



The ABC's of Affordable Housing in Kenya

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1. THE CASE FOR AFFORDABLE HOUSING

We are living in a world where the majority of people live in cities and 1 billion live in slums, a figure that will double by 2030.¹ Urban populations are growing at a rate much faster than can be absorbed and managed, causing demands on services and infrastructure that massively outstrip supply. In many emerging market cities, this leaves the majority of residents with few options but to live in slums.

Increasing access to high quality affordable housing has a profound impact, both for the individual and society at large. Yet, housing is a challenging and capital-intensive sector characterized by delays and regulatory difficulties, and as a result, it rarely gains the limelight for impact investors and social entrepreneurs.

At Acumen Fund, we feel it is time for this dynamic to change and for social entrepreneurs and impact investors to recognize the need to catalyze and support affordable housing across emerging markets. If we are trying to improve the lives of the poor, we cannot overlook housing, especially as cities rapidly expand and the need for housing grows. If we ignore housing,

we are missing the forest for the trees. Housing is at the root of many of the other issues we work to address—the lack of quality shelter means people live in areas with reduced access to clean water and sanitation, unreliable and unhealthy energy sources, increased exposure to disease, and low levels of financial security.

Kenya is no exception. Twenty-two percent of Kenyans live in cities, and the urban population is growing at a rate of 4.2 percent every year.² With this level of growth, Nairobi requires at least 120,000 new housing units annually to meet demand, yet only 35,000 homes are built, leaving the housing deficit growing by 85,000 units per year. As a result of this mismatched supply and demand, housing prices have increased 100 percent since 2004.³ This pushes lower income residents out of the formal housing market and into the slums.

There are many avenues through which to address these dynamics, whether it is housing supply, end-user finance, or new technologies. Each has its own unique challenges and opportunities; each warrants a document of its own. In this particular report we choose to focus on housing supply in urban Kenya. We attempt to paint a picture of the landscape and offer some strategies for success.



Nairobi skyline. The city is rapidly growing and unable to meet a growing demand for housing.

1. "Slum Dwellers to double by 2030", UN HABITAT report, 2007

2. CIA World Factbook, 2010

3. Hass Consult Property Index, 2011

Our primary reason for releasing this report is to encourage more entrepreneurs and investors to enter the affordable housing sector in Kenya and provide them with the tools to succeed. At Acumen Fund, we invest in six sectors—health, water, agriculture, energy, education, and housing. Housing is on the list because, despite the challenges, we believe that the impact of providing a home is undisputed and the need for patient capital clear. If we are trying to improve the lives of the poor, we cannot ignore housing, especially as the cities where we work expand so rapidly.

Acumen Fund has made seven investments in housing in three geographies. Our focus is two-pronged—investing in the supply side (developments that directly increase the supply of affordable homes) and the demand side (increasing access to affordable end-user finance). We are also closely watching what is happening with affordable building materials and slum upgradation, as these are important parts of the low-cost housing ecosystem as well.

Our portfolio of housing investments, combined with significant time spent understanding the market in Kenya, teaches us a lot about what works and does not work. While there are many nuances to “getting it right,” we identified six key components of success for any company looking to build affordable housing in Kenya:

- **Being creative**

Affordable housing does not happen by simply downsizing a model targeted at middle-income populations. It requires creativity and deep understandings of the target market’s preferences and where there is room to maneuver on costs.

- **Being willing to take risks in order to maintain the social impact, even when it means saying no to potential revenue**

It is one thing to build a home for a poor family. It is another to take the steps to ensure it actually reaches the poor. Sometimes this means denying potential customers because they do not meet the target criteria, and in a competitive business environment, it takes guts to turn away interested buyers.

- **Developing relationships with institutions, and keeping them clean**

Players in the housing sector deal with large bureaucratic institutions such as banks and governments whether they like it or not. Many people, especially in the notoriously corrupt

housing sector, resort to bribes in order to move projects forward, but there are alternatives. It is in your interest to develop a friendly and trusting relationship with local officials and banks, while maintaining high standards against corruption. These relationships might just allow you to have timely approvals and disbursements instead of massive delays, while still keeping it clean.⁴

- **Recognizing the cultural context**

If you are entering the housing market in Kenya having worked in the sector elsewhere, take the time to learn about the cultural context. Low-income Kenyans may aspire to own different types of homes than the low-income population with whom you worked in the past. Understanding this may bring light to new challenges or open up new worlds of possibility that did not exist in your previous context.

- **Understanding that housing isn’t just physical infrastructure, it is also community infrastructure**

A healthy and vibrant community is much more than just houses. It includes schools, clinics, places of worship, parks, and perhaps most importantly, a sense of ownership that is shared by the residents. It is essential for developers to think holistically, and include the physical spaces and social mechanisms that will foster a sense of community. This will determine the sustainability of the project and keep it from devolving into a slum or a ghost town.

- **Building plenty of leeway into the model**

No matter how much research and planning you do, expect the unexpected. There will be plenty of delays, roadblocks, and unforeseen challenges. If you have the leeway to absorb these, they will not pull you under.

This report is meant to encourage and assist practitioners looking to enter the affordable housing sector in Kenya. Additionally, investors can use it as a checklist of key components to look for in potential housing deals. It should be used as a guide, not a blueprint. Unfortunately, there are no clear blueprints for affordable housing. But our hope is that the document will help sow the seeds for new and innovative strategies that will lead to lower-cost, higher quality homes for the poor.

4. At Acumen Fund, we have a zero tolerance policy for paying bribes because we know there are more ethical ways of doing business. By holding our portfolio companies to these standards, we help to erode corruption and build cleaner business environments in the geographies where we work.

How to read this report: for Developers & Entrepreneurs

The following pages contain a handful of challenges you may encounter, followed by strategies to address them. These are strategies that have proven successful either in Kenya or elsewhere. As you develop and refine your business model, you can use the report as a checklist to make sure you have all your bases covered or as a foundation for your plan. The report ends with a Who's Who of Affordable Housing in Kenya, a resource that will help you understand the landscape, develop partnerships, pursue funding, and learn from seasoned developers. Our hope is that the information contained here is useful to commercial developers moving into low-income markets, for social entrepreneurs moving into housing, and for low-income developers moving to Kenya from other geographies.

How to read this report: for Investors

This report contains valuable information about what to look for during due diligence and how to encourage and assist your investees. It is useful whether you are an impact investor beginning to explore housing deals or a housing investor beginning to explore Kenya or affordable housing. At Acumen Fund, we use this information to evaluate potential housing deals. If an entrepreneur does not have strategies to address the challenges laid out in Section 3, it is a red flag. Additionally, our entrepreneurs will inevitably come upon stumbling blocks, and we increase our value as an investor by advising them with our understanding of the strategies listed in Section 4. Finally, the Who's Who of Affordable Housing at the end of the report can help identify co-investors, project financiers, housing experts, and pipeline.

2. THE KENYAN CONTEXT

“Provision of adequate housing and attendant services especially for the poor remains probably the most elusive challenge for the Government.”

-Ministry of Housing

A. The Current Landscape

Kenya's housing challenge is extreme. The average price for an apartment in the capital city of Nairobi is currently KES 11.58M (USD 136,000), up from KES 5.2M (USD 61,000) in December 2000.⁵ There is no home on the formal market below KES 2M (USD 23,000), a level that is still completely unaffordable to low-income populations. As displayed in the graph below, property prices in Kenya continue to rise at a rapid rate. According to real estate and property experts Hass Consult, this trend is likely to continue, “With few mortgage owners, and ongoing economic growth, we see no prospect for a collapse in housing prices. Kenya isn't yet oversupplied with housing.” As a result, 60 percent of urban residents live in slums. And this is just the supply side.



Sixty percent of urban Kenyans live in sprawling slums such as this

The demand side (i.e. end-user finance) is just as underdeveloped. Only 8 percent of urban Kenyans have access to housing finance and there are currently only 22,000 active mortgages in the whole country.⁶ This is not because Kenyans lack the desire to own a home—homeownership is a central part of the culture. Instead, it is because of a nascent mortgage market that equals only 2.5 percent of GDP (compared to 70 percent in the United States) and a financial market that suffers from a lack of long-term capital to on-lend as mortgages.⁷

5. Hass Consult Property Index, 2011

6. 2011 Yearbook: Housing Finance in Africa, Center for Affordable Housing Finance. September 2011.

7. Ibid

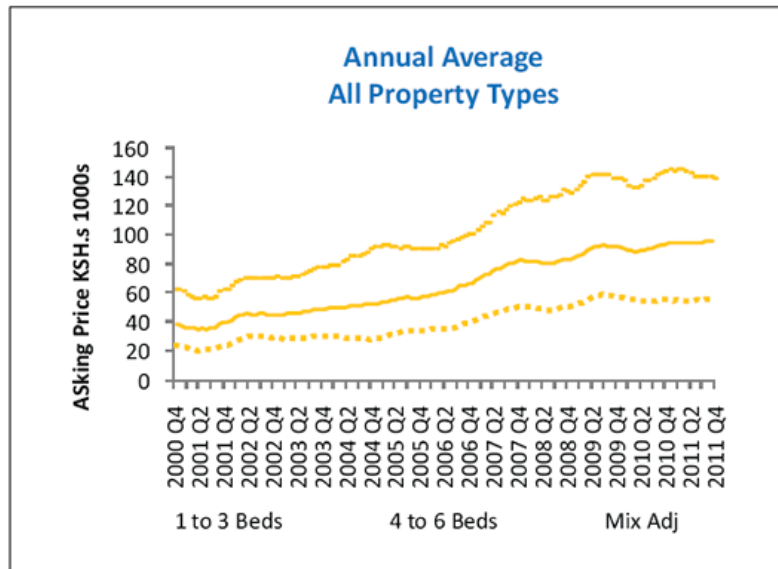
As a result of the constraints on both the supply and demand sides, Kenya’s low-income urban population is forced to live in informal settlements, with no security of tenure, limited access to water, sewage and power systems, and a myriad of security issues.

Given this dynamic, any developer offering homes at less than KES 2M (USD 23,000) is likely to have rapid uptake from the market as long as the homes are in an easily accessible location. However, few are lowering their prices to this level due to the skyrocketing cost of land and materials, the high cost of construction finance, and the higher margins that can be earned on middle and high-income homes.

B. The Opportunity

Just like any big challenge, this presents an opportunity. Access to affordable, quality shelter brings many additional, often overlooked, benefits. In addition to the improved structure itself, there is the obvious benefit of financial security—in many cases the new homeowner now has an asset that is far more secure and valuable than any asset they have ever owned. However, no less significant are the proven health benefits of this new home. Disease thrives in the unsanitary, crowded conditions of slums and tenement housing, and unsafe and unhealthy physical structures are the norm. By providing a home to a low-income family, you not only provide an improved living space, but financial security, better health, safety, and the dignity of owning one’s own home.

Providing more affordable homes and housing finance in Kenya is not impossible and there are a growing number of groups who are making strides in this direction. They are taking risks and testing new models, and many of them need patient capital from impact investors in order to move forward.



Source: Hass Consult Property Index, Quarter 4 2011 Report

What is “affordable housing” in Kenya?

“Affordable housing” is an ambiguous phrase, so we want to clearly define what we mean by “affordable” for the purposes of this document. Acumen Fund defines our target market at Base of the Pyramid, or individuals making USD 4 per day or less. However, the bounds of affordable housing stretch beyond our specific target market, especially in contexts like Kenya where existing options are only affordable to middle income households and above.

For the purposes of this document, we consider a home that is sold at or close to KES 1M (USD 11,765) to be “affordable.” This number was determined through an understanding of the current market dynamics (i.e. the sheer lack of anything remotely affordable) and by working backwards to determine the household income needed to purchase a home. The monthly mortgage payment should be around the same as the buyer’s previous rental payments, which are typically 30 percent of household income. **Therefore, a KES 1M home is affordable to a household earning USD 15 per day.**

Price of home=KES 1M
 Mortgage=15% annual interest rate, 15 year tenure;
 Down payment=10% (KES 100,000)
 Amount financed=KES 900,000
 Monthly payment (principal + interest)= KES 12,596 (USD 148)
 Household income=KES 37,788 (USD 445) per month= KES 1,260 (USD 15) per day

There is a palpable feeling in Kenya that the housing market is on the verge of change, with widespread recognition amongst developers of the massive unmet demand for more affordable homes. The sector is at a point where a new, commercially viable model for affordable housing has the potential to have a significant demonstration effect and spur others to replicate it. However, getting this model right will not be easy, and there are many barriers that still stand in the way.

C. Kenya as a unique market

“Investment in housing sector has been minimal and sporadic. This is as a result of lack of an enabling environment for private sector participation in housing delivery process particularly for lower middle and low-income groups; low government funding; high cost of finance; lack of serviced land; high cost of building and construction materials; inappropriate building and construction technologies; limited research on low cost building materials and construction technologies; stringent planning regulations and standards, and high cost of infrastructure.”

-Ministry of Housing,
Strategic Plan: 2008-2013

Despite the challenges, Kenya has one of the more developed and stable economies in East Africa, and its housing sector is more advanced than neighboring countries. The country is currently experiencing a housing boom, with a highly speculative property market and high unmet demand driving Kenya’s residential property price inflation. Yet, this housing boom has an obviously negative impact on the ability to provide commercially viable homes at an affordable price.

As stated in the Ministry of Housing quote above, there is historically little government involvement, high cost of finance, an underdeveloped mortgage market, and widespread land scandals and delays. However, in recent years the government and developers have begun to pay more attention to the need for affordable homes on the market. For example, the government of Kenya recognized housing as a human right in the new constitution established in 2010, and the Nairobi Metro2030 Strategy contains the following statement,

Housing...represents a key element in improving not only the quality of life in the region, but also a major component of its economic growth plan. The latter is significant given the multiplier effects of investment in housing. In Kenya every shilling invested in housing yield nine more shillings.

However, despite this recognition, the government is still a relatively passive player in the sector. Yet there are government agencies, pieces of legislation, and incentives with the explicit purpose of increasing affordable housing supply. See *Appendix B* for more information on the government role and information on housing-related legislation. The government may be an important enabler, but many believe that the private sector is likely to be in the driver’s seat of supplying more affordable homes. The government programs are not enough, and Kenya needs developers who are committed to the social impact and willing to take the risks involved with catering to the low end of the market.

The Ministry of Housing incentives listed here are meant to encourage more developers to move down-market, but the fact that they have barely been utilized indicates that these alone are not enough to encourage developers. At least initially, it will take a developer who is truly dedicated to bringing down the cost and is willing to take risks to do so. Yet this dedication is a necessary but not sufficient ingredient. Success will require addressing the challenges listed in the next section with creative solutions that can help increase the speed and lower the overall cost of the project.

Incentives provided by Ministry of Housing

The Ministry of Housing developed 30 incentives in 2007 to encourage greater private sector participation. Eight of these incentives are technically operational, but it is unclear whether they have been executed. This is partly due to a lack of awareness amongst developers. Therefore, we list them here in order to increase the chances that they might be utilized:

- Exemption from VAT tax for any “low income housing project,” defined as no less than twenty housing units at a construction cost of no more than KES 1.6M
- Tax deductibility for expenditures for social infrastructure
- Tax deductibility of interest from capital cost used for construction of social infrastructure (such as school and healthcare facilities) and interest from infrastructure and social service bonds
- Tax deductibility for housing loans up to KES 150,000 per annum
- Contributions to Home Ownership Savings Plan
- Lower taxation of Housing bonds
- Prescribed dwelling house provided by employers allows employer a deduction against taxable income at the rate of 1/40 of the capital expenditure
- Tax deductions for industrial buildings

3. HOUSING SUPPLY: CHALLENGES

It is important for a developer to enter a project with an understanding of the challenges that might arise, and even to expect them. A business plan can paint a commercially viable picture of a project to deliver affordable homes, but if the barriers listed below are not taken into account from the outset, achieving those price points will be next to impossible.

Challenge 1: Availability of finance

i. Project Finance: Housing developments are extremely capital intensive and highly leveraged. Yet it can be difficult to secure debt, especially at reasonable rates, which are a key component of bringing down the cost for the end-user. In fact, the cost of finance is one of the most prohibitive factors in the Kenyan market. The Kenyan Central Bank Rate (CBR), the lending rate of the Central Bank, and therefore all the banks, rose to 18 percent in 2011.

Yet, even if the banks did lend at reasonable rates, approvals and timely disbursements would still be a challenge. Developers tell cautionary tales about banks committing project finance but neglecting to disburse, making claims such as that they will only disburse after construction is complete. This clearly defeats the purpose of project finance, which is meant to fund the construction itself.

The lesson here is to take the commitment from the banks with a grain of salt. Expect delays and plan to spend significant time pushing them to disburse. Developing friendly and trusting relationships with someone at the bank who has the power to hit “Send” can move things forward without relying on bribes.

ii. End-user finance: Once the homes are built, how will the buyer finance them? This is an especially important question when catering to low-income populations. Few banks provide mortgages in Kenya, and those that do typically only lend to high and middle-income clients. Yet, even if low-income borrowers were to be approved, interest rates might be too expensive.

There are a handful of banks developing products targeted toward the low-income homeowner (see The Housing Ecosystem section for more details), yet most of them still require salaried employees (i.e. formal sector) with clear credit records. This cuts out the majority of the low-income market.

Therefore, it is essential to have strong agreements with a handful of banks and/or microfinance institutions (MFI) to provide mortgages for qualified borrowers looking to purchase a home. From our perspective as an investor, we would need to see these agreements in place before we could invest in a new housing development in Kenya.

Challenge 2: Delays

Delays can come at many different points and should be expected. They become a real problem when the developer does not anticipate them. This is especially because large-scale construction projects tend to be highly leveraged and cash flows are more likely to become an issue with unanticipated delays. The most common delays described in Kenya are the following:

i. Clean land titles: Kenya is plagued by frequent land fraud and fake titles. This issue is even more significant than in other countries in the region. Many developers have purchased land and begun to build, only to have an unknown party to enter the picture and claim it as their land. Long legal battles can then ensue. Therefore, it is essential to check and recheck the validity of a title before purchasing the land.

ii. Land classification (i.e. converting from agricultural to residential) and approvals: The speed at which approvals and classifications can be obtained varies county by county. The following are three important pieces of advice to improve your chances of a speedy process, yet one must be cognizant that there is a fine line between using these strategies and corruption:

- i. Build a positive relationship with the municipal council.
- ii. Know the bylaws and requirements before submitting your proposals. If your plans follow the bylaws, they are less likely to get delayed.
- iii. Do not let your case get lost in stacks of paper on an official's desk. Don't be shy to follow up, follow up, and follow up again until it goes through.

iii. Timely disbursements of project finance: As discussed above, this can be a major issue that can bring a project to a halt for some time. Here again, it is important to build a strong and positive relationship with the banks.

iv. Infrastructure promised/planned by the government: This could come in the form of incentives promised by the government or roads and other infrastructure that already exist in the government master plans. However, your development cannot be dependent on these being delivered in a timely fashion, or even at all. For example, if the government is planning a major road that will pass your property, your project must be viable with or without it.

v. Supply chain/Materials supply shortages: Almost all materials are imported into Kenya and are US dollar dependent, causing price and quantity fluctuations that can create major challenges. Additionally, even cement, which is made locally, has frequent supply shortages. This is one reason to explore alternative building materials and/or have strong contracts with materials suppliers.

Challenge 3: Volatile economic environment

Rapid inflation has caused large increases in the cost of materials and land. On average, developers saw their costs increase by 20 percent in the last 6 months of 2011. It is difficult to maintain a healthy margin with this level of inflation, especially if a large portion of the units were sold off plan at a price that failed to predict the inflation. This is yet another reason to leave a lot of leeway in your model and to understand that while there are many benefits to selling off plan (i.e. selling homes before construct begins or is completed), there are also consequences that should be thought through.

Challenge 4: Materials Bias

Kenyans have been slow to adopt alternative building technologies and have a strong bias towards traditional materials and techniques, specifically stone or cement. Kenya is by no means unique in this regard, and the marketing of alternative techniques has been a challenge throughout the world.

A few measures are being taken to introduce alternative materials into the Kenyan market (see Housing Ecosystem section). Once there is greater confidence among consumers, it will become easier to build using new technologies. However, the lack of trust of new materials means that any developer using alternative materials or building techniques must have a finished product that looks and feels like traditional bricks and mortar.

Challenge 5: Speculation

Just because the intention is for low-income buyers to purchase the homes does not make it the case. Speculators and investors are rampant in the Kenyan real estate market—snatching up homes and reselling them at higher prices. This will continue to be true as long as there is a shortage in the market. Therefore, developers wishing to cater to the poor must address this challenge head on or they will not achieve the desired impact.



Middle income housing development in the typical style of urban Kenya.

4. STRATEGIES TO BRING DOWN THE COST

This section offers a set of strategies that have been used in Kenya or elsewhere to increase affordability while maintaining commercial viability. These strategies are not a formula, but suggested ingredients that we expect will improve the chances of success.

This is by no means an exhaustive list of potential strategies, but they are an important place to start. But do not take our word for it when you can get it directly from practitioners. The *Who's Who of Affordable Housing* section includes a list of individuals and companies either developing homes at more affordable rates or using alternative techniques that could be applied to the low-end of the market in Kenya.

Strategy 1: Make land affordable

Land is so expensive in urban Kenya that it alone can make affordable housing unviable. Additionally, banks in Kenya are reluctant to finance the purchase of land. Therefore creative methods often need to be used to secure land in a way that makes sense for the project. Below are a few possibilities:

i. Land as equity: Find a land partner who can come in with the land as equity. This means eventually paying for the land in the form of dividends, which may align nicely with cash flows since revenue comes in first and the whole payment does not need to be made at once.



Developments are popping up all over Nairobi, including on the outskirts of the city, and land is sold at rapidly increasing prices.

Fun Fact

Kenyans have high standards when it comes to structural strength! According to developers and real estate agents, "Is the house bullet proof?" is one of the most common questions asked by customers. They probably don't actually think someone will try to shoot through their home, but over the years this became one of the main measurements of whether a house is up to par.

ii. Concessionary land: Find an organization or government agency with an interest in low cost housing and receive the land at a concessionary rate. This is currently happening in Kenya on land that belongs to UN HABITAT. A low-income housing development is being planned on their land, enabling the project to have much more flexibility with pricing than is typical because the land is free. This same scenario could be replicated on government land or land belonging to individual owners with an interest in affordable housing.

iii. Land banking/Flipping land: Buying more land than is needed for the project and reselling it at an increased price can dramatically reduce the net cost of the land. Assuming significant appreciation of land value continues to be the trend, this can even make the land essentially free. However, it does not solve the challenge of financing the land since the initial purchase still needs to happen upfront.

iv. Develop in smaller cities and towns where land is cheaper. In many cases, the need for affordable homes is just as extreme. For example, just like Nairobi, 60 percent of residents in Kisumu live in slums.

Strategy 2: Alternative Technologies

Using alternative technologies can be challenging in the Kenyan market, but if done correctly it has the potential to be an essential piece of bringing down the cost. The most important aspect to be aware of is ensuring that the look and feel of the home is similar, if not the same, as traditional techniques. When someone purchases a home, whether they are rich or poor, they want to put their savings into old-fashioned brick and mortar rather than a shiny new technology that is untested and unfamiliar.

There are a few specific techniques we believe have notable promise, and these are discussed in more detail in the *Housing Ecosystem* section.

Strategy 3: Creative Financing

Given the unfriendly nature of the lending climate in Kenya, it can be hugely beneficial to think creatively about how to raise funds. Looking to international lenders for finance is one way to address this problem. Development Finance Institutions (DFIs) and other International Organizations can be sources of project finance with single digit interest rates. This reduced cost of capital (especially in such capital intensive and highly leveraged projects) can make a big difference in the final unit price.

Strategy 4: Subsidy

i. Government Subsidy: Cashing in on the subsidies offered by the government seems straightforward, but many developers seem unaware of what is offered, or simply disillusioned that it will be delivered. Therefore, it is important to be familiar with the incentives and the path to benefit from them. There is still some

Charity Bond

One housing social enterprise in Nairobi developed a particularly creative method of receiving finances at a concessionary rate. They created the "Charity Bond" concept, where a handful of individuals and institutions buy into a "bond" with the expectation that they will be repaid with some interest at the end of the project. They targeted individuals and groups with an interest in the social mission, which allowed them to promise returns in the low single digits. This let them maintain a low cost of capital, especially compared to what they would otherwise receive at commercial lending rates from Kenyan banks.

mystery about whether the government will follow through in its promised incentives, so assumptions should be verified early. The advertised incentives are listed in the previous section, The Kenyan Context.

You can increase your chances of benefiting from these subsidies by developing strong relationships with government officials to get commitments early. Yet, even with clear commitments, expect delays.

ii. Building subsidy into your model: While the best scenario is a development where every unit is profitable, this is not always possible if the goal is to cater to low-income populations. Therefore, the choice to incorporate cross-subsidy is worth considering. This can be in the form of traditional cross-subsidy, where the affordable units make a loss that is subsidized by middle-income units. Or the affordable units can make a small margin while middle-income units make a larger margin.

Either scenario creates a mixed-income development. Many housing experts believe that in order for affordable housing to be financially viable, especially in an urban setting and without alternative technologies, mixed-income is the only way to go.

Strategy 5: Design

Innovative designs and layouts can help to use space efficiently and effectively. There have been many interesting experiments with creative designs for affordable housing communities that save on cost and space as well as create more community interaction and reduce the risk of ghettoization. Most affordable housing communities that fail to increase quality of life do so because master planning and design were overlooked. They ignore the benefits of creating mixed-use developments with community spaces and commercial areas. The importance of design should not be underestimated!

Strategy 6: Incremental construction

In some contexts incremental construction increases the ability to provide homes at an affordable rate. An Acumen Fund portfolio company in Pakistan, Ansaar Management Company (AMC), provides an example of successful, developer-led, incremental construction.

AMC's model entails constructing and selling homes block by block to avoid the large amounts of capital needed at one time to build in the traditional fashion. This means that economies of scale are not achieved, and therefore the profit per home is

less than a traditional model. But in exchange for a lower margin, AMC is able to recycle capital and spread out demand, and the profits made from each block can be used to fund the construction of the next block.⁸

Strategy 7: Self construction

Self-construction refers to homeowners driving the construction of their own homes, which allows them to work within their own financial requirements and timeframe. Self-construction can be integrated into a model in a variety of ways. It can range from a private sector version of the “site and services” model (infrastructure and foundations are provided, and the homeowner purchases a plot and builds their own home) to a simple ground floor structure constructed by the developer, leaving residents with the ability to expand as their financial situation allows.

The key to successful homeowner-led incremental construction is ensuring the quality of the construction both to maintain the look and feel of the development and to maintain safety standards. This can be challenging and requires a strong ongoing role from the developer or other affiliated agency, sometimes in the form of technical assistance through engineering and design support.

Strategy 8: Community supported labor

Labor costs can be cut by hiring the current or future residents as construction labor. This strategy was used at Jamii Bora Kaputei Town, another Acumen Fund investee, and allowed them to both cut costs and to increase the residents’ feeling of ownership in the project. However, it is worth noting that it may take more management and is only viable for certain project designs and construction techniques. Usually the community workers must also be accompanied by skilled labor.



Jawad Aslam, founder of Acumen Fund housing investee, Ansaar Management Company

Umoja Estate: An Innovative Design to Cut Costs

In the 1970’s, the Nairobi City Council built Umoja Estate in order to accommodate the growing urban population brought by industrialization. The homes were targeted at low-income residents and therefore needed to be significantly less expensive than the existing options on the market. In order to cut costs, they developed an innovative design.

The Umoja units were clustered in groups of five or six homes, and the utilities (toilet, shower, and sink) were built in a block outside each cluster. Each family had its own, lockable utilities, but placing them together instead of inside individual units dramatically cut unit costs. By not outfitting each home with its own plumbing system, they saved on materials, space, and time.

Unfortunately, a clever design does not ensure success, and Umoja’s challenges arose when maintenance and quality control were overlooked. Over time, the Council became budget constrained and thus allowed people to construct or expand their own units, leaving no oversight of the quality of construction. The shared infrastructure was not maintained, and as the years went by the sewage system fell into shambles, taps frequently ran dry, and there was insufficient disposal of solid waste.

If the right mechanisms had been put in place for long term maintenance and quality, Umoja could have been a unique success. Yet the original design did not go unnoticed, and it is resurfacing among architects and urban planners in Kenya as an innovative way to cut costs.

⁸ Farris, Bryan, “Understanding Three Affordable Housing X-Factors.” *Nextbillion.net*, January 9 2012.

Strategy 9: Avoiding speculation

What is the use of bringing down the price if it does not reach your target market in the end? There is no clear answer to keeping speculators from buying, especially since in many cases they are not wealthy individuals buying plots in bulk, but middle class people who want to make a few extra shillings. However, developing a strategy to avoid this cannot be an afterthought and must be carefully developed from the outset. Some potential strategies include:

- i. Developing strict criteria for buyers to qualify
- ii. Ensuring owner-occupation within a short time period
- iii. Limiting the number of homes that can be purchased by one individual
- iv. Withholding title deed for a period of time, such as 5 years, so owners are unable to re-sell.

Strategy 10: Develop contracts with suppliers

Given the volatile economic environment, materials prices can skyrocket and turn a healthy project completely unviable. In order to avoid this, develop fixed rate contracts with materials suppliers whenever possible. Some may even have Corporate Social Responsibility programs, so do not be afraid to market the social impact side of the project in order to negotiate better terms.

5. THE HOUSING ECOSYSTEM

Increasing housing supply does not happen in isolation, and any developer should understand the various components of the housing ecosystem. In addition to end-user finance, it is also beneficial to be familiar with the worlds of alternative building materials and technologies and rental housing.

A. End-user finance as a key component

End-user finance cannot be ignored, especially when the goal is to provide homes to low-income buyers who do not have access to traditional mortgages. You may offer homes at a price lower than existing options on the market, but you can be sure these homes will not make it to the intended buyers unless they have access to mortgages that appropriately match their affordability level and credit-worthiness. Unfortunately, this is not an easy task in Kenya, and at this point in the development of the mortgage market, it requires active facilitation from the developer.

a. Current landscape

Kenya has a sophisticated and robust mortgage market compared to its neighbors, but it still serves only 0.05 percent of the population.⁹ Research published recently by the World Bank estimates the potential size of the mortgage market to be about KES 800 billion (USD 9.9 billion), thirteen times its current size.¹⁰ Of the 45 commercial banks in the country, only about 25 have mortgage portfolios, and the two largest mortgage lenders in Kenya, Kenya Commercial Bank (KCB) and Housing Finance Kenya, control over half the mortgage market in the country. Many banks recognize this untapped opportunity to provide mortgages, especially to Kenya's growing upper and middle class.

A small number of banks are developing housing products explicitly designed for lower income borrowers, but these still cater almost exclusively to salaried employees and those with existing bank accounts. There are a handful of microfinance institutions and cooperatives providing housing-related loans to informal and self-employed people, but this is a massively underdeveloped sub-sector where we see a great deal of potential for growth.

b. Challenges

There are reasons why the mortgage market is so nascent in Kenya and why mortgages for low-income borrowers are virtually non-existent. The major barriers keeping lenders out of this market are the following:

i. Funding of financial sector:

Banks have trouble providing mortgages in Kenya regardless of the income of their borrowers because they are typically liquidity constrained and lack the long-term capital to on-lend.¹¹ Yet, this may start to change because the government recently put in place measures to encourage lending by banks and the Central Bank of Kenya reduced cash reserve ratios for banks in 2009, intending to free up more money for lending.

ii. Insecure titling affects banks' security:

In most contexts mortgages are a relatively safe product for the banks because the collateral is the title deed itself. Yet, in the case of Kenya, where there is so much land fraud and false titling, the deed is no longer a safe asset. In 2009, for example, there was a large scale revocation of illegally provided deeds that shook confidence in the land titling system and affected the banks' appetite for collateralization.¹² A similar land scare just

9. 2011 Yearbook: Housing Finance in Africa, Center for Affordable Housing Finance. September 2011.

10. Walley, Simon, "Developing Kenya's Mortgage Market." Presentation, February 2011.

11. 2011 Yearbook: Housing Finance in Africa, Center for Affordable Housing Finance. September 2011.

12. *Ibid*

took place again at the beginning of 2012. Some efforts are being taken to clean up the land titling system in Kenya by digitalizing land records, but the benefits of this will not be felt for some time and there is a long way to go.

iii. Affordability: Beyond the barriers to simply providing mortgages in Kenya, there are a host of challenges specific to reaching low income borrowers:

i. Reducing risk and collateralizing creatively especially when providing home-improvement loans to slum dwellers without formal tenure. Reaching low-income borrowers usually requires a different kind of relationship, process, and system that looks more like the high touch MFI model and often times requires group-lending strategies.

ii. Assessing credit-worthiness is much more challenging when clients are unsalaried workers (i.e. informal sector) and/or do not have bank accounts. This keeps most non-MFI banks from catering to the low end of the market since 61 percent of urban workers in Kenya are employed in the informal sector.¹³

iii. Unmet demand from high income leaves little reason to go down market, especially with higher transaction costs and lower payments associated with low-income clients.

13. "Statistics on Informal Employment in Kenya," *Women in Informal Employment: Globalizing and Organizing*, Statistical Brief No., May 4 2011.



Homes developed by SDI members in Nairobi's Kambi-Moto slum after years of group saving. The community made of 270 families eventually received the land for free from the Nairobi City Council and incrementally constructed multistory homes.

c. Strategies to make it affordable

The few banks and MFIs that are providing housing loans to the poor are doing so by developing new and innovative products as well as strategies for assessing borrowers.

i. Creative products that match the cash flows of the poor

i. Home improvement loans: Construction loans given to residents of either formal or informal settlements. The scale of construction can vary from small refurbishments such as fixing leaks, to upgrades such as installing a toilet, to building a whole new floor. These improvements can dramatically alter the quality of the home, yet typically require smaller loans than a mortgage and are more accessible to lower-income families.

ii. Incremental financing: Funding a new home in series of stages to match the cash flow of the borrower. Clients may chip in their labor resources to build their desired houses. This often starts with a loan for the purchase of the land, followed by a separate loan to build the foundation, a loan for materials acquisition, a loan for the first floor, etc.

iii. Joint-purchase land loans: Financing of land purchase by groups of individual clients. Joint land purchases by groups of low-income households makes land affordable and reduces the risk to the lenders (if one group member defaults, they are replaced by someone else).

Case Study: Slum Dwellers Saving Together to Purchase Land

Last year 2,000 slum dwellers in Nairobi purchased 23 acres of land in Mukuru slum. Through the help of Akiba Mashinani Trust (AMT), a Kenyan NGO working closely with slum dwellers across the country, they organized themselves into 49 groups of 40 and started saving in 2007. The land was purchased in 2011 for KES 81 million (USD 953,000). Eventually, all 2000 slum dwellers will have homes there and an additional 1000 middle-income homes will be built to subsidize the cost.

In Katani Slum near Nairobi's airport, 700 dwellers bought eight acres at KES 18 million (USD 211,000) and are hoping to build 1,000 units, and similar land-purchases by slum dweller cooperatives are taking place elsewhere in the country. In all these cases, the land was significantly more affordable because they saved together and could purchase it in bulk.

ii. Reducing rates

Find concessionary funding to on-lend (from foundations, Development Finance Institutions, etc). If relying purely on local debt funding, the interest rates are often prohibitively expensive.

iii. Creative (and often informal) mechanisms for collateralizing

Use strategies such as requiring guarantors from the community or other forms of tapping into social networks and social pressure.

B. Alternative materials and technologies

The use of alternative materials and technologies is also nascent in Kenya, and across most of the world for that matter. As mentioned before, the major barrier is market acceptance, though steps are being taken now that may alter this dynamic.

Most developers in Kenya stick to stone and cement, and there is not widespread use of any alternative building material. The look and feel of the home is attached to status, and unlike new medical devices or agricultural inputs, when someone purchases a home, they want to put their savings into a reliable structure that looks and feels like the homes of their middle class counterparts.

However, a few are venturing away from traditional methods,

either in the form of new building techniques or new materials. And the efforts are not isolated to private developers—the government is investing millions of dollars in order to introduce new, lower-cost materials into the market.

a. Public sector efforts

The National Housing Corporation, implementation arm of the Ministry of Housing, spent KES 700M on a new factory to produce a new Italian construction material. The method, which uses a special kind of Styrofoam between two thick panels of cement, is projected to reduce both time and cost of construction by 30 percent. Many eyes are on this new material because NHC will soon begin to use it in its own housing projects. This has the potential to create market acceptance as well as allow private developers to benefit from the time and cost savings it offers.

b. Alternative materials

The most common alternative material Kenya is interlocking bricks, a type of brick with grooves along the side that allow it to be quickly and cheaply assembled. In addition to dramatically reducing construction time, interlocking bricks can be made with local raw materials and decrease the need for expensive imported materials such as steel (the bricks often require only three inputs—soil, small amounts of cement, and water). However, interlocking bricks have not yet proven acceptable in urban markets and are primarily used in rural areas.

c. Alternative construction techniques

Innovative construction techniques are more acceptable to the market than alternative materials, because more often than not the end product looks the same as a structure built using traditional methods.

*i. Two of the most promising techniques are **Form Technique** and **Pre-cast concrete**. Both have track records outside Kenya, including extensive use in the developed world. More information about both of these techniques is readily available online.*

ii. Manufacturing materials on site is another way to reduce costs and also maintain more control over the construction process. This technique may not be appropriate for all developments, but should be considered when possible, especially in a context where materials acquisition can be fraught with delays and supply shortages.



Jamii Bora manufactures their materials on site at Kaputei Town. Here a worker, who is also a resident of the community, is drying roof tiles made in the factory on-site.

C. Rental housing

We include rental housing in this report because it is an important yet frequently overlooked aspect of affordable housing. Solely discussing home-ownership models assumes that the poor have only one preference, to own. Yet this could not be further from the truth. In reality, many rent instead, sometimes by necessity and sometimes by choice. Unfortunately, there are few quality and affordable rental options, and the vast majority of low-income renters are forced to rent in slums or tenements (semi-formal rentals that are essentially vertical slums). Renters in these areas have even fewer rights than other slum residents and are one of the most vulnerable populations in urban Kenya.

Therefore, there is a profound impact inherent in providing high quality rental options to the poor. Yet there are few private sector developers addressing this need, despite the fact that it can be quite attractive from a business perspective due to the predictable and constant revenue it creates.

Even developers focused on home-ownership can consider reserving a portion of their development for rental housing. This requires budgeting for the increased operations needed to support rental, such as rent collection and maintenance. Yet, once this is accounted for, including rental housing in the development can assist with cash flows as well as potentially increase the social impact of the development.

It is worth noting that if rules are not set up to ensure owner occupancy, a portion of owners will rent out their units anyway. However, the problem with this scenario is that renters' rights may not be upheld and units are less likely to be maintained. Therefore, the developer should not ignore rental housing—it is likely to happen one way or the other, and better for it to happen right.

6. CONCLUSION

We need more impact investors and social entrepreneurs to join us in the fight for affordable homes. As the pages of this report demonstrate, affordable housing is not easy, but it is also not impossible. It may not be as sexy as some of the other sectors where we put our time and money, but if we call ourselves risk takers who support work that will result in significant impact, even without a proven track record, we need to give affordable housing a serious look. The housing sector is in desperate need of more entrepreneurs and investors with the patience, creativity, and risk appetite required to increase access to quality, affordable homes.

Our hope is that the information and strategies within this document will encourage more practitioners and investors to take the plunge, and ideally, improve their chances of success. Keeping in mind the six key components of success will help you along the way.

- **Be creative**
- **Be willing to take risks in order to maintain the social impact, even when it means saying no**
- **Develop relationships with institutions, but keep them clean**
- **Recognize the cultural context**
- **Housing isn't just the physical infrastructure, it's also community infrastructure**
- **Build in plenty of leeway into your model**

Yet, above all else, successfully delivering affordable housing takes commitment. Even if you follow all of the suggestions in this document exactly, you will come across numerous unforeseen challenges and stumbling blocks. At the end of the day, you will differentiate yourself from the rest through the creativity and drive to push through those challenges. In doing so, you will create a new category of home on the market, demonstrate to other developers that it is possible, and help poor Kenyans realize their dream of owning a home.



Category	Org/Individual	Description
Architects: Low cost	Joseph Mukeku (Independent Architect, SDI/AMT)	Architect focused on low-cost housing designs, primarily targeted at current slum dwellers. Works with SDI and AMT to develop architectural plans for their members.
Architects: Low cost	Andrew Gremley (Pharosarchitects)	Architect based in Nairobi with personal interest in affordable housing who developed a master-plan for a low-cost housing development.
Developers: Commercial	Superior Homes	Developer in Nairobi using Wall Ties Form, a kind of form technique that cuts down on time and materials cost.
Developers: Commercial	PSP Homes	Developer in Nairobi catering to lower middle income groups.
Developers: Low cost	Edermann Properties	Chinese-owned development company with the mission of providing affordable housing, though their homes typically sell to lower middle income.
Developers: Low cost	Karibu Homes	Working to build low cost housing development on outskirts of Nairobi. Currently in planning stages.
Developers: Low cost	Lyndon Capital	Working to build low cost housing development on outskirts of Nairobi. Currently in planning stages.
Developers: Low cost	Urbanis Africa (Jamii Bora)	Affordable housing developer managing Jamii Bora Makao and planning additional developments in Nairobi. Their goal is to replicate commercially viable models of affordable housing around the African continent.
Developers: Low cost	Jamii Bora Makao	The arm of Jamii Bora Bank that built an affordable housing development for its MFI borrowers living in slums. Phase II of Jamii Bora's development, Kaputei Town, is in planning phases.
Developers: Low cost	National Social Security Fund (NSSF)	Just announced plans to build 30,000 low-cost homes on 1,000 acres of land in Mavoko, on the outskirts of Nairobi. Cost and timeline details have yet to be released.
Financiers: End-user	Equity Bank	One of Kenya's largest banks with a history of catering to lower income groups. Recently launched a mortgage line, which includes an "affordable mortgage" product targeted at lower income borrowers.
Financiers: End-user	Housing Finance Company Kenya	Housing Finance company is the leading mortgage provider bank and Premier Property Company in Kenya. They both develop property and provide mortgages. The advantage of working with Housing Finance is that they have partnerships with hundreds of employee co-operatives that gives them an existing pool or potential lower income clients and allows them to offer mortgages at more affordable rates.

Category	Org/Individual	Description
Financiers: End-user	Jamii Bora Bank	MFI that recently converted into a bank with the mission of targeting low-income borrowers. Offer mortgages.
Financiers: End-user	Family Bank	Former MFI turned bank with new housing product line focused on low-income borrowers. Includes mortgages, incremental construction loans, and land loans.
Financiers: End-user	Makao Mashinani Trust	Only purely housing focused MFI in Kenya. Incubated at K-Rep Development Agency, an innovation arm of one of Kenya's largest and most established MFIs. Recently spun out as independent entity. Provide mortgages, home improvement loans, and land loans, targetted primarily at unsalaried slum dwellers.
Financiers: Project	Shelter Afrique	A fund established by 44 African countries and the African Development Bank in order to mobilize resources for housing development in Africa. Shelter Afrique provides project finance, occasionally equity, and has strong relationships with international lenders with the ability to give concessionary debt. They also have deep expertise in housing development across the continent
Financiers: Project	International Housing Solutions	Invests in affordable housing on African continent. The majority of their work is in South Africa, though they are hoping to expand
Government	Ministry of Housing	Mandate is to facilitate the development and management of quality affordable shelter for Kenyans, develop housing policies and incentives, and carry out slum upgrading programs (KENSUP).
Government	National Housing Corporation (NHC)	Implementing arm for government housing policies and programs. They build housing developments funded by the Ministry of Housing, yet they are typically affordable only to lower middle and middle-income populations.
Government	Municipal Councils	The local governing bodies must approve all building plans and may have their own set of incentives for affordable housing.
International Organization	UN Habitat	UN agency for human settlements, headquartered in Nairobi. They are beginning to do projects in Kenya, included a planned development on the outskirts of Nairobi.
International Organization	World Bank	The World Bank has been involved in helping to stimulate the mortgage markets in East Africa, particularly in Tanzania where they set up a mortgage liquidity facility for banks. They hope to replicate this in Kenya.
New technology	WorldHaus	Social enterprise that developed a new kind of interlocking brick technology. They are currently piloting in India but hope to expand to East Africa.

Category	Org/Individual	Description
New technology	Hydraforms South Africa	South African interlocking bricks company supplying around the African continent. They sell or rent their brick-making machines to developers/contractors and provide training to the site team.
New technology	Innovations Housing (interlocking bricks in Kenya)	Small NGO in Kenya with a few projects using interlocking bricks.
New technology	Easy Nyumba Co Ltd	Interlocking bricks company based in Kenya, building homes mostly in rural areas. They sell interlocking bricks and interlocking brick machinery and/or act as a contractor.
NGO	National Cooperative Housing Union (NACHU)	An organization made up of 400 housing cooperatives. NACHU works to provide members with affordable housing and access to housing loans.
NGO	Habitat for Humanity	Have operations in most countries in Africa. Kenyan activities focused on housing for internally displaced persons and some housing finance.
NGO	Rooftops Canada	Works with local partners around Africa (NACHU is their Kenyan local partner) to improve access to affordable housing and housing finance. Working to develop a regional Housing Microfinance working group made up of the HMFI practitioners in Kenya.
NGO/Affordable Housing Expert	The Centre for Affordable Housing Finance in Africa (CAHF)	Aims to be the primary source of information and debate relating to affordable housing finance in Africa. CAHF is a division of FinMark Trust, a DFID funded think tank.
NGO/Affordable Housing Expert	Slum Dwellers International: Kenya	International NGO founded and run by slum dwellers worldwide. Work in Kenya has focused creating savings cooperatives and home improvement. SDI is extremely networked and knowledgeable about affordable housing in Kenya.
NGO/Affordable Housing Expert	Akiba Mashinani Trust	A Kenyan trust with over 14 years experience working with the urban poor. AMT works closely with SDI to establish savings groups and facilitate the purchase of land by groups of slum dwellers.
Real Estate/Housing Expert	Hass Consult	Well established Real Estate Agency in Kenya that also publishes an annual Hass Consult Property Index, with information about trends in real estate and house price inflation.
Rental Housing	Johannesburg Housing Company	Social enterprise providing affordable, high quality rental option to the poor in South Africa. There is no similar organization yet in Kenya.
Sector Funder	Rockefeller Foundation	Rockefeller's Urban Initiative provided funding to a handful of housing-related projects in Kenya, including SDI and AMT.

Relevant Government Agencies

A. National:

a. Ministry of Housing—The Ministry of Housing is a strategic ministry in facilitating development and management of quality and affordable shelter for Kenyans. Mandate is the following:

- + Develop housing policies and incentives.
- + Promote research and utilization of appropriate building materials and technologies
- + Coordinate stakeholders on housing and human settlements matters
- + Facilitating housing for Civil Servants
- + Carry out slum upgrading programs (KENSUP)
- + Development of housing through National Housing Corporation (NHC)
- + Facilitation of housing finance through Housing Finance

b. National Housing Corporation

- + Implementing arm for government housing policies and programs
- + Build housing developments
- + Supported by the Ministry of Housing
- + Project-types:
 - Site & Services (of Dandora, Umoja, Kayole and Kahawa):
 - Tenant purchase schemes that were constructed on the (then) outskirts of Nairobi as an alternative housing development strategy that hoped to prevent the proliferation of urban slum conditions.
 - Provided serviced plots to former slum-residents. In some cases, NHC constructed homes on those plots, and in others the allottee was expected to build.
 - Home-ownership
 - Tenant purchase model
 - Similar to a rent-to-own scheme where rent payments are slowing going to pay off the unit until the tenant eventually owns.
 - Rental units

c. Ministry of Lands

- + The Ministry of Lands was formed in 1903. It has grown to over 50 Lands offices countrywide. It has four main departments, which include Lands, Physical Planning, Survey and Land Adjudication and Settlement.
- + However, the Ministry of Lands is one of the more corrupt government agencies, leading to widespread issues with false titles and illegal allocation of land to government officials.

B. Municipal:

a. Municipal Councils

- + Determine countywide regulations on land-use, titling, bylaws, provision of infrastructure, etc.
- + Approval needed for any new development within jurisdiction. Process time needed for approval varies greatly between municipalities. For example, approvals in Mavoko can take as little as 30 days, while Nairobi proper typically takes multiple months.
- + Each council can develop its own incentives in addition to the national incentives. These incentives tend to be minimal.
 - The Mavoko Municipal Council for example, reduced approval fees and allows estates greater than 50 units to pay certificates of occupation later.

Legislation/Incentives for Affordable Housing

Some positive reform has happened in recent years.

- + The new constitution includes Right to Adequate Housing (Article 22).
- + 2009 saw the adoption of the National Land Policy, a positive step in resolving the question of the reliability and accuracy of the land administration system. There is still a significant amount to do in this arena and land fraud is one of the greatest barriers to a healthy real estate market in Kenya.
- + Steps in 2009 were also taken to increase affordability for developers, the stamp duty on property purchases was cut from 25 percent to five percent of the principle amount, and the tax on mortgages was reduced to 0.1 percent from 0.2 percent.
- + 2009 was also meant to see the adoption of a new Housing Act that was never approved. Therefore, the latest housing act is Housing Act 117 from 2004. The Ministry is back to the drawing board and currently attempting to develop a new housing act. However, devolution to county control due to the new constitution may mean that many incentives and regulations move to the county level. This is all to be determined in the next few years.
- + Current building codes are outdated and are being revised to include new technologies. New legislation on building maintenance and building codes is expected to be approved in June 2012. However, this legislation will not serve the purpose of a comprehensive Housing Act.