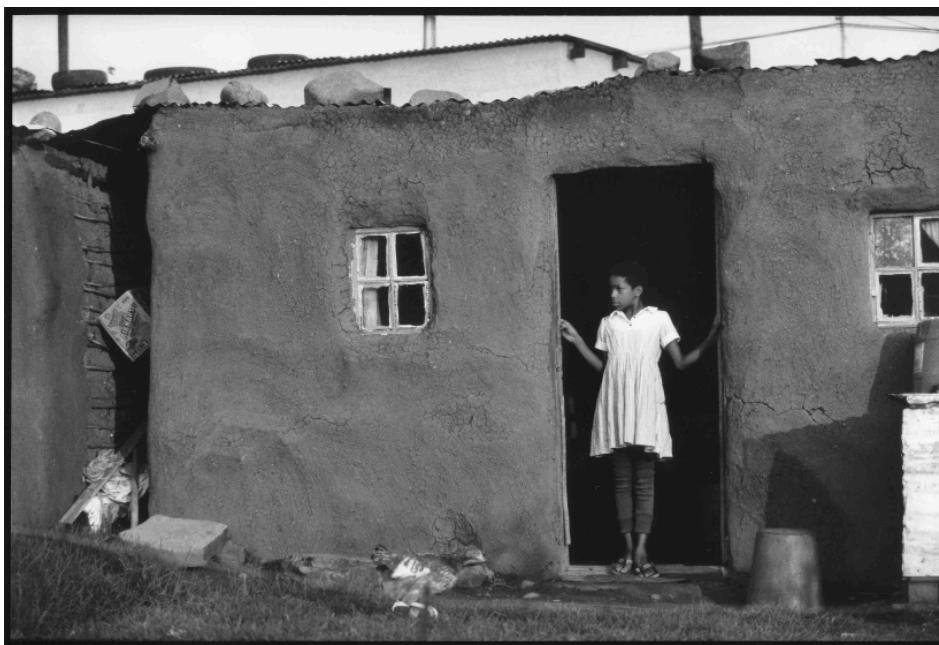




ASHOKA INNOVATORS FOR THE PUBLIC

HOUSING THE POOR BY ENGAGING THE PRIVATE AND CITIZEN SECTORS: SOCIAL INNOVATIONS AND “HYBRID VALUE CHAINS”

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Executive Summary

More than one billion of the world's urban residents live in inadequate housing, mostly in slums and squatter settlements of the developing world. While the UN and most governments recognize the basic right to adequate housing, this is yet to be translated into effective solutions to address the housing needs of low-income populations - particularly as population growth and urbanization rates strain the ability of existing systems to keep up with demand for housing construction, but also for water, sanitation, electricity, and transportation infrastructure.

Improving the housing conditions of one-sixth of the world's population constitutes a massive economic, social, and environmental challenge. Or, when looking at it from a business perspective, it could represent a sizeable unserved market.

Many governments cannot afford to heavily subsidize the capital-intensive housing sector with the hope of solving the housing shortage. While some progress has been achieved at the policy level, so far most private initiatives sponsored by developing country governments have benefited middle-income rather than low-income families. As a result, the most important players in low-income housing delivery are the poor themselves. Faced with almost no

formal options, they use a variety of resourceful, incremental, informal, and often illegal means to meet their shelter needs.

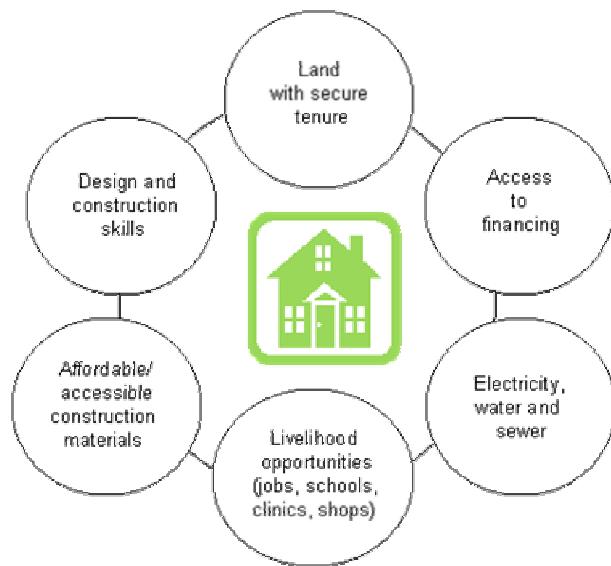
But two new types of actors are emerging to support this effort. On one hand, during the last two decades, the citizen sector^[11] has experienced unparalleled growth and has become increasingly competitive. This has resulted in numerous bottom-up social innovations and in active involvement of community groups in housing initiatives. Most of these innovations are powerful and effective at the local level but they often encounter challenges to secure the resources needed to scale-up, with only a few and remarkable exceptions. On the other hand, although most large businesses in the housing sector still consider low-income populations to be an insignificant or unattractive business segment, an increasing number of visionary business leaders have started leading the way to serve these markets profitably and with social impact.

Serving the needs of hundreds of millions of families will require combining the talents and resources of both the citizen and the private sectors. We argue that these concurrent trends provide the right environment for an unprecedented level of business-social congruence to address the central challenge of scale by leveraging the core competencies of both sectors. The first part of this paper will briefly discuss the inadequacy of current housing value chains^[2] to serve low-income populations in developing countries. The second part will highlight innovative housing solutions from social entrepreneurs and will illustrate how large corporations have started to successfully learn from these principles to develop new business models capable of delivering not only products and services to low-income communities, but also significant social impact. Finally, we will discuss the need for "Hybrid Value Chains", highly leveraged and commercially sustainable business-social partnerships, to provide large-scale solutions for low-income housing and transform the way housing services are delivered to the poor.

A. Inadequacy of current housing value chains to serve low-income populations

Housing is a complex process that involves the coordination of a wide range of "inputs" and players, even more so in low-resources environments. For the majority of mid- and high-income consumers, the housing industry is adequately delivering affordable and comprehensive services. In contrast, as we describe below, low-income households face a very different situation. In spite of an increasing focus on urban housing and development, informal systems are still the dominant producers in many developing countries - an estimated 60 and 70 percent of Mexico's and Brazil's current housing stock is built informally^[3] - because current value chains are not adapted to the needs and realities of this growing market.

Exhibit 1. The various components of housing solutions for low-income populations



Development of housing offerings: The “low-cost housing” that is produced is often inadequate to meet the real needs of the poor for reasons of desirability or quality. Developing an appropriate offer must begin with an understanding of the end-value for the clients themselves. For low-income families, a house is much more than a roof over one’s head. Beyond physical shelter, it represents the promise of improved health through more decent sanitation systems and protection from weather; security against violence, vandalism, and theft; productivity given that many informal sector workers use their homes as factories and/or warehouses for inventory, and that services like water and electricity reduce the time spent on household chores and/or extend productive daylight hours; and sense of identity, confidence, and an increased ability to plan for the future. For example, Grameen Bank views housing as a basic human need and a critical element of its members’ overall development. As stated in its principles, a shelter is one of the basic requirements for a person to organize her thoughts, discipline her action, and undertake long-term plans. It also enables increased productive capacity of micro-entrepreneurs.

A common misperception is that low-income consumers make purchasing decisions based solely on cost. However, if there is a perceived value, there will be a willingness to contribute. Pride and aspirations, quality, and suitability are important factors to consider. First, housing is a product intimately linked with its owner’s sense of identity. Many low-cost housing projects have the effect of branding their occupants as poor or outcasts - often because they look “different.” Monolithic block housing can do this, but so can innovative, low-cost, environmentally-friendly housing structures. Instead of creating incentives for long-term investment in their homes, these structures can breed alienation and resentment. Low-income individuals are also rational economic decision-makers who must make the most of every penny to survive - so factors like quality, safety, and durability count. However, free or low-cost services from governments or NGOs often lead to a negative dynamic where providers may not feel obliged to provide quality services and beneficiaries may not feel entitled to claim quality services. Another issue may be the lack of effective quality incentives: for example, for developers who are funded by government subsidies or obliged by law to allocate 20 percent of any new development to low-income housing. Lastly, some low-income individuals may want their homes to be conducive to family and community relationships. For them, single-family detached homes on large plots may be undesirable. Others may need homes designed to support income-generating activities, making a flat roof for drying leaves or an open porch a desirable feature. For all, proximity to social networks, schools, and employment opportunities is key.

Land: Access to land with secure tenure is definitely at the core of the housing issue for low-income households. Not only might they face the risk of being evicted, but even when their situation is secure, lack of formal land title will limit their access to additional services such as finance, water, or electricity. Current property rights policies make it difficult to ascertain legal claim to land, even where families have lived for decades in a location, paid taxes, etc. According to Hernando de Soto^[4], the amount of capital locked up in extralegal housing in emerging markets alone currently exceeds USD\$9.3 trillion. Land cost is an issue in rapidly-growing cities where land is scarce. Moreover, the number of new plots available is often limited by local municipalities that try to control rural migrations to address issues of urban planning, poor hygiene conditions, and public safety. As a result, informal land developers may take advantage of low-income families who lack options by charging exorbitant prices, selling the same plot several times, not delivering on their sales, etc.

Basic services: The willingness of low-income families to invest in basic infrastructure and services like water, sanitation, or electricity is inversely linked to the risk of being evicted. Nevertheless, even when low-income families are willing to upgrade their housing conditions, many formal service providers are not interested in serving them for legal or economic reasons. On one hand, local laws may prohibit them from serving households without legal land titles. On the other hand, communities may not be organized collectively to represent a critical mass of demand in order to guarantee sufficient return on their investments. Providers may consider low-income families as “bad payers” or even “thieves” who are responsible for setting up illegal connections and degrading their infrastructures. In reality, few companies have tried to develop appropriate strategies and pricing schemes to enable the poor to become regular clients. In spite of these generalized misperceptions, the poor can and often do pay many times more in absolute terms than their middle-class counterparts for the same goods and services. We argue that low individual purchasing power is less an inherent barrier to serving low-income markets than a market characteristic that most private sector providers choose not to innovate around.

Finance: Access to housing finance is another critical bottleneck for the majority of the population in developing countries. Although several potential sources of housing finance for low-income families exist, most of the needs are still unmet. Government subsidies tend to be insufficient or inappropriate; mortgage markets tend to serve only the richest 10-20 percent of the population; in spite of its strong value proposition, housing microfinance is still an emerging industry; and informal systems are not efficient. Only 3 percent of outstanding credit in low-income countries is held in the form of housing loans compared to 27 percent in high-income countries^[5]. Highlights on each one of these financing mechanisms are provided below.

a. Government subsidies. The performance of many subsidy programs is not optimal. Ironically, the poor may not be eligible for housing subsidies that will benefit middle-income households, because they operate through the mortgage market or require the recipient to build a house before obtaining the funding (coming back to the issue of upfront construction costs). Beyond this, one of the biggest issues with government subsidies is that they tend to crowd out market-based housing initiatives, which have the potential to be more scalable, sustainable, and therefore more effective in meeting low-income housing needs. Overall, government programs may end up not being cost-effective as they spend money on contractors who are making standard profits in their industries. Quality and size of dwellings are sometimes a second priority.

b. Traditional mortgage market. There are limitless opportunities to use private capital for low-income housing as it has barely been tapped. Low-income households are often excluded from traditional mortgage markets for several reasons:

- They may not be able to use their land or homes as collateral because they lack formal property rights; their homes are of low resale value and/or secondary housing markets do not exist; or regulations prohibit it.
- They may not be formally employed. In India, for example, 92 percent of workers are informally employed without stable employer-employee relationships.
- They may have irregular cash flows and incomes are, in any case, low. Low-income families cannot afford the loan size that would be economical for traditional mortgage financiers to manage. In addition, their preferences often run against it. On one hand, developing countries are characterized by both macro and micro uncertainty (such as property rights insecurity, inflation, or income instability) and under such conditions the poor are naturally reluctant to assume long-term liabilities. On the other hand, many favor improving existing homes rather than moving to new ones in new locations because they value and need to preserve their social networks.

c. Housing microfinance. In spite of recent growth, effective demand for housing microfinance far exceeds supply. As a whole, the microfinance industry, with approximately 50 million clients worldwide, still meets only 5-10 percent of likely demand. Moreover, individual providers face particular challenges in adding housing microfinance products to their portfolios due to: lack of access to medium- and long-term funding; national regulations (e.g., access to savings, taxes); institutional capacity; confusion over the roles of subsidies and financial services; and high fragmentation of the industry. There are about 10,000 MFIs today, of which about 200 or 300 are considered commercially viable and financially sustainable. Only two percent have more than 100,000 clients^[6].

Major players in housing microfinance include Grameen Bank (Bangladesh) with over 600,000 loans since 1984, Patrimonio Hoy (Mexico) with over 120,000 loans since 1998, MiBanco (Peru) with over 20,000 loans since 2001, SEWA Bank (India) with over 20,000 loans currently outstanding, and Bank Rayat (Indonesia). However positive trends include an increasing involvement of commercial banks in microfinance through downscaling or on-lending and massive remittance flows. In this context, housing microfinance has emerged as a fast-growing sub-industry within microfinance over the past five years. Although they are still limited, microfinance-style solutions are often more appropriate to the housing finance needs of low-income families:

- Loans are small and repayment periods are short. This matches borrowers' incomes, preferences, and building habits although loan amounts and terms can vary significantly.

- Nontraditional forms of collateral are accepted. These might include co-signers, “peer support” groups, or small items of value such as jewelry, appliances, or vehicles; sometimes no collateral is required at all.
- Ability to pay, even with informal and/or irregular incomes, can be ascertained through standard microfinance techniques. Many housing microfinance providers foster participation in savings groups to reinforce cultures of savings and repayment or require the prospective home loan borrower to complete one or more working capital loans successfully.

d. Informal financial systems. As a result of limitations in the other sources of housing finance, the most common way for the poor to finance their homes is through informal systems. The two most common are local “loan sharks” who charge exorbitant interest rates, and savings groups such as *tandas* in Mexico; *stokvel*, *letsema*, or *ubuntu* in South Africa; or *minga* in Ecuador. Savings may be monthly, weekly, or daily to capture the unpredictable income flows as they occur. Saving for housing is a primary goal for savings groups in many countries; however, realities of life often interfere.

These various illustrations demonstrate that current delivery systems that have typically been developed primarily for middle and upper-class clients are still not adapted to the realities of low-income populations, who are too often caught in a vicious circle. In order to make the housing value chains work for the poor, successful strategies of social entrepreneurs that have been designed, from their inception, for and with low-income communities are particularly relevant.

B. Social innovations in urban housing and urban development

Although public institutions have traditionally played a significant role in providing for housing, new actors are emerging and demonstrating alternatives to traditionally top-down approaches of governments and international institutions. The past two decades have seen an extraordinary explosion of entrepreneurship and competition in the citizen sector that had been sometimes considered as inefficient, unresponsive, and mainly about activism. With an estimated volume of resources of over US\$1 trillion and 19 million jobs at a global level, the non-profit sector is already equivalent to the eighth largest economy in the world^[2].

Social entrepreneurs^[3], practical visionaries committed to finding systemic solutions to address social challenges, have been at the forefront of this transformation. Most of these social innovations typically arise from a market or public sector failure. They often start at a grassroots level and are developed on a shoestring budget, leveraging the power of communities. Successful initiatives are based on leveraged solutions that approach a problem from a different and targeted angle.

Based on recent research on innovative solutions in affordable housing that focused on the main patterns or principles emerging from these solutions, we present below a “mosaic of solutions” that attempts to offer a conceptual framework to the issue of housing in developing countries. The value of the mosaic is also to illustrate a “More-than-the-Sum-of-Their-Parts” effect where individual social entrepreneurs can see the approaches they developed in perspective with those created by the rest of the field. The main barriers to housing for low-income families, real or perceived, are listed horizontally and the main principles emerging from the innovative solutions, vertically. Because innovations usually emerge simultaneously in more than one location and context, you may think of other initiatives around the world using the same How To’s as those mentioned here. Note as well that although the best solutions would probably speak to more than one principle or one barrier, we have chosen to emphasize one specific aspect of the initiatives.

These innovative solutions carry many lessons for players such as businesses interested in low-income markets. First, most solutions are based on insights rather than on breakthrough science. Many have actually innovated by rationalizing and improving on traditional community practices rather than by introducing technological innovations. Second, the importance of designing solutions that have a transformational effect and leverage the power of low-income communities will never be emphasized enough. It is about helping communities and individuals to become self-reliant and unlocking their vision for their future. This is particularly relevant for housing given its potential as a

springboard for development and as a productive asset for the poor. Lastly, although many innovative approaches are cost-effective, reaching scale to serve a large number of beneficiaries is still the exception rather than the rule. Reasons include the challenge of providing systemic housing solutions (ranging from property laws to financing and construction), the lack of efficient funding for the citizen sector, but also sometimes the resistance of individual players to think big. As we will argue later in this paper, business-social partnerships can be a powerful strategy to enable large-scale and sustainable solutions.

Exhibit 2. Mosaic of innovative solutions for affordable housing

MAIN PRINCIPLES EMERGING FROM INNOVATIVE SOLUTIONS	MAIN BARRIERS			
	Unavailability of complementary goods (e.g., land, infrastructure)	Low individual purchasing power	Limited access to housing finance	Inadequate current product offerings
Enable long-term investment	<ul style="list-style-type: none"> Assign property rights to decrease investment risk - <i>Bairro Legal, Brazil</i> Invest in services and infrastructure to unlock latent housing demand - <i>Orangi Pilot Project, Pakistan</i> 	<ul style="list-style-type: none"> Mobilize low-income families' purchasing power through experience-based learning and demonstration projects - <i>Slum Dwellers International, Global*</i> 	<ul style="list-style-type: none"> Market program by speaking to the poor's aspirations - housing as patrimony - to catalyze savings - <i>Cemex/ Patrimonio Hoy, Mexico</i> 	<ul style="list-style-type: none"> Enable asset-building and create design that meets low-income communities' preferences - <i>Housing Stock Exchange, Sri Lanka*</i>
Leverage resources abundant at the local level	<ul style="list-style-type: none"> Build critical mass and empowerment for communities to negotiate with government - <i>Homeless People Federation, S. Africa</i> Target already-organized communities - <i>Baan Mankong, Thailand*</i> 	<ul style="list-style-type: none"> Use "sweat equity" to reduce labor costs and create new skills - <i>Mutirões, Brazil</i> 	<ul style="list-style-type: none"> Invest in customers' income-generating potential - <i>YKPR, Indonesia*</i> Build systems to capture savings for all types and sizes of incomes - <i>VSSU, India*</i> 	<ul style="list-style-type: none"> Facilitate community-led design - <i>SPARC, India</i> Utilize local materials and building techniques - <i>ADAPT, Egypt*</i>
Radically lower the cost of the whole housing delivery process	<ul style="list-style-type: none"> Harness the effectiveness of existing informal systems - <i>Saiban, Pakistan</i> Design new electricity distribution channels for slums through cooperatives - <i>Ashok Bharti, India*</i> 	<ul style="list-style-type: none"> Aggregate demand to reduce transaction cost - <i>ICICI Bank, India</i> 	<ul style="list-style-type: none"> Reduce the risk of housing finance by building credit history and income generation opportunities - <i>Grameen Bank Housing Program, Bangladesh</i> 	<ul style="list-style-type: none"> Leverage community-led market research - <i>Slum Dwellers International, Global*</i> Offer comprehensive solutions - <i>Cemex/ Patrimonio Hoy, Mexico</i>

* Organization created by Ashoka Fellows.

Main principles emerging from innovative solutions in housing

As described below, we have distilled three main principles emerging from successful low-income housing initiatives based on a research conducted in 2005. This work included identifying and researching over 60 social innovations and interviews with over 30 key informants specialized in low-income housing around the world. The quotes inserted at the beginning of each section were obtained during this process.

1. Enable long-term investment

“Poverty is a lack of material conditions, but it is also a lack of hope. Housing fulfills a material need, but also the need for hope.” - Alfredo Stein, Swedish International Development Agency, Central America

“Housing can be a key point of leverage in the development process.” - Fazal Noor, Ashoka Representative and housing expert, Pakistan

“Under the threat of eviction, there will be no market.” - Billy Cobbett, Cities Alliance, and former Housing Minister, South Africa

Low-income individuals must engage in a delicate financial balancing act every day to survive. Making it possible for them to undertake long-term, large investments (or successive short-term investments over long periods of time) requires ensuring the right economic incentives for them, as well as addressing more psychological aspects such as their ability to plan for the future.

Precarious and insecure living conditions heighten the financial risk of any investment occupants might otherwise make in their homes. In an attempt to break this vicious circle, the municipality of Sao Paulo's Bairro Legal initiative succeeded in providing secure tenure to more than 45,000 families through a comprehensive program from 2001 to 2004. Services included conflict mediation between land owners and squatters, assistance for legal acquisition of land directly and through partnership with the local Bar Association, and microcredit through Brazil's largest private sector bank. Another innovative market-based initiative that has enabled slum dwellers to build assets and climb the financial ladder is led by Darin Gunasekera from the Wiros Lokh Institute in Sri Lanka. Darin has started a variation of a stock exchange market to raise funds for the construction of new dwellings for poor families who are entitled to certificates to purchase a new home of their preference. This has changed the practices of developers who need to compete for the preferences of the poor. Low-income families can voice their preferences and gain confidence to invest their resources in home improvement.

Unlocking some of the psychological barriers of low-income families to build a better future is the other side of the coin. Slum Dwellers International, a global network of squatter groups started by several social leaders (including Ashoka Fellows Samsook Boonyabancha and Joel Bolnick respectively in South Africa and Thailand) that counts a total of 5.6 million members in 14 countries^[9] has defined its programmatic priorities based on people's aspirations and devised several strategies to enable action and problem-solving among their beneficiaries. These include visits between members from different neighborhoods, cities, and countries in order to encourage learning through real life experience, as opposed to formal education, and generate empowerment. The visible achievements in home improvement are another powerful element to demonstrate that change is possible. Demonstration houses are used to trigger discussion and joint decision-making about design, construction materials, and processes.

2. Leverage resources abundant at the local level

“Look to build self-reliance, not just houses.” - Paul Cohen, Tlholego, South Africa, Ashoka Fellow

“Beyond building a home, community-building is key because there are so many other things poor people need to accomplish together.” - Celine d’Cruz, SPARC, India

“Support the development of housing by supporting the development of the community.” - Oswaldo Setti, Ação Moradia, Brazil, Ashoka Fellow

“Your biggest competitor can be the expectation of free help.” - Cheryl Young, SAATH, Ahmedabad, India

Many of the barriers to housing for the poor require political, or at least multi-stakeholder, solutions - for example, securing land, modifying property rights regimes, or convincing electricity providers to serve a settlement. Social capital is probably the greatest asset of low-income communities who can achieve much by joining forces. This is precisely the key break-through of microcredit that replaced traditional loan collateral by social collateral. The South African Homeless People’s Federation (SAHPP) is an example of a truly community-based organization designed to be inclusive for the very poor. It uses collective action as a core strategy to strengthen communities and enable them to initiate and manage changes in the areas that they have prioritized such as housing. The core strategy to organize communities is the creation of daily saving groups where members, mostly women, learn to trust each other and build a discipline. Saving groups are then federated at the neighborhood, regional, and national levels.

More generally, there is a great potential in enabling low-income communities and individuals to become self-reliant. They have tremendous assets they can contribute including a great deal of resourcefulness, skills, time, and the ability to save. It is not a lack of skills that makes poor people poor. Poverty is not created by poor people but often by the institutions and policies that surround them^[10]. There is therefore a great need for transformational and market-based approaches to housing, as opposed to hand-outs, that leverage these assets to provide long-term and sustainable solutions. This also requires a different perception of the “poor” not based on pity or mistrust but on openness and belief in their potential. The movement of “mutirões” that started in Brazil and other parts of the world in the early 1980s is based on individuals who come together after work and during weekends to construct their homes and neighborhoods through mutual self-help projects because they are unwilling or unable to rely completely on the state. Despite the fact that this process takes longer than using professional full-time constructors, this approach enables them to reduce costs and effectively teaches self-management and other administration skills to the community. Another initiative that illustrates this principle is ADAPT in Egypt led by Hany El Miniawy. It leverages locally available materials as a substitute for conventional construction materials as well as ancient building techniques that are more adapted to weather conditions and culture, given the limited resources available.

Leveraging the productive potential of low-income communities that can access the inputs needed for success is an important strategy that enables them to increase their purchasing power. YKPR in Indonesia organizes groups of families to apply collectively for credit from the government housing bank that is unavailable on an individual basis and it coordinates repayments on a calendar that accommodates the seasonal nature of incomes. The negotiated credit is “three-way,” intended to cover land acquisition, house construction, and income-generating investments to help cover repayments on the loan. The government housing bank now considers them more reliable than its traditional clients and makes additional efforts to achieve customer satisfaction - for example by collecting loan repayments at customers’ doorsteps. Although the model was initially developed for rural areas, the principle is applicable to urban settings.

3. Radically lower the cost of the whole housing delivery process

“Understand housing as a process, including not only construction but also land acquisition and title, provision of infrastructure and services, planning and negotiation, financing, and community organizing.” - Fazal Noor, Ashoka Representative and housing expert, Pakistan

“Understand what families want...and the fact that it’s not what we think they want.” - Oswaldo Setti, Ação Moradia, Brazil, Ashoka Fellow

“The poor are the world’s experts at managing money...They just face a very narrow range of choices.” - Asian Coalition on Housing Rights

Thinking holistically about how to make the overall housing transaction affordable to low-income households rather than reducing the cost of individual components such as cement or labor is critical. Saiban in Pakistan is a remarkable initiative that makes the overall housing transaction affordable and convenient for low-income households by leveraging the benefits of informal housing processes. The organization finances the purchase of unserviced plots of land, and leaves housing and infrastructure to be developed incrementally as each household accumulates the money to pay for them – as occurs in the informal sector. While leveraging informal processes, the organization also improves on them by providing secure land tenure and organizing residents to plan and negotiate for additional services. Security in Saiban settlements is higher; costs of living are lower; and services are obtained years faster than in comparable informal settlements.

Radical cost reductions can be achieved by streamlining the whole process and switching some of the costs and responsibilities to clients - an interesting parallel with the Internet revolution that enabled many companies to rethink their business models by putting customers and partners to work thanks to the Internet interface. Other strategies to increase the profitability of distribution in slums and rural areas include multi-purpose distribution channels and demand aggregation. Examples from other industries such as e-Choupal, an ITC-led initiative for small farmers in India, could inspire innovations in housing and building materials. With regards to housing finance, Grameen was one of the pioneers and has already enabled the construction of over 600,000 houses in Bangladesh. Unlike other financial institutions, Grameen ventured into giving housing loans based on the philosophy that investment in shelter for the poor is productive. Its strategy for providing housing microfinance profitably uses the same organizational infrastructure that it uses to make income-generating loans, and restricts eligibility to clients who have developed successful credit histories for four years to reduce risks associated with housing loan products.

Additionally, an in-depth understanding of potential customers' needs and preferences is necessary to get the highest return on investment by focusing on specific features or components that really matter to end-clients. But conventional wisdom often does not apply in low-income markets and market data is scarce. CEMEX learned this the hard way when it began offering small bags of cement in order to minimize waste, logically thinking that it would be more convenient and affordable to low-income Mexican households without transportation means and with limited disposable cash. However, they soon realized that these bags were not popular as customers valued the social status associated with having a large bag of cement propped up in front of one's house^[11]. This constitutes just one example of the multiple intangibles that play a role in low-income customers' preferences.

C. Business in development: an increasing trend

Another trend parallel to the transformation of the citizen sector over the last two decades is the increasing role that businesses have been playing in local development by going beyond mere corporate social responsibility. There is a growing realization that doing business with social impact is possible, which is blurring the gap between

conventional territories of development players and businesses. This is particularly critical in sectors such as housing and urban development that have the potential to create significant social impact by tremendously improving conditions of life, productivity and health of low-income communities.

Traditionally, large companies have served only about 20 percent of the developing country markets. However, expanding one's traditional markets is increasingly becoming a strategic matter given the rate of growth and the sheer size of low-income markets, in addition to being an effective way to improve one's socially responsible image. 98 percent of population growth until 2025 is expected to come from developing countries. If efficient markets and appropriate product offers, such as financing and delivery systems plus secure land tenure were in place, the global market potential could be in the order of hundreds of billions of dollars. Private companies could not only benefit from this sizeable business opportunity but their investments could also serve as critical enablers of the infrastructure and institutions needed to develop a capital intensive sector such as the affordable housing one worldwide.

But successfully entering these markets requires learning new skills and adjusting business models to different and rapidly evolving market dynamics^[12]. The housing market is no exception. While the aggregated power of low-income communities is significant, individual transactions are small and incomes are low. Can most people in urban slums afford to build a home? Most businesses are not yet convinced by this business proposition. In the meantime, many of these potential customers have found ways to build their homes, even when it takes a decade to complete them. They pay top prices for their building materials, tend to hire untrained masons who use poor construction techniques, self-construct, or access loans with exorbitant interest rates.

A house will progressively evolve with the flow of life: a room may be added when a new child is born, a son marries or relatives move in. Just as commercial banks used to claim that the poor were not bankable prior to the microfinance revolution, most business players in housing behave as if this market was not worth entering. While banks actively targeted large volumes, Mohammad Yunus departed from conventional wisdom based on his fine understanding of the local culture: "I decided to do exactly the opposite of traditional banks. To overcome the psychological barrier of parting with large sums, I decided to institute a daily payment program. I made the loan payments so small that borrowers would barely miss the money."^[13] Twenty years later, after mastering ways to keep transaction costs to a bare minimum, microfinance is considered as a sound investment and large private banks are moving in.

One of the most remarkable examples emerging from the private sector is the case of Patrimonio Hoy ("Assets Now"), a program launched in 1998 by CEMEX, one of the top three global cement manufacturers. This case illustrates how a company successfully translated the social innovation of microfinance to the construction material industry, expanded their core business model to overcome the main barriers faced by their potential customers (e.g., access to financing), and found cost-effective ways to serve this market. It also an illustration of a company actively seeking what constitutes an attractive value proposition for low-income populations. PH was started after CEMEX issued a "Declaration of Ignorance" and sent a team to the slum for several months to understand how low-income families lived and built their houses. It acknowledges the sense of empowerment produced by a better home that enables low-income clients to break from their hopeless resignation, the importance of social capital, and the critical issue of trust by the community—notions that are typically considered as "soft" or dubious by businesses. Also worth stressing is that unlike typical innovations in the construction material industry, PH's breakthrough is about innovative business processes rather than technology-based products.^[14]

Mexico has one of the worst housing shortages in the world, with the need for 1.5 million new homes annually and another 3.7 million existing units that are estimated to be inadequate. Part of the initial motivation of CEMEX to start PH was their realization that low-income segments were an unusually stable market as the demand was not as strongly affected by Mexico's devaluation crises or by government spending cycles. It observed that 40 percent of the cement consumption in Mexico came from the self-built, low-income segment, representing potential sales of US\$500-\$600 million per year. The challenge then became finding a way to transform this housing need into a viable market opportunity.

In most Mexican communities where incomes are low and cultural norms may mitigate against saving for the future, people tend to build their homes incrementally as money becomes available. This can be a long process, taking up to four years to build an additional room. PH's model addresses the financial constraints of low-income families by building a system for saving and planning ahead. PH marketing emphasizes "patrimony" – an asset and a legacy to pass down to one's children – as opposed to construction materials. Its offer is tailored to the reality of how the poor build their homes, one room at a time, with their own labor. PH makes it attractive with a "total housing solution" that encompasses financing, cement, and various other building materials, technical assistance, storage, and quality customer service. Since its creation in 1998, it has enabled about 130,000 families to improve their homes, saving an average 2/3 of the time and 20 percent of the costs of traditional methods. PH's current client base in Mexico is already larger than all subsidized housing programs combined and unlike them, PH is not limited in its growth by the amount of available subsidies.

PH's comprehensive offer includes financing, construction materials, technical assistance, and other benefits:

- *Financing:* While studying low-income families' habits, CEMEX found that while 70 percent of the women involved in traditional saving cooperatives were saving for housing, only 10 percent succeeded in actually spending their savings on housing. PH's scheme therefore provides a "system" for those who do not have the discipline to save and a solution for those without credit history or collateral through a combination of micro lending and community savings. It consists of a 70-week payment plan in which members make weekly payments of about US\$14 through an individual or group plan. Credit is provided in the form of materials, delivered in several installments agreed on by the member. It has achieved impressive repayment rates above 99.2 percent, demonstrating once again that the poor can be trusted customers.
- *Construction materials:* CEMEX has not developed lower cost or lower quality products for low-income markets, but instead offers its standard products. In addition to cement, PH's plan includes more than 200 other building materials provided by distributors. PH negotiates discount prices with distributors and suppliers thanks to the considerable buying power of CEMEX. Quoted building material prices remain constant for the duration of the plan, a great protection against inflation. At each installment, materials are delivered immediately or stored in PH distributors' facilities until customers are ready to build.
- *Technical assistance and other services:* New members receive free advice from an architect /engineer about design, planning, selection of materials, and construction techniques. This assistance is very valuable to do-it-yourself homebuilders who often can waste up to 30 percent of materials due to inappropriate methods. Some variations of PH's offer include a partnership with the Mexican government to work on public infrastructure projects financed partly by households and partly the local municipalities (Calle Digna).

More than 130,000 families have gone through PH, improving their living conditions and building rooms faster and at an average 80 percent of previous costs. The improved homes have also a higher market value, thereby directly increasing the net worth of PH members. PH aims to reach over one million families by 2010 and is expanding to Colombia and Venezuela this year. It does not currently target the very poor, but those earning between US\$1,825 and US\$5,475 per year, mostly in urban and peri-urban areas. With regards to social impact, PH has also created jobs for thousands of door-to-door promoters who earn an average US\$200 a month for two to three hours work per day. From a business perspective, the program is now profitable, generating a net income of approximately US\$1.3 million in 2004 and total sales of US\$42 million since its inception. Cement consumption has tripled among its low-income, do-it-yourself customers where PH is present and PH has improved CEMEX's reputation as a socially responsible business.

From the beginning, PH was set up as a separate division within CEMEX to allow more flexibility in terms of salary structure and corporate culture among other reasons. It has now more than 62 offices in 29 cities of Mexico. Each cell has a general manager, an engineer or architect, a supply manager, and a customer service representative. Most of the employees come from low-income communities. With regards to distribution, PH selects distributors via a demanding set of criteria, including good relationships with CEMEX and the capacity to store and deliver materials

to hard-to-reach neighborhoods. This is a critical element as PH realized the importance of impeccable delivery despite the logistical challenges in urban slums in order to overcome the trust issues of its members.

Overall, PH's marketing strategy aims at excellent customer service and trust building. In close-knit communities where relationships are highly valued, word of mouth is the number one marketing channel. PH leverages this channel by using local promoters who work on commission, 98 percent of them women who have established credibility among their social networks. The introduction to PH starts with a group session and a small party is thrown when a member completes a room. Building on these principles, PH and Ashoka are currently testing alternative strategies to leverage the knowledge and grassroots-based infrastructure of already existing citizen sector organizations. Patricia Nava (founder of Sisex, a reproductive health network), ONI (a leading nutrition organization), and the food bank of Toluca in Mexico are engaging members of their networks as promoters or potential members of PH. In return, the partnering social organizations receive a commission for referring clients to PH and are able to advance their social mission by reducing domestic violence and providing more decent living space for the participating families. As CEMEX/PH move further into lower-income segments and/or rural markets, these types of partnerships will become increasingly important.

Patrimonio Hoy is a pioneering program and is part of a rapidly emerging trend. Lafarge and Holcim, the other two corporate cement giants have also started initiatives to grow their presence in low-income markets. In addition, various national and local players that may not have as much visibility on the global scene have developed innovative solutions thanks to their greater proximity to low-income communities. Looking more broadly at urban development beyond housing, water and electricity companies are also experimenting with creative schemes designed to make the market more inclusive of low-income customers. Two noteworthy examples from the Philippines and Colombia are briefly introduced below. As competition increases, low-income communities will benefit from a multiplicity of affordable offers and much more effective commercialization channels.

Manila Water in the Philippines, whose customer base is more than half urban poor, returned 16 percent on employed capital in 2004, the best showing amongst a set of peer companies in Asia. When it won the concession of a neighborhood in Manila in 1997, it faced numerous challenges: one-third of the population did not have water, only 10 percent had sewerage services, and as much as 65 percent of the water that left the treatment plant brought no revenues due to leakages, illegal connections, or measurement problems. Low-income communities were the major source of pilferage, accounting for up to 40 percent of the total lost revenues.

In order to address the issues faced by low-income communities with regard to high installation costs and difficulties in collecting post-paid services, Manila Water developed a novel collective installation and billing scheme. Clients can choose between an individual or group scheme (chosen by 70 percent of the urban poor) that not only lowers the connection fees for customers but leverages social capital and peer pressure for bill payment for the provider. Manila Water also launched a program to educate consumers on the risks of illegal connections where water was often sold for seven times more than what Manila Water would typically charge. They realigned their philanthropic strategy to support development programs that had the effect of gaining the support of the communities. Last but not least, they resolved an important legal obstacle by securing regulatory support. In the past, users were required to have a land title to secure piping and faucets on their premises – creating incentives for illegal connections – but now providers are allowed to serve informal settlements^[15].

AAA in Colombia is another case of providing water services. The company was on the verge of leaving the region of Barranquilla in Colombia to pursue more attractive investment opportunities in Chile when some of the local management staff convinced the company to start a systematic approach towards low-income markets that combined market mechanisms with strong outreach to political and citizen-sector organizations in the region. Major investments were made to increase the quality of the water and the number of people with access to water and sanitation. Beyond revamping its database to improve information about clients and its customer service, it became possible to collect weekly or even daily payments thus tailoring the collection cycle to the low cash reserves of the poor. Bills were simplified for greater comprehension, the service line was fully subsidized by the government, and the meter was repaid in 36 months, again addressing the inability of the poor to make large cash outlays. Mobile

units were created to allow customers to pay without leaving their neighborhoods, cutting down on transportation costs.^[16]

D. Advancing housing solutions for the poor through Hybrid Value Chain collaborations

While an increasing number of businesses are starting to explore low-income market opportunities, most of them soon realize that they need to learn about these markets and find ways to access them. Businesses may have strong technology, logistics, and investment capacity but, more often than not, they face major challenges when it comes to developing the necessary market knowledge about low-income communities, the distribution channels in slums or rural areas, and building trust-based relationships with these communities. Not only have companies rarely considered these market segments as a source of potential clients but there is little formal market data available.

In contrast, over many years the citizen sector has built grassroots networks and alternative service delivery systems and demonstrated significant outreach capacities to low-income families throughout the developing world. These networks cover a diverse array of specialized services targeting basic human needs like education, healthcare, and access to financial services. While by themselves most of these networks are not profitable, they constitute an outreach infrastructure that can serve multiple purposes, one of which is the delivery of valuable products and services to the poor. We argue that these networks are the cornerstone to establish a new delivery infrastructure capable of reaching hundreds of millions of people through market-based solutions.^[17]

To the extent that businesses - particularly those involved with basic human needs like housing, water, and electricity - can learn to leverage these social networks and their market knowledge, they could substantially reduce the investment needed to develop these underserved markets as well as accelerate their entrance into these new markets. It makes business sense and it creates social value thanks to CSOs and businesses offering complementary services to low-income clients. One example of this is the alternative growth strategy for Patrimonio Hoy that CEMEX and Ashoka are currently testing by leveraging existing social networks as promoters of PH's services rather than solely relying on individual promoters.

In order to do this, CSOs must sensitize themselves to the possibility of building new types of commercial collaborations that would facilitate their access to the specialized infrastructure and financial resources typically available only to businesses, and to significantly increasing their impact. On the other hand, businesses will need to change their perception of the citizen sector, recognizing them as co-designers of solutions and finding ways to compensate them fairly for the assets and skills they bring to the partnership. Alternatively, they could also consider adopting and scaling up specific elements of social innovations developed by CSOs. Some businesses have already led the way, such as Lafarge which has placed partnerships with CSOs at the core of its philosophy, starting with a broad global collaboration in the field of environment with the World Wildlife Foundation and extending it to housing with Habitat for Humanity - an opportunity for the staff to get engaged in housing projects but also to exchange good practices among business units. Based on these experiences, Lafarge is now exploring the next stage of partnerships for its low-income market initiatives in South Africa and India among other locations.

From providing access to basic services (water, sanitation, electricity) to distributing building materials, there are multiple value-added steps that constitute the housing value chain. Enabling the transformation of low-income populations into viable customers requires carefully synchronizing the interventions of numerous partners including community development organizations, social networks, building material companies, large and informal constructors, microfinance institutions, commercial banks, legal services, and the individual customers. As shown in Exhibit 3, what emerges is a "hybrid value chain" in which the business and citizen sectors work together to achieve maximum output:

Exhibit 3. Examples of opportunities for Business/Social Hybrid Value Chain collaborations in housing

Critical steps	Main barriers to serve low-income markets profitably	Potential value proposition of citizen organizations	Examples of main players needed
Access to land	<ul style="list-style-type: none"> • High cost of urban land • Inefficient/ inappropriate property rights system • Heavy migration flows 	<ul style="list-style-type: none"> • Organize communities • Negotiate new land allocation • Suggest legal changes • Offer financing schemes 	<ul style="list-style-type: none"> • Municipal governments • Lawyers • Social movements and citizen groups
Access to basic services	<ul style="list-style-type: none"> • Illegal settlements • High cost of infrastructure • Small individual transactions • Fear of low payment collection 	<ul style="list-style-type: none"> • Organize communities • Create demand for better environment /change mindsets • Aggregate demand • Offer financing schemes • Manage alternative land development model 	<ul style="list-style-type: none"> • Municipal governments • Developers • Water, sanitation, and electricity companies • Social movements and citizen groups
Financing	<ul style="list-style-type: none"> • Lack of collateral • Lack of regular and verifiable salary • Limited outreach of housing microfinance 	<ul style="list-style-type: none"> • Organize communities • Deliver financial services • Promote housing loan programs • Provide added services such as technical assistance 	<ul style="list-style-type: none"> • National / local governments • Committed investors capable of mobilizing the creation of a housing fund (e.g., investment banks, private investors, consumer banks, building material manufacturers/ retailers) • Microfinance institutions and citizen groups
Construction process	<ul style="list-style-type: none"> • Small individual transactions • Limited financing available • Limited construction skills • Lack of existing distribution channels in slums 	<ul style="list-style-type: none"> • Organize communities • Create demand for better environment / change mindsets • Aggregate demand (for construction materials for example) • Provide alternative distribution channels • Provide technical assistance (create new skills and employment opportunities) 	<ul style="list-style-type: none"> • Construction material companies • Distributors • Constructors (large and small) • CSOs

The above table illustrates the fact that businesses will be able to enter low-income markets more rapidly and profitably if they learn to tap into the knowledge and resources of citizen organizations. It also highlights the need for widespread collaboration across the industry to unlock demand and create opportunities for mutual value creation. Multi-partner collaborations are required to create an “ecosystem” because many services are interdependent and feed each other. If there is no land security, there will be no willingness to invest in services or housing beyond the basics - if there is no financing, there will be no opportunities to advance construction, and so on. In addition, looking beyond the traditional economist’s perspective is critical. Designing offers based on a virtuous cycle where low-income communities are not only consumers but also producers is critical for economic and social value as new incomes generated by providing employment will also foster long-term demand for housing products and services.

In order to do so, a new vision of partnerships is necessary - one that is centered simultaneously on profit and social impact and that leverages the core competencies of all partners. These include in-depth understanding of markets and the ability to organize communities for citizen groups, and strong financial, technological, and logistical capacities for businesses. From the business perspective, these partnerships that are breaking from the philanthropic paradigms and thus are not limited by corporate social responsibility budgets are still scarce. They have the potential to generate a “win-win-win” value proposition:

- Improved products/services for low-income communities, empowerment, and possible employment opportunities;
- Accelerated social impact (by providing products that address basic human needs and leverage the business sector infrastructure) and new sources of revenues (based on sales commissions or flat fees, as negotiated) for the social partners;
- New markets, an improved image, and staff retention for businesses;

E. Reflections on the concept of Hybrid Value Chain

Ashoka is committed to help foster this new generation of partnerships in areas of high social impact potential such as housing, water and irrigation, and health. “Hybrid Value Chain” collaborations as we have named them, represent a systemic change in the way businesses and CSOs interact. These are not punctual, opportunistic, and contractual relationships between businesses and CSOs but strategic alliances that leverage resources to better serve communities. They are commercial in nature and based on the premise that companies and social entrepreneurs can interact commercially as equals. In this scheme, CSOs are not only becoming alternative distributors but critical enablers, value creators, and catalysts to ensure that all of the parts of the system that are required are in place, such as land, services, construction material, skills, and financing. This requires a profound change of mindset and culture for both businesses and CSOs. Successful demonstration projects involving industry pioneers are needed to build a new paradigm that becomes standard practice for both businesses and CSOs, and that will be replicated independently.

While we recognize that there is a cost associated to develop partnerships and that business-social collaborations may not always be the most cost-effective approach to developing low-income markets, we believe that this is typically a superior solution, provided certain conditions apply. These include products or services of high social impact (required to engage CSOs on a sustainable basis) and high-investment products or services that typically require a cluster approach with value-added services that allow low-income customers to fully benefit from their investment. This necessary cluster includes services of mixed financial returns such as financial services, community empowerment/mobilization, or capacity building that range from market-based rates to merely philanthropic support.

In spite of the many cultural, strategic, and operational challenges ahead, the potential is massive and pioneers will benefit from first mover advantages. The key to these partnerships is to identify the right partners and to ensure alignment at the strategic level, complementarities at the operational level, involvement of low-income communities, and the necessary resources to design, launch, and scale the new business models.

Basically, creating an enabling environment for these new partnerships relies on several factors that include people, money, policies, trust, and collaboration. First, visionary leaders and entrepreneurs are needed because this is not business as usual for companies or for CSOs. Then the right kind of capital for the different stages of the ventures is necessary: patient seed capital that will enable the search for appropriate solutions, innovation, and support to CSOs that must manage major internal changes when they "convert" from being grant-dependant to income-generating entities that provide services to businesses; and investment capital for the scaling-up stage. Accessing seed funding is currently a challenge for most companies because R&D is typically understood as innovating products rather than processes. Moreover, according to classical thinking, the business of business is business: all investment opportunities within a corporation are subject to internal arbitrage based on future returns. As we argued earlier, low-income markets offer sizeable growth opportunities in addition to more intangible benefits such as social image and goodwill with government and communities themselves, but in some cases a compromise on margins is required especially when targeting very poor populations. There is therefore a need for a new type of hybrid capital that will take economic and social returns into account as well as for different types of investors to fund the different pieces of the mosaic of variable returns.

Although we advocate a greater level of business-social congruence, we do recognize the critical role of government as an enabler of low-income housing. Ensuring the safety of urban development is one dimension. With regard to financing, government incentives to attract investments in these markets could make a big difference, as could mixed financing models. Taking again the example of Patrimonio Hoy, CEMEX has already envisioned leveraging partly public subsidies and partly individual contributions to reach lower-income segments and expand their saving program to infrastructure improvements. Microcredit schemes could also be more widely adopted by public housing programs to reach more beneficiaries, reduce up-front payment requirements, and increase individual ownership and responsibility towards their homes, improving the chance of commitment to further improvements in homes and communities in the future. Although relying on communities' micro savings and informal processes typically takes more time to complete construction, it makes achievements visible quickly and progressively builds confidence about what can be accomplished.

Optimal solutions to address the massive shortage of adequate housing are yet to be found but it is clear that given the magnitude and the nature of the needs, no sector can deliver services by itself. Forward thinking business leaders, social leaders, and investors are needed to develop affordable housing solutions at a large scale and to take the lead in tackling the various dimensions of the systemic solution. We look forward to continuing the dialogue with these various players.

We also want to recognize some key questions raised by this new paradigm and open up the dialogue. Market-based approaches enable financially sustainable solutions to low-income communities, but how much profit is ethical in these market segments? Given that markets do not always work efficiently in low-resource environments, what support structures need to be created? How much can businesses collaborate versus compete to address the massive social challenge of one billion people living in slums? Are shared investments possible to develop an enabling environment? To some extent, industry-level dynamics have started in the environmental field. Can this alliance model be applied to develop low-income markets commercially? Lastly, if the citizen sector contributes to the creation of new wealth for private investors, how can we then economically value their contributions? How do we value social capital and intellectual property embedded in social innovations that they bring?

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About Ashoka:

Ashoka is a global network of social entrepreneurs. Since its creation 25 years ago, it has invested in over 1,700 social entrepreneurs in 62 countries through a "social venture capital" approach as a way to address major social challenges with systemic responses. Ashoka Fellows are selected for their innovative and practical solutions to social needs. Based on these innovations, Ashoka's Full Economic Citizenship initiative focuses on spreading successful solutions for low-income populations - harnessing the potential of commercially sustainable business-social partnerships ("Hybrid Value Chains") to reach significant impact. www.ashoka.org.

^[1] Ashoka has adopted the terms "Citizen Sector" and "Citizen Sector Organization" instead of negative definitions such as "Non-Profit" and "Non Governmental Organizations."

^[2] The term "Value Chain" popularized by Michael Porter in the 1980s refers to the key value-added activities involved in the delivery of products and services to end-customers including distribution and sales of construction materials, construction and financing in the case of housing. By "Hybrid Value Chains" Ashoka refers to new types of commercial collaborations between businesses and social organizations that leverage their core competencies to improve the delivery of essential products/services to low-income populations. Hybrid Value Chains typically mobilize various actors from both sectors, each managing its own value chain.

^[3] Sources: Daphnis Franck and Bruce Ferguson. Housing Microfinance: A Guide to Practice. Kumarian Press, 2004; Cement Association of Brazil Portland.

^[4] Source: Hernando de Soto, The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else, Basic Books 2003.

^[5] Source: Hernando de Soto, *ibid*.

^[6] Source: ResponsAbility's discussion paper "Engaging the private sector". <<http://www.responsability.ch>>

^[7] Source: "The 21st century NGO: In the market for change", SustainAbility, UN Global Compact & UN Environment Program Publication, London 2003. (Note that this excludes religious congregations).

^[8] For more on social entrepreneurship, see: David Bornstein. How to Change the World: Social Entrepreneurs and the Power of New Ideas. Oxford University Press, 2004.

^[9] SDI is definitely one exception within the citizen sector with regards to scale. Its organization as a network as opposed to a direct service provider has enabled it to grow rapidly.

^[10] Source: Muhammad Yunus, Commonwealth Lecture. 2003.

^[11] Source: Flores, Letelier and Spinoza, Developing Productive Customers in Emerging Markets. California Management Review. 2003.

^[12] Although we recognize that 'the poor' are not an homogenous group and different strategies may be needed by geographic locations, income levels or social groups, this is not the focus of this paper.

^[13] Muhammad Yunus, Banker to the Poor: The autobiography of Muhammad Yunus, Founder of Grameen Bank. The University Press Limited, 1998.

^[14] Facts about PH are extracted from several sources: Herbst. Enabling the Poor to Build Housing: Cemex Combines Profit and Social Development. 2002. Ashoka/ Changemakers.net; Segel and Meghji. Patrimonio Hoy: a Groundbreaking Corporate Program to Alleviate Mexico's Housing Crisis. 2005. Paper presented at HBS conference on business approaches to global poverty's paper; Flores, Letelier and Spinoza. Ibid; Prahalad. The Fortune at the Bottom of the Pyramid. 2004. Wharton School Publishing.

^[15] Zobel de Ayala, Aquino, Ablaza, Beshouri and Romano. Developing Viable Business Models to Serve Low-Income Consumers. Paper presented at HBS conference on business approaches to global poverty. 2005.

^[16] Rufin and Arboleda. Utilities and the Poor: A Story from Colombia. 2005.

^[17] Budinich. A Framework for Developing Market based Strategies that Benefit Low Income Communities. 2005. Changemakers.net.