructure development also come from FUSAI funds. Land is titled in favour of FUSAI, which parcels it and then gives individual titles once the families pay back the loan. The monthly repayment is based on the cost of the house plus the interest. The amount to be financed by the loan equals the price of the house, including road and infrastructure development, minus the subsidy received by the state and minus the value of the

self-help contribution by the family.

When working to improve housing in informal settlements, the logic is different. It is possible to work only with lending for housing improvements without engaging in the other phases. In the case of FUSAI, the interest rate for a housing improvement loan is established according to the following criteria:

- the cost of the capital that will be loaned to the end user (the cost of leverage of the funds plus inflation costs); plus
- the operational and administrative expenses (promotion, selection and screening of potential loan users, legalization of the loan and followup); plus
- a reserve for loan losses (delinquency defaults that cannot be recovered); plus
- the margin of profit of the institution that provides the financial service (or the desired capitalization rate).

## h. Cost-recovery

If the loan principal is not recovered at the scheduled time, loans to other potential borrowers cannot be made and the payment of some expenses can be delayed. (24) Sida's experiences in Central America show that, as in any other credit programme, it is not necessarily bad debtors that are the issue but, rather, methods of cost-recovery that can secure the success of the housing credit lending programmes. One of the best ways to secure good cost-recovery is to have high-quality pre-credit and credit analysis and client screening before loans are given.

This requires that the staff in charge of the credit process understand the importance of cost-recovery and the follow-up of clients during the whole repayment period. The experience of FUNDEVI in Honduras shows the importance of having a continuous training process, and consciousness-raising campaigns among the staff directly linked to credit analysis and cost-recovery. Sometimes, staff working with low-income groups can be particularly sensitive to these groups' daily struggle to survive on their fragile incomes, and it can be difficult for them to confront their clients with demands for repayments. In this sense, it is advisable to separate the promotion of the loans from the process of approval, disbursement and follow-up of loan repayments. This will contribute to the continuity and sustainability of the operation and reduce the risk of increasing delinquency rates among clients. Staff should understand that the recovery of the loan is what makes further assistance to other poor families possible.

### V. RECOMMENDATIONS

THE RECOMMENDATIONS IN this section reflect the lessons learned from the housing and local development programmes in Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua described above.

### a. Housing policies

In a world in which cities in low-income countries are growing rapidly, but with relatively slow economic growth and increasing urban poverty, the possibilities for delivering new housing to the urban poor are very limited. Housing improvement schemes through non-conventional finan-

24. Ledgerwood, Joanna (1998), "Sustainable banking with the poor" in Microfinance Handbook. An Institutional and Financial Perspective, The World Bank, Washington DC.

25. See reference 12.

cial intermediaries that work through participatory approaches with the poor should become part of poverty reduction strategies and housing policies in low-income countries. Building norms and standards for housing as well as for land sub-divisions should be adapted to these conditions. In addition, the definition of what constitutes an adequate shelter, and the solutions for the quantitative and qualitative housing deficit, should be adapted to the types of limited resources available for housing in each country. (25)

Full land titling has proven to be expensive and difficult for government bureaucracies to manage. However, providing households with secure land tenure can enhance individual initiatives by the urban poor to improve housing. The introduction of new basic services will always be more expensive than improving or expanding existing services, and their provision and delivery almost always lags behind the increasing needs of the urban poor.

Politicians, private building companies, government officials at central and local levels and international agencies should be convinced that the best way to deal with the backlog of housing is to create enabling housing policies for low-income groups. These policies should recognize the incremental strategies that low-income families use to construct and improve their housing over time.

The types of programmes described in this paper always face political risks. A change in government after an election, even within the same party, can have serious consequences on these programmes' development. A change of minister or political leader at the local level can mean new priorities, which might reduce the priority of low-income housing and jeopardize the work done in a previous administration. Thus, it is important to elaborate strategies that allow programmes to have some influence on the definition of housing policies, in order to achieve and sustain the necessary institutional reforms in the housing sector. These might aim to avoid the pressures and political manipulations that sometime affect these innovative lending and financial housing schemes. Low-income housing programmes must be a long-term commitment from both governments and funding agencies. It takes time to build up systems and programmes and to achieve results. Sida's long-term commitment to the programmes, even in the midst of crucial political changes in Central America, has allowed them to evolve positively over time.

# b. Integrated interventions and the participation of multiple actors

The key in the participatory process is the technical assistance that these programmes have provided to families and communities to allow them to manage the loans, subsidies and their own monetary resources, as well as the technical and construction aspects of their shelter improvements or new housing solutions. It is important to conceive of participation as a means of mobilizing resources, increasing community capacities and empowering households. The creation of enabling environments and of processes and institutions that improve the capacity of the poor to access viable social, technical and financial solutions and resources is a key factor in the success of the Sida-supported programmes.

It is not the microfinance lending per se but, rather, how the programmes create social inclusion, social justice and empowerment that complements the good results of loan programmes. Knowledge of local conditions is indispensable, and data collection should also be locally generated. (26) However,

26. Bolnick, Joel, Sheela Patel and David Satterthwaite (2003), "By what measures are the lives of 'slum dwellers' significantly improved and how do we monitor this?", notes for the Millennium Slum Dwellers Task Force.

participation should not be a lengthy process and should provide tangible results in a relatively short period. If it takes too long, the participating families may be disappointed and may feel that their expectations are not being fulfilled.

It is important to remember that working with low-income housing can be very different from one continent to another. There is no guarantee that what worked in one place will automatically work elsewhere. What is possible to organize in Latin America may be impossible in Africa or Asia and vice-versa. Cultural as well as political and socioeconomic conditions (at the national, municipal and local levels) must be considered during both the design and the implementation of housing programmes.

#### c. Subsidies

The subsidy system for housing improvements must be transparent, and must focus on the demand side not on the interest rate. Subsidies must be managed in a system that is accountable to both clients and financial intermediaries. The principal function of the public sector is to set out the parameters of the system and to finance the demand-side subsidy. Authorized institutions, such as the organizations supported by Sida, should be the agents that issue the mortgages and manage the subsidies, and they should also receive an administrative fee for doing so. Thus, subsidies must be available and accessible when needed by those institutions responsible for managing the loans. The bulk of the subsidies should be provided to the poorest groups. Institutions with small amounts of capital to invest should have contingency plans for times when governments simply do not have resources for subsidies, or when they try to manipulate these subsidies politically.

# d. Revolving funds

Revolving funds are one of the best ways of ensuring that seed capital provided by external funding agencies can be maintained and re-used over a long period. The sustainability of revolving funds depends on the strategic financial and administrative decisions that an institution takes regarding the target population, the way liquid assets are invested, and the period of rotation for funds. The faster funds rotate, the greater the possibilities for recovering the funds and achieving financial sustainability. The sustainability of the revolving fund is not the same as the sustainability of the institution responsible for administering the fund.

Bookkeeping for revolving funds should be kept separate from the implementing agency's accounting, to allow the revolving funds to have an independent financial balance and statement. The composition of the revolving fund's board of directors is also important, to achieve transparency and accountability.

## e. Mechanisms for channelling financial resources

The experience of these five Central American programmes shows that there are models of integrated support that can make resources accessible to low-income households for new housing or housing improvements. If a programme wishes to expand, offer loans on a large scale, mobilize resources and increase the value of the capital, then institutional changes are critical. One mechanism for change is support for the creation and

strengthening of micro-lending programmes for housing improvements through non-governmental intermediary institutions that specialize in the management of revolving funds.

## f. Institutional development

Providing funding for institutional development to intermediary organizations is critical to the success of the housing improvement lending programmes. All Sida-supported programmes had such funds. Technical and financial assistance are required not only for the development of the programmes and the revolving funds but also for the institutional development of the organizations.

It is important for micro-lending institutions to have indicators regarding their institutional development in handling the loan portfolio – for instance, monitoring the target population being served, operative efficiency, technical management of the loans and financial administration of the portfolio.

## g. Credit characteristics and conditions

Loans for housing improvements should be small and should match what the families can afford based on their regular monthly income. The process of loan approval and disbursement and the start of the building process should be rapid and without too much bureaucracy. In many cases, it does not take more than 15 days. Credits should also be incremental (as good performance in repaying one credit allows another), with short-term repayment periods (two to four years). The longer the repayment period, the greater the risk of default. Since no mortgage collateral is required, given the relatively small size of the loans, the interest rate can be higher than for housing loans with a longer repayment period. (27)

It is important to be creative with the type of collateral requested of families and recognized by the financial intermediaries. In micro-lending, alternatives to land titles could and should be used, for example, recognition of land occupancy by a governmental organization, payment of taxes by the household to governmental institutions, and number of years that the family has lived on the site without threat of eviction by the original owners.<sup>(28)</sup>

Usually, interest for a housing improvement loan is calculated based on the declining balance method rather than on the flat method commonly used in the micro-enterprise industry. However, the amount of interest charged on loans is determined by each institution, for its programme. If the goal is to have a very large-scale impact and to leverage private capital and savings, then the programme design requires market interest rates. If the goal is to identify innovative responses to the housing needs of low-income households, this implies the need for different ways to determine costs and interest rates.

New housing requires a combination of actors, and a longer period for the projects to mature than required in improving existing housing. So the logic of the investments and the profit margins have to be looked at in a longer perspective. The costs of a new housing project include land, basic services and technical assistance, financial costs during the construction period, the costs of the housing building materials and the indirect costs of financing.

## h. Cost-recovery

One of the best ways to secure good cost-recovery is to have high-quality

27. Becerra, Nora (2003), "Propuesta para la introducción del microcredito en FUNDEVI", GITEC Consult, Tegucigalpa.

28. See reference 27.

pre-credit and credit analysis, and client screening before loans are provided. This also requires exact information for clients and careful observation of their attitudes to repayment. The staff in charge of the credit process must understand the importance of cost-recovery and the follow-up of clients during the whole repayment period. It is very important to have a continuous process of training and consciousness-raising among the staff that is directly linked to credit analysis and cost-recovery. This will contribute to the continuation and sustainability of the operation and will reduce the risks of increasing delinquency rates among clients.