

CHAPTER 2

# Water, Sanitation, and Shelter: A Fresh Look at Finance

for hundreds of millions of people around the world, access to toilets is a luxury and obtaining water for drinking and cooking is an arduous chore. The good news is, as World Bank president Robert Zoellick noted in 2007, global economic forces have lifted some 300 million of the poorest citizens of the world out of extreme poverty since 1990. As he quickly added, however, those forces have left a billion behind. But that billion is just the number of people living in the most primitive conditions on the planet. As much as half the world's population, about 3 billion, subsists on less than \$2 (U.S.) a day.

A new look at the role of finance could help increase access to clean water, sanitation, and decent shelter for many. Much heralded for its success in assisting individuals in starting small enterprises, microfinance has also become an effective tool in improving housing with modest investments. Similar approaches taken to larger scale and using the collective assets of organized communities also hold potential for closing the gap on access to water and sanitation.

Over the previous century, the world's leading donor organizations focused on the poor in rural areas. Today, however, with the rural poor migrating to metropolitan areas in vast numbers and with the majority of the world's population now living in urban settings, the new planetary challenge is how to make cities livable for all people. "Many in the world might say, 'Poverty is sad—but the poor will always be with us,' and move on to the next problem," notes Mila Friere, senior adviser to the World Bank's Sustainable Development Network. "However,

not a crisis for  
the poor alone

enormous  
benefits for  
everyone

this is not a crisis for the poor alone. Carrying the economic burden of large concentrations of urban poor will be an expensive mistake for all of us. Conversely, stemming the trends that contribute to urban poverty can bring enormous benefits for everyone—in better health, less damage to the environment, better political stability, and higher economic productivity in the most fragile parts of the world.”

Friere’s statement, early in the discussions of the Rockefeller Foundation Global Urban Summit at Bellagio, set the tone for this extended dialogue: First it was a remarkable comment coming from a leader of an organization that has long focused mostly on rural, not urban, challenges; second, her forthrightness underscored both the threat from inattention and the rich opportunities in taking action to meet the basic needs of the urban poor of the Global South.

loss of  
potential  
productivity

The threat is serious. If the world allows a majority of the earth’s increased population to be stuck in squalid conditions, deprived of basic necessities, and cut off from reasonable access to mainstream jobs, what outcome is possible other than a huge loss of potential productivity, at best, and rampant social and political instability and environmental disasters, at worst?

It is important to understand that making necessary change need not be about giving handouts. All over the developing world, examples are emerging of poor people who are channeling their assets and aspirations into improving their living conditions by pooling local savings and showing powerful social cohesion to thwart the forces blighting their

communities. But until this commitment among poor people is connected to larger sources of capital than today's meager communal savings, all efforts to mobilize their communities could be wasted.

microfinance

In order for microfinance and similar approaches to significantly improve access to shelter, water, and sanitation, however, mind-sets must change. People who control the flow of capital—from political leaders to banking officials—must recognize that change cannot be only top down. Financing the basic necessities for the least well-off communities must start with intensely local initiatives. The next step is where the finance community enters: making more adaptive credit formulas—not more lax credit formulas, simply nimbler.

innovative  
financing  
methods

Not only are the poor not helpless, but assisting them in financing their basic needs can be a profitable venture for investors. Innovative financing methods, ripe for greater awareness and support, are poised to be taken to scale. And with economic challenges so severe and widespread, taking these new finance models to breathtaking scale is critical.

### the challenge: enormous and still growing

Across the globe, the trend toward urban living shows no signs of a slowdown. According to U.N. estimates, more than 90 percent of the unprecedented urban growth projected by 2030 will occur in cities in the developing world, the Global South. In Asia and Africa, where nearly 40 percent of people now reside in urban areas, a majority will live in cities by 2030.

Asia already has the largest total number of urban residents, while Africa is the fastest growing. By 2030, the world will have more than 2,000 urban regions with populations more than 1 million apiece.

As people flock to cities for a better life, urban infrastructure and government cannot cope. Already hundreds of millions inhabit what officials politely call informal settlements known as slums by those who live in them. The world's slum population is growing at a rate of 25 million a year. Half the burgeoning urban population of Asia, Africa, and Latin America live in these areas, where families are squeezed into small spaces with dirt floors, sheltered by scrap siding and makeshift roofs. Many women must take a long, perilous journey for a single bucket of water. Limited or no access to toilets results in streams of raw sewage along narrow dirt paths between shanties; in fact, UN-HABITAT estimates that up to 2.5 billion people do not have convenient access to toilets, even in urbanized areas.

Despite these squalid conditions, people continue to arrive in cities. "If the world is urbanizing," says Rakesh Mohan of the Reserve Bank of India, "it's because people think it's a good idea. And they are right: In general, despite the slums, despite the very poor state of many parts of cities, we find reductions in poverty and a continuous increase in access to services—electricity, water, health across the board. Even Mumbai pavement dwellers have access to municipal schools." Yet these families pay a heavy price in their housing quality.

usually  
an illegal  
settlement

They can only afford shelter in what is usually an illegal settlement, located on the least valuable land—often on a steep hillside or a floodplain, or in an industrial waste zone where few people would choose to live voluntarily.

stressful  
environment

This type of stressful environment defines life for many in Dhaka, the capital of Bangladesh, where large slum areas rest on a floodplain rife with factory waste water. In this city, 3.4 million people (out of the total population of 13 million) live in some 5,000 slum settlements. Sixty percent of Nairobi's citizens are packed into more than 130 slums squeezed into spaces that take up only 5 percent of the land. In Mumbai, home to Dharavi, the largest slum in the world, half the city's 11 million people live in slums, which are growing 11 times faster than the city as a whole. A hundred thousand or more of these people live without addresses—in the streets, alongside rail tracks, in trash dumps. And unlike the Mumbai pavement dwellers Mohan mentioned, sometimes children from Dharavi and other slums find that schools refuse to accept them. Officially, these residents do not exist.

entrepreneurial  
hustle

In amazing contrast, what also defines life in most slums is entrepreneurial hustle—people doing what they can with what they have. A mostly informal economy, even in a massively deprived slum such as Dharavi, creates locally made goods and services that are sold outside the slum. Many of the small enterprises, such as those making textiles or selling recycled goods, are actually registered businesses. And many inhabitants migrate every day to work as gardeners, nannies,

construction workers, or drivers for steady, if low, wages.

Many more work in the slum as seamstresses, carpenters, masons, and shopkeepers.

Not all the urban poor, of course, live in slums, and not all slum dwellers are equally poor. Indeed, in many of the favelas (slums) of Rio de Janeiro, the basics of electricity and water have become stable, along with a robust local economy. Drug lords may constitute the strongest local governance, but life is a far cry from the hardships of Kibera, Nairobi, where human feces in plastic bags thrown from windows and doors have given rise to its reputation for “flying toilets.”

no legal  
entitlement to  
secure tenures

Often with no legal entitlement to secure tenures, slum dwellers are evicted and must find other informal dwellings. This is sometimes because, whether inspired by civic reform or land speculation, cities bent on improvement slate slum areas for redevelopment. Recent proposals in Mumbai, for instance, suggest that new mixed-income apartments (sometimes viewed by slum dwellers as destructive to their existing communities), or even golf courses or a cricket stadium, would constitute a better use of land.

## back to basics

the world's  
abundant  
sources of  
capital

The core problem is that sanitation, safe water supplies, and decent shelter are not connected to the world's abundant sources of capital. Although links to creative small-scale financing structures do exist, a persistent gap lies between small-scale and larger capital flows. At the Global Urban

## Nairobi's Kibera

kibera — with a population somewhere between 400,000 and 600,000 and just one of some 200 slums in Nairobi, Kenya — illustrates the challenge of helping a community afford water, sanitation, and shelter. Nearly 1,200 people are crammed into each hectare; this means that a family of five has about nine square meters of space.

Most housing consists of tin shacks with mud walls. Pit latrines stand in for normal sanitation and each is shared by some 75 people. Aromas of open-air food preparation blend with the odor of human waste as plastic bags filled with feces litter dirt paths. Even if children were recognized as legal residents, sufficient space for them does not exist in schools they could reach. Ideas about upgrading are met with skepticism, with most people suspicious of being “upgraded” to homelessness.

Why does anyone stay? The lure of urban employment, even in the informal sector (such as street peddling), is strong for people whose earlier lives were mired in rural poverty. And where else would they live? Even basic and often substandard tenement housing costs nearly \$100 (U.S.) a month, close to a whole month's income for many families. Kibera housing may be illegal, but the rent is only \$12 a month.

Yet, as Kenyan Rasna Warah wrote for the WorldWatch Institute's 2007 State of the World book, this misery is mixed with “immense opportunity and enterprise ... where dreams of escaping poverty are first nurtured.”

## Mumbai: City of Contrasts

already home to more than 11 million people, Mumbai, India, is on its way to becoming the largest city in the world. Nearly half of its people live in slums, however, the largest of which is Dharavi, with a population of about 1 million. Unlike slums that crawl up hillsides at the edges of cities, this one is located in a planner's ideal spot for urban development: right between two principal train lines serving suburbanites' access to jobs, adjacent to Mumbai's new corporate center development, and close to an international airport. Dharavi's residents contribute much to Mumbai's robust economy. Many have mainstream jobs but cannot afford to live in the nicer parts of the city where Manhattan-like prices prevail, leaving an average of some 3,000 central Mumbai housing units vacant at any given time. Others toil as vegetable vendors, construction laborers, factory workers, and domestics — at wages that many would not accept.

Inside this slum, a thriving informal economy generates what is estimated to be about \$650 (U.S.) million a year in sales and exportable products. Slum dwellers excel in handcrafts, from creating leather goods and garments to pottery-making. Though many homes have electricity, boasting color televisions, DVD players, and stoves, rain turns dirt paths to slippery mud and the landscape is littered with trash and uncollected garbage.

Because Dharavi is centrally located, there are recurring efforts to redevelop the land. One such recent plan would displace 300,000 people on the promise of on-site relocation into very modest formalized tenement housing — but only for those families who can prove they took up residence in the slum prior to 1995. Dharavi residents, fearful of ending up displaced without being relocated and of having nowhere to restart local businesses, are resisting, demanding a meaningful voice in the redevelopment process.

Mumbai, already the commercial and cultural capital of India, continues its aspirational march toward becoming to India what Shanghai is to China. The city and the state of Maharashtra have committed some \$9 billion to improve infrastructure where slum dwellers live. The documented need, however, is at least \$60 billion.

Summit, participants explored ways to bridge this gap. That a major first step had already been taken, many noted, was apparent simply by looking around the room. Here in one place, all tackling the challenges of improving access to water, sanitation, and housing, was an unusually broad cross section of international experts: academic researchers and consultants from the field, NGO representatives and government officials, slum-based community organizers and, in especially large numbers, financiers. Summing up the feelings of many, David Smith, founder of the Affordable Housing Institute, remarked how pleased he was that the Summit had “succeeded in bringing all the tribes together for a whole week.”

These experts agreed that it is critical to intervene before slum dwelling becomes a permanent norm for urban living around the world. While they were eager to move from defining the problem to discussing potential innovations in financing the work that needs to be done, they began by sharing their basic analyses of the problems involved in providing water, sanitation, and shelter to the urban poor.

### water woes

There are only two certainties in the debate over water in cities of the developing world: one is that no one lives without water; the other is that there is no definitive count of how many people have difficulty accessing it today. Estimates, derived mostly from sampling with questionnaires, suggest that up to half the urban populations in Asia and Africa,

struggle for  
water

and a third of those in Latin America, struggle for water.

Some predictions indicate that there will simply not be enough water for the basic needs of these cities, owing to population increases, persistent pollution, and water that is wasted because of inadequate management.

Poor people in slums do of course find water. But it varies considerably in quality and often costs 10 to 20 times more than conventionally piped water. It is usually women in these settlements who are responsible for fetching water, which they must haul in metal or plastic containers as large as they can carry. Not only is this repetitive task arduous, but it can also be dangerous. “Even if you don’t care about women going 14 hours a day without a bathroom or risking rape by going out for water at night, you should care about the economic implications,” said civil engineer Barbara Evans, pointing to all the time and energy wasted every day by so many people in the recurring search for a life necessity taken for granted by so many others in the world.

When the United Nations’ Millennium Development Goals (MDGs) were adopted in 2000, the focus came squarely on water, which was identified along with sanitation as the key driver for lifting people out of the deepest poverty. Launched in 2003 at the Third World Water Forum held in Japan, the influential “Camdessus Report” pointed to the paltry share of national or even local budgets aimed at providing water and called for a doubling of capital flows for water. All sources totaled, though, show that the share of spending remains in the single digits.

How can this be, given how critical access to water is? Some experts believe that donor organizations are still making the transition from an emphasis on rural poverty to the mounting challenges of the urban poor. But scarce resources also reflect a crowded set of municipal priorities, caught in a maelstrom of financing needs. The result: Government fails to make water access important and the formal market cannot profitably serve the very poor without government support. Neither sector seems able or willing to pay to avert the gathering urban storm feeding off this neglect.

Even as most banks come closer to providing financing for housing, “water and sanitation are not equal priorities, often not eligible at all,” Ravinath Goonesekera, former mayor of Moratuwa, Sri Lanka, pointed out, lamenting the private sector’s general reluctance to pursue financing for water and sanitation projects. Where financing capacity exists, it largely comes from governments and large development banks.

This failure for water to be ranked as key is cruelly exacerbated by local governments’ inclination to ignore the existence of these poor settlements, said economist and urban planner Elliott Sclar. Sclar, director of the Center for Sustainable Urban Development at Columbia University, recalls traveling to large Latin American cities and finding that official maps had “grayed out” the slums. In Bangladesh, when a group of NGOs set out to connect a settlement in Dhaka to water points, the water authority took the position that service was simply not possible for residents who could not demonstrate any tenure rights.

No one suggests that solutions are simple, but the practices of many large state-protected water authorities appear to be part of the problem. On the outskirts of Lima, Peru, large water towers are emblazoned with slogans such as “Water is Health—Care for It.” Yet a million of the city’s 8 million people struggle to get daily water, and Sedapal, the state monopoly water company, presides over a distribution system that leaks 40 percent of the flowing water. Internet access is easier than tapping a share of water. To be fair, wasteful leakage is a widespread international problem, whether the water authority is public or private, large or small.

wasteful  
leakage

Anna Tibaijuka, executive director of UN-HABITAT, pointed out that often it is the local government authority that presents the biggest barrier to getting water to the poor. “How can you deliver water and sanitation,” she asked, “when you find that not only is 60 percent of the water being wasted but this high cost is unaccounted for?” Nonetheless, Tibaijuka added, there is a growing Water and Sanitation Trust Fund at work with some \$70 million in capital, connected to \$1 billion in follow-up investment with the Asian Development Bank and \$540 million with the African Development Bank.

Very poor, landlocked Burkina Faso in western Africa has a leading International Institute for Water and Environmental Engineering at its University in Ouagadougou. Though there are numerous water and environmental engineering programs based within African universities, this is a rare free-standing institute, training desperately needed engineers. Burkina Faso

training  
desperately  
needed  
engineers

## Regaining Dignity: Partnerships with the Poor

# Anna Kajumulo Tibaijuka



Undersecretary-  
General and  
Executive Director,  
UN-HABITAT;  
plenary speaker

my job with the united nations is to advocate for the urban poor across the world — a group growing rapidly in number, but still marginal for policy makers. Although to be poor in the countryside is hard, at least life can be lived there despite the difficulty. But to be poor in such growing Global South cities as Nairobi and Cape Town is to lose one's dignity as well.

Yet the process of urbanization is irreversible. Policies intended to send people back countryside have not worked anywhere. From record-breaking city populations of 1 million, the world has proceeded to megacities of 10 million or more and now faces the emergence of “metacities” of 20 million or more.

Poor women — often the first to stretch the limits of urban expansion as they move to cities seeking scarce work and housing — pose a special challenge, one which the UN-HABITAT foundation is currently targeting. Overcrowding is endemic. Slum dwellers are often there because they want to be close to central business districts and their employment possibilities. Try to move the poor out of the center of town and you'll meet resistance because, with their limited access to transportation, proximity is critical for them.

Access to basic water supplies and sanitation is another major issue. Too many cities disregard their basic responsibilities, often allowing most of their pumped water to be wasted. In many countries poor people, frequently obliged to buy potable water from vendors, easily pay 10 to 20 times more per liter than their wealthier neighbors. Because of this, they consume much less water, with malnutrition and disease an all-too-common consequence. Too many municipalities provide services to exclusive suburbs near city centers, while making no provisions for the poor.

For too long, the urban poor have been obliged to work hard while earning little because institutions — bureaucratic systems, harassment, municipalities that allow houses to be built in vulnerable places — disregard their legitimate needs and aspirations. We must begin to view the urban poor as an asset. We must find innovative ways to form partnerships with the private sector, use international capital to leverage domestic savings of hard-working poor people, and recognize that combined economic potential.

Even in the World Bank and the United Nations, we continually have to combat the mind-set that marginalizes urban issues. But the good news is that slum dwellers are gaining ground in getting economic recognition.

also has a sophisticated public–private partnership in place to improve access to water, but it runs into both financial and cultural barriers. Field researchers report that people resist paying for clean water and say they prefer the taste of the water they know, even though it is neither safe nor convenient.

Cost certainly is an issue. Burkina Faso illustrates at least one dimension of the African problem. Its government spends a little more than \$13 million a year on water resources (and about \$4 million more on sanitation). To meet its share of the MDGs for 2015, that figure would need to be \$116 million. In the Global South, 10 million more people gained access to clean water between 1900 and 2004, but over the same period, the absolute number of people in dire need grew by an additional 60 million, a clear sign that the world is losing this race against time.

gained access  
to clean water

So what does providing water cost? In a briefing paper provided to panelists, Catarina Fonseca, of the International Water and Sanitation Centre in the Netherlands, cited a recent study that yielded a range of estimates, depending on the type of water provision and the geographic location of the proposed distribution system. Generally the cost for getting water to each household site ranged from \$100 to \$214 (or twice that if the system were built where no water provision existed before). Costs were a lot lower, according to the Global Water Partnership, if the provision was limited to a standpipe convenient for people to use as a communal source. Those costs, if shared by benefiting households, were \$33 to

\$69 per household with annual operating costs of only \$8, versus \$32 for the household connection.

### sanitation, a similar story

Although the developed world has grown accustomed to private indoor toilets over the past century, for some 2.6 billion of our fellow human beings—both urban and rural—this now routine accommodation remains only a remote possibility. A majority of cities in the developing world have no sewer systems. A 2006 U.N. Human Development report provides this range of cost estimates for various sanitation approaches:

no sewer systems

(U.S. dollars)

a communal toilet or latrine (cost per person)	\$ 12–40
a basic sanitary latrine	\$ 10–50
an improved latrine or in-home pour-flush toilet	\$ 40–260
a community-managed network of sewer pipes	\$ 40–300
a flush toilet connected to sewer or septic	\$ 400–1,500

Consultants in the field have in fact long been intrigued by the possibility of a community network, through which local citizens participate in setting up and managing a system of sewer pipes. They tell and retell the story of the 1980 Orangi Pilot Project, in Karachi, Pakistan, an early experiment in which good quality sewers were installed, serving each house. Those benefiting took responsibility for planning, financing, overseeing construction, and managing the care of the internal pipe system that connected to the government's drains. Costs were a fifth of what the official agency would have charged.

That network now serves hundreds of thousands of people, noted Gordon McGranahan and David Satterthwaite, both affiliated with the London-based International Institute for Environment and Development, in the Worldwatch Institute's 2007 State of the World. Attempts to replicate the Orangi results, however, have seen mixed outcomes.

Studies conducted by the United Nations estimated that creating a formal sewer connection would cost from \$24 to \$260 per person served, per year. An installation as sophisticated as a septic tank would cost \$799 a year for every person who benefited. That makes pit latrines a more practical solution for most settlements. Without any running water but enclosed and presumably safe and sanitary, these latrines cost between \$11 and \$54 per person per year. Since some of this cost is paid to the slum dwellers themselves for running and cleaning their latrines, this process recycles money back into the local economy.

Even at the latrine level, however, cost remains a major barrier, along with the inertia born of entrenched habits developed while living without toilet facilities. Diarrhea, hookworms, and skin boils are a consequence of the absence of toilets as fecal matter seeps into the soil and streams, noted Ravi Singh, of Hasanpur, India, in a September 2007 Los Angeles Times article. Though Singh holds no official position, he has become a self-appointed guardian of better sanitation habits. Some 700,000 Indians die each year of diarrhea, most of them under the age of five, according to a 2002 report by the World Health

Organization. Yet, Singh said, when latrines are installed, the long-standing habit of defecating outdoors dies hard. Coping mechanisms developed in the face of the persistent inaccessibility of sanitary, safe, and convenient facilities are not easily relinquished. Singh's solution: shame. He uses a whistle and, at night, a flashlight. Progress may be slow in places where the practice of defecating and urinating outdoors in public is not yet taboo. But without the provision of adequate facilities, no progress is possible at all.

Hundreds of millions of people suffer from disease related to unclean water or lack of sanitation, and U.N. studies catalog a million or more children who die every year as a direct result of inadequate water and sanitation. The death rate of children under the age of 5 is already ten times higher in the developing world's cities than in cities of the developed world; in the worst urban conditions, 15 percent of children die before their fifth birthday. Regardless of whether cost or custom is the main barrier, the conditions in which too many people live are simply unacceptable.

### shelter: from shacks to houses

Already an enormous problem around the world, the lack of adequate shelter worsens every year with rapid population increases. Although new housing is continually built, the formal housing market does not stretch to the most shelter-vulnerable. Filling the void are the many irregular, informal settlements in cities, where the birth rates remain high and

rural migration continues unabated. Here a house is an incremental investment. It starts as one room; over months and years, another is built on. As rooms are added, more families are housed in the same dwelling. When the house reaches three or four rooms, one of the families has often become landlord to two or three others.

These shacks are often improved: When people are able, they add real floors over the dirt and durable walls and roofs, install a basic kitchen, and, if water is available, a tap and a toilet. But these costs are many multiples of residents' incomes, and there is no functioning long-term formalized mortgage market for slums. This is not because these potential customers are uninterested in financing their homes, but because of financial obstacles. (Of course, ownership is not the only option, and often not the best one. But renting can be just as costly.) If the landlord has no written title, if the structure is not formally registered, if the building does not meet code, a lender has no hard collateral. If the borrower has no formal income, is paid in cash, or perhaps has no birth certificate, there is no payment record to create a credit history. Add to these challenges the very small size of loans and formal lenders often just give up because the loans they can make still seem too costly for the poor to repay. So the urban poor build their homes one wall at a time, cement block by cement block.

no written title

Meanwhile, even as it is hard to expand supply, slum dwellers have minimal income available to pay for housing. The result: families crowded into extraordinarily tight spaces,

often only a single room for every function and every person. And, absent some serious intervention, why would anyone expect this pattern to change? As Affordable Housing Institute founder David Smith put it, “Slums are economically rational. They always come into being in rapidly urbanizing environments—unless people do something to change the economics.”

Slum living means loss of privacy and dignity. It also means constant health threats as anyone’s disease becomes everyone’s problem. Sleep quality suffers, so daily productivity is limited. In communities with open sewers, contaminated water, and exposure to industrial waste, public health declines.

Those U.N. Millennium Development Goals so proudly adopted in 2000 include one that commits the world to improving the lives of 100 million people who live under these conditions—by 2015. Compared to the size of the problem, the goal was not considered very ambitious. Analysts now argue over whether this limited goal has been largely realized, as communities and governments and donor organizations have worked diligently on assistance. One Global Urban Summit panel suggested keeping the emphasis on the core of the goal, to improve the lives of 100 million slum dwellers, but noted that we must also get serious about alternatives to new slum formation—a challenge that relies on better systems of finance.

### making the poor profitable

Governments, investment communities, and donor organizations must learn from small-scale experience and adapt finance

## Rays of Light

the challenges of urban poverty in the Global South are so massive that there is a natural temptation to despair and suggest the problem is just too big, with any possible interventions too little or too late.

But defeatism may be as unnecessary as it is ill-advised. There is evidence that governments enlisting the appropriate partners can slow, if not reverse, the trends toward urban slums.

Brazil, Mexico, South Africa, Thailand, and Tunisia stand out for their commitments to upgrading service provision to slums, according to UN-HABITAT. Smaller countries, such as Ghana and Morocco, have also stepped up their action programs. In sub-Saharan Africa, Burkina Faso, Senegal, and Tanzania have reformed policies governing land and housing. Morocco has publicly declared its intention to be slum-free (“Villes sans bidonvilles”) by 2010, and is backing this promise up with a bold program of social housing construction.

All such programs, of course, depend on good governance: respect for the rule of law, reasonable transparency, and accountability. The upgrading of the favela Bairro in Rio de Janeiro is entirely traceable to the institutional structures now built up for efficient service delivery, according to the UN-HABITAT report on the State of the World’s Cities.

Critical to all necessary advances are government leaders who care about the success of their entire societies.

practices to address the difficult circumstances of the urban poor. The first step on the path of progress is acknowledging the assets of these communities: the resourcefulness of the people, their aspirations for improvement, and, yes, even their savings rates, which tend to be proportionately higher than rates for the middle and upper classes. The industrious and organized poor in these communities are fully capable of participating in for-profit financial structures.

As UN-HABITAT executive director Anna Tibaijuka said, housing studies in places such as the slums of Nairobi show that some 80 percent of residents are renting, often at high rates. Still, individuals and, even more important, the collective community, have assets—most notably the enterprise, drive, and intelligence of the slum dwellers themselves.

As World Bank Sustainable Development Network senior adviser Mila Friere noted, “We are emerging from an era of trying things that did not work well—interventions that were top-down, hierarchical, bureaucratic, the kinds of processes that the middle and upper classes are accustomed to navigating.” Gradually replacing this mentality is an appreciation of the social and knowledge capital inherent in the collective assets of a community—however poor its citizens may be. “This is a new thought for some in the finance world,” said Bruce Cameron of the Overseas Private Investment Corporation. The social cohesion of a community, he said, becomes “the first line of collateral and in turn leverages some ‘free’ money [donor capital], which starts up the ladder toward serious market capital.”

collective  
assets of a  
community

Changing  
the finance  
equation

Changing the finance equation by starting with community organizing has not yet caught on among financial institutions, where, as Joel Bolnick, director of the Community Organisation Resource Center, in Cape Town, South Africa, explained, “If you say ‘community organizing’ or ‘political capital,’ they hear ‘confrontation’ and ‘ideological activism.’ What they miss is the power of monetizing the social capital of the community.” When 5,000 families put their collective savings on the table, they demonstrate not only some economic equity but also community organization and political activism. They become a body large and capable enough to sit across the table from government and the private sector. The result can be a real transaction.

don't trust  
each other

Rose Molokoane, a grassroots activist on the board of Shack/Slum Dwellers International, is involved in housing and tenure issues in many international cities. Referring to poor citizens and banking institutions, she admitted, “Well, it’s true that we don’t trust each other. We go to banking institutions who say we cannot get loans by pooling our resources.” Affordable Housing Institute’s David Smith added that the problem is compounded by all “the Stone Age financial forms” that remain the currency of real estate transactions all over the world, with down payments, amortization schedules, and reams of paperwork for every detail. Or, in the words of Alfredo Stein, a veteran urban development specialist in Latin America and Africa, “It’s men in dark suits behind desks requiring forms and avoiding risks.”

## community cohesion as capital

So how is this culture changed? One starts, argued Stein, with changing the culture of financing institutions to respect the assets the poor have, especially their ability to save and make their payments. “When they are screening for a loan,” he said, “they should pay attention to whether it is a woman applying because they are the best payers and that should earn points, and they should look at the whole household, the collective income.”

Mary Mathenge, the chief executive officer of Kenya’s National Cooperative Housing Union, said this is a matter of “making the communities themselves responsible.” Smith agreed but, like Stein, emphasized that credit should also turn on individual reputation. Rather than rely on some computer-generated rating, he suggested, ask people in the community, “What do you think about Pablo?”

## shelter financing solutions

Mortgage finance. The standard financing approach is not impossible to use, but is difficult for the poor in most of the developing world. Many cities lack formal registration systems for titles, even if the poor can demonstrate the rights of ownership. Besides, mortgages are rarely issued to people whose incomes do not come from the formal employment sector. In her extensive briefing to the Global South assembly, Diana Mitlin, an economist with the International Institute for Environment and Development

thanks to  
their savings

and the University of Manchester, emphasized the proportional size of the informal economy in Africa (41 percent), Latin America (42 percent), and Asia (26 percent). Plus, as Mitlin added, low-income residents typically do not finance an entire house. In the developed world, a house is a finished product before it is occupied; in the Global South, the house is occupied long before it is ever finished. The incremental improvements residents make are largely thanks to their savings. In India, she said, more than 80 percent of housing finance comes from family savings and nonformal sources of credit. A study of 53 households in a favela in Rio de Janeiro found none using a bank for housing; 60 percent were using savings. In Angola less than 2 percent of housing investments came from banks.

Panelists generally agreed that up to now mortgages play a very small role in financing shelter for the urban poor, but, as a strategy, it shows up on every list in the hope that more imaginative approaches will emerge to better serve people with limited resources.

Social housing. Some Global South nations are exploring direct government provision of “social housing,” a system of subsidies and direct government construction, development, or ownership. This is used in Chile, Costa Rica, Brazil, Argentina, Singapore, and South Africa (as well as in a variety of forms throughout Europe). It resembles what is usually called “public housing” in the United States. The subsidies require some compulsory savings on the part of benefiting

communities, but so far are targeted mostly to building entire homes rather than making incremental improvements.

Community funds. Here the approach, which emerged from a pilot in the Philippines, emphasizes a savings and loan system that sets up funds for collective investments in acquiring land, constructing basic infrastructure, and building or improving houses. The idea goes beyond mere finance: It seeks to build strong bonds within the community. The members depend on each other for success and can together create significant leverage in dealing with governments.

Microfinance. A relative newcomer showing considerable promise, microfinance is evolving from its roots as enterprise loans to become a more robust strategy for helping the poorest citizens improve their housing situation. The reason: it works. Where an enterprise microfinance loan might be \$500 for five months, a housing microfinance loan might be \$2,500 for 18 months. Even though housing microfinance loans are larger in amount and longer in tenure, their default rates are still phenomenally low. The clear indication is that poor people who have proven to be good at saving are also reliable at repaying loans.

The iconic example (just as Pakistan's Orangi sewer project was for sanitation) is the experience of the Grameen Bank, which started in Bangladesh and whose founder, Muhammad Yunus, was honored with a 2006 Nobel Peace Prize. Grameen Bank now has more than 2,000 branches in some 65,000 different villages. Of the nearly \$6 billion it has lent, the loan recovery rate is a solid 98 percent. What banker would fail to love that?

Grameen has always taken a social capital approach, requiring borrowers to apply as a small group of people, using their moral guarantee as the underlying collateral. One or two of the group may initially benefit; the prospects for the others depend on the reliability of performing on the loan.

Emerging especially in Asia and Latin America, micro-finance loans fit the need because they can finance adding rooms, upgrading the materials used for floors, walls, or roofs, or adding kitchens and toilets. Though microfinance is sometimes deployed to add basic infrastructure for water supply, extending it to the water and sanitation challenge goes slowly.

Usually there is an NGO playing a key catalytic role. The panelists heard an accounting of work in Nicaragua, where more than 12,000 households saw their homes improved through microlending of about \$800 each. These loans leveraged improvements from local governments and made connections with financial intermediaries more likely.

homes  
improved

### a strategy for scale

Any plan for scaling up the most promising approaches has to begin with the capacity question: Where can the requisite monies be found? Trying to settle that early in the discussion, Barbara Hewson, managing director of NewLine Capital Partners, rushed to the front of the room to write on the board and declare that “no one should say that the barrier is insufficient capital.” She then proceeded to post on the board the rough numbers—all the discretionary global capital,

capital markets

by categories. “At any given time,” she said, “it’s more than a \$100 trillion.” Having worked both at Lehman Brothers and JPMorgan Chase, Hewson is experienced in capital markets. Yet, skeptics said, while there may be capital, it is inaccessible to the global urban poor, who are not recognized as a profitable base of customers. Further, because there will never be sufficient capital from donor organizations alone, or even from responsible governments, the private sector must be induced to play a role as financier, even as government is the source of subsidy and donor organizations provide seed capital to create new entities and financial paradigms.

upgrading slums

How much would it cost to take upgrading slums to scale? Since estimates vary, the 2005 Task Force on Improving the Lives of Slum Dwellers, coordinated by Sclar and assisted by Gabriella Carolini, an international development fellow at Columbia University, analyzed the leading research on costs and projected a total of \$66.5 billion from 2005 to 2020. The task force assumed this would cover purchase of land, housing upgrades, necessary infrastructure, community facilities as well as some programs to build more community capacity. That figure rounds out to \$42 per beneficiary per year over the target period.

The task force report, entitled *A Home in the City*, went on to lay out a scheme for finance. If 30 percent of the investment needed could be recovered through small loans and 10 percent were generated by the residents themselves, this would leave \$39.9 billion to be raised from donor organizations and governments—or about \$2.5 billion a year.

If, as the task force report suggests, middle-income developing nations could handle the upgrading in their cities without the external subsidies, then the numbers become even more manageable. The donor organizations' share would be \$1.4 billion a year, while governments in these developing nations would provide \$2.3 billion.

upgrading is  
feasible

So for about \$600 per person in today's slums, upgrading is feasible. But skeptics quickly point to the further challenge of bad governance in a number of developing countries. And worse than merely bad governance, corruption within government persists as a corrosive deterrent to the level of investment needed to finance basic necessities for the poorest citizens.

Although there are formidable barriers to improving the lot of even 100 million people now in slum settlements, a strategy for success is apparent and feasible. And the price of failure is high—for everyone. To overcome both scarcity of capital and skepticism from the financial world, the persistent execution of a sound strategy is key. From the first round of discussions at the Global Urban Summit, here are the essential elements of an effective strategy:

Start with the communities. Organize the demand for change. Let this organized demand create the change in supply policy.

Shack/Slum Dwellers International (SDI) is a prime example of this approach. Founded in 1996, this organization has demonstrated the potential of taking the demand principle to scale. SDI has its roots organizing in India during the 1980s.

It was then that an NGO, Society for the Promotion of Area Resource Centers (SPARC), teamed with a women's network called Mahila Milan, to set up a process for communities to take responsibility for managing money, mostly made available by the state, for the community upgrading process. These groups demonstrated that saving just a rupee a day (about two U.S. cents) adds up to collective capacity not just for emergencies but to finance community improvements. These funds were used to leverage more financing, and the communities assumed responsibility to assure that loans would be repaid by the individuals who benefited.

collective  
capacity

SDI has now organized savings programs that assist some 6 million members in 14 countries. In 11 other countries, SDI is helping to organize savings groups and building federations for families living in slums. It has also been instrumental in securing land rights for 125,000 families and creating nearly 80,000 new housing units. This has led to SDI's formation of Urban Poor Funds, which take advantage of any available grants or subsidies to offer households lower rates of interest than the formal sector does. The payments per household are typically lower than the rent they were previously paying. These transactions not only support improvement in housing but they build leverage in securing tenure rights to the land and in persuading local authorities to improve the delivery of safe, reliable water and sanitation services.

organized  
savings  
programs

Another important benefit is that groups gain critical sophistication in managing finance at the community level and

at the  
community  
level

## Golden Eggs: Harnessing the Promise of Shadow Cities

# Sheela Patel



Co-founder, SPARC  
(the Society for  
Promotion of Area  
Resource Centres),  
Mumbai, India

poverty, climate change, and urbanization are the most crucial issues for this century. This triad was brought together at the Rockefeller Foundation Global Urban Summit in 2007. For representatives from Slum/Shack Dwellers International (SDI) who attended the Summit, some very important lessons emerged for moving forward. First, there is huge potential in disparate groups of people interested in a particular set of issues meeting as equals in a neutral environment to explore possibilities — learning to understand each other’s points of view with patience and examining new ways to address old unsolved problems. Second, we must recognize the power of local and global connectivity to turn a vertical hierarchical structure into a circle; today, global and local entities are so closely linked that they are both critical to developing scalable solutions. Third, with much of this century’s development drama taking place in urban areas, we must build new skill sets to engage each other to transform what appears to be crises into potential opportunities.

SDI, including all its affiliates in Asia and Africa, has found that it is not only national governments that have ignored the implications of an urbanizing world, but also foundations and bilateral and multilateral agencies. So it is with these perspectives in mind that we discuss what is required for investments in practical terms, such as institutional capacity building, research in options, strengthening civil society to participate or even lead the process, and terms under which finance should be provided. Even as I write these words, however, the doom and gloom scenario-setting, especially related to poverty, climate change, and urbanization, almost blocks exploration of what human creativity and ingenuity can produce as responses.

In most countries in Asia and Africa, rural areas bring in the majority of votes for national parties and crucial leadership elected for national and provincial governments comes from rural areas. In many of these countries today, most of the dissent faced by national

governments is from urban areas. This means that urban issues often take a back seat on political agendas, behind other development issues. Almost all political parties find their overall experience historically in rural development. When governments receive international support, most of this too has a rural focus. When private foundations seek to align with existing priority setting by national governments, they join this process as well. This further delays any urban agenda setting.

Meanwhile, cities and towns become geese that lay golden eggs. Global and national trading services, institutions, and enterprises set in cities produce taxes, wealth, and political donations that are welcomed. But impoverished shadow cities — the informal areas that usually include 15 to 50 percent of all residents — are ignored. In many cases, this is because, with aggregate data reviewed on basic amenities, civic services, or health outcomes, urban populations seem better off overall than rural populations. Rarely is the data disaggregated. When it is, the serious problems facing the poorest half of the urban population become evident.

Since governments and international agencies have ignored urban problems for so long, challenges due to urban poverty, environmental degradation, and other allied conditions often seem insurmountable. Now, when governments and international agencies are suddenly pushed to consider these neglected issues, they sometimes take outdated or inappropriate urban policies off the shelf. Other times they look to examples they have read about or seen in another nation. In India, for instance, the newly set up delimitation exercise is redrawing constituencies based on population. Since urban agglomerations have increased considerably in India in the last ten years, this will now give urban areas more representation. It will be useful to examine the implications this has for development investments.

Market-driven forces can certainly aid urban areas. While some markets emerge and scale up naturally, however, many others have to be produced. Clearly market-based solutions have not magically appeared to produce urban infrastructure or housing or equitable livelihood options for the poor. The persistence of poverty and increasing gaps between the rich and poor in cities is evidence of that. All the ingredients for developing new market possibilities may exist but clearly they need some deep

research and experimentation to link demand to supply of resources, embedded in a framework laid by policies that provide incentives for such a strategy. Unfortunately, though, in many parts of the world today, the foundation for such a country-level framework, a stable fiscal environment, is yet to be in place.

learn the advantages of taking vital next steps to connect with higher, more market-oriented sources of continuing capital. In addition, the process itself often significantly improves cohesion within the group, relationships among residents, and pride in the community.

Redefine the relationship between lenders and borrowers.

Here David Smith may have captured the shift perfectly:

There are essentially three kinds of money: debt, equity, and subsidy. Debt is what bankers think about. It's regular. I can sit behind my desk and make decisions and minimize risk. Subsidy, on the other hand, comes from governments or grant makers. If I give it to you, you should be grateful and I also want to suggest that you buy vegetables with it. The equity model is fundamentally different. It's how the banks themselves were built. It's my money, my confidence, and I can make it grow. Of course, subsidy can be turned into equity, and that's what counts, as people decide they own this asset and can create more with it.

With that terse analysis, Smith finds the juncture between subsidy and equity and underscores the need to take whatever subsidies that may come and convert them into leverage and longer-term equity. Carrying out this step, however, usually requires some sort of financial intermediary organization.

As to lenders, they need not be consigned, as in Dante's *Divine Comedy*, to a flaming desert in the seventh circle of hell, but they do need to awaken to the moral and civic obligations and the missed opportunities of neglecting the financing needs of poor citizens. Of course there are risks, but most risk, where the lender has the option to seize collateral, lies in extending

more credit than a household can reasonably manage (look to the United States experience in 2007 and 2008 when too many households could not handle the payment ladders built into subprime loans).

Are the aspirant poor a bad bet? An August 2007 issue of *The Economist* reported the other side of the credit risk. Professors conducting a study at Yale University and Dartmouth College reviewed some 787 rejections for loans in Cape Town, Port Elizabeth, and Durban, South Africa. To test the prevailing standards of who is worthy of credit, they persuaded the lending authorities to reverse their decision for a random 325 applicants. Most of the loans were short-term, often as little as four months. Interest rates were predictably high. But, as it turned out, so were profits for the lenders. Some would say that because interest rates were high, the poor were exploited. A subsequent review of the randomly selected applicants a year later showed lower hunger rates, poverty rates down by 19 percent, and a greater likelihood of employment. The reason? Though interest rates were high, the loans were small, so the outlay cost was low, and the recipients used the money for essentials, such as finishing a new room or buying a sewing machine.

James Mwangi heads the Equity Bank of Africa and offered Global Urban Summit participants ample testimony to both the viability and profitability of lending to motivated poor citizens. Equity Bank, which is listed on the Nairobi stock exchange, has 1.4 million depositors of whom some 400,000 are urban residents. The average balance is \$200. The average

lending to  
motivated poor  
citizens

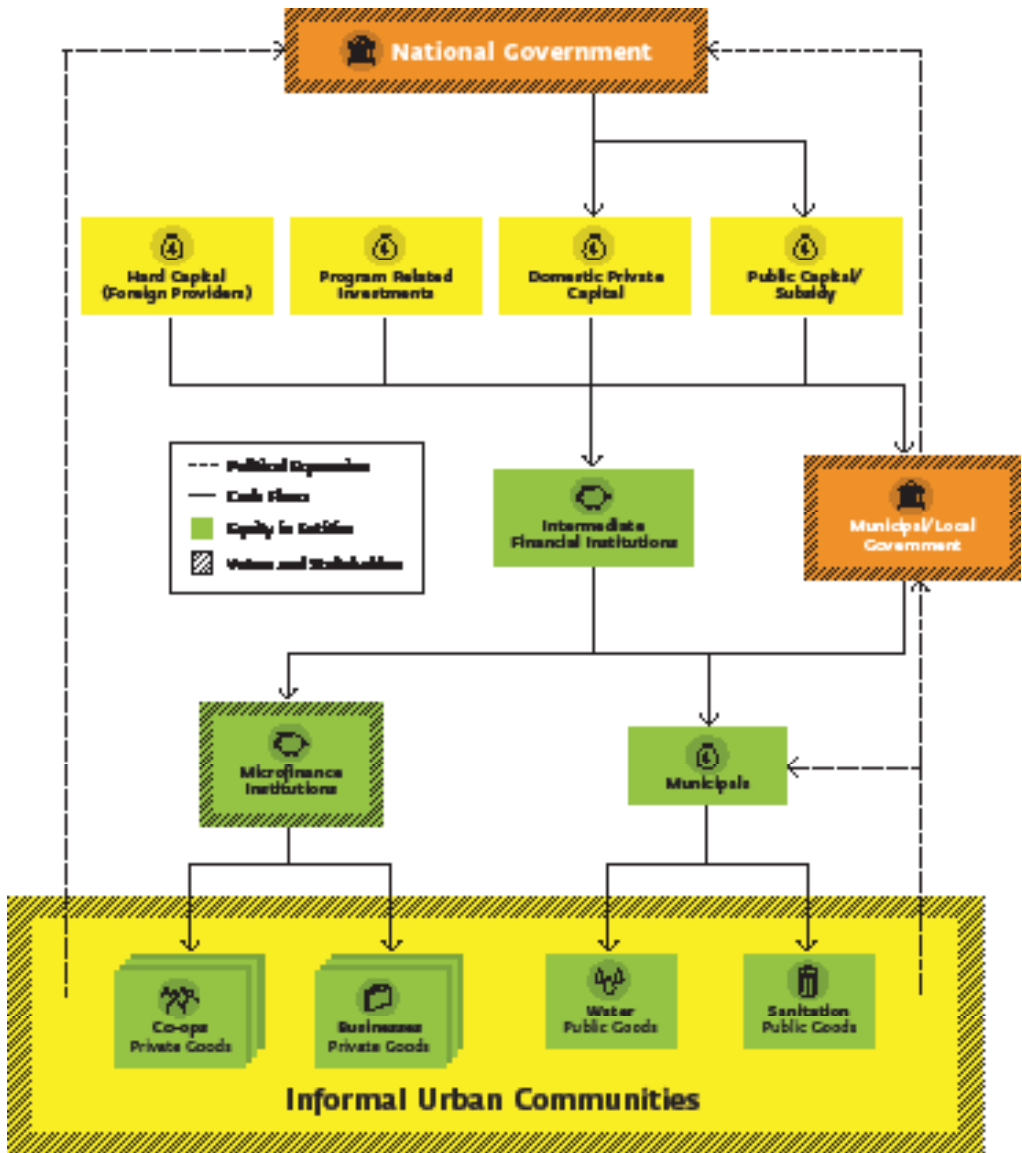
loan is \$600. Mwangi declares the risk is no greater than among more advantaged people; that the real collateral lies in the community organizations and their ability to put pressure on people to make their payments.

Mwangi's biggest problem is raising capital without compromising his principles of giving the best breaks to the poor. So far he is sticking with his principles, telling Summit participants, "If someone says, 'Here is \$10 million but this is how you must use it,' you should say, 'Keep your money.'" Mwangi could easily attract more capital if his bank were charging higher interest rates, but that would undermine the bank's mission. He said the bank's experience shows that lending to the poor at lower rates is profitable. And as evidence, he cites how other banks in Kenya are rethinking their rates and terms to participate in this growing market. Mwangi knows the hard numbers, but he contends that with all the collective knowledge bearing down on this challenge, "We will make a breakthrough. The future is in our hands."

Accept the logic and inevitability of incremental improvements. A 2006 report by Global Urban Development, written by Donatus Okpala and colleagues, estimated that 70 percent of housing improvements in poor Global South areas occur in progressive stages, not all at once, confirming what panelists said at the Global Urban Summit.

If a community has access to a water tap, or a well, a system of piping can progressively expand to bring a water source closer to households. The number of latrines can increase and be located

# financing informal communities



for improved safety and convenience. Improving in steady steps makes financing a more realistic strategy for using the collective assets and borrowing power of a community.

Mobilize community assets into larger aggregates. Use the clout from a larger pool of savings and commitments to leverage entrance into higher capital markets. While microfinance and other small-scale strategies have shown dramatic progress, the key is finding a way to climb the finance ladder up to intermediary finance organizations and then all the way to those major capital markets that Hewson pointed to in her assertion about capital capacity.

a certified  
success

Microfinance is now a certified success and is gradually extending its reach to housing and infrastructure improvements, as communities organize their collective capacity. While microfinance is oriented to individual loans, higher up on the chain of finance there are intermediary organizations with the capital and connections to tap the larger scale sources of capital. The missing link has been between the communities of the urban poor and these intermediary organizations. This is where the concept of metafinance emerges. As Lisa Schineller, who is responsible for the Latin American Group of Standard and Poor's, explained, "You leverage off the small savings pool of a group to build up to a community-wide level. That's how you get to larger amounts, longer duration, and more bearable interest rates."

Another vital connection, director of Cape Town's Community Organisation Resource Center Joel Bolnick added,

is helping community-based organizations (CBOs) engage with the proliferating community of microfinancing institutions (MFIs). Sometimes, beyond different languages of nations, there are terminological gaps, quipped Sclar. “We say CBOs and we’re talking about ‘community based organizations.’ A banker hears the same acronym and thinks ‘collateralized bond obligations,’ and a U.S. housing advocate thinks ‘Congressional Budget Office.’”

Participants came to new conclusions, based on a more relevant definition of the relationship between borrowers and bankers, and on the new logic of a chain of capital starting with the community. These new relationships, new logic, and new connections require specific action steps. Reporting from one of the groups charged with brainstorming strategies was Sumila Gulyani, World Bank staffer and former director of the Infrastructure and Poverty Action Lab at Columbia University. Gulyani first reminded everyone of essential conditions for scaling up small successes. “You have to rely on the municipality or the state as the unit of action,” she said. “You should start with a national framework with a macrofinance conception because local government has constraints ranging from money to mindsets.” Some panelists did not agree with this fine point, but wholeheartedly agreed with Gulyani when she said, “Finance may turn out to be a small part of the problem. What we need most is good ideas.”

scaling up  
small successes

Panelists agreed to a list of strategic levers that could overcome barriers:

- Reliable, community-based, integrated, accessible information from census and GIS (geographic information systems) databases
- Inclusive planning processes that produce real plans
- Capacity building through organizing the demand for improvements
- Outreach through communications and media
- A chain of finance that completes the connections to outside capital

Once the poor are seen not as needy beggars but rather potentially effective partners and profitable customers, it becomes plausible to expand existing capital sources and add new ones. Participants cited the potential for expanding the Urban Poor Funds internationally, adding reimbursable seeding fund operations, coalescing more capital for infrastructure through regional banks, and aggregating housing loan potentials.

imaginative  
tools and  
structures

There is little question that more imaginative tools and structures are emerging. One example is eBay's MicroPlace.com. Reaping returns of 1 to 4 percent, people use this Web site to invest in lending organizations around the world that make loans to poor traders, farmers, craftspeople, and others to start or expand small businesses. As founder Tracey Pettengill Turner explained, "You get your principal back with your rate of return." Turner was inspired by the Grameen bank experience. Pierre Omidyar, founder of eBay, was already deep into this strategy, having put hundreds of millions of dollars into

microlending, including Kiva.com, which links individual investors with specific struggling entrepreneurs in the developing world. Kiva has been so successful at attracting capital that it sometimes temporarily runs out of borrowers. The next step, as panelists consistently said, is developing the metafinance capacity.

The new logic behind the power of finance rests on the assumption that success is built on demand and the will and collective capacity of the poorest communities. Essential elements for helping people afford water, sanitation, and shelter are now clear:

- Focus on the full scope of the challenge, not just what seems easiest to finance at the moment. Water, sanitation, and shelter are interdependent. Any missing element drags down the prospects to lift people into full participation in a civil society.
- Mobilize the community to save and pool its assets to leverage its influence and financial access to credit markets.
- Use the network of NGOs as well as bilateral and multilateral donor organizations to fill the gap between the capacity of micro-finance to meet the first level of improvements and the supply of capital needed to take these models to serious scale.

Grants may not be necessary, as reports have suggested, in cities and nations with more income or where creative credit enhancements will build the credibility of unconventional borrowers. Still, the scope of the challenge, given the number of slums and the number of people in them, is simply enormous. Nothing less than a major escalation of financing capacity, despite all the optimistic declarations, stands a chance of

meeting the minimal MDG goal. Besides, participants agreed, the world should do more than the minimum.

Alfredo Stein, an urban development specialist on Latin America and Africa, reminded the group that there are many institutions hard at work on this challenge. “Just take Central America,” he said, “where we think we are reaching about 6 percent of urban families in need. That’s a lot of people, but it’s still only 6 percent.”

And Bolnick, the Community Organisation Resource Center director in Cape Town, warned against the usual practice of taking models that work in the market and pushing them down to make them work for the impoverished. “On the other hand,” he said, “if we create a model designed to work for the very poor, it is much easier to scale that up to work for the less poor, where the market can actually support the solution.” Diana Mitlin, the International Institute for Environment and Development economist, reminded the group that at least 35 percent of the poor are well beyond the reach of the market.

Where does philanthropy fit into this new equation? As the group was reaching its conclusions, Rockefeller Foundation president Judith Rodin noted, “Remember, philanthropy should be the risk capital, not for projects, but to underwrite the effort that shows how innovations can be scaled up to the need.” She said that Rockefeller would use its influence, possibly more than its grants, to persuade others to focus on this challenge. “If it works for the poor,” she added, “it can be scaled up for others. But it doesn’t work in the other direction.”

philanthropy  
should be the  
risk capital