

## FINANCING METROPOLITAN GOVERNMENTS in DEVELOPING COUNTRIES

*Edited by* ROY W. BAHL, JOHANNES F. LINN, AND DEBORAH L. WETZEL



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Roy W. Bahl Johannes F. Linn Deborah L. Wetzel

LINCOLN INSTITUTE OF LAND POLICY CAMBRIDGE, MASSACHUSETTS

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Library of Congress Cataloging-in-Publication Data

Financing metropolitan governments in developing countries / edited by Roy W. Bahl, Johannes F. Linn, Deborah L. Wetzel.

pages cm Includes index. ISBN 978-1-55844-254-2 (alk. paper)

Municipal finance—Developing countries.
 Finance, Public—Developing countries.
 Municipal government—Developing countries.
 Municipal finance—Developing countries—Case studies.
 Finance, Public—Developing countries—Case studies.
 Local taxation—Developing countries—Case studies.
 Municipal government—
 Developing countries—Case studies.
 Bahl, Roy W. II. Linn, Johannes F. III. Wetzel, Deborah L.

HJ9695.F663 2013

352.4'216091724-dc23

2013001063

Designed by Westchester Publishing Services

Composed in 10.5/13 Minion, by Westchester Publishing Services in Danbury, Connecticut. Printed and bound by Puritan Press Inc., in Hollis, New Hampshire.

The paper is Rolland Enviro100, an acid-free, 100 percent PCW recycled sheet.

MANUFACTURED IN THE UNITED STATES OF AMERICA

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#### SLUM UPGRADING

# 14

MARIA E. FREIRE

With urbanization and its benefits, large flows of people have moved to cities, increasing the demand for shelter. Unfortunately, the formal market in developing countries rarely meets that demand for housing at affordable prices. Poor regulations, insufficient resources for infrastructure, and scarcity of serviced land often lead to high housing prices, patchy urban development, and exclusion of the urban poor, who have to settle in inadequate and informal places that lack basic amenities, minimal services, and housing security.

The word *slum* commonly describes the situation of people living in overcrowded quarters, without water and sanitation, and lacking title security. Rapid urban growth has outpaced the ability of urban authorities to provide for housing and health infrastructure in most metropolitan regions of developing countries. In Ho Chi Minh City in Vietnam, neither the government nor the private developers are able to provide the housing needed for 50,000 migrants per year. The resulting squatter and slum settlements now comprise 15 percent of housing in the city. In Dhaka, Bangladesh, only one-quarter of the population in the city is connected to the piped sewage system (McGee 2005). The outcome has been one of the highest rates of death from infectious diseases among Asian cities. In metro Manila, Philippines, and in Kuala Lumpur, Malaysia, the competitive demand for land in cities has led to the marginalization of the urban poor. In Greater Mumbai, India, 94–95 percent of the population cannot afford a house due to soaring property prices and speculation (see chapter 10).

The inability of city governments to plan and provide affordable housing is aggravated by the lack of coordination among different authorities that are in charge of economic development, urban planning, and land allocation. For example, in the Mumbai metropolitan region, multilevels of government, different protocols, and different cultures have undermined the success of many slum upgrading policies launched by the Mumbai metropolitan region (see chapter 10). Such coordination issues also exist in the São Paulo metropolitan region, as described later in this chapter.

Some countries, such as India, Brazil, and South Africa, have made great efforts to deal with the slum problem in a sustainable way. The complex Jawaharlal Nehru National Urban Renewal Mission program that includes Indian states and municipalities and the national housing program in Brazil (Minha Casa Minha Vida) are examples of this determination to deal with the lack of adequate shelter for the urban poor.

Yet progress has been slow. A recent review of the Society for the Promotion of Area Resource Centres (SPARC) program in India has identified some key obstacles to scaling up slum upgrading at both metropolitan and national levels (Merryl and Suri 2007). They include lack of areawide (metropolitan) strategies and planning for land use and slums; lack of community mobilization capacity; lack of participation of developers in low-income housing projects; lack of housing finance for low-income households; failure to leverage subsidies and household loans; and lack of participation of commercial banks in construction finance in slum projects. Add to this lack of commitment, good governance, and pragmatic approaches, and the result is a problem that will take decades to solve.

Slum upgrading policies should include three elements: provision of basic services and affordable infrastructure, improvement of shelter conditions, and security of land occupancy rights. From a policy viewpoint, this requires a combination of policies to lift income of slum dwellers and policies to improve the supply side of housing and land markets. Since cities in developing countries will continue to grow at a fast pace, urban authorities need to strengthen urban planning and metropolitan strategies to provide alternatives to slum formation. By making land available to the poor at affordable prices and ensuring the provision of housing, urban infrastructure, and transport services at the fringes of cities, metropolitan authorities could contribute to address the slum problem.

This chapter discusses the alternatives to finance slum upgrading at the scale of metropolitan areas and large cities. First, it examines the size of the problem as described by the U.N. Human Settlements Programme (UN-HABITAT), as well as the assumptions used to project the cost of providing a dwelling for everyone. Next is a review of the successive approaches to slum upgrading as implemented by donors and governments alike. The following section discusses the principles for slum upgrading finance and who should provide what in a municipal finance framework. It shows the potential that combinations of private, public, and external finance provide to committed communities. Five cases of slum upgrading policy are then reviewed, identifying the key elements that make them successful and whether these conditions can be replicable in other regions and large urban areas. The chapter concludes with key lessons from experience.

#### The Size and Cost of the Slum Problem

The United Nations estimates that one-third of urban populations in developing countries, nearly one billion people, are living in slums (UN-HABITAT 2005). The

Region	Urban population as percentage of total population	Slum dwellers as percentage of urban population
World	47.7	31.6
Developed regions	75.5	6
Developing regions	40.9	43
Africa	44.9	60.9
Eastern Asia (excluding China)	36.5	42.1
South Asia	30	58
	75.8	31.9

#### TABLE 14.1 Population living in slums

SOURCE: Data from UN-HABITAT (2005).

largest proportion of the urban population living in slums is in the Africa region, followed closely by South Asia (table 14.1). The number of slum dwellers is projected to reach 1.4 billion by 2020 (Smolka and Larangeira 2008) and may well reach 2 billion by 2030, as a result of the urban "explosion" in sub-Saharan and South Asian countries and the lack of response from the formal markets for low-income shelter. Not all slum dwellers are at the extremes of poverty. One-fourth live on more than \$2/day, suggesting that home deprivation is more than just a matter of income poverty (Baker and McCain 2009).

The cost of providing shelter to slum dwellers is hard to estimate. Slum upgrading is place specific, and unit costs vary greatly across cities. The U.N. Millennium Project estimates that, from 2005 to 2020, the upgrading needs of the 100 million slum dwellers (a target of Millennium Development Goal 11) will cost \$67 billion during the 15 years. In addition, to provide new/alternative shelter for the 570 million new arrivals, another US\$227 billion would be required. In total, the cost would reach US\$294 billion (table 14.2). If one tried to expand the slum upgrading programs to the totality of 1 billion slum dwellers, the total cost would reach \$897 billion, or about \$60 billion a year. This is six times the total amount of investment currently being made in slum upgrading every year.

#### APPROACHES TO SLUM UPGRADING

The approach to slum upgrading has changed considerably from the 1950s to the 2000s. From the 1950s to the mid-1970s, many cities tried to deal with slums by keeping migrants from coming into town and bulldozing the shacks while providing public housing to relocate the slum dwellers (UN-HABITAT 2005). Following public outcry against those inhuman policies, other approaches emerged. Providing sites and services was one of them. Governments allocated land (with minimal infrastructure) to newcomers and encouraged them to construct their

		Cost per	Cost per person (US\$)		Overall cost, 2005	Overall cost, 2005–2020 US\$ (billion)	
Target	Target population (million)	Per year	Total, 2005–2020*	Cost 2005–2020	Donor contribution (US\$)	Government contribution (US\$)	Slum dwellers' contribution
<ol> <li>Upgrading slums (Millennium Development Goal target)</li> </ol>	100	45	670	67	23	37	
2. Alternative shelter 3. Total	570 670	27 29	400 440	227 294	78 101	126 163	22 29
Per memoire 4. Upgrading all slums 5. Total (4 + 2)	1,000	45	670	670 897			
NOTE: The cost estimates are based on data from upgrading projects in Central America. A per capita cost of US\$670 for slum upgrading and US\$400 for alternative shelter includes investment in land titling.	ata from upgrading proje	cts in Central Americ	ca. A per capita cost of US	\$670 for slum upgrading	and US\$400 for alternat	ive shelter includes investi	ment in la

Investment requirements and potential sources of funding, 2005–2020 TABLE 14.2

access to water, and sanitation and sewerage.

\*Rounded numbers. source: Data from U.N. Millennium Project (2005).

own dwellings. The approach was quite successful. In the 1970s and 1980s, the sites and services approach was tried in many countries across the globe: Bo-tswana, Burkina Faso, El Salvador, Senegal, and Tanzania (Buckley and Kalar-ickal 2006). The global outcome was positive. Housing construction improved, and physical infrastructure was provided (Kessides 1997). Unfortunately, the sites were too far from the city, and the cost of infrastructure was too high for the cities concerned.

In situ upgrading then became the prevalent solution. This approach tried to improve the situation of the slum dwellers without necessarily moving them away. Early on, World Bank urban projects focused on access to water and sewage networks in slum areas. Many of these projects were demonstration activities and tried to show the potential of being replicated at a larger scale. Urban upgrading is still the predominant approach to deal with informal encroachments.

In the 1990s and 2000s, the approaches became more comprehensive, calling for an enabling approach: good policies, slum prevention, community participation, and engagement of the private sector. The role of the government shifted from provider to facilitator. Cities were expected to remove obstacles that blocked access to urban land, such as inflexible zoning and regulations. To stimulate demand, upfront subsidies looked appropriate, especially to leverage own savings or bank credit, and property rights became a high priority (Mayo 1991).

At present, one finds a wide range of policies that work together to provide affordable and adjustable housing solutions for the urban poor. The following are some examples.

- Community-driven programs: In these types of solutions, organized communities lead the design, financing, and implementation of upgrading programs. Examples include Bahia Alagados and Favela Bairro in Brazil and Dar es Salaam community urban improvement in Tanzania (see also table 14.3).
- National housing programs: This approach is best when there are massive needs for low-income housing. Morocco, Mexico, Tunisia, Brazil, and Chile have demonstrated that strong central institutions can achieve significant results, given adequate resources (UN-HABITAT 2005).
- Slum prevention: This approach has emerged as a priority, aiming for preventive planning and availability of sites (Cities Alliance 1999). This requires land at affordable prices and access to transportation and education to enhance economic opportunities. As cities expand, the relevant spatial unit has gone from the neighborhood to the metropolitan level.
- Private finance: Market-based housing finance has spread throughout the world (Buckley and Kalarickal 2006). For the poorest layers, the challenge is to leverage ongoing initiatives (microfinancing, savings and loans systems) and tap larger sources of capital finance.
- Land: Land markets and land policy are identified as major bottlenecks on the supply side. In the case of India, Annez et al. (2010) have shown the negative impact of land restrictions that have prevented millions of poor people in Mumbai from attaining affordable housing. Land also has the potential for urban

#### TABLE 14.3

Examples of community	v-based	approaches	to slum	upgrading
	,			

Organization	Objectives	Features
Brazil: Goiania Federation for Tenants and Posseiros	Tenure security: public land occupied and tenure secured by appealing to rights of citizens to occupy unused land	Cover 100,000 former tenants. Efforts to get tenure security, covering 100,000 tenants, supported by a local grassroots organization
Malawi Homeless People's Federation	Land provision, flexible regulation	Since 2003 provided 760 plots for housing and housing construction loans for savings groups
Pakistan (Orangi)	Amenities provision: federations formed by slum dwellers	Covered about 100,000 households in Orangi and 300 locations in Pakistan, eliminating contractors and reducing standards to cover all costs
Thailand (national)	Amenities provision: subsidies and housing loans to community organizations formed by low-income slum households	Projects in 960 communities covering more than 50,000 households, with activities identified by each community
PRODEL (Nicaragua)	Amenities provision (cofinance small infrastructure projects)	Funds provided by nongovernmental organizations, local governments, and households, with 460 projects benefiting 60,000 households

SOURCE: Data from World Bank (2008).

finance in a wide range of countries and cities, from China to Latin America (Peterson 2009; Smolka and Larangeira 2008).

#### FINANCING SLUM UPGRADING: THE MAJOR APPROACHES

#### A Framework for Slum Improvement Finance

Slum upgrading programs are generally defined as a set of three activities: investment in infrastructure, improvement of shelter, and security of land tenure. In parallel, enabling policies such as land and housing markets, comprehensive metropolitan-wide planning, participation of the community, and improvement of household economic conditions are needed.

Financing slum upgrading is then equivalent to financing infrastructure, shelter, and land tenure, to which the usual framework of public finance can be applied, which postulates that public goods should be financed by public money and private

		Fina	ncing
Services/programs	Characteristics	In theory	In practice
Basic services: trunk infrastructure	Public good	Public sector (with donor help), central and local	Donors, all levels of urban government, help from community organizations, federal and state funds
Basic services, individual connections	Private good	Households through tariffs	Subsidies, tariffs, community savings
Land titling	Private/public good	Private: purchase of title; public: land title programs	Public for large programs
Home improvement	Private good	Household savings	With help from up- front subsidies, microfinancing, community savings
Economic opportunities	Private good	Microfinance, community savings	Comprehensive upgrading programs
Home purchasing	Private good	Bank credit	With subsidies for those in need

#### TABLE 14.4

Slum upgrading finance options

goods by the beneficiary of those goods. Table 14.4 suggests a simple topology for how this might work.

#### LONG-TERM INFRASTRUCTURE

Start-up funding from the public sector seems to be essential. In most slum upgrading programs, federal and state funds finance trunk infrastructure. This can be helped by international grants, concessionary loans, budget resources, or commercial borrowing with government guarantees. Often, local governments fund the land preparation, connections, and supervision. Sometimes, cities form associations to finance large programs, as in Tamil Nadu, where the municipality association issued municipal bonds to finance slum improvements. In most cases, there are large financing gaps, and not all of the community can be served in a single program. The main problem is the low level of budget revenues in most cities of the developing world; in Nairobi, the per capita budget is US\$7.0 per year; in Lagos, it is \$2.3 (table 14.5). This is less than 5 percent of unit cost estimated by the United Nations (table 14.2).

#### SHORT-TERM OPERATION AND MAINTENANCE OF SERVICES

These should be covered by the users through adequate tariffs. Tariffs may need to be aligned to the purchasing power of the users. Cross-subsidization, public transfers, and social tariffs are often used to reach out to the poorest residents.

City	Budget per capita
Stockholm	5,450
Singapore	4,637
New York	3,609
Seattle	2,372
Dar es Salaam	11
Bujumbura	8
Nairobi	7
Phnom Penh	5
Lagos	2

TABLE 14.5				
Budget revenue	per	capita,	1998	(US\$)

SOURCE: Data from United Nations.

#### SHELTER IMPROVEMENTS AND LAND TENURE

These are private goods and should be financed by the beneficiaries. Nevertheless, low-income housing is a difficult sector. A large part of housing demand in developing countries comes from poor people, who are forced to spend 30–40 percent of their income on rent, compared with 19 percent in developed countries (ISTED 2005). Housing production is hindered by the very small incomes of the urban poor. Since the public sector cannot provide the required housing, and the formal sector does not find it profitable, most housing is produced by informal small developers in unplanned settlements. Accepting the concept of progressive housing, engaging informal developers, and reviewing the legislation that often pushes settlers to informality will help slum dwellers improve their shelter conditions.

#### Main Sources of Financing: Aid Donor Funding

Donor support plays a key role in urban upgrading. It provides cash for capital investment, as well as technical capacity and policy advice. Data from the World Bank and the Inter-American Development Bank, the two major donors, indicate that from 1992 to 2005, financial flows for slum upgrading and housing policy to-taled US\$11.7 billion (less than \$1 billion a year): \$6.7 billion from the World Bank and \$5 billion from the Inter-American Development Bank (table 14.6). In both cases, lending for shelter shifted over time from small loans to large-scale policy-related programs, such as those in Brazil, Egypt, Mexico, and Poland (Buckley and Kalarickal 2006). Housing has also become a growing line of business for private-sector development. The International Finance Corporation (IFC), for example, has undertaken 45 investments in housing projects, and the Multilateral Investment Guarantee Agency (MIGA) has been offering guarantees in the housing sector.

The Inter-American Development Bank (IADB) has focused on housing voucher programs and urban upgrading. From 1993 to 2005, the IADB approved 29 housing loans totaling US\$2.6 million and 36 slum upgrading projects worth US\$3.2 billion. Upgrading represented almost half of the portfolio, followed by develop-

Region	Slum upgrading	Sites and services	Housing policy	Housing finance	Disaster relief	Total	Percentage of total
Sub-Saharan Africa	42	16	2.5	17	2.9	81.3	1.2
East Asia	40.8	35.8	36.1	439.1	34	585.8	8.6
Europe and Central Asia	10.6	16.5	311	235	305	878.1	12.9
Latin America	129	0	657	1,585	397	2,773	40.8
Middle East and North Africa	94	358	48	290	550	1,341	19.7
South Asia	21	79	2.4	145	884	1,132	16.7
Total	337.4	505.3	1057	2711.1	2172.9	6791.2	100
Percentage of total	5	7.4	15.6	39.9	32	100	

TABLE 14.6					
World bank she	lter loans.	1992-2005	(2001	US\$ in	millions)

SOURCE: Data from Shea (2008).

ment of long-term mortgage credit, up-front demand-side subsidies, or vouchers to individual households. The Asian Development Bank supports technical assistance to establish housing finance entities and mortgage systems. Examples include projects in Vietnam, Mongolia, India, and Indonesia (Shea 2008).

Among bilateral donors, the U.S. Agency for International Development (USAID), the Swedish International Development Agency (SIDA), the German Agency for International Cooperation (GIZ), and the Spanish Agency for International Cooperation (AECI) have significant programs in slum upgrading, with USAID being the largest. From 1960 to 1993, USAID funded housing programs with more than \$110 million per year, mostly for low-income families. It also provided loan guarantees for housing in 44 countries. The Swedish SIDA, German GIZ and KfW Development Bank, and Spanish AECI have active programs focused on African cities, Central America, and select European countries. As a whole, less than 1 percent of the official development assistance finances upgrading.

Donors have also had a major impact in creating advocacy and financing agencies, such as Cities Alliance and the UN Slum Upgrading Facility. Both programs have been instrumental in raising awareness about the needs of the urban dwellers. Hundreds of cities have benefited from Cities Alliance assistance, including São Paulo, whose case is described later in this chapter.

#### From Land-Based Financing to Progressive Housing

#### LAND-BASED FINANCING

Urban land is a natural candidate to be taxed and to generate resources for shelter improvement. "Whenever the benefits of the project can be located within a certain

benefit zone, it is economically efficient to finance infrastructure projects by using the increases in the value of land that results from them" (Peterson 2009, 4). Land sales, value capture via land sale, sale of development rights, and impact fees are the instruments most used by large cities, such as Mumbai and São Paulo (using the sale of development rights). Chinese cities, such as Shanghai, use land sale proceeds to finance most of their infrastructure needs in combination with capital market funds raised through special financial vehicles. In the case of São Paulo metro station projects, the proceeds of the auction of building permits were directly channeled to improve infrastructure of slums around the new metro station.

Other approaches try to curb speculative profits associated with the increase in land values due to greater demand for housing (Smolka and Larangeira 2008). In the case of two projects in Colombia, Nuevo Usme in Bogotá and Gonzalo Vallejo Macro-Pereira (Rojas 2010; Smolka and Larangeira 2008), the city government acquired land to develop serviced plots for low-income housing projects and to gain control over the form of land use. Participating landowners share in the land-value increments generated by large-scale development projects, although less than the market-increase in value.

In Porto Alegre, Brazil, the Social Urbanizer project uses the expertise of informal developers (Rojas 2010). A Social Urbanizer is a registered private real estate developer that helps the municipality develop areas for low-income housing. The city purchases land from a landowner and allows the Social Urbanizer to sell pieces of land and provide infrastructure incrementally, at standards below the rest of the city, provided the plots are offered at affordable prices. The model has several advantages. Households obtain legal plots at prices similar to those they would pay for illegal occupation, and the landowner is not subject to illegal occupations. The city government profits from the difference between the sale value of the plot and the price it paid the landowner. These profits help to finance infrastructure in the new settlements.

#### PROGRESSIVE HOUSING

The concept of progressive housing is particularly suited to low-income residents and to cities in rapid expansion. Under this approach, residents are allowed to legalize their land plots even before they are fully serviced often with the help of informal developers. The best-known cases are the land subdivision programs in El Salvador and Pakistan. Progressive subdivisions in El Salvador began in the 1960s and now serve 60 percent of the new low-income households, selling from 5,000 to 8,000 lots per year. Seventy private firms operate in this market. These firms work with landowners to subdivide the land and serve as financial intermediaries with the buyers of the plots to be developed. Thirty-five percent of the parcel is reserved for public spaces and infrastructure; the remaining is divided into lots of 150–250 square meters.

In Pakistan, Saiban, a nongovernmental organization (NGO) created in 1997, works in partnership with the government to formalize illegal developers. It purchases and subdivides the land on a grid plan consistent with city zoning regulations and sells the plots to informal settlers. Households make a down payment of 20–40 percent of the total price (about \$175) and pay the remaining in

monthly installments over eight years. The success of the program has inspired other commercial banks to offer financial products to low-income residents (Azfar and Rahman 2004).

#### Helping the Demand Side: Housing Microfinance

Low-income households rarely can afford a market-rate mortgage for a completed house.<sup>1</sup> Mortgage lending remains limited to upper- and middle-income households with steady and verifiable incomes. As a result, the main funding sources for low-income households to acquire housing, besides their own savings, have been supplier credit or neighborhood money lent at expensive terms (10–20 percent per month) or the financing described above under progressive housing. In this context, housing microfinance is an efficient method to help low-income households access credit. By borrowing small amounts of money, households can progressively upgrade their house.

Typically, housing microfinance comprises small loans (from \$550 to \$5,000) of limited maturity (from six months to three years), generally without collateral. In Peru, where microfinance has developed quickly, housing microfinance loans average \$1,000, compared with the average subsidized mortgage loan of \$30,000. Mibanco, the market leader in the financing sector, is Latin America's largest microfinance institution, with 70,000 active borrowers. Other microfinancing housing institutions include the Fundación Hábitat y Vivienda in Mexico; financial cooperatives (e.g., Federal Credit Union) in Guatemala; commercial banks involved with microfinance, such as the BancoSol in Bolivia; and specialized microfinance banks, such as Tameer Bank in Pakistan (Chiquier 2009; Ferguson 2008a; 2008b).

In South Africa, the Kuyasa Fund, a nonprofit microfinance institution based in Cape Town, has reached more than 2,700 clients with a total of US\$1.8 million in housing loans. Grameen Bank in Bangladesh has delivered 600,000 housing loans since it was established. All these institutions show performance rates for their loans that exceed those of housing loans in the banking industry (Biswas 2003).

Sometimes housing microfinance is included as a component of neighborhood upgrading programs. In the case of the Local Development Program (PRODEL, Programa de Desarollo Local) in Nicaragua, small-scale community infrastructure projects are financed through small loans that range from \$200 for housing improvement to \$300-\$1,500 for microenterprises. In 2003, more than 11,000 loans were given out for housing. The beneficiaries are low-income residents: 70 percent have a monthly income equivalent to \$200 or less.

#### Collective Savings and Community Funds

While individual savings are generally small, collective savings have played an important role to link the poor and the financial institutions and provide funds for

<sup>&</sup>lt;sup>1</sup>In only a few countries, such as Mexico or Malaysia, have mortgage lenders reached moderate-income households (Chiquier 2009).

improved housing and infrastructure. Mitlin (2007) stresses the significance of savings as a key source of shelter investment for low-income housing. In Pakistan, South Africa, and Namibia, infrastructure has been financed by community savings collected by the people through NGOs.

Community funds encourage savings by establishing and strengthening local savings groups that provide collective finance for shelter improvement. They also leverage resources from the national governments and from foreign donors and can contribute to infrastructure development (Mitlin and Muller 2004). Slum Dwellers International (SDI) is a good example of a network that incorporates savings and lending activities for shelter improvement. From 1995 to 2010, SDI has become an international movement with affiliates in more than 12 countries. It has helped millions of households to access land and improved housing with small grants. Other examples include Cambodia Urban Poor Development Fund, the Bann Mekong (secure housing) in Thailand, the Community Mortgage Program in the Philippines, PRODEL in Nicaragua, and the Jamii Bora Trust low-cost housing scheme in Kenya (UN-HABITAT 2005).

Community funds in India and Thailand have grown substantially with the help of the central government and foreign donors. The Community-Led Infrastructure Financing Facility (CLIFF) in India is a fund capitalized by donors that provides support for community-initiated housing and infrastructure projects that have the potential for scaling up. The facility works with the National Slum Dwellers Federation and other large community organizations to increase access of urban poor communities to commercial and public-sector finance for medium- to large-scale infrastructure and housing initiatives. It provides bridge loans, guarantees, and technical assistance (UN-HABITAT 2005).

#### Helping Demand: Housing Subsidies

Housing subsidies are used by many countries to help households purchase or repair their housing. Subsidies can be used to help beneficiaries overcome constraints in accessing housing finance, notably providing assistance with down payments and improving loan-to-value ratios. Hoik Smit (2009) uses the distribution of income in Mexico to illustrate the large percentage of people that cannot be served by the formal banking and would need specific support through, for example, targeted up-front subsidies.

In some countries, housing subsidies represent a considerable portion of their gross domestic product (GDP). In 2002, Algeria and Iran spent 4 percent of GDP in housing subsidies, the same amount spent on education and health (Buckley and Kalarickal 2006). In Chile, housing subsidies have had a major role in the strategy to extend formal housing to low-income groups (box 14.1). Minha Casa Minha Vida, the Brazil national housing program, follows a similar approach. This national housing fund receives contributions from the central government and from state and local governments to take care of infrastructure, while a wide program of subsidies helps residents make down payments or pay lower the average loan cost. In Mexico, the Habitat program is financed as part of the Urban Poverty Allevia-

#### BOX 14.1

Chile: A housing policy focused solely on up-front subsidies

Chile is often considered a pioneer in the design and implementation of housing subsidy programs in Latin America (OECD 2007). In the last 30 years, Chilean housing policies have focused on a demand-oriented system of up-front and targeted subsidies aimed to promote home ownership and reduce the housing deficit (Cummings and Di Pasquale 2002). In the 1980s, 1990s, and 2000s, more than 55 percent of the units built each year had some degree of housing subsidies. Public provision programs, which were the main channel to provide housing to first income quintile, have gradually been eliminated in favor of beneficiary-based subsidies (figure 14.1).

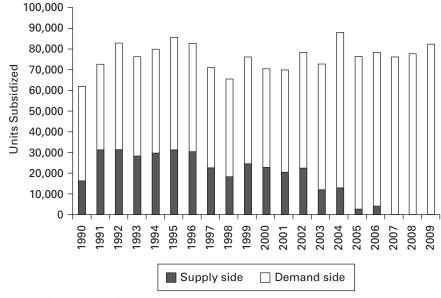
Until very recently, most programs favored the purchase of new units over existing ones, on the grounds that it would boost economic activity, increase employment, and ensure an increase in levels of home ownership.

That perception has now changed: since the end of 2006, second-hand units can be purchased through subsidized programs. In 2008 and 2009, 30 percent of the subsidies were used to purchase existing units.

This new strategy gives sellers the chance to move up the housing ladder, change neighborhood or city, or pursue other forms of investment with the product of the sale. It also provides the beneficiaries with more alternatives and adds value to a large portion of the housing stock that had been virtually absent from the real estate market.

#### FIGURE 14.1

Housing subsidies by delivery mechanism in Chile



SOURCE: Data from Burgos (2010).

tion Program (Oportunidades) and includes a large component of housing subsidies. It operates on a territorial basis, focusing on the city blocks with the highest concentration of poor families. Operated by the Social Secretariat since 2007, Habitat has been successful at integrating different social and urban policies and targets them to the poorest city blocks.

#### Raising Other National Resources: Provident Funds

Provident funds are long-term savings schemes that operate through mandatory contributions (Chiquier 2009). They collect mandatory savings from private and public employees as a percentage of their salary. Emerging economies often use provident funds to solve the problem of lack of medium-term funds in the economy. Some provident funds have been critical in housing development, notably in Singapore, Brazil, Mexico, the Philippines, and Nigeria.

In Brazil, most low-income housing finance is funded by the FGTS (Fundo de Garantia do tempo de Servico), which operates as a provident fund. FGTS collects 8 percent from all formal private-sector workers. These savings are held in individual accounts from which workers can withdraw money for home purchases. Since 2005, FGTS has steadily refocused its target group on the lower-income groups, with 77 percent of its loans going to households with incomes less than five times the minimum wage. It has stopped financing the upper income class and is now implementing a system of up-front subsidies for low-income groups within the large National Housing Policy in Brazil (Chiquier 2009). INFONAVIT (Instituto Fondo Nacional de la Vivienda para los Trabajadores) in Mexico has a similar profile to help contributors to access housing loans. INFONAVIT provides 70 percent of the subsidized housing mortgage. Provident funds need careful management and rigorous accountability to ensure proper targeting.

#### Private-Sector Involvement and Financing

Slums provide a large potential market for private-sector investment (in addition to the informal developers and land dealers that help slum dwellers invade land) (Baker and McCain 2009).

Baker (2008) reports that poor people "at the bottom of the pyramid with incomes less than \$3000 a year represent more than 4 billion people and more than \$5 trillion in purchasing power." Much of these earnings are generated in the informal economy, which in many countries represent up to 40 percent of the GDP.

One of the drivers of this trend has been the idea that the "bottom of the pyramid" represents a large untapped market (see Prahalad and Hart 2002). HSBC and CitiGroup have been among the first large international banks to seek new partnerships in this area. In India, ICICI (Industrial Credit and Investment Corporation of India) is extending a wide range of financial services to the poor. In other cases, partnerships are being developed with local financial institutions. The Home Finance Company Bank of Ghana is working with CHF International to create lowincome finance products including a home improvement finance product. Banks in Senegal have financed mortgages for low-income groups and public water supply.

Private firms also extend supplier credits (e.g., Patrimonio Hoy, the housing microfinance program of CEMEX Mexico) and mobilize capital through bond issues in the case of large metropolitan areas. FIRE-D, supported by USAID, helped the first and successful bond program (Moser 2006) issued by the Ahmedabad Municipal Corporation in 1998 to finance a citywide water and sanitation project that included the slum networking project Parivarta (Baker 2008). In 2005, eight

municipalities around Bangalore (Bengaluru) created the Greater Bangalore Water and Sanitation Pooled Facility, a typical metropolitan structure that combined the commitments of the eight cities. USAID has also created finance facilities, such as the Community Water and Sanitation Facility, to help the municipality access commercial finance for slum infrastructure and service expansion projects (Baker et al. 2005).<sup>2</sup>

Alternative arrangements may include private-sector developers and privatesector financing. The Oshiwara II slum upgrading project in Mumbai used a public/private partnership comprising the organizing NGOs (Society for the Promotion of Area Resource Centres and NSDF), a private-sector bank that provided construction finance (ICICI), and a guarantee for the bank loan from USAID's Development Credit Authority (Merryl and Suri 2007). In São Paulo, some of the recent urban upgrading has been tied to the development of commercial areas around metro stations and funded by auctioning and trading similar construction rights (*solo criado*).

Output-based aid subsidies have been effective to get the private sector involved in particular projects, notably in extending water connection to slums. Disbursements are made against performance targets, such as the connection of a given number of new customers to the electrical grid or water distribution network. Private providers must provide their own finance up front (in most cases) to meet the performance targets. Output-based aid has been particularly effective in extending water connections to slums through one-time network extension and connection fee subsidies, as is being done in Manaus (Brazil), Jakarta, Manila, Mozambique, Surabaya (Indonesia), and Ethiopia (Baker and McCain 2009).

#### Progression of Finance Instrument Use

In sum, depending on technical capacity and budgetary resources, cities and metropolitan areas can use different combinations of instruments. Figure 14.2 summarizes how the sophistication of the instruments can grow with technical capacity and financial resources available to the policy maker. For poor and low-capacity cities, slum upgrading programs will probably be financed by grants and federal funds. Community initiatives (e.g., in Dar es Salaam, Nairobi, and Maputo) will be important assets as well. As technical capacity improves and more financial resources can be mobilized, slum upgrading can be financed by microfinancing schemes, community credit, or national provident funds. At the top of the ladder are national housing programs linked to financial sector and subsidy schemes that help urban dwellers to leverage their savings and purchase or rent affordable housing.

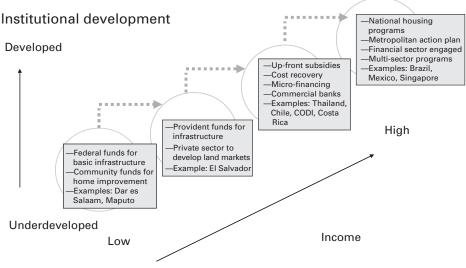
#### LEARNING FROM CONCRETE CASES

Preceding sections have reviewed various forms of slum improvement interventions and specific financing modalities employed in developing country cities. This

<sup>&</sup>lt;sup>2</sup>Ahmedabad's four municipal bond issues raised \$89.5 million from 1998 to 2006. The Greater Bangalore Facility raised more than \$23 million with the assistance of a \$780,000 partial credit guarantee from USAID, essentially mobilizing more than \$29 in domestic capital for every dollar donated (Baker et al. 2005; Peterson 2009).

#### FIGURE 14.2

Sources of slum upgrading finance



Abbreviation: CODI, Community Organizations Development Institute. source: Data from World Bank and UN-HABITAT (1999).

section explores the experience in five concrete cases involving different approaches, each successful in its own way.

#### Singapore

The case of Singapore illustrates how institutions, basic services, and connectivity work together to produce an inclusive city (Hui and Wong 2004).<sup>3</sup> At independence in 1965, 70 percent of the population lived in overcrowded areas, and one-third squatted in squalid and unsanitary slums (*attap kampungs*) with primitive sanitation. Unemployment was at 14 percent, and half of the population was illiterate. Water-borne illnesses such as cholera and dysentery were a perennial problem, largely due to lack of an adequate potable water supply. Tuberculosis was common because of congested living conditions and low standards of hygiene.

Since the 1960s, Singapore has pursued a vision of "shelter for all" that provides affordable, adequate housing to the poor, especially the lower-income families. Public housing was identified as the primary mechanism for housing delivery, based on the idea that housing is one of the most basic needs and is a merit service: it should be provided regardless of the ability to pay, and because of the limited capacity of the private supply to meet the quantitative and qualitative housing demand.

To achieve this vision, Singapore launched a comprehensive public housing sector development plan, covering institutions, financing, allocation, and rentals.

<sup>&</sup>lt;sup>3</sup>This chapter otherwise relies on Freire and Yuen (2004), Kallidaikurichi and Yuen (2010), and Wong, Yuen, and Goldblum (2008).

A law was passed regulating public housing delivery. As a result, within five years, 50,000 units of low-cost housing had been delivered. The building rate was 10 times faster than in the previous year. Forty years later, public housing is the predominant form of housing in Singapore: more than 85 percent of the population lives in publicly produced housing. A key factor that enabled such a large scale was the ownership of land; as in Hong Kong, more than half of the land in Singapore is state land, leased for 90 years to private owners.

The success of the Singapore large-scale upgrading was due to (1) good institutions, transparent governance, and commitment that led to a redevelopment of the center of the city; (2) steady financing streams fueled by a mandatory retirement provident fund; and (3) purchase of large portions of land. The success of Singapore also owes to strong political will combined with the technical and financial capacity to translate such will into urban plans sustained over a long time horizon.

Public housing estates were first developed in and around the central area, which reduced the dislocation of the households being resettled. Only incrementally did the public housing authority develop housing estates and new towns farther away from the city center. The first new town developed was located six to eight kilometers away. To compensate for the longer distance between their new homes and the city center, this new town was planned with a full range of neighborhood facilities and services, including public bus transport. Furthermore, the new town was located along highways connecting the town center to the city, thus facilitating relatively convenient and fast transportation to workplaces (Wong, Yuen, and Goldblum 2008). Eventually public housing spread throughout the city. All of the housing estates were connected to modern sanitation and sewage treatment works and to piped potable water and electricity. A solid waste management system was also provided. The public sector managed to buy more than two-thirds of the land in Singapore through the Land Amalgamation Act. This enabled development to occur without much speculation.

In the late 1960s, the city government introduced a financing system to help households buy public housing units through the use of a part of their mandatory retirement provident funds. The copayment scheme between state and homebuyers ensured financing for the housing program. In the beginning of the program, the homes built and bought were small. Over time, families moved to bigger apartments either because their wages increased or because children grew up and supplemented their parents' incomes. The proportion of residents living in smaller oneand two-room apartments declined to 5 percent in 2000, while those living in the larger four- and five-room apartments increased to more than 50 percent of public housing residents.

#### Hong Kong

Similarly to Singapore, Hong Kong is renowned for its extensive public housing program.<sup>4</sup> Since 1953, the Hong Kong government has supported public housing

<sup>&</sup>lt;sup>4</sup>This section relies on Hui and Wong (2004).

development through the direct injection of capital and indirect subsidies of land. It has financed the construction of more than 1.3 million domestic units under public rental housing and various subsidized-ownership programs, which now accommodate about half of the population in Hong Kong.

In 1973, the new Hong Kong Housing Authority (HKHA) received the responsibility for the provision, allocation, and management of public housing. With the participation of the private sector, HKHA has moved from a highly subsidized institution to a self-financed institution, as announced in the long-term housing strategy prepared in 1987. Under this new financial system, subsidies and cost arrangements have significantly changed. Financial subsidies have been introduced in the form of a home purchase loan scheme. It offers low-interest down payment loans to eligible applicants to encourage them to purchase private-sector flats. In addition, the HKHA implemented various measures to ensure a more efficient control over subsidies, construction, and estate management.

Since 1997, the HKHA has been working to respond to the government's ambitions to increase the home ownership rate and speed up the allocation of public rental housing by building more public housing and increase the quotas of the housing purchase loan scheme. Although there is no new funding from the city government, the HKHA started selling housing purchase loan schemes to the Hong Kong Mortgage Corporation to obtain more funds for the home purchase loan scheme. Moreover, the private sector has increased its involvement in estate management and development of public housing. Still, more than 30 percent of Hong Kong residents live in public rental housing.

The HKHA's major sources of funding are an annual grant from the city government and recurrent income through selling and leasing its properties. The government largely supports the finance of public housing: it offers land, loans, and capital to the HKHA, which is responsible for planning and implementing the development of public housing. The HKHA is the largest landlord in Hong Kong. In 2001, it received \$9.628 million from more than 660,000 rental flats totaling \$9,528 million (Hong Kong Housing Authority 2000). However, public housing rents are set at a subsidized level. Since 1988, when the HKHA became a self-financing institution, it started to raise funds by investing in the housing ownership system and other commercial/industrial properties. Leasing spaces for commercial use, at near-market price, has been effective in financing the budget and helps offset the deficit from its rented sector. HKHA also announced the tenants purchase scheme in 1997, where tenants can buy their own flats.

Hong Kong's success reflects the management of urban land as a source of revenues for the city and the value of having an independent housing company, which administers the land occupation and derives its finance power from managing the sector. As in Singapore, it also reflects the benefits of city planning and management that is independent from any higher-level authority. However, the beneficiaries of subsidized housing in Singapore have more freedom in buying and selling their houses than in Hong Kong, where restrictions imposed on subsidized rental units hinder the free flow of the subsidized units in the housing market (Wong 2011).

#### Indonesia: The Kampung Improvement Program

The Kampung Improvement Program (KIP) of Jakarta, also known as the Muhammad Husni Thamrin program, is considered one of the best urban poverty programs in the world, primarily for two reasons. First, the cost per person of investment in slum upgrading is one of the lowest on record (ranging from US\$118 in Jakarta to US\$23 in smaller cities). Second, it combined centrally funded infrastructure with local and community participation. This resulted in rapid scaling up to more than 800 cities and towns, benefiting almost 30 million people since 1989 (Surjadi and Haryatiningsih 1998). Community-based organizations were fundamental to preserving the identity of the housing conditions across Jakarta's large metropolitan area and to adapting upgrading from site to site across such a large city. The secret to this success was the use of community-based organizations as project initiators, which could encourage active, innovative, and self-sustained communities to undertake urban upgrading with the resources that were available.

The KIP program was supported by four projects of the World Bank. The first two concentrated on physical improvements; the third included a social/economic dimension. During its peak performance in the 1970s, KIP was able to upgrade up to 2,000 hectares per year. KIP played a significant role in improving the quality of life of slum dwellers. "It improved infrastructure, paths, lighting, and housing. Land values increased; drainage helped reduce flooding; and good institutions were created.... Residents are better educated and healthier, household size declined, more residents are employed and have greater income, and women have taken jobs" (World Bank 1995).

KIP's success was rooted in three factors. The first was the political will of governments and the engagement of community. With the improvement and provision of affordable infrastructure, the communities were encouraged to renovate and build their houses with only a little help from the government. Second, there was good management. KIP was managed under a special, multidisciplinary unit, comprising well-trained staff providing a wide range of skills needed in slum upgrading. The staff working in the project unit received higher wages than the average public official, in line with a more intensive workload. Third, the project had financial and management support from the World Bank. This support was essential to scale up the project and implement it in large cities in Indonesia such as Bandung, Surabaya, and Semarang, using a combination of funding sources, including local and national governments and the World Bank.

While KIP had a tremendous impact on the lives of millions of people, sustainability issues emerged early on (Serageldin, Kim, and Wahba 2000) and have since materialized as a significant problem. KIP performance deteriorated over time as the maintenance costs increased and there was no budget to maintain communal works and infrastructure. In contrast to the Singapore and Hong Kong models of slum improvement and public housing development, the KIP had not adequately addressed the challenge of fiscal and financial sustainability.

## *Dar es Salaam: The Impact of Community Participation at the Metro Level*

Dar es Salaam is a rapidly growing metropolitan area. It comprises three municipalities and a coordinating council, which has no authority over the other municipalities. All have very little budget. From 1948 to 2008, the population of the metropolitan area grew from 51,000 to 3.5 million. Lacking infrastructure, planning capacity, and resources, most of the new comers stayed in the fringes of the main city. In total, more than 80 percent reside in informal areas (Stren 2009). But contrary to the case in other slums, slum dwellers in Dar es Salaam have taken concrete steps to organize their communities and construct infrastructure or plea for better conditions and service delivery.

A positive aspect of Dar es Salaam is that most urban households enjoy relatively secure tenure. In 1983, all urban land was converted from freehold to government land with leasehold conditions. Subsequently, the government decided that all of those who occupy land can only be removed with an adequate compensation (Stren 2009).

In 1990, the World Bank financed a project to upgrade the poorest communities of the metro area in Dar es Salaam. The community was expected to help with project design and maintenance of the new facilities. The result has been encouraging. A recent assessment prepared by the World Bank (Stren 2009) concluded that the engagement of the community gave the population a great sense of ownership and provided incentives for the residents to contribute to the finance of the capital cost. Actually, each resident contributed about \$22; in total, residents contributed 5 percent of the capital cost.

As part of the project design, the community helped in the prioritization process. Residents identified the 30 wards (out of 310) that would receive priority investments and contributed to preparation of the plans. To ensure comparability across wards, capital costs were set at \$18,000 per hectare. The final version of the project was discussed with the communities.

The results have been remarkable. First, the project was a boost to the official approach that encourages slum dwellers (both house owners and tenants) to organize and obtain local services and infrastructure. Second, the project led to one of the most inclusive resettlement policies in Africa. The resettlement law was published in October 2008. It follows the guidelines and approaches of the World Bank resettlement policy (Stren 2009).

The case of Dar es Salaam shows how important it to have the participation of the community to identify priorities, raise funding, and supervise implementation of projects. Since most urban settlements in Dar es Salaam are informal, there are no income or consumption records and no way to prioritize the most needy. Using the community to help identify the families at risk was effective and accepted by the residents at large.

#### São Paulo: From Lack of Coordination to Improved Planning

The São Paulo metropolitan area, the largest city in Brazil with the most dynamic economy, has attracted a large number of migrants who settle in environmentally

precarious areas. The SEAD Foundation estimates that one-third of São Paulo inhabitants live in slum and informal areas. Since the 1970s, the city has developed important programs to deal with the slum problems (from provision of public housing to rental solutions, upgrading, and generous subsidies), financed by multiple sources, including federal, state, municipal, and international finance. Nevertheless, lack of coordination across city programs and absence of coordination across metropolitan jurisdictions lessened the impact of the programs. At present, São Paulo has four agencies in charge of slum upgrading: Caixa Economica Federal, the official bank, the municipal housing secretary, the state housing secretariat, a housing cooperative, and several institutions in charge of managing funds, including the State Housing Fund. There is no metropolitan or citywide plan, and each agency has its own budget, programs, and clients.

The World Bank (2007) report on São Paulo suggests several low-income housing policy issues. First, the city policy is biased toward finished units (rather than basic units that can be completed by the residents over time) in an effort to relocate the people displaced from the catchment areas that provide most of the water to the city. No funds were allocated to encourage new low-income housing or progressive solutions, and the private sector has no particular role in the strategy. Second, the finished units are very expensive and require large subsidies to be affordable: from 70 percent to 90 percent of the unit cost. This leaves few resources to expand social housing programs. Third, the rental housing units built in 2005 are inhabited by households whose low earnings make it impossible for them to pay the rent that would finance maintenance of the units. Fourth, enforcement of land use restrictions is difficult for municipal authorities, and invasions of public land continue.

The authorities in São Paulo are aware of this situation and are making efforts to gather information on the types of slums and residents in the city, establish a database, and have information available to all actors in urban policy (Herling and França 2009). Given the number of institutions working in this area and the volume of resources, São Paulo should be able to upgrade the existing substandard housing stock while keeping pace with the new flows.

The positive experience with the development of a metropolitan program to improve urban settlements in two major water basins in São Paulo could serve as a model for doing so. The metropolitan region of São Paulo draws its water supply from environmentally protected suburban areas that have been occupied by informal settlements. To address this problem, the state government and the governments of nine municipalities in the São Paulo metropolitan region have implemented the Guarapiranga Basin Environmental Cleanup Program, aimed to restore the water quality of this watershed. The overall program, which was supported by a loan from the World Bank, includes five subprograms: installment of water and sewer services; waste collection and disposal; urban upgrading; environmental protection; and management of the basin by tripartite committees composed of representatives of the state and municipal governments and private citizens.

This new institutional arrangement allowed the integration of different agencies that work on land and upgrading. From 1993 to 2000, 87 settlements (favelas and informal subdivisions) were upgraded, benefiting 38,000 families. The main idea behind the program was to move from a narrowly focused water infrastructure project to a comprehensive slum upgrading program that would engage the residents in the process of protecting the quality of the water services. The second phase of the program began in 2008 with the inclusion of the sensitive water supply area near the Billings reservoir, with the goal of upgrading 81 settlements, favelas, and informal subdivisions by 2012 (Herling and França 2009).

As a result of this experience, São Paulo has combined social inclusiveness and environmental sustainability goals. The Municipal Housing Plan uses the 103 hydrographic subbasins as the unit of intervention for the entire municipality, recognizing the presence of informal land subdivisions and assuring that environmental and slum improvement go hand in hand throughout the city (França 2000). As part of the effort to improve city planning, São Paulo has obtained a grant from Cities Alliance to monitor the development of slums and informality in the city, to develop a statistical database and provide a better basis for future planning and interventions.

## CONCLUSIONS: THE PILLARS OF SUCCESSFUL SCALING UP OF SLUM UPGRADING

Past experience suggests that success depends on several factors, notably the capacity of the urban government to finance infrastructure and deliver basic services and the capacity of the slum dwellers to mobilize resources to improve their dwellings. Experience has also shown that while small projects may be more successful and easier to implement, they cannot accommodate the needs of the rapidly growing urban population in many developing countries. To upgrade the current stock of slum dwellings and to prevent further slum development, integrated metropolitan planning should cover problems across urban and peri-urban areas and address multijurisdiction issues such as transport connectivity, water supply, and environmental cleanup in connection with slum upgrading. Table 14.7 provides a useful list of action items extracted from UN-HABITAT experience.

In addition, eight pillars for successful slum upgrading can be identified from the experiences reviewed in this chapter.

- Political will and good governance are key for successful upgrading. For many years, slum upgrading was small scale, neighborhood specific, and ad hoc. The creation of Cities Alliance and the work of international organizations (e.g., UN-HABITAT) have raised awareness concerning the need to scale up and design/implement nationwide comprehensive housing policies, with low-income housing at their core.
- It is critical to commit sufficient resources. UN-HABITAT estimates that \$500 per year per capita is needed for effective slum upgrading. Unfortunately, in most of the developing world, city expenditures are a fraction of that amount. Scaling up slum upgrading will take time. To complement taxpayer resources, several countries have established national housing funds. Homeowner purchasing power can also be raised with a combination of up-front subsidies, microcredit, and access to housing finance.

### TABLE 14.7The do's of slum upgrading finance

Ensure that financing for slum upgrading is recognized as a priority within national development planning and infrastructure plans.

Encourage local and international banks and micro finance institutions to become active participants in financing upgrading as part of their core business. Guarantee and technical assistance will make a difference.

Build investment in slum upgrading on a firm foundation of community based savings and loan systems and local authority commitments to provide in-kind and monetary allocations on an annual basis.

Recognize that financing for slum upgrading requires a mix of short-, medium-, and long-term loans, integrating finance for building, infrastructure and livelihoods.

Provide mechanisms to blend municipal finance, cross subsidies and beneficiary contributions to ensure financial viability of upgrading projects and home improvement programs.

Develop a process for sharing risk analysis and planning for risk mitigation and management with all the key stakeholders.

Plan projects on a mixed-use basis with revenue generating elements such as saleable residential units and rentable commercial space in order to maximize financial viability.

Recognize that not everyone who lives in a slum is poor. Where an area upgrading strategy is to be implemented provision needs to be made for a range of income groups with steps taken to ensure that the poorest are not excluded.

Recognize that home ownership is not the solution to everyone's problems. Provision for the development of affordable rental property is an important component of financing slum upgrading.

Make the real cost of finance very clear so that people clearly understand the commitments they are making to loan repayment. Don't hide the real cost behind misleading promotional messages.

Where appropriate establish local upgrading finance facilities so that funding is locally available. Ensure that subsidies are effectively targeted so that the benefits reach those for whom they are

intended and build on the basis of long term engagement.

Explore options to use land allocation, readjustment and sharing methods to release finance for upgrading.

SOURCE: The UN-HABITAT Slum Upgrading Facility Newsletter (April 2009).

- A land policy framework must be established, and the strict land regulations and zoning that limit the supply of serviced land must be addressed. If land supply is inelastic, as is often the case, any increase in the purchasing power of the slum residents will only result in higher land prices, offsetting the impact of the subsidy policy.
- Connective infrastructure should enable the poor to have access to labor markets and to enhance the metropolitan labor market. Most urban upgrading packages include water, sanitation, and paved roads. Urban transportation is crucial to enable slum dwellers to access the labor market and connect with the formal economy.
- Participation of local communities will help assemble resources for basic infrastructure (as in Tanzania). Community participation is key to prioritize needs, identify recipients of assistance, raise communal funds needed for infrastructure, and ensure maintenance of new investment.

- Slum upgrading should include income generation components to enable households to finance their own shelter improvement and ensure the sustainability of the provision of basic services (Rojas 2010).
- Subsidies should be targeted to those who cannot afford to pay for housing improvement or services. Given the lack of data, information from the community and local government is crucial to identify individuals at risk.
- The influx of new settlers should be included in the plan. Because of the high costs involved with remedial strategies, preventing new slum formations has become the new mantra of urban planners. The best way to avoid slums is to ensure that land markets and solutions are available to all levels of income. This implies helping small credit and neighborhood schemes, microfinance, progressive housing, and small saving schemes (Rojas 2010).

Slum upgrading fails mostly because of a lack of realistic plans that take into account the financial and political constraints in providing affordable housing to the poor. In most cases, slum upgrading focuses on a small part of the population at risk, letting slums mushroom in other parts of the city. Investments in basic infrastructure are equally urgent, but preserving a share of city budget to extend basic services to slum areas is often an uphill battle. Even with political will, the mismatch between the needs of the increasing population and the lack of resources at the metropolitan level will lead to years of inadequate services and low living quality. The good news is that the accumulation of good experiences and the awareness that combinations of public, private, and community-based solutions can produce win-win outcomes for all stakeholders will lead to a concerted effort to improve the lives of the urban poor.

#### REFERENCES

- Annez, Patricia, Alain Bertaud, B. Patel, and V. K. Phatak. 2010. Working with the market, approach to reducing urban slums in India. Washington, DC: World Bank. (November).
- Azfar, Asad and Aun Rahman. 2004. Acumen fund and housing the urban poor. Available at http://www.acumenfund.org/uploads/assets/documents/saiban\_study\_9EHCYHWl.pdf
- Baker, Judy. 2008. Urban poverty: A global view. Urban Paper No. 5. Washington, DC: World Bank. (June).
- Baker, Judy, R. Basu, M. Cropper, S. Lall, and A. Takeuchi. 2005. Urban poverty and transport: The case of Mumbai. Policy Research Working Paper No. 3683. Washington, DC: World Bank.
- Baker, Judy, and Kim McCain. 2009. Private sector initiatives in slum upgrading. Urban Paper No. 8. Washington, DC: World Bank.
- Biswas, Smita. 2003. Housing is a productive asset, housing finance for self-employed women in India. *Small Enterprise Development* 14:1–49.
- Buckley, Robert, and Jerry Kalarickal. 2006. Thirty years of world bank shelter lending: What have we learned? Washington, DC: World Bank.
- Burgos, Slaven Antonio Razmilic. 2010. Property values, housing subsidies and incentives: Evidence from Chile's current housing policies. Master's thesis, MIT. http://dspace.mit .edu/bitstream/handle/1721.1/62112/708579235.pdf?sequence=1

Chiquier, Loic. 2009. Housing finance. Washington, DC: World Bank.

Cities Alliance. 1999. Cities Alliance for Cities Without Slums. Washington, DC.

- Cummings, Jean, and Denise Di Pasquale. 2002. The spatial implications of housing policy in Chile. In *Chile: The political economy of urban development*, ed. Edward L. Glaeser and John R. Meyer. Cambridge, MA: Harvard University Press.
- Ferguson, Bruce. 2008a. Market based models for land development for the low/moderate-income majority. *Global Urban Development* 4(2). http://www.globalurban.org/GUDMag08Vol4Iss2 /FergusonMarketBasedModels.htm
  - -----. 2008b. A value chain framework for affordable housing in emerging countries. *Global Urban Development* 4(2). http://www.globalurban.org/GUDMag08Vol4Iss2/Ferguson ValueChain.htm
- França, Elisabete. (2000). Guarapiranga: Urban and environmental recovery in the municipality of São Paulo. São Paulo: M. Carrilho Arquitetos.
- Freire, Mila, and Belinda K. P. Yuen, eds. 2004. *Enhancing urban management in East Asia*. Aldershot, U.K.: Ashgate.
- Herling, Tereza, and Elisabete França. 2009. Social housing in São Paulo: Challenges and new management tools. Washington, DC: Cities Alliance.
- Hoik Smit, Marja. 2009. Housing subsidies. In *Housing financing*, ed. Loic Chiquier. Washington, DC: World Bank.
- Hong Kong Housing Authority. 2001. Quality housing: Partnering for change. Annual Report on Enhancing Public Housing Quality. Available at http://www.housingauthority.gov.hk/eng /ha/ephq0001/pdf/ereport.pdf
- Hui, Eddie C., and Francis Wong. 2004. The Hong Kong Housing Authority and its financial arrangement over the past 50 years. Hong Kong: Hong Kong Polytechnic University.
- ISTED (Intitut des Sciences et des Etudes de Developpement). 2005. Emerging cities, keys to understanding and acting. www.villesendevenir.org
- Kallidaikurichi, See, and Belinda Yuen. 2010. Developing living cities, from analysis to action. London: World Scientific Publishing Company.
- Kessides, Christine. 1997. World Bank experience with the provision of infrastructure services for the urban poor: Preliminary identification and review of best practices. http://siteresources .worldbank.org/INTEMPOWERMENT/Resources/10142\_urban.pdf
- Mayo, Stephen. 1991. Housing policy and housing research: The view from the World Bank. *Housing Finance International* (December).
- McGee, T. G. 2005. Urbanization takes on new dimensions in Asia's population giants. Population Reference Bureau. www.prb.org.
- Merryl, Sally, and Ajay Suri. 2007. Low income shelter finance in slum upgrading. Washington, DC: Urban Institute.
- Mitlin, Diana. 2007. The role of collective action and urban social movement in reducing chronic urban poverty. Working Paper No. 64. Manchester, U.K.: Chronic Poverty Research Centre.
- Mitlin, Diana, and Anna Muller. 2004. Windhoek Namibia: Towards progressive urban land policies in South Africa. *International Development Policy Review* 26(2):167–186.
- Moser, Caroline. 2006. Asset-based approaches to poverty reduction in a globalised context. Global Economy and Development Working Paper No. 01. Washington, DC: Brookings Institution.
- Peterson, George. 2009. Unlocking land values to finance urban infrastructure. Washington, DC: World Bank.
- Prahalad, C. K., and Stuart Hart. 2002. The fortune at the bottom of the pyramid. *Strategy +Business* 26:54–67.
- Rojas, Eduardo. 2010. Building cities, neighborhood upgrading and urban quality of life. Washington, DC: Inter-American Development Bank.
- Seetharam, Kalindakunri, and Belinda Yuen. 2010. Developing living cities: From analysis to action. London: World Scientific Publishing Company.
- Serageldin, Mona, S. Kim, and Sahah Wahba. 2000. Decentralization and urban infrastructure management capacity. In *Third global report on human settlements*. UN-HABITAT.
- Shea, Michael. 2008. Multilateral and bilateral funding of housing and slum upgrading development in developing countries. Washington, DC: International Housing Coalition.

- Smolka, Martin, and Adriana Larangeira. 2008. Informality and poverty in Latin American urban policies. In *The new global frontier*, ed. Gordon McGranahan, George Martine, Mark Montgomery, and Rogelio Fernandez-Castilla. London: Earthscan.
- Stren, Richard. 2009. Community infrastructure upgrading program case study: The case of Dar es Salaam. Washington, DC: World Bank.
- Surjadi, Charles, and Darrundono Haryatiningsih. 1998. Review of Kampung Improvement Program Evaluation in Jakarta. Final Report for UNDP/World Bank Water and Sanitation Program by the Regional Water and Sanitation Group for East Asia and the Pacific. Jakarta: U.N. Development Programme/World Bank.
- UN-HABITAT. 2005. Financing urban shelter: Global report on human settlements. London: Earthscan and UN-HABITAT.
- U.N. Millennium Project. 2005. Investing in development. A practical guide to achieve the Millennium Development Goals. London: Earthscan.

Wong, Richard. 2011. Public policy in Hong Kong and China. Unpublished manuscript.

- Wong, Tai-Chee, Belinda Yuen, and Charles Goldblum. 2008. Spatial planning for a sustainable Singapore [e-book]. Springer.
- World Bank. 1993. Housing: Enabling markets to work. Washington, DC.
  - ——. 1995. Kampung improvement programs. Impact Evaluation Report No. 14747. Indonesia Urban Projects. Washington, DC: World Bank (June 29).
- ——. 2007. São Paulo: Inputs for a sustainable competitive city strategy. Report No. 37324-BR. Washington, DC.
- . 2008. Reshaping economic geography. World Development Report. Washington, DC.
- . 2010. Africa's infrastructure a time for transformation. Washington, DC.
- World Bank and UN-HABITAT. 1999. Cities alliance for cities without slums: Action plan for moving slum upgrading to scale. http://web.mit.edu/urbanupgrading/sponsor/ActionPlan .pdf