3
Keeping a Roof over One's Head: Improving Access to Safe and Decent Shelter

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Gaining access to housing that provides adequate shelter and physical safety is one of the greatest challenges confronting the urban poor. Most poor people live in informal housing, often located in marginal areas that are vulnerable to natural disasters and poorly served by public services or utilities.

This chapter looks at how the poor obtain shelter and what this implies in terms of their living conditions. It then discusses what can be done to improve the often dismal living conditions of the urban poor through housing and land policies, infrastructure reform, and disaster management interventions.

How Do the Poor Access Shelter?

The poor are typically homeowners with insecure tenure who improve their houses over time. Access to services is relatively high, although poor quality and informal coverage cause serious environmental risks. The poor quality of housing and infrastructure, combined with the fact that informal settlements are often located in risky locations, implies that residents of informal settlements are frequently at risk for natural disasters.

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High Rate of Homeownership

The rate of homeownership is high (73 percent) in Latin America and the Caribbean, comparable to that in Asia and substantially higher than in Eastern Europe, Africa, or high-income countries (table 3.1). Homeownership is even higher than in the United States (69 percent), with its well-developed real estate market and long tradition of promoting homeownership. Informal tenure is common, accounting for about a third of homeownership. Although high, the proportion of informal tenure is much lower than in Africa or Asia (table 3.1).

Homeownership increases somewhat with income, but the relationship is not monotonic. In Argentina and Ecuador, for example, homeownership is higher in the poorest quintile than in the second and third quintiles. It is generally high among the urban poor, among whom the rate exceeds 60 percent in most countries (table 3.2). Surveys of slums or poor neighborhoods often show homeownership rates of 70–80 percent.[1]

Perhaps because of the high rate of homeownership, remarkably little research has been done on low-income rental markets. The assumption appears to be that homeownership is generally accessible to all (even if by informal means) and desired by all. The limited research that has been done does confirm that homeownership is almost a universal desire of low-income people (Edwards 1982).[2]

Rentals tend to be a solution that becomes more common where land markets are more mature and property rights better enforced, so that land occupation and informal housing become less of an option, as it has in Colombia. The majority of renters occupy a room in a private home. Data from Central America suggest that some 8 percent of poor urban households share their house with others. Others settle in *vecindades* or *mesones*, old central city buildings in which entire families share a single

Table 3.1 Latin America has very high rates of homeownership

	Owners			
Region	*All*	*Informal tenure*	*Tenants*	*Other*
Asia (without China)	74	45	19	7
Latin America and the Caribbean	73	25	21	6
Eastern Europe and Central Asia	66	1	34	3
Africa	63	38	23	15
China	44	9	50	6
High-income countries	42	2	57	1
World	61	19	34	5

Note: Figures may not add to 100 percent due to rounding.

Table 3.2 Homeownership has been stagnant or fell in the 1990s for the poorest

	Income quintile					*Whole*
Country	*Q1*	*Q2*	*Q3*	*Q4*	*Q5*	*sample*
Early 1990s						
Argentina	82	76	78	81	78	79
Brazil	—	—	—	—	—	71
Chile	72	59	58	64	71	65
Colombia	38	57	65	68	69	59
Mexico	64	68	71	79	86	73
Peru	73	71	71	74	74	72
Late 1990s						
Argentina	78	72	73	79	83	77
Brazil	—	—	—	—	—	75
Chile	62	64	68	72	68	67
Colombia	30	44	54	58	58	49
Mexico	63	65	69	77	81	71
Peru	65	72	71	77	82	73

Source: Fay, Yepes, and Foster (2003), except for the Brazil data, which are from Reis and others (nd).

Note: — Not available. Data are for urban areas only. Countries in this sample account for three-quarters of Latin America's urban population.

room, typically living in precarious and unsanitary conditions. These central city tenements appear to have become much less common in the past 20 years. A third category of tenants are those renting unifamily dwellings or apartments. By some accounts, they are the only category of tenants that are virtually undistinguishable in terms of income, age, and family profile from low-income homeowners. Most are self-employed, with their savings invested in their businesses (Edwards 1982).

The large-scale exploitative landlord no longer represents the norm: most landlords own few properties and belong to a similar or only slightly higher socioeconomic class than their tenants. In Caracas, Mexico City, and Santiago, landlords have similar per capita incomes as their tenants, and more than two-thirds of landlords have only one tenant (Gilbert 2003). In addition, landlords often live on the property they rent, and many of these properties are or were originally of an informal nature. These are thus subsistence landlords, producing housing as a survival strategy rather than an investment (Kumar 1996). They are usually older than tenants or other owners (Gilbert 2003), often owning property as a form of pension (see chapter 5).

Most important, the choice between rental and homeownership is primarily a lifecycle decision. Younger families rent (or share a house with relatives); as they accumulate savings, they purchase a home. Newcomers also typically rent, particularly if they are alone or have young families. Data from a survey of 31 poor Mexican neighborhoods (one in each of Mexico's state capitals) confirms that renters are indeed younger and tend to be more recent arrivals in the neighborhood (Ruggeri Laderchi 2005). They also appear less stable, as they are more likely to have recently moved. Income appears to have no direct effect on the decision to rent or own.

In addition to renting, lending and sharing shelter are frequently used housing options among the poor. In fact, "lent" houses are almost as common as rented ones in low-income neighborhoods. In Guayaquil, Mexico, 16 percent of households rent, while 15 percent "borrow," occupying a home they do not own without any monetary payment (Lanjouw and Levy 2002). In Mexico's poor neighborhoods, renters account for about 10 percent of households and borrowers about 8 percent. One theory is that "home lending" occurs when the property is untitled or ownership claims are uncertain: owners who cannot occupy the property themselves get a trusted friend or relative to do so rather than risk renting it to a stranger or someone outside their sphere of authority or dominance. This theory is broadly supported by the Mexico data, in which the probability of occupying a lent house is greater among poorer and female-headed households, which may be less able to claim or enforce de facto ownership.[3] Lent houses are also more common among indigenous people, perhaps because of stronger ties or reciprocal obligations.

Shared housing is similar to lent housing in that it is most common among relatives. Although it is a second-best strategy, surveys in Mexico City indicate that 54 percent of sharers are content with the situation (Coulomb and Sanchez 1991, cited in Gilbert 2003). The distinction between renting and sharing is not always clear, as sharers often contribute significantly to household finances.

Low-income renting can be characterized as informal, as it operates without formal written contracts or observance of rental regulations. Rented homes tend to be significantly older than shared homes, suggesting a more established property claim by homeowners. Data from La Paz, Bolivia, and Ciudad Juarez, Mexico, demonstrate how sharing becomes much less important than renting as an urban area matures.

Informal Markets

Most low-income families in Latin America cannot afford formal sector housing and acquire housing through informal markets, whose main

characteristic is to allow for a gradual improvement of housing (box 3.1). Indeed, the survey of poor Mexican neighborhoods shows that the quality of housing as well as the probability of a house having access to services such as water, sanitation, solid waste removal, and electricity increases linearly with the age of the house (Ruggeri Laderchi 2005).[4]

Informal housing is estimated to account for about a quarter of all urban homes in Latin America (Angel and others 2001), ranging from 10 percent in Buenos Aires to 44 percent in Caracas (CEPAL 2000).[5] The proportion of households that can afford formal sector housing in these countries is very small, as doing so requires an income level placing a household in about the 70th percentile in Brazil and Mexico (Hoek-Smit

Box 3.1 How the Poor Typically Acquire Housing: Progressive Housing

In the formal sector the production of housing involves four steps: acquiring a plot of land, planning, constructing, and selling. In the informal sector the process is different. "Progressive housing" starts with occupation of a piece of land, then moves to transition and consolidation. Occupation can start with a single person building a shack or setting up a tent and living in it, although it usually involves some kind of middleman. Progressive housing can occur through invasions, usually occurring through the purchase of a plot of land that is not zoned for urban residential use, fails to meet standards, or has an unclear property title. When occupation is not opposed by the authorities or landowners, the transition phase begins. During this phase more families arrive. They construct rudimentary houses and begin demanding basic services and utilities from state and local governments. Consolidation occurs when the families obtain all basic infrastructure and urban services and receive title to the land (Siembieda and Moreno 1997). In many countries, services and utilities cannot be provided until disputes over the land's status and ownership have been cleared.

Progressive housing tends to be substantially cheaper than formal housing, because it avoids cumbersome regulation and excessive standards. In Buenos Aires the cheapest formal sector house or apartment costs 2.7 times the median income; similar housing in an informal settlement costs about 0.8 times the median income (Angel and others 2001). Informal housing also offers the opportunity for progressive or self-built houses, which can be improved over time in a pay-as-you-go system that allows the resident to make adjustments based on the family's economic situation over time instead of requiring a mortgage with fixed payments over a long period. Finally, for many poor people, progressive housing is all equity. It can be lived in, sold, rented, or passed on as family patrimony, however modest and incomplete. A significant proportion of informal housing homeowners do borrow from friends, relatives, or informal financial institutions in order to acquire or improve their house.

and Diamond 2003). The norm among the poor is self-construction, typically with help from neighbors or family. Three-quarters of poor families in Tegucigalpa, 70 percent in Panama City, and 62 percent in San Salvador report constructing their home themselves in a progressive manner (World Bank 2002c).

Lack of Land Tenure

In Mexico's poor urban neighborhoods less than half of homeowners have title to their land (table 3.3). Even in Argentina, where the housing market is quite mature, 18 percent of all homeowners lack full title (Angel and others 2001). Combined with underdeveloped rental markets, this may explain why the home ownership rate of the poor is much higher than in Europe (40–50 percent) or the United States (50 percent).

Tenure security and titling issues are discussed in detail in chapter 5. Two points are worth making here in the context of shelter. First, as households increase tenure security (through titling or other means) and therefore their sense of permanence, they tend to increase investment in their homes. Following a massive regularization program in Peru that granted titles to 1.2 million households and 6,000 businesses, 17 percent of households invested in home improvements the year following titling, housing quality improved overall (with more titled homes made of durable materials), and access to services (notably water) rose. Crowding was reduced, as households enlarged their homes and increased the number of rooms, which also stimulated the rental market (Mosqueira 2003).

Several factors make regularization a difficult and often controversial process, even for governments willing to make progress in this area. First, public officers and public opinion may be reluctant (or refuse) to regularize illegal settlements, which often violate property rights the

Table 3.3 Only about half of poor homeowners have formal title to their homes or their property
(percent)

City	*Share of poor homeowners with registered title*
Metro San Salvador	55
Metro Tegucigalpa	65
Greater Panama City	64
Mexico (31 cities)	48

Source: World Bank 2002c; Ruggeri Laderchi 2005.

Note: In Mexico the sample is poor neighborhoods in 2003; in Central America it is poor people living throughout the metropolitan area in 2001.

public sector is meant to protect. Regularizing occupied lands could be interpreted as rewarding illegal behavior. This feeling is more acute when occupation or illegal settlement takes place on privately owned land. Second, the sites may be unsuited for human settlement. Sites on disaster-prone areas are more likely to be available and are less expensive when transacted through informal markets. Third, the complexity of regularization can be daunting and may require specific legislation or provision to make it manageable (box 3.2). Local governments may not have the human or financial resources needed for very complex court cases. Moreover, settlers may not always push for full tenure, which could result in additional costs, such as property tax payments (World Bank 1993). This is more likely to be the case in well-settled areas that provide a certain degree of security and services. Indeed, evidence shows that many of the benefits of secure tenure can be achieved through a wide range of measures that increase security without providing fully enforceable titles (Lanjouw and Levy 2002; Payne 2002).

Although informal housing is generally the solution of choice for low-income families, it is clearly a second-best solution. It is much more difficult for the informal sector to properly undertake the collective action role of the public sector, ensuring the provision of public goods such as well-defined rights of way, properly titled properties, and basic services. Failure to properly plan for these goods means greater capital outlays in the future to provide infrastructure, replot rights of way so that emergency vehicles and collective transport can access these communities, and untangle legal claims on property, which can take years or decades.[6] It also creates settlement patterns that place low-income families at greater risk of natural hazards—an issue that is made worse by the low quality of housing and infrastructure that is usually associated with informal

Box 3.2 The Central City Slum of Santo Domingo

The central city slum of Santo Domingo in the Dominican Republic is home to 11 percent of the city's population—300,000 people crowded into less than 1.6 percent of the city. About three decades ago, the area was at the outer edge of the city. As the city has grown, this area has become prime property, with easy access to the city. If this land could be developed and sold, its market value would be in the tens of billions of dollars. Several attempts by the government to regularize the area have failed. Except for a section in the extreme south, the land is owned by one family, which has engaged in an ongoing court battle for decades.

Source: Fay and others 2001.

housing. The issue of access to services is reviewed first, followed by a discussion of the vulnerability of the urban poor to natural disasters.

Inadequate Access to Infrastructure Services

In general, access to services is much higher among urban than rural populations. But urban averages can hide wide differences between rich and poor. In urban Paraguay, for example, only 30 percent of poor households—less than half the urban average—have access to water (table 3.4). Household-level data reveal significant inequalities in access between rich and poor (figure 3.1), although these differences have been declining over time and the higher the coverage, the lower the inequality (Estache, Foster, and Wodon 2002). Thus electricity coverage, which is about 98 percent in most urban areas, shows little variation across quintiles (although some of the poor may have access through illegal connections). Telephone and sewerage and drainage tend to be the most unequally distributed services.[7]

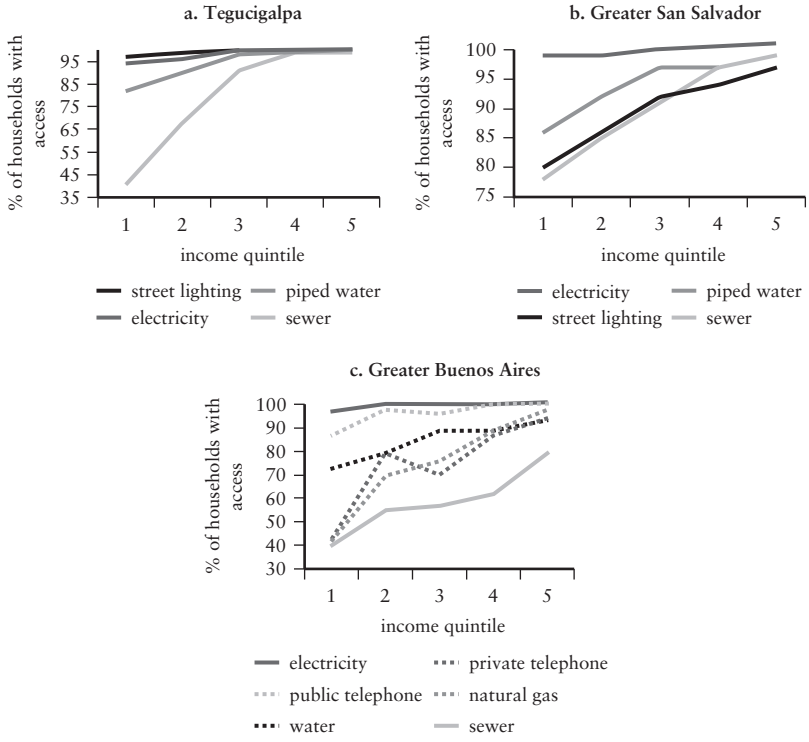
Service coverage for the poor tends to improve with time, as settlements become formalized or simply more organized. Regression analysis for Mexico's *barrios* reveals that the key determinants of a household's access to services are the age of the house and the maturity of the settlement (as measured by both the age of the settlement and the proportion of the population that has recently migrated to it). Income also matters, but its effect quickly decreases. There is also evidence that it takes longer for the

Table 3.4 High average access to water obfuscates the situation of the poor

	Quintile					*Urban*
Country	*1*	*2*	*3*	*4*	*5*	*average*
Bolivia	76	84	87	93	97	91
Brazil	63	85	90	97	98	90
Chile	97	98	99	99	100	99
Colombia	92	97	98	98	99	97
Ecuador	52	64	70	73	92	75
Nicaragua	57	75	83	89	93	84
Paraguay	30	50	61	72	83	67
Peru	57	75	87	90	94	85
Quintile average	65	79	84	89	94	86

Source: PAHO 2002.
Note: Data are for urban populations only.

Figure 3.1 Services with lower coverage are the most unequally distributed



Sources: For Central America, World Bank (2002c); for Buenos Aires, Foster, CEER, and UADE (2003).

poor to obtain services: 22–30 percent of the population in the poorest quintile in San Salvador and Tegucigalpa had to wait five years or more to get water, while just 7 percent of households in the richest quintiles had to do so. In both cities about 60 percent of the poor report getting service through communal action. In contrast, three-quarters or more of the rich obtain access through a developer (World Bank 2002c).

These access figures do not take quality and reliability of service into account and may therefore overestimate effective access. In Tegucigalpa, for example, less than half of poor households but 78 percent of the richest quintile have water service more than 8 hours a day. In urban Mexico's poor neighborhoods, three-quarters of households have water service on their property (indoor or outdoor), but just 56 percent of them actually get water all day every day. This quality issue is most obvious in the case of

water and solid waste, where it differentially affects the rich and the poor.[8] Electricity blackouts, where they occur, seem to affect all income quintiles almost equally (Ruggeri Laderchi 2005).

Unreliability of service and incomplete coverage cause serious environmental risks in urban areas. Demographic and Health Survey data show that the incidence of diarrhea and acute respiratory infections is higher among the urban poor than the rural poor in Latin America and infant mortality is about the same among the rural and urban poor, despite the urban poor's much higher access to health care (chapter 5).

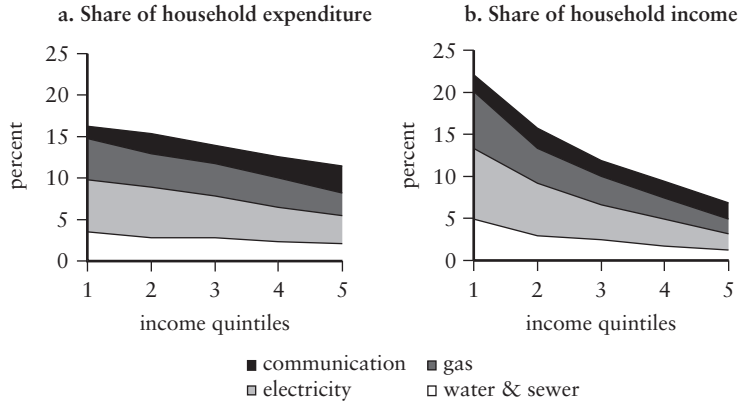
A number of studies have documented the fact that the poor often pay more than the rich for services, particularly when they have to rely on alternative providers (Estache, Foster, and Wodon 2002). This is particularly true of nonnetwork provision (such as water tankers). It is also true of connections that are not managed by developers but acquired retroactively. Thus in San Salvador the reported cost of connection to the water utility's network in 2001 was $72 for the poorest but just $29 for the richest (World Bank 2002c).

In some cases the poor are served by alternative providers that are able to undercut the dominant firms by relying on networks but using lower cost and smaller scale technologies. This is the case of water provision in Asuncion, Paraguay; Barranquilla, Colombia; Cordoba, Argentina; and Guatemala City, Guatemala, where alternative providers account for 15–50 percent of the market (Estache, Foster, and Wodon 2002).

Utilities generally account for a substantial share of poor families' income or expenditures. In Argentina on average households in the poorest quintiles allocate 16 percent of their expenditures to utilities, while the richest quintiles spend just 11 percent (figure 3.2). As a share of household income, the contrast is even more dramatic: utilities absorb 22 percent of household income among the poorest quintile and only 7 percent for the richest.[9] In La Paz and El Alto, Bolivia, the poor spend about 10 percent of their income on water and electricity (Foster and Irusta 2001). Household expenditure shares vary across countries and utilities depending on pricing and subsidy schemes.

In addition to the cost of consumption, the connection cost can be a heavy burden on poor households, particularly if financing schemes are not available. In La Paz and El Alto, Bolivia, the water company allowed customers to spread the connection cost over time through monthly payments tied to the regular service bill. As a result, coverage expansion was very rapid. The electricity company's failure to offer a similar scheme resulted in much lower coverage expansion among poor households, even though the connection charge was very similar to that for water and sewer service (Foster and Irusta 2001).

Figure 3.2 Utilities represent a substantial share of household income or expenditures, especially for the poorest: The case of Argentina, 2002



Source: Foster, CEER, and UADE 2003.

Note: Figures reflect the collapse in income and consumption that occurred in Argentina during the crisis of 2002. In 1997 infrastructure accounted for 11, 9, 8, 7, and 5 percent of expenditures for quintiles 1 through 5. Data on expenditures as a share of household income were not available for 1997.

Lack of affordability—whether because of connection or consumption cost—can be a strong deterrent to connecting to a service. These demand-side obstacles to universal coverage of basic services could be resolved without major investments in network expansion. In Guatemala, for example, the 20–40 percent coverage gap reflects households that choose not to take up a service, even though it is available in their neighborhood (Foster and Araujo 2001). Take-up increases dramatically with income: only half of Guatemalan households in the bottom two deciles choose to connect to electricity, even when it is locally available (Estache, Foster, and Wodon 2002).

Vulnerability to Natural Disasters

Natural disasters left 2.5 million people homeless in Latin America between 1990 and 1999.[10] The region has been plagued by about 90 disasters over the past three decades, causing an average 7,500 fatalities a year (Charvériat 2000). The frequency of natural disasters appears to be rising, partly as a result of rapid population growth leading to larger and denser human settlements, combined with environmental degradation.

The emergence of megacities, the concentration of populations in coastal areas that are particularly vulnerable to natural disasters, and persistent widespread poverty increase vulnerability to natural disasters. Indeed, if natural hazards are viewed as exogenous shocks, independent of human actions, natural disasters are at least partially controllable, being the result of concentrated human settlements and activities in disaster-prone areas. So vulnerability to natural disaster should be seen as a policy outcome.

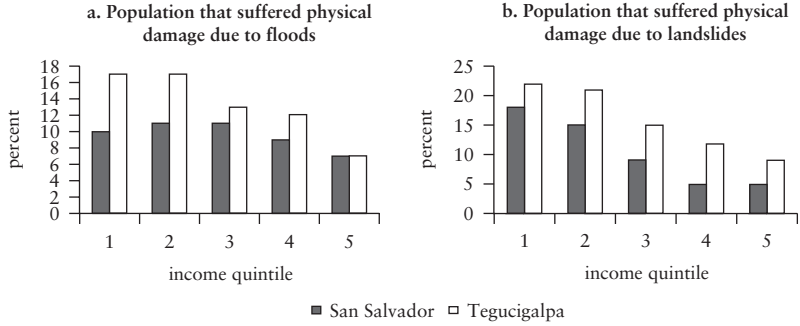
Poor people are particularly vulnerable to disasters. In Mexico, which is particularly prone to natural disasters, 68 percent of people affected are poor or extremely poor (World Bank 2004). Among the poorest quintile of Honduran households affected by Hurricane Mitch, losses averaged 18 percent of total assets, compared with 3 percent among the richest quintile (Morris and others 2000). There are no general disaster statistics comparing the urban poor with other urban dwellers or the rural poor. But there is broad agreement in the natural disaster literature that cities are particularly vulnerable to natural hazards and that within the urban population the poor are generally (although not uniquely) at great risk (Charvériat 2000).

The vulnerability of cities is attributed to the high density of assets and people and to the poor quality of housing, urban planning, and urban infrastructure common in developing countries. In addition, the 20 largest cities in Latin America are in areas with steep slopes, swamps, floodable land, or seismic activity. As a result, many of the region's worst disasters have hit cities. Earthquakes hit Guatemala City, San Salvador, Lima, Managua, Mexico City, and Santiago, and landslides wreaked major destruction in Caracas and Rio de Janeiro.

The more hazardous location and poorer quality of their dwellings—which accounted for the 30,000 deaths caused by mudslides in Venezuela in 1999—puts the poor at particular risk from natural disasters. Poorly functioning land markets, urban sprawl, and poor public transportation push low-income households to settle in disaster-prone areas. In metropolitan San Salvador and Tegucigalpa, about one-fifth of the poor report having suffered damage from landslides in the past five years, and 10 percent of poor residents of San Salvador and 17 percent of the poor in Tegucigalpa report suffering from floods. These percentages are much higher than for richer groups (figure 3.3). As of 1993 at least 37 percent of Latin America's housing stock was estimated to provide inadequate protection against disaster and illness. There is also evidence that the low quality of infrastructure in poor communities contributes to vulnerability (World Bank 2000).

In addition, the poor tend to exhibit different risk behavior from higher income people. They are more risk averse in economic terms, because

Figure 3.3 Poor people are at greatest risk of suffering physical damage from a natural disaster



Source: World Bank 2002c.

they lack savings or assets, but they are more risk inclined in terms of where they will live (Pantoja 2002). This could be because they are less informed of the risk or, more likely, because the advantages of risky locations (low cost, proximity to employment and therefore low transport cost) are perceived as outweighing the risks. In locations where catastrophic risk is recurrent and well understood, the low-income housing market clearly factors in this risk (box 3.3). Alternatively, the poor may not engage in risk-reduction strategies because they lack resources: resettlement, home retrofitting, and insurance coverage (seldom available for the poor) may be too costly relative to savings capacity and perceived benefits. As most of the poor's income is allocated to immediate survival, the

Box 3.3 Risk-Adjusted Housing Strategies in the Slums of Santo Domingo

Santo Domingo's central city slum spans several worlds, with varying vulnerability to flooding and landslides. When it rains, the risk of flooding ranges from 6 percent for households on higher, consolidated ground to 45 percent for households near the river or along the 11 main drainage systems and *cañadas* (gullies). Knowledge is common about which areas of the neighborhood are at risk of landslides. Rents (actual or imputed) reflect location safety and are almost twice as high in the safer areas than near the river or gullies. Housing quality also reflects risk perception, with simple wooden shacks in areas at risk for regular, catastrophic floods and multistory homes of durable materials in the consolidated part.

Source: Fay and others 2001.

low frequency of a natural disaster, however catastrophic its effects, may not justify a change in behavior.

The poor are also less able to recover from natural disasters, partly because of their lack of resources but also because of public policies. Four years after Hurricane Mitch, bridges linking poor neighborhoods in Tegucigalpa to the city center had still not been repaired, despite improvements in other parts of the city. In Venezuela eight months after the 1999 landslides, 33,000 people still lived in shelters or barracks in appalling conditions. Most lived in extreme poverty. Poor conditions in shelters and uncertainty over the future were linked to higher rates of rape, domestic violence, child prostitution, and drug abuse. The Venezuelan government was criticized for focusing on rebuilding roads and other economic infrastructure at the expense of social issues (International Federation of Red Cross and Red Crescent Societies 2001).

Women (especially household heads) are more likely to suffer long-term consequences after natural disasters. The proportion of women living in shelters in the immediate aftermath of Hurricane Mitch equaled their proportion in the general population in Central America. This percentage significantly increased over time, particularly for female household heads, possibly demonstrating their greater difficulty in accessing lodging and food-for-work programs. On the other hand, disasters can also create opportunities for empowerment of and leadership by women: nearly a third of shelters in Honduras were managed by women (World Bank 2001).

What Can Be Done to Improve Access to Shelter for the Urban Poor?

The current paradigm for public sector interventions in housing markets in general, and in low-income housing in particular, is an enabling one. The government is seen as the main guarantor of well-functioning markets through adequate housing and land legislation, rather than as a provider of housing. This is a striking evolution from previous approaches (box 3.4).

This approach focuses on homeownership rather than rental policies, because homeownership is perceived as a quasi-universal aspiration and presumed to be a desirable achievement, particularly for low-income households. As a result, there is very little discussion of policies to support rental housing for low-income populations. However, acknowledging and promoting rental housing as a shelter option is a logical expansion of the enabling paradigm in housing policy.[11] The little that is known is reviewed here.

Box 3.4 A Brief History of Housing Policies Since the 1950s

Starting in the 1950s and lasting through the 1970s, many governments built public housing for direct sale or rent. The construction followed Western standards and usually took the form of subsidized blocks of apartments built to high construction and infrastructure standards, often accompanied by the destruction of slum areas. Public housing usually failed to reach the poor, as the units were too expensive for the targeted households and required large subsidies, taxing fiscal resources and limiting the scale of programs. The buildings were typically in unattractive locations on the urban periphery, implying additional transportation costs. As a result, a high percentage of units were resold or rented to wealthier families.

In the 1970s and 1980s, governments began to recognize the value of squatters' gradual approach to housing and moved to support squatters' initiatives through upgrading of slums and sites and the provision of services. Slum upgrading involved improving the existing housing of the urban poor; site upgrading focused on providing vacant tracts of land for housing with only basic services or core houses for residents to improve. The lower costs of these approaches—through lower planning and engineering standards—boded well for scaling up. Nevertheless, sites and services projects generally suffered from the same problems as public housing—the apartments were too expensive for the poor, and they were located in unattractive locations, with plot sizes and layouts that poorly matched the needs of the beneficiaries. Upgrading projects suffered from a lack of fiscal resources and institutional capacity to expand the programs and maintain the services.

Public Policies for Low-Income Renters

Public policies for rental housing fall into three categories:

- *Policies on private sector rental housing*. Policies include rent control, regulation of the relationship between tenant and owner, and building and environmental health regulation. Rent control is problematic for a number of reasons. It discourages mobility and the production of affordable housing.[12] Although rent control depresses rents, countries with stricter rent control tend to have higher house prices (Rakodi 1995). However, simply removing rent control may not always be sufficient to stimulate the housing market; additional policies may be needed. In addition, reforms should be wary of eliminating embedded provisions that control the relationship between tenants and owners, although these tend to be ineffective for poor people, who seldom have contracts (usually a necessary condition for protection) and who lack

the ability to resort to justice or arbitration. Promoting simple contracts and landlord-tenant arbitration could promote transparency in the rental sector. Bolivia's Office for Conflict in Renting and Bogotá's Chamber of Commerce, local governments, and faculties of law are examples of extrajudicial arbitration of rental disputes; their impact has not been evaluated. Building and environmental health regulations need to be applied with care in order not to displace poor people during upgrading. In most cases, regularization and upgrading of poor settlements tend to be accompanied by an increase in availability of rentals, particularly if accompanied by policies to increase density.

- *Policies on public sector rental housing*. Because it is generally in short supply, public housing tends to foster favoritism and bribery and not reach the very poor. In addition to this targeting problem, rent-setting is problematic. If it is too high or too low it will result in subletting. Maintenance is a common problem, although various countries have experimented successfully with alternative schemes, such as turning responsibility for maintenance to tenants associations. The problems and costs associated with public sector rental housing have led to the switch toward policies that support homeownership and the widespread sale of public sector rentals and to policies that encourage the private sector production of an adequate supply of rental accommodations.
- *Policies that increase the supply of rental accommodations*. Policies include the provision of land or credit on favorable terms and tax incentives. Because of the emphasis on homeownership, such policies are rare; exceptions include the Republic of Korea, Mexico, and Thailand (in the 1980s), with limited success in Korea and Mexico. More generally, if housing policy includes tax incentive and subsidy programs to purchase a home, an attempt should be made to extend the benefits to subsistence landlords and their tenants. The practical application of this idea has yet to emerge, as there are many obstacles to overcome, including the lack of institutional capacity. Most Latin American countries probably lack the administrative capacity to run a rental voucher program, such as the Section 8 program in the United States.[13]

The verdict on active policies for low-income rentals is not encouraging. It is important to keep in mind, however, that constraints on housing supply adversely affect urban households, particularly the poor, whether they rent or own. Thus it is possible that the best recommendations may be to improve the functioning of the overall housing market—preferably in a way that is tenure neutral. Making informal housing more secure, through tenure or other means, has an immediate positive impact on the supply of rental housing.

Box 3.5 Reforming the Rental Market in Colombia

In June 2003, the Colombian Congress passed a law that aimed to stimulate rental markets (Law 820; see http://www.secretariasenado.gov.co/leyes/L0820003.HTM). The law seeks to simplify rental contracts in order to make them more effective and to streamline the law regarding tenant-landlord conflicts in the hope of speeding up the repossession process. In addition, the government lifted rent control and contemplated tax incentives and indirect subsidies for the development of rental housing. The results of this attempt to improve rental markets and attract investment in the rental sector will be closely watched.

Source: Gilbert 2003.

Because rental markets have not been part of housing policies in most countries, there is no evidence yet of its impact. Colombia appears to be the only country that is beginning to address the issue (box 3.5).

Public Policies for Low-Income Homeowners

Public housing policies aim for an integrated approach that supports demand (by strengthening property rights, developing mortgage financing, and rationalizing demand subsidies); helps organize supply (by providing infrastructure for residential land development, regulating land and housing development, and organizing the building industry); and promotes institutional development. Focusing on the poor, these policies seek to convert informal sector housing needs into effective demand for housing and increase the supply of land, infrastructure, and housing (Siembieda and Moreno 1997).

On the demand side, the objective is to ease the financial constraints of the poor. This includes alleviating liquidity constraints by providing access to microcredit and fostering household savings to allow the poor to better use their limited resources. It may also involve addressing solvency issues through the limited use of housing subsidies. Developing financing for low-income housing demand may stimulate the interest of private sector entrepreneurs for low-income development and construction.

MICROCREDIT

Commercial banks are out of reach for the majority of the population in the region, not only in terms of loans for home purchases but also in terms of savings and other banking services. Short-term successive microcredits for housing ($500–$5,000 payable over two to five years) are a powerful

Box 3.6 Using Housing Microfinance: The Micasa Program in Peru

Mibanco of Peru, one of the most successful microfinance agencies in the region, launched its home improvement program in mid-2000. Within 12 months, Micasa had 3,000 active clients and an outstanding portfolio of $2.6 million. Moreover, it was profitable, generating almost $16,000 a month in net income.

The program differs from Mibanco's successful microenterprise lending methodology, in that the loans carry a lower interest rate, allow for longer terms (up to 36 months), tend to be slightly larger in size, and are available not just to microentrepreneurs but also to low-income, salaried employees. Micasa loans average $916 over 11 months. Borrowers are not required to have legal title in order to obtain a loan, and the loans are often secured with household assets or guarantees by cosigners.

Source: Cities Alliance 2003.

tool for facilitating access to finance for low-income families (box 3.6). Unlike mortgage finance, which deals with complete units, housing microfinance is well suited to the incremental building process, as short-term loans can fund each progressive step at affordable market terms. Moreover, microcredit can be used by people who lack formal titles, income, or employment.

Housing microfinance is growing and looks very promising. But expansion will require tackling a number of challenges. First, in countries such as Mexico, interest rate subsidies and noncommercial origination and collection practices by public sector lenders crowd out private lenders. Second, legal and regulatory frameworks that are poorly adapted to nonbank financial institutions may either limit their expansion or make expansion financially risky. Third, there is a need for technical assistance in gradual construction processes to ensure the safety and stability of the structure, to follow construction standards, and so forth. Whether microfinance institutions should be providing this support is under debate. There have been many models for providing this assistance, from provision by lenders on a fee basis to involvement of the local government or a civil society organization.

SAVINGS AND SUBSIDY SCHEMES

Subsidized housing savings programs can ease financial constraints by enhancing households' capacity to make an initial investment in shelter and by building a credit history to allow households to leverage their savings through credit.[14] Perhaps the best known example of this type of scheme is Chile's Unified Subsidy and Basic House Program, which targets

the lowest income groups, enrolling them in a savings program that eventually allows them to acquire a house by using their savings, a direct subsidy that varies with income, and an optional mortgage credit. A key to this program's success is that it allows participants to purchase an old or new housing unit or build a house if they already own land (World Bank 2002a). One of the weaknesses of the program has been its failure to attract private lending for the lowest income segments and the subsequent substitution of public lending and associated sustainability programs due to low levels of loan repayment. Costa Rica has also experienced some success with this type of scheme (box 3.7).

Residential savings programs, or mutual assistance programs, have also been used to leverage resources of very low-income communities for housing. The residents' savings are commonly pooled into a legal trust, often set up by an NGO or community association. The trust serves as a mechanism to leverage and attract additional sources of financing, to protect against default, and to receive and manage subsidies. The trust can provide the seed capital for community infrastructure and bridge loans and end-user finance.

A good example of a mutual assistance scheme is Mexico's Plan de Ayuda Mutua, a self-financing program for residents of informal settlements. Participants contribute a set amount every week over a savings cycle, generally less than a year, to maintain the interest of the participants. Funds are allotted every month (or week) based on a lottery, in which one participant receives benefits—in the form of construction materials, labor, or down payments on land—equivalent to the sum of his or her savings during the cycle (World Bank 2002a).

SUPPLY-SIDE ISSUES

Government agencies are without comparative advantage as land developers.[15] However, they can help reduce the cost of land and housing through several planning, regulatory, and fiscal mechanisms.

- *Land and urban regulations and standards*. Local governments can adjust standards for urbanization and construction to adapt to the effective demand of low-income populations. Reducing minimum plot size and increasing maximum floor and area ratios in poor neighborhoods can allow development of low-income housing that is profitable to the private sector yet affordable to low-income families. Different standards can also be considered for street design, basic services, community facilities, and pedestrian and bike streets. By lowering standards, the formal sector should be able to shift some of its housing production down market and legally produce subdivisions.

Box 3.7 Costa Rica's Direct Demand Housing Subsidy Program

The Costa Rican direct demand subsidy program, started in 1987, was modeled on the Chilean program. The program, which can be used for construction alone, land purchase and construction, or purchase or improvement of an existing unit, consists of the following elements:

- A subsidy voucher of an amount inversely related to household income, with a maximum value of about $4,000.
- The beneficiaries' down payment.
- A mortgage loan given by an "authorized entity," including government banks, nongovernmental organizations (NGOs), cooperative federations, and savings and loans. These entities have the authority to choose beneficiaries, deliver the direct subsidy, and extend a loan to complement the direct subsidy and the household's down payment. Households go to the authorized entities and ask them how much they can afford to pay for a housing solution. The authorities inform them of the maximum house price, the loan amount, and the required down payment. The household then seeks a housing solution that costs no more than this maximum price. The government housing bank then buys the authorized entities' social housing portfolio at below-market rates.

At its initiation, the program attempted to recapture the subsidy from the household when the house was sold. These efforts were abandoned in the early 1990s.

In contrast to Chile and most other countries that have adopted direct demand subsidies, Costa Rica has succeeded in attracting the private sector into the very low-income market. The main reason why it has been able to do so is that sophisticated NGOs experienced in housing development—a rarity in developing countries—have become the main developers under the program. When the direct subsidy program began, many for-profit developers used it. Most stopped participating in 1994, however, mainly because of increased political and economic risk. NGOs have stepped in to fill this gap. Some NGOs help households construct a unit on an existing lot by providing technical assistance. Others assemble groups of beneficiaries, extend credit, and develop units by contracting with for-profit construction firms.

Until recently, the program proved stable, delivering a significant number of direct subsidies each year from its inception in 1987 through the mid-1990s. Subsidies delivered between 1988 and 1998 (93,049) benefited 13 percent of households in Costa Rica. Authorized entities experienced few arrears on these loans.

Although the program has proved politically popular, fiscal constraints since the mid-1990s have caused a decline in resources available for subsidies. Various stop-gap measures—such as issuing bonds for funding the direct demand subsidy—have proved problematic and complicated the operations of the program.

Sources: Ferguson 2001; World Bank 2002b.

- *Permit processes*. Complicated and time-consuming procedures with unpredictable outcomes make it difficult for developers to quickly respond to changing housing demands and adequately gauge the cost of development. Streamlined procedures reduce uncertainty and help developers determine whether a project will be profitable.
- *Information*. Governments can play an important role in providing information in the form of data on available land, land characteristics, and urban trends, as well as examples of good practice and benchmarking. As part of the planning process, bringing various actors together and sharing perspectives can have a significant impact on policy outcomes (Prud'homme 2003).
- *Taxes and subsidies*. High taxes on undeveloped land can discourage the holding of such land, increasing the supply and thereby reducing the price of developed land.
- *Infrastructure investments*. By providing basic trunk infrastructure, governments can increase the supply of serviced urban land—reducing price, increasing affordability, and thereby reducing the probability of the continued formation of irregular settlements. Tertiary infrastructure and services can be built in a progressive manner, making land more affordable to the poor and providing some form of self-targeting, as only those who prefer partially serviced land would apply. A gradual strategy of urbanization may reduce many of the negative externalities of irregular development (such as unstructured neighborhood layout and construction in precarious areas), reducing the ex post cost of infrastructure provision. Governments can also play an important role in helping organize communities to help plan and construct local infrastructure. In finished formal housing, the housing unit is transferred with all supporting shelter amenities. In contrast, low-income housing, consolidated through a gradual construction process, is transferred with varying bundles of amenities. The gradual provision of infrastructure entails substantial transaction costs and as such requires a high level of technical assistance to households and community groups.

SLUM UPGRADING

Destruction of slums and the relocation of slum dwellers have proven costly in social and financial terms. In contrast, neighborhood upgrading provides residents with improved living environments without displacing them. It also costs about one-tenth as much as destruction and relocation (SIGUS 2001). The investment already made to properties remains, enhanced and stimulated. Regularization of land tenure results in significant private investment in these communities, with $1 of public funds typically generating about $7 in private investment (SIGUS 2001). In addition, upgrading projects can yield important social and economic benefits. In the upgraded

area of El Mezquital, Guatemala, for example, infant mortality rates fell 90 percent and crime fell 43 percent (World Bank 2002a).

Neighborhood upgrading typically entails a set of geographically focused interventions. Traditionally, these interventions focused on physical improvements of living conditions—drainage, vehicular and pedestrian access, water supply and sanitation, public lighting and electricity, resettlement of houses living in areas vulnerable to natural disasters, and provision and land tenure. Experience has shown the need for additional attention to environmental and social issues. The Guarapiranga project in metropolitan São Paulo focused on water basin management; employment and job training were the focus of the *favela barrio* project in Rio de Janeiro.

Three decades of experience point to the following elements as essential for successful neighborhood upgrading:

- *Community and public sector involvement*. Upgrading requires extensive coordination by the public sector and community groups, notably in the provision of basic services (such as housing, water, and sewerage) and public goods (such as street lights and sidewalks). Utilities often ignore marginal neighborhoods, due to restrictions on providing services to areas without full tenure. These restrictions reflect the assumption that these areas are not profitable. But innovative community solutions and small-scale private providers have had success. In El Mezquital, Guatemala, the community formed a cooperative that manages sewerage services on a cost-recovery basis. In Asunción, Paraguay, *aguateros* (small private water suppliers) serve 30 percent of households, including most of the marginal peri-urban neighborhoods not covered by the main utility.
- *Appropriate standards*. Inappropriate development standards are partly responsible for the creation of informal neighborhoods. Lower levels of services or alternative technologies should be considered to increase affordability and accommodate physical limitations imposed by the generally irregular and dense layout of marginal neighborhoods. One of the best-known cases is the use of condominial sewerage, which allows provision of network sewer services through piping in the rear of lots, along sidewalks, or in front of lots to reduce costs in terms of in-house and secondary network investment, destruction and repavement of streets, and displacement of homes in cases of irregular, dense urban layouts.
- *Effective land regularization and layout improvement schemes*. Land regularization in upgrading projects aims to stimulate household investment by improving tenure security and adjusting the layout of the neighborhood to reduce vulnerability to natural disasters and allow for

the provision of services and access ways. In terms of layout adjustment, various schemes—land sharing, land pooling, land reconstruction—have proven successful, but all require residents to work together and with the landowner to agree on physical reorganization of the neighborhood and division of the land parcel.

- *Financial sustainability and the feasibility of scaling up*. Cost recovery can also be a powerful tool to ensure that services and investments are in line with residents' interest and willingness to pay and allow government to design appropriate subsidy policies if necessary and feasible. Specific strategies need to be developed for public and private goods, with the understanding that subsidization of public goods may be justified while full cost recovery for private goods should be a goal. Involving residents in issues of cost recovery during the planning phases will help build the ownership necessary for future sustainability. Evidence from numerous cases throughout the region shows that the poor can and are willing to pay for services and frequently pay more in cash, time, and work loss than the cost of standard services (Estache, Foster, and Wodon 2002). Reducing the fiscal costs of upgrading through more appropriate standards, cost recovery, and tighter poverty targeting of subsidies would help reduce the financial barriers to scaling up.

Making Infrastructure Work for the Poor

Making infrastructure work for the poor requires promoting access and ensuring consumption affordability.[16] Promoting access can entail reducing connection costs, increasing the number and types of suppliers, and requiring operators to promote access. Promoting affordability can entail reducing actual bills, service cost, and facilitating payment.

Several actions can promote access:

- *Require operators to promote access*. This type of instrument is used mostly when the operator is a private one and increased access becomes an integral part of its service obligation. It takes one of two forms: a universal service obligation (USO), in which there is a legal obligation to bring service to all households, or connection targets. USOs tend to be defined in general terms and require complementary specifications of connection targets, access costs, and sources of subsidy to be operational. USOs can be bidirectional, in which case households are obliged to connect once the service is made available. When they are, affordability issues are particularly critical. Connection targets entail clear obligations (they typically include the exact number of households, their location, and the date at which they need to be connected.) Attaining the targets requires that customers pick up the service, however.

- *Reduce connection cost*. Connection costs can be reduced in several ways. One is to allow for a combination of technology choice and quality of service that allows for faster and cheaper service for the poor (condominial sewerage is one example). Financing arrangements should be designed that allow poor customers to spread out the connection cost over time (financing is usually provided by the operator, as in the La Paz/El Alto case discussed earlier). Cross-subsidies, in which the connected population contributes to a connection fund, tend to be well targeted toward the poor (who are typically the ones without connection). They are most suitable where the unconnected population is small relative to the connected one. Governments can also choose to provide connection subsidies, either general or targeted at specific components of the connection cost that customers find difficult to pay for. Connection subsidies are administratively more cost-effective than recurring subsidies for the use of a service, because they involve one-time rather than ongoing payments.
- *Increase the number and type of suppliers*. Alternative network suppliers can provide competition as well as tailor services to the needs of the poor. Supporting them in a way that is beneficial to the poor can entail providing a legitimate role for such suppliers, promoting cooperation between the dominant operator and alternative suppliers, and requiring the utility to provide various types of services.
- *Reduce the cost of the bill*. Targeted subsidies can be allocated on the basis of consumption levels, income, needs, or location. Subsidies issued on the basis of consumption do not target the poor effectively, given the weak correlation between income and consumption. Targeting based on income or needs requires a reliable poverty proxy and a relatively advanced administrative mechanism for screening individual households. Such a mechanism can be very costly if it does not already exist as part of a broader platform for social protection.[17] Finally, geographic subsidies tend to be poorly targeted given the income heterogeneity of most poor urban neighborhoods. Rebalancing fixed and variable tariffs, whereby most of the charges are recovered through the variable tariff, is more attractive to small consumers. Voucher programs are used in the United States and Europe but so far not in Latin America. They rely on some form of means testing and therefore suffer from the same types of advantages and inconvenience as means-based targeted subsidies.
- *Reduce the cost of service*. The cost of service can be reduced by letting consumers opt for lower quality service (choosing to be among the first to be rationed in time of energy scarcity, for example) or by placing physical limits on the volume of consumption (through telephone service that limits the volume of calls that can be made over a given period or

by allowing a minimum amount of energy to be consumed over a given period). Both approaches have been used in the United States and Europe with success.

- *Facilitate payment*. Poor households with little or no liquid savings often find it difficult to pay relatively infrequent and unpredictable bills or to cover them in periods of crisis (illness, loss of jobs). One approach is to allow for more frequent billings (although doing so increases administrative costs) or to install prepayment meters. Prepayment meters function best for telephones. They appear to be costly for water and electricity.

Estache, Foster, and Wodon (2002) discuss international experiences with all of these approaches and provide guidance on how best to choose among combinations of instruments. For the most part, all of these instruments can be used whether the operator is a private or public one. Regardless of who the operator is, a quasi-universal lesson of infrastructure reform is that where utilities are inefficient, the poor suffer most. Thus improving overall performance is a necessary—but not sufficient—prerequisite for making infrastructure work for the poor.

Reducing Vulnerability to Natural Disasters

The risk of disaster can be diminished by reducing either the hazard factor or the vulnerability factor. The risk of certain types of hazards, such as floods and landslides, can be mitigated through engineering solutions. The risk of others, such as earthquakes and hurricanes, cannot. Much can be done to reduce vulnerability to these events, however (Kreimer and others 1999). Land use planning can prevent settlements in dangerous areas. Infrastructure and housing quality can be improved to make it more disaster resistant—through building codes and the provision of hurricane shutters and better roofing. Insurance can help ensure faster recovery and limit long-term impacts.

Many of these recommendations are difficult for poor cities to implement and pose special difficulties for poor people, for several reasons. First, few Latin American cities have undertaken the hazard or vulnerability assessments needed to plan for development, evaluate options for mitigation or risk reduction investments, and prepare for a response in case a disaster hits.[18] Second, few cities in the region have the capacity to prevent settlement in disaster-prone areas. Rules and regulations, when they exist, are seldom enforced. Moreover, regulations that declare certain areas unsafe for habitation may make matters worse, by limiting the land available for safe settlement (in case of overly strict regulations) or reducing

the price of unsafe land, making it attractive to those who cannot afford anything else. Third, improving or retrofitting infrastructure usually occurs in the richer parts of a town or city. Poor neighborhoods are typically characterized by low-quality infrastructure and are usually in need of basic repairs, let alone upgrading or retrofitting.

Despite the problems, some successes have been achieved, even in poor communities. Indeed, the case of Cuba shows that political will and good institutional organization can overcome the lack of wealth (box 3.8). A number of communities and cities in Cuba organized themselves and successfully averted major disasters. In the Dominican Republic a government organization and NGOs organized workshops to help communities come up with community emergency plans. During Hurricane George, in 1998, communities that had such plans successfully evacuated people, established shelters, organized clean-up brigades, and requested and distributed assistance. Participating communities were less affected than other communities by the hurricane (CGCED 2002). More generally, building social assets in a neighborhood can greatly contribute to minimizing the impact of a disaster. In Catuche, a neighborhood of Caracas, very few people died during the floods, reportedly due to community mobilization and mutual help efforts (Sanderson 2000).

Box 3.8 Minimizing Deaths from Natural Disasters through Good Planning: The Case of Cuba

Developing countries are more vulnerable than developed countries to natural disasters. The San Francisco earthquake of 1989, with a magnitude of 7.1, caused 63 deaths, while a 6.2 earthquake near Guatemala City in 1976 resulted in 22,780 fatalities. Countries with similar occurrences of natural disasters, such as Japan and Peru, have very different disaster-related deaths statistics: between 1970 and 1999 Peru had 2,420 fatalities, while Japan recorded 315.

However, the different outcomes seem to be related less to the wealth of a country than to its degree of preparedness. When Hurricane Michelle ripped through Cuba in November 2001, only five people were killed. In comparison, Hurricane Mitch, which was of similar strength, killed 20,000 people when it hit Central America. In Cuba successful civil defense and Red Cross planning ensured that 700,000 people were evacuated to emergency shelters in time; search and rescue and emergency health care plans were in place. In Havana electricity and water were turned off to avoid electrocution and sewage contamination. A UN report concluded that the government's high degree of preparedness was essential in preventing major loss of life.

Sources: Charvériat 2000; International Federation of Red Cross and Red Crescent Societies 2002.

A number of countries are experimenting with improving disaster preparedness by building stronger buildings. In the British Virgin Islands, 100 percent of new buildings are reportedly equipped with hurricane shutters, which are tax exempt. National development foundations in Antigua and Barbuda, Dominica, and St. Lucia have implemented hurricane-resistant home improvement programs for poor and vulnerable communities. These programs are designed to strengthen safer building practices in the informal housing sector by conducting workshops for builders and artisans and by providing access to loans for home retrofit and upgrade (CGED 2002).

While disaster insurance is fairly common in industrial countries, in large part thanks to government intervention, in developing countries it is mainly confined to wealthy individuals, large companies, and government organizations. Irregular settlements without titles or valuation and suboptimal housing are generally considered uninsurable. The model adopted by the city of Manizales, in Colombia, shows that this is not the case and that with innovative schemes and political will, even the very poorest can have access to catastrophic insurance (box 3.9).

Box 3.9 Providing Catastrophic Insurance to the Poor: The Experience of Manizales, Colombia

The city of Manizales has been at the forefront of disaster risk management in Latin America. Its insurance program covers buildings owned by the poorest strata of its population. Through an agreement with an insurance company, the city allows any resident to purchase insurance coverage through the municipal tax collection system. Once 30 percent of the insurable buildings in the metropolitan area participate in the plan, the insurance coverage extends to all properties that are exempt of property tax. These include some buildings hosting organizations dedicated to the provision of public good (NGOs, foundations, and nonprofit organizations), as well as all properties with cadastral value of less than 25 minimum monthly salaries (about $3,400), as established by the municipal council.

The insurance contract is priced competitively and designed so that the insurance company ends up with a direct contractual relationship with the individual taxpayer who decides to participate in the insurance plan. The municipal administration acts only as a premium collector and is not responsible for any claims under the plan, which remain the responsibility of the insurance company. The municipality retains 6 percent of the value of the premiums collected for handling the process, transferring the rest of the proceeds to the insurance company.

Source: Written by Francis Ghesquiere, Senior Urban Specialist at the World Bank.

An exhaustive study of the role of microfinance in disaster risk management suggests that microcredit can play a role in both prevention and recovery (Pantoja 2002). Housing loans promote the adoption of appropriate building technologies; microfinance institutions occasionally include some type of technical assistance. Access to a loan in the aftermath of a disaster can make a critical difference in a poor family's ability to recover. But microcredit is limited in what it can do. Microcredit institutions do not usually reach the poorest of the poor. And the fact that disasters are a covariant risk implies that microfinance institutions have to protect themselves, both to avoid serious financial reversals and to ensure that they can keep resources flowing after a disaster: to remain viable, microcredit institutions need to maintain financial discipline.

A 1997 USAID survey of disaster mitigation and response efforts of municipalities in seven South American countries found that most cities had limited roles, usually within the limited confines of existing legislation that established national civil defense legislation. Where municipalities do not have the capacity to carry out responsibilities designated to them in the decentralized civil defense system, the vulnerability of the population is very high.

Some cities in the region are taking action. Cali, Medellin, and Manizales, Colombia, have created municipal disaster prevention and relief systems that are models for the rest of Latin America (CGRTCA 1998). In the United States communities or municipalities tend not to organize on their own unless there is a federal incentive in place (CGRTCA 1998). Thus increased recognition of the importance of local initiatives should not come at the expense of a national framework.

Conclusion

The dismal shelter situation of the urban poor in Latin America and the Caribbean has important implications for their well-being and health, issues addressed in chapter 5. Improving housing for the poor is complex, but it is by no means beyond the scope of Latin America's governments. Slums are, to a large extent, the products of failed policies. Preventing the development of future slums and improving living conditions in existing ones therefore requires policy reform.

What might be the priorities for governments that seek to improve the housing situation of the poor? Clearly, priorities are context specific. Priority setting may also be guided by the fact that there is clearer knowledge on some interventions than others—and that many of the needed reforms depend on the institutional and political context.

Annex: Basic Principles of Housing Subsidy Schemes (Adapted from Hoek-Smit and Diamond 2003)

Well-designed and executed subsidies can help mitigate housing market failures and meet public policy goals. To do so, it is crucial to clearly identify the program's objectives and ensure that they are consistent with the country's overall housing goals (public health, social stability, overcoming market inefficiencies, and so forth). Subsidies should be used as a last resort, after relevant regulatory, policy, and macroeconomic reforms have been considered.

The following considerations should be taken into account in designing a subsidy that efficiently meets policy objectives:

- cost (directed, indirect, and administrative) relative to expected social and economic benefits
- expected displacement of investments or expenditures that would have occurred anyway
- equity issues (horizontal and vertical), including cliff effects resulting from subsidies with rigid income or housing price brackets and cut-off points
- portability and possible labor market effects due to reduced mobility
- administrative simplicity
- extent of market distortion (programs that specify housing type and price brackets will often drastically increase both the supply and the price of the type of housing specified)

In recent decades governments have favored demand-side subsidies to beneficiary households and, on a more limited basis, incentives to financial agents over public construction and ownership of social housing. Demand-side subsidies focus on increasing the willingness and ability of households to consume better housing or housing of a particular type. Such subsidies can be provided through housing allowances or vouchers for rental or owner-occupied housing or through up-front grants tied to savings or housing finance. The risk associated with demand-side lump-sum grants is that they are often tied to nonmarket (informal) new housing with questionable resale value, in undesirable locations. As a result, the private sector may not be interested in lending to the target group. In Chile, where the lump-sum demand-side subsidy was pioneered effectively in a scheme in which public grants to households are matched by loans from banks, the private sector could not be induced to service the lowest income market. As a result, the state had to sponsor lending for that segment of the market.

In contrast, supply-side subsidies reduce the opportunity costs and risks for private lenders and developers to deliver low-income housing. In general, supply-side subsidies are efficient only when input markets do not work well and do not respond to regulatory or policy incentives to deliver specific types of housing. For example, there may be high demand for new low-income housing and the construction sector may ready to deliver but lenders are reluctant because they perceive the market as too risky or unprofitable. In this case, a supply-side subsidy may be effectively used on a declining basis to provide incentives for private lenders to enter and gain experience in assessing the profitability and risks associated with lending to lower income borrowers. The risk of supply-side subsidies is that they distort markets, particularly when government takes on roles that could be performed more efficiently by the private sector.

Endnotes

1. Surveys from poor neighborhoods suggest home ownership is indeed high. It averages 81 percent across 31 poor neighborhoods distributed across all of Mexico's state capitals (excluding the Federal District). According to surveys, home ownership among the poor is 87 percent in Metropolitan San Salvador, 82 percent in Tegucigalpa, and 86 percent in greater Panama City (World Bank 2002c). In the central city slum of Santo Domingo, Dominican Republic, home ownership is 58 percent (Fay and others 2001).

2. It is unclear whether the high rate of home ownership springs from some innate desire to own one's roof, or because of the greater insecurity of rentals, from which one can be evicted at any point and which require generating a steady stream of income in order to pay the rent.

3. The Mexico survey of poor neighborhoods shows that households occupying lent houses are also more likely to have a relative or trusted friend living in the neighborhood (Ruggeri Laderchi 2005). However, they are less likely to have helped this person solve problems of money, transport, health, or lodgings over the past month, possibly because benefiting from lent housing is more likely to occur among people who are in a subordinate position in the patronage network. This is consistent with female-headed households being more likely to live in lent accommodation.

4. The results are less clear for the age of the settlement. Housing quality increases with age, reaching its highest level for settlements 6 to 10 years old and decreasing thereafter. For services, age of settlement seems to matter (positively) only for access to water.

5. It is estimated that more than 46 percent of the population of Recife, Brazil, and 40 percent of the population of Mexico City (CEPAL 2000) live in informal settlements.

6. For infrastructure provision, the rule of thumb among urban planners is that retrofitting costs three to six times more than providing the services ex ante.

7. For telephones this seems to remain true despite the extraordinary rise of cellular phones.

8. The poor in Tegucigalpa and San Salvador are substantially more likely to experience problems with solid waste management, such as pests and garbage accumulation (World Bank 2002c).

9. The difference between using income or expenditure as a denominator stems from the fact that the rich tend to save a much larger proportion of their income.

10. This section draws heavily on Charvériat (2000). For more information on disaster management, see http://worldbank.org/dmf/and http://www.iadb.org/.

11. This section draws on Rakodi (1995) unless otherwise specified. For a more Latin America–specific discussion, see Gilbert (1993) and Gilbert and Varley (1991).

12. Problems include patchy enforcement and uneven distribution of benefits; even if programs are designed so that they benefit low-income populations, they often favor long-term tenants over newcomers. Most important, rent control deters maintenance and inhibits investment in new housing, resulting in the entrapment of tenants in poor quality housing and the use of illegal payments, such as key money, which penalize new tenants and further discourage mobility.

13. Under the Section 8 rental voucher program, "the public housing authority (PHA) generally pays the landlord the difference between 30 percent of household income and the PHA–determined payment standard—about 80–100 percent of the fair market rent (FMR). The rent must be reasonable. The household may choose a unit with a higher rent than the FMR and pay the landlord the difference or choose a lower cost unit and keep the difference" (http://www.hud.gov/progdesc/voucher.cfm).

14. For subsidized schemes to work, they need to respect a number of principles (discussed in appendix C).

15. Public efforts to create land reserves for housing the poor have consistently been overtaken by a market-based approach of illegal sale and subsequent conversion.

16. This section is based on Estache, Foster, and Wodon (2002).

17. A recent article comparing Chile's individual means-tested subsidy and Colombia's geographic subsidy suggests that both suffer from large errors of inclusion (subsidizing households that should not be) but that errors of exclusion seem to be fewer in the Colombian scheme, which, overall, appears more cost-effective (Gómez-Lobo and Contreras 2000).

18. Hazard assessments identify hazard zones; vulnerability assessments evaluate the expected performance of structures, infrastructure, and institutions under the stress of a disaster.

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