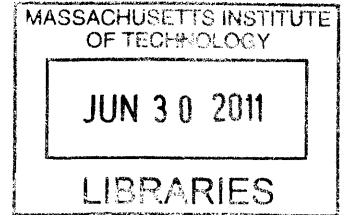


Low-Income Housing in Kampala, Uganda: A Strategy Package
to Overcome Barriers for Delivering Housing Opportunities
Affordable to the Urban Poor

By

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B.A. Planning, Public Policy & Management
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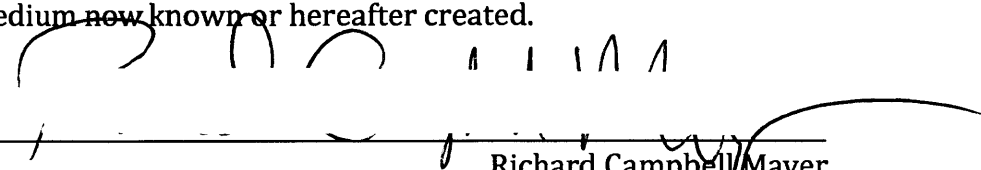
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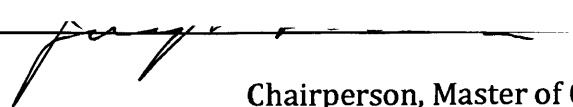
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Submitted to the Department of Urban Studies and Planning on June 3, 2011 in Partial Fulfillment of the Requirements for the Degree of Master in City Planning

ABSTRACT

The city of Kampala, Uganda, is struggling with a housing deficit that is compounding each year and creating market distortions that threaten to derail recent economic success and destabilize the social fabric of the community. The majority of government and private developers who build new housing are only providing units affordable to Kampala's minority of wealthy and well-connected elites. The majority of Kampala's residents are low-income earners who currently live in unplanned slum neighborhoods that consist of mostly informal rental housing. Inflating land values, exorbitant infrastructure costs and the lack of affordable home finance mechanisms are preventing the delivery of affordable housing to the majority of city residents.

The same factors that are compounding the housing crisis in Kampala can be leveraged and reversed to create new opportunities that incentivize the private sector to deliver housing for the low-income market. Developers who construct middle-class housing products should be given tax discounts in exchange for formal commitments to deliver simple and well-planned housing estates for low-income families. This strategy provides a monetary incentive for private developers to bring their project management efficiencies into the low-income market and facilitates the government's need to placate social and political pressure to improve the local housing sector's performance for Ugandans at all levels of household income.

To achieve these goals, pre-tax profits generated by a private developer utilizing tax incentives provided through a public/private partnership with government are reinvested into low-income housing projects built by the same developer. On the periphery of Kampala, where many development costs are significantly lower, new housing opportunities can be built and sold for a low price while generating a profit. Existing community groups and NGO programs can form a service network to help reduce the credit risk of low-income families and help them apply for "micro-mortgage" products to become homeowners and shift away from survival economics to working towards economic self-sufficiency.

This program can be implemented to a large scale if supported by the "three pillars" of the "affordable housing cycle" that are: public/private development incentives, community training programs and customized low-income mortgage products. Government can achieve a more diversified real estate market and establish a formal planning process for suburban communities to accommodate the approaching urbanization of the city. Developers earn strong profits while expanding capacity and creating jobs. And finally, this strategy can begin a transformative process to bring poor families out of city slums and into formal housing, providing an avenue for increased civic engagement and entrepreneurship for people stuck in the poverty trap.

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Chapter One

Introduction

1.1 Research Question

Kampala, Uganda, has been rapidly urbanizing over the last two decades and is becoming a regional hub of economic and cultural activity within the East African Community. The city has become a magnet for many business sectors and is attracting Ugandans from all over the country, especially from the rural villages, seeking a higher standard of living than is achievable through subsistence farming. Since 2000, Uganda has maintained between 6%-9% annual growth in GDP and more of that capital remains in the Ugandan economy each year as value-added industrial and service outputs steadily increase as a percentage of GDP. (World Development Indicators Database, December 2010)

Entrepreneurial Ugandans from all income levels and market scales need access to urban markets because Kampala alone generates more than 50% of Uganda's gross domestic product (GDP). (Giddings, Stephen, 2009) This population shift is creating a large and sustained rate of urbanization, but the city is unable to support this migration with sufficient infrastructure. This is creating systemic problems with the potential to stifle the economic successes achieved to date. One major problem facing Kampala is the acute shortage of housing stock, a problem that is compounding each year. As of 2009, it is estimated that Kampala has a housing deficit of 100,000 units and the current pace of construction (both formal and informal) is incapable of closing this gap as estimates of the growing deficit range as high as 1,000,000 units by 2025. (Balimwikungu, Alex, 2010)

The housing deficit is further compounded by the propensity of the private sector to build housing for only middle and high-income clients because low-income purchasers

cannot access mortgage financing to purchase formal housing. Unfortunately, many Ugandans, 55% nationally, are still living at or below the poverty line of \$2/day, but this problem is less acute in Kampala where less than 10% of the Kampala population lives below poverty. (World Development Indicators Database, December 2010) However, the transient and informal nature of impoverished Kampalans makes this data somewhat ambiguous, as the reality may be that a greater number of urban residents are living in poverty. Government programs have supplied some housing units that are affordable by lower middle-income Ugandans (those with formal employment) but have preferred to leave the low-income housing deficit to the international development community to resolve through humanitarian and charity programs. The magnitude of the current housing deficit indicates how government has failed to incentivize the private sector to produce housing that is truly affordable by low-income Ugandans.

This thesis accepts this housing dynamic as the reality on the ground and proposes a strategy package to increase housing stock in the Kampala region for low- and middle-income clients who constitute the majority of demand for new housing units. This thesis asks the question; What policies are necessary to incentivize private sector developers to produce low-cost housing that is affordable by a majority of Kampala residents? It provides a practical solution using comparative literature reviews and personal interviews (See Appendix I) conducted in Uganda in January 2011 to formulate a new housing strategy.

This thesis presents a proposal to activate the “three pillars” of housing policy that are essential for establishing a sustainable cycle of affordable housing development in the Kampala region. These pillars are: 1) Private sector construction incentives created through public/private partnership agreements with the government; 2) Robust community mobilization programs as outlined in the “TRREE” (Training, Risk Reduction,

Education and Entrepreneurship) program, and 3) Mortgage products or “micro-mortgages” provided by the financial sector and tailored to informal family income cycles.

These three pillars generate an “affordable housing cycle” which begins with private developers constructing conventional apartment units for the Kampala market in partnership with the Ugandan government. Revenue generated from constructing market-rate apartments is retained by the developer/government partnership and converted into construction capital to finance low-income housing projects on the periphery of Kampala. This strategy will increase housing stock for low-income Ugandan families that are currently neglected by the private sector, and provide a development model that standardizes how government can incentivize developers to construct low-income housing.

Chapter One introduces the housing situation in Kampala and provides an overview of market conditions and possible alternative housing strategies. Chapter Two analyzes the Kampala housing market and details how current conditions contain pent up demand for low- and middle-income housing. Chapter Two also identifies the social, political and economic barriers that combine to prevent the development of a formal affordable housing market and how those barriers can be overcome. Chapter Three presents a literature review that explores the role of the state in creating the conditions that allow a robust housing sector to develop and how housing can have an impact on urban poverty eradication. Chapter Four outlines a framework for public/private partnerships that incentivize private sector development of affordable housing and presents a strategy for delivering market-rate apartments to the Kampala market to generate profit sufficient for financing low-income housing projects. Chapter Five outlines the economics of peri-urban housing development and considers the support programs that are essential to scale up affordable housing programs in the Kampala market. Chapter Six discusses the context and risks of the affordable housing development cycle for Kamala. Chapter Seven steps back to

describe how the central elements of this housing strategy can impact other rapidly urbanizing regions of the developing world.

1.2 Kampala Overview

Kampala, Uganda, is a bustling capital city located near the equator on the shores of Lake Victoria (the source of the Nile river) and almost 4,000 feet above sea level, giving it a lush and unique climate compared to typically hot and humid African cities. The metropolitan region has a “nighttime” population of around 1.7million residents and it is estimated that Kampala doubles its population during the day because so many workers and traders cannot afford to live within the city. (Nyakaana, Sengendo & Lwasa, 2007) This daily migration reflects the systemic problem created by the housing deficit and how it is impeding the city’s economic growth and failing to support its residents. However, this migration pattern also indicates the strong determination of many low-income Ugandans to use their resourcefulness for accessing the economic opportunities of Kampala’s markets, and shows how the society has responded to the problem by developing a transportation network between the city and its periphery that serves the needs and budgets of most Ugandans.

Ordinary Kampala residents wake up each day in various neighborhood environments that are vastly different from others depending upon a person’s household income. A Kampala resident who has formal employment and a consistent income stream of at least US\$600 per month, most likely lives in an apartment or house in a walled compound and serviced with standard utility connections, sanitary waste disposal, a self-contained kitchen with standard appliances and confidence that their possessions are secure when they are not home. However, most Kampala residents cannot afford this

standard of living. Slum housing conditions are prevalent throughout the city and characterized by structures built illegally, without safety standards and using local materials ranging from mud and sticks, to soil bricks with mortar and everything in between. Kampala's slums are also notoriously overcrowded and underserved as residents wait in lines to pay a small fee to use shared pit latrines or walk long distances to collect water from unsafe sources.

Kampala is emerging as a cosmopolitan African city that is diversifying its economic base through significant industrialization and the government has succeeded in attracting investment opportunities from international markets by setting up special manufacturing zones in the Kampala region. This positive economic growth is a strong influence that is pulling people into the city from rural areas of the country, but the benefits of economic development are only reaching a small segment of the population. Income disparity in Uganda is compounding rapidly as the top 10% of formal income earners in Uganda control 36% of the gross national income (GNI) and the top 20% control 51% of GNI. (World Development Indicators Database, December 2010) This situation has led to distortions in the housing sector as the majority of new housing supply is built for this small, economically elite portion of city residents who can self-finance their housing investments.

1.3 Greater Kampala Urbanization

The metropolitan area of Kampala has grown incrementally over the years and has exploded more recently as adjacent townships and rural areas are annexed. (See Appendix A) Kampala currently covers over 839km² (324miles²) and supports about 7% of the total population of the country and the Kampala population continues to grow at over 4% per year. (Giddings, Stephen, 2009) At this rate of growth the urban population of Kampala will

be well over 2,000,000 residents before the end of this decade. This continued growth is fueled by natural increase as Uganda has a high birth rate, but it is also influenced heavily by economic policies that have concentrated industrial and commercial development in the Kampala region, attracting people from the rural parts of the country who are in search of employment. (See Appendix B)

Kampala's inability to plan for land use impacts or public infrastructure demands at the same pace as the city's growth rate is compounding the consequences of urbanization. It is driving up land prices in areas where infrastructure services are available. Only 25%-30% of land in Uganda is formally registered and only about 50% of the Kampala region is formally registered for individual ownership, however; only about 15% of all Ugandan land titles are classified as "active" titles as the remainder are old registrations that no longer reflect the reality on the ground. (Ellis, Manuel & Blackden, 2006) In addition to unclear ownership records, subsequent legislation has given occupational rights to squatters and land tenants to create a situation where two individuals can have a bona fide ownership claim to the same piece of land. Much of the legislative efforts intended to address land use and the housing deficit have focused mostly on tenure issue because squatters and tenants make up a significant majority of the population. This has resulted in no new tools or powers for planners to enforce development standards and allows for chaotic and unplanned development to continue consuming the scarce land resources of the city.

The lack of a comprehensive land registration system as well as the lack of a zoning master plan for Kampala has resulted in disorganized urbanization patterns in Kampala. New arrivals to the city that cannot afford formal housing have chosen to settle on marginal lands with unclear ownership or responsibility. This factor increases the dangers of informal housing as low-income residents build illegal housing in wetlands surrounding the city that are prone to flooding and diseases such as malaria. Some Ugandans are willing to

endure severe hardships to find some form of shelter in proximity to the city center, believing that the costs associated with illegal houses on the fringes of the city are worth the benefits of access to trading in the commercial markets found in Kampala. John Turner (1977) has done extensive research on this settlement dynamic where he distinguishes between the low-income resident's desire for a "functional shack" that meets the cost and location needs of the resident. Turner compares this to the housing standards preferred by formal markets that constitute an "oppressive house" for low-income people because of the high costs necessary to construct housing to such a standard. Each individual will evaluate these tradeoffs and priorities when considering how to secure their own housing situation, and indicates how affordable housing is not a one-size-fits-all situation. Informal slum housing is a common situation for many Kampala residents as a recent study by Action Aid International estimated that 85% of Kampala's residents are living in slums. (Giddings, Stephen, 2009) Conversely, a survey of real estate listings from EastLands Agency in Kampala shows homes in upscale neighborhoods of the city are selling for well over US\$1,000,000 and basic, fully serviced housing units are selling for US\$60,000 or renting for about US\$250 per month. These prices, for what might be considered a standard house, are well beyond the financial means of the low-income people who live in informal slum dwellings.

Chapter Two

Affordable Housing Market: Local Dynamics

2.1 Kampala Housing Market

Residents of Kampala live in vastly different housing conditions and competition is intense to own a property that suits the household budget and family needs. Depending on household income and ability to mobilize capital, housing conditions range from modern, “western standard” houses and apartments at the high end of the scale and the bottom of the scale includes everyone from homeless citizens, illegal squatters and informal rooms for rent in slum neighborhoods with a host of health, safety and economic challenges. Slums continue to proliferate throughout the Kampala region as the gap between housing production and demand keeps widening and government continues to ignore the demand for housing programs that are affordable to slum residents.

An article in the New Vision, a leading daily newspaper in Uganda, noted;

“...although investment made in the housing sector in the past 20 years was unavailable, reports show that the National Housing and Construction Company (NHCC), the Government house construction arm, has amassed assets to a tune of over \$70m over this period.... NHCC, which has been overwhelmed by the demand, has however, only been able to construct few housing units for the elite and well to do”. (Balimwikungu, 2011)

This situation is indicative of the structural barriers preventing the construction of low-income housing, as even government housing programs are unwilling to provide supply for the most needy section of the housing market. Large parcels of land close to the city center and suitable for high volume housing development are no longer abundant and very difficult to attain, mostly because the government sold off their holdings of urban land long ago. Parcels within the city center that are attainable also carry a high premium that is

shifted onto the consumer, raising sale prices, and further preventing affordability.

Companies who develop large parcels for the Kampala market usually find suitable land at a long distance from existing road and utility networks, requiring major investments in infrastructure. Individual plots for single or duplex developments are available, but require individuals to mobilize construction capital to pay for the same land cost burdens, and has resulted in many incomplete units that may get completed over a 5-10 year period, or never. Affordable housing in Kampala is also hampered by the inability of the government to provide stable utility connections such as electricity, water and waste handling. Private developers are forced to make additional investments in infrastructure to offset the shortfalls of public utility systems and that leads to more development costs shifted onto the consumer.

When new housing is constructed in Kampala, the high sale price reflects these conditions and yet consumers continue to purchase, driving up prices even further. One example, in the Nsambya area, a neighborhood close the city center and serviced with utility connections, a ¼ acre of land sold for US\$15,000 in 2002 and by 2008, the same parcels were selling for US\$60,000. (Nyakaana, Sengendo & Lwasa, 2007) This kind of four-fold increase in value over a six-year period is incongruent with inflation and seems indicative of a housing “bubble” but as of 2011, local real estate agents are still in denial that the Kampala market is in need of an adjustment. (Multiple personal interviews, 2011) Property value/sale price is determined through intensive negotiations between buyer and seller and the lack of real estate services for accurate valuation or property comparisons leads to price negotiations taking place “in a vacuum” when there are no mechanisms to gather information about true values. Given this environment, there does not seem to be a collective outcry for market reforms from the wealthy Ugandans competing for real estate. Despite the high cost of housing, real estate investment continues to produce returns unlike

any other investment instrument available in the local market. Hopefully the Kampala real estate market can normalize slowly over time as data collection improves and information is contextualized to find the fair market value of Kampala properties. If the market corrects in a more drastic “bubble burst”, the ripple effects will thwart the private sector’s ability to capture value on developments and dilute the incentives to produce low-income housing while credit and lending sources dry up across the market.

A major factor driving strong returns on real estate investment is the local expatriate community that has been growing exponentially every year since the new millennium. Expats and NGOs have increased the demand for high-income housing and also prefer to conduct their business operations from large residential properties throughout the city instead of creating demand for higher density office space in the city center. The current real estate conditions may only be offset by new developments making more intensive use of the remaining available land by drastically increasing density and spreading the additional development costs across a larger group of clients. Otherwise, the current demand for expensive low-density urban housing will continue pushing urbanization and low-income residents farther out of the city.

2.2 Current Affordable Housing Delivery Programs

Much has been said about the inability of government and private sector developers to deliver housing that is financially viable for the majority of Kampala residents who are low-income earners. The non-governmental organization (NGO) sector has also struggled to deliver affordable housing in the Kampala region because their project models are based on various forms of subsidies which make it difficult for NGOs to mobilize the capital necessary to roll out housing programs on a large scale. Within Kampala, NGOs are now

concentrating on slum upgrading and restructuring projects to foster formalization, better services and incremental growth for existing housing units because NGOs are unable to make the economics of new affordable housing developments reach successful outcomes. (Olowo-Freers, Bernadette, Personal interview, 2011)

Recent trends in international development strategies are focused on fair-trade, income-generation and entrepreneurship models to combat poverty issues. There are local NGOs in Kampala implementing various forms of these economic programs and many have shown enormous potential to create capital for poor individuals. (Nakhooda, Rashmi, Personal interview, 2011) For example, BeadforLife, a fair-trade NGO operating in Kampala, has created a temporary income stream for its clients through a jewelry/craft production business that allows its members to pay for a range of development assistance choices, one of which is housing construction. This type of housing model requires significant upfront investment and management resources to initiate housing projects, but also has the potential to generate significant profit from housing. The success of the project is conditional on the NGO's ability to access and consistently maintain a specialized international craft market. This kind of volatility prevents a widespread scaling up of their housing model, but it is a housing model that can perform well if income-generation programs can be sustained.

Habitat for Humanity Uganda (HFHU) is a mission-driven organization that has built many houses around Kampala, but the organization's affiliate in Uganda nearly collapsed in 2006 as their traditional business model failed to achieve its development and repayment goals for many years. Before 2006, HFHU would partner with local Ugandans who already owned land and could document a somewhat stable income stream in order to construct a simple house at a very low cost. HFHU would build a house on the client's land with only a 10% down payment and a signed agreement to repay the cost of building the house,

adjusted over time for inflation, plus an administration fee. This was a great opportunity for those who qualified and the applications submitted to HFHU were endless. Over time, HFHU found two major flaws that led to the near-collapse of its operations. One flaw was that most of the clients who qualified for a house had exclusive family connections with local authorities or HFHU employees, leaving other qualified applicants shut out of the opportunity. The other flaw was local managers of HFHU had set up informal extortion agreements with applicants in order to receive direct payments from families who qualified for a HFHU house. Both situations led to widespread refusal to pay mortgages by HFHU clients who had already received their new house. Given that the HFHU house was constructed on the client's private property, the lack of legal support to enforce the repayment contracts led to HFHU eventually closing its housing program all together and refocus their efforts to upgrading programs for existing houses only- no new construction. Essentially, HFHU took on too many roles and responsibilities in the house building process and did not fully understand the risk exposure created by their development model. This example highlights the need for new affordable housing programs to distribute risk across more involved parties such as micro-finance institutions and local governments to reduce risk exposure and ensure that inherent risks are managed by the organization best suited for the task. In this case, HFHU did not have the capacity to operate a functional system of credit and mortgages for their clients.

Government programs have been unable to engage affordable housing projects in Kampala for many reasons already identified, but specifically, the Ugandan government does not have access to new lands within the city to subsidize its own development goals. The lack of public lands ownership is a result of the confusion and complexity of the current land registry system, but also stems from the government's adversarial relationship with the local Buganda tribal chief who controls about 900km² throughout the Kampala region

and will not enter into any development partnership with the Ugandan government for affordable housing. (Ngabirano, Emmanuel, Personal interview) The historical context for this ongoing conflict is deeply rooted and unlikely to be resolved any time soon, but this conflict is what dominates the political wrangling over land policy reform while other development continues in a haphazard manner.

There is a possibility of government land subsidies for affordable housing outside of Kampala city limits as many districts peripheral to the city are mostly low-density rural/agricultural with minimal infrastructure. In the past, local government officials have offered to provide free land for housing developments, but have been unable to find private sector developers with an ability to mobilize the capital necessary to put up a significant amount of housing. The project manager of the affordable housing project built by the NGO BeadforLife in Mukono District on the outskirts of Kampala was offered free land by the LC5 (Governor) of the district to implement another housing project, saying, “if you can bring us another project like the good one you have already built, we shall find you free land to do so.” (Mukoome, Francis, Personal interview, 2011) In recognition of the housing challenges facing Kampala, and having the foresight to see that districts adjacent to Kampala will also become urbanized over time, district land managers are eager to institute anticipatory planning regulations to ensure land development and formalization fits into district plans for infrastructure investments. But the rural districts are too far from Kampala to create any demand for market rate housing in the near future and district governments lack the resources to apply and enforce regulations and often capitulate on planning standards to appease any developer who brings projects into the district. This situation is creating optimal conditions for affordable housing developments as low-income clients can afford new developments in the districts peripheral to Kampala and the districts are eager to attract developments that formalize the land base and plan for future density.

2.3 Ideal Time to Reform the Housing Market with the “Three Pillars”

For the first time in Kampala, the opportunity exists to weave together a network of institutions from the state, private market and local society to restructure the affordable housing market by creating partnerships based on incentives and mutual support. Until this time, those who have tried to deliver affordable housing on a large scale have been forced to accept roles for which they either did not have the requisite skills to adequately perform or they were incapable of executing without government support.

From these experiences, three distinct “pillars” of support have emerged that are absolutely essential for sustaining a more robust affordable housing development cycle in Kampala. 1) The high cost of development stemming from property market distortions and infrastructure deficiencies can be alleviated by government support of incentivized partnerships with the private sector to encourage development for low-income markets. 2) Financial markets and micro-finance institutions (MFIs) have established successful business models working with low-income clients and are now poised to expand into mortgage services for low-income clients. 3) The existing network of public service, university, NGO and private sector programs that each perform various community service, skills training and economic development programs across Kampala can form the foundation of a movement to engage low-income residents and informal slum dwellers in ways that prepare individuals to develop income-generating activities as well as mitigate the risks such clients pose to potential mortgage lending institutions.

Today in Kampala there exists a capable network of private developers with the knowledge and experience to efficiently manage the construction of housing projects, and Makerere University of Kampala is producing ever more graduates with the technical

training to scale up construction operations across the region. (Mukiibi, Stephen, Personal interview, 2011) If these developers can earn profit from building low-income housing that is competitive with profit margins available from constructing middle- and high-income housing, a real transformation in the housing sector can begin. (Kamukama, Alex, Personal interview, 2011) Once these developers are properly incentivized to begin building large-scale affordable housing projects, they will still need the confidence that they can sell what they build. As MFIs expand their range of services into low-income mortgages, they will be able to take out the developer's financing once a new house is built, and take on the risk of repayment with their new client through a collateralized loan. Currently, MFIs are reluctant to extend mortgage credit to clients who do not have an established reputation for income-generation and loan repayment based on smaller prior loans. (Bekalanze, Joel, Personal interview, 2011)

There is a natural flow to this circle of mutually interested parties, but initiating the process and building momentum will require an initial commitment by the government to prove the sincerity that they want to support this process to come about. As the parties involved in this circle each meet their goals and priorities, hard work will be rewarded with assets and profits and the housing market of Kampala can begin to reverse its current downward spiral.

Chapter Three

Literature Review

3.1 The State's Role in Enabling the Housing Sector

Creating the optimal conditions for a robust housing system is unique to each market and country as each national strategy to produce housing evolves from various practical and theoretical origins. Debate over the best approach to deliver affordable housing in the developing world has focused on the roles and relationships between the state, market and society in the production of housing. The negotiation between these actors requires a minimum level of institutional capacity to ensure balanced roles across sectors and more recent analysis by Cedric Pugh emphasizes the need to take into account the economic, social and political factors for equitable housing production to take place. (Jenkins & Smith, 2001)

Further research into the capacity of the state to encourage housing production uses a breakdown of state operations for a better understanding of where governments are changing and where new opportunities exist for the state to support the housing sector. Merilee Grindle's research into Latin American and sub-Saharan African government capacity uses four dimensions of state capacity; *Institutional capacity* describes states having authoritative and effective "rules of the game" to regulate economic and political behavior. *Technical capacity* is the ability to formulate and manage macro-economic policies. *Administrative capacity* describes effective administration of basic physical and social infrastructure – the ability to perform basic administrative functions essential for economic development and social welfare. *Political capacity* consists of effective and legitimate channels for societal demand making, representation and conflict resolution – and having

responsive political leaders and administrators. (Grindle, 1996) Grindle speculates that Latin American and African states have responded to the economic crisis of the 1980s by improving technical capacity, while in general the other capacities have deteriorated as a result of structural reforms imposed by international finance institutions. (Grindle, 1996)

Analysis of the state's involvement in the housing sector across the developing world shows a wide range of pros and cons, successes and failures. In one example, the state was the central driving force behind South Africa's ambitious affordable housing policy enacted in the mid 1990's by the new ANC (African National Congress) government after transition from the Apartheid era. The state allocated land, established a state-controlled housing finance entity and tried to recruit citizen and private sector involvement through substantial subsidies. The state commanded large resources to be applied to the housing effort, but ultimately, the overall policy failed to meet its targeted goals because of failures within the state at various capacity levels. It lacked the institutional capacity to overcome the "culture of non-payment" among the low-income groups, lacked the political and administrative capacity to overcome ideological differences with opposition parties in various provinces, leading to a failure to deliver housing in line with stated policy goals. (Jenkins & Smith, 2001) Compounding this dynamic was the governments somewhat hostile attitude towards NGOs at the time, suggesting that they should just fold into government agencies to continue their work. With NGOs providing significant community organization services for the national housing policy, the hostility and skepticism they received from government severely limited their ability to function and reduced the ability of the government to successfully operate its housing policy. (Jones & Datta, 2000) Despite the desire, resources and motivation to deliver housing, the state's housing policy failed to distribute accountability and responsibility across the housing sector and compromised its

ability to function. The state must reconsider the appropriate balance of influences for market and social sector actors to compliment a productive housing policy.

An alternative approach to state policy for delivering a large volume of affordable housing in the developing world came out of research done in the 1970's by John Turner. Turner's research reframed the conventional perspective about the purpose of affordable housing. He experienced the efficiency of low-income individuals building housing independently, in informal communities, in Latin America and analyzed the conditions that supported this trend. Turner observed on-the-ground success coming from a system where the state had a very limited role in facilitating the production of affordable housing.

"In favorable circumstances, the poor could produce substantial, spacious and reasonably serviced homes." (Turner, 1976)

The basic circumstances Turner is referring to include; appropriate tenure, basic services, access to employment and housing finance. He believes that if these basic conditions are present, the urban poor can find solutions to their problems without the burden of state intervention. In observing how low-income people supported their families in informal neighborhoods, Turner saw the significance of housing for low-income people is not the physical characteristics of a house, but rather the function the house provided for the people who used it. (Turner, 1976) This perspective is constantly debated when searching for what is considered the appropriate minimum standard for housing to be considered safe and dignifying for low-income people and highlights the tradeoffs between cost and quality for affordable housing design. Turner sees the difference between a universal standard for housing and informal housing as stark factors in whether a housing system is functional for those living in it. The "oppressive house" was one that had all basic services and material qualities provided by the government to achieve a minimum design standard, but the

economics of the house destabilized the family living inside it because of the high costs to finance such a structure. Conversely, the “supportive shack” was the informal house that was not built to a minimum standard, but functioned physically and economically for the occupants who existed on the margins of poverty. (Turner, 1976)

Turner sees the organic energy of informal house builders as something to be supported by the state, not ignored. In Turner’s opinion, the proper role of government in the delivery of affordable housing is to facilitate access to the essential elements of the housing process. The essential elements include; rule of law, land, land tenure, building materials, tools, credit and the knowhow to build. (Turner, 1976) This kind of housing policy that balances the controls of the housing process across a wider set of actors has defined roles to manage development and impacts, but may be difficult to scale up depending on the institutional capacity of the state to fulfill its obligations to the process.

3.2 Affordable Housing and Poverty

Affordable housing is a specific niche of the overall housing sector that traditionally does not operate like conventional housing markets or respond to the same policies and incentives to grow. The strategies for housing construction, finance and sales differ significantly because of the income levels of the clients involved. Affordable housing policy requires the state to have an intimate understanding of the differences between the informal and formal housing markets in order to coordinate support and services necessary for each market to flourish. Today, those involved with the problems and challenges found in informal urban slums are designing policy based on the perspective that if affordable housing programs can be implemented and successful models scaled up, then a robust affordable housing market can reverse the conditions that cause poverty.

One of the main advocates of poverty alleviation through increased access to formal markets for low-income earners, is the Peruvian economist Hernando de Soto. In his seminal work, "The Mystery of Capital", de Soto argues that global poverty continues to grow because low-income earners have been shut out of the economic advantages provided by formalized markets and institutions. Despite increasing income-generation and acquisition of tangible assets, they are unable to utilize the full value of these assets because incomes are not documented and consistent and assets are able to qualify as collateral to access financial loans. One of the core strategies of de Soto's theory is facilitating the registration of property rights in informal communities. Unregistered property is called "dead capital" by de Soto because while a family may have lived on a property for generations and the local community may all agree on the location and value of the property, the family has no mechanism to leverage the value of their property to generate other economic activity to develop new income streams. (de Soto, 2000) To describe this dynamic, whether it is informal low-income people blocked out of property rights, business registration, courts of justice, conventional finance institutions or global trade markets, de Soto uses the analogy of a "bell-jar" to symbolize the barrier to entry.

"Inside the bell jar are elites who hold property and run businesses using codified law borrowed from the west. Outside the bell jar, where most people live, property is used and protected by all sorts of extralegal arrangements rooted in informal consensus disbursed through large areas." (de Soto, 2000)

While de Soto's comprehensive theory about economic inclusion for low-income people holds merit and provides a framework for economic policies to bring about poverty eradication, the results on the ground have not yet shown universal success.

An interesting case study from a community outside Cape Town, South Africa, highlighted the effects of formalization on beneficiaries of the housing subsidy programs implemented by the government since the early 1990s. Charlotte Lemanski's research

analyzed to what extent new homeowners in Westlake Village have utilized their formal housing assets since acquiring them under the government program. In a survey of new homeowners, only 4% responded that they had used their property title to secure a loan. Even more revealing is that 31% applied for a loan, but were unable to secure a loan because of insufficient income. (Lemanski, 2011) While these results are disappointing for proponents of de Soto's theoretical panacea for poverty, it does suggest that property formalization does begin a process that opens a door to financial resources to low-income people, however, formal property title alone will not ensure the full economic transition from poverty to middle-income.

It has been difficult to promote this strategy to low-income people and convince them to spend their time and money to endure the sometimes long and nebulous process to formalize their assets. There are legitimate fears of corruption and vulnerability for low-income people as they face discrimination and stigmas when pioneering economic opportunities usually reserved for upper-class people. Despite the long-term economic advantages of formalization, informal people do not come from a culture of savings and economic planning. From their perspective, there are great risks to their monthly budget as the formalization process requires fees and taxes that are not charged in the informal sector, and transparency requirements may expose technical illegalities of an informal person's business strategy that would not be scrutinized otherwise. All of these issues present real obstacles to widespread formalization programs no matter how powerful the model proves to be for increasing the economic power of low-income people.

The linkage between formalization and poverty eradication hardly proves conclusive either way at this point in time, more research and testing is clearly needed. While there are opportunities for low-income people to advance economically through formalization, the process is certainly not universally applicable. In the case of Westlake

Village, South Africa, having formal property title did provide people access to financial opportunities they would not have had otherwise, it was the consistency, stability and level of income-generation that prevented those with land titles from securing a loan. Maybe this reveals a need for a more thorough process for preparing and training low-income people with the skills that lead to higher income generation? Additional steps are needed to facilitate a person's transition from the informal economy to the formal economy and maybe de Soto's theory of lifting the bell jar is too drastic to be done on a large scale? Clearly the low-income community needs leadership and positive examples to build up confidence for entering formal market competition. A slower approach to safely transition people into the formal economy would seem consistent with the relative institutional capacity of many African states. The government support structures such as the judiciary, land registration and company registry are already operating very inefficiently and unable to accommodate a massive influx of newly formalized actors.

The reality for most low-income people in sub-Saharan Africa seems to suggest that housing programs, whether new projects or slum upgrading of existing housing, should provide a cost effective plan to formalize informal property assets. For low-income housing projects to be successful for increasing affordable housing stock in cities as well as impacting the challenge of urban poverty, housing policy must be just one component within a larger, comprehensive strategy to transform low-income communities across the developing world. If governments are to take this opportunity seriously, poverty transformation requires a negotiation between the state, market and society to ensure equitable outcomes and properly designed incentives to foster a successful and sustainable program.

Chapter Four

Generating Capital: Market-Rate Projects to Finance Affordable Housing Projects

4.1 Value Proposition – Introduction of the Affordable Housing Cycle

The strategy package proposed by this thesis delivers affordable housing for Kampala's low-income market and involves a stepped process of multiple construction projects. In this model, the initial investment required is equal to the amount a conventional developer would leverage to construct a middle-income apartment project near Kampala city center, about \$1,600,000. Ordinarily, the developer builds the conventional apartment project and recoups their investment, with a standard developer's margin of profit. The power behind the "affordable housing cycle" to deliver affordable housing comes from government incentives that provide tax breaks to developer to allow them to build a two-fold increase of low-income units for each middle-income unit produced. Partnerships across sectors is the central proposition of the "three pillars" necessary to support construction of affordable housing, and as we will see, the affordable housing cycle provides incentives to all members of the partnership to achieve project goals each member would be unable to achieve independently. The following diagram (Figure 1) outlines the major steps of the affordable housing cycle development strategy:

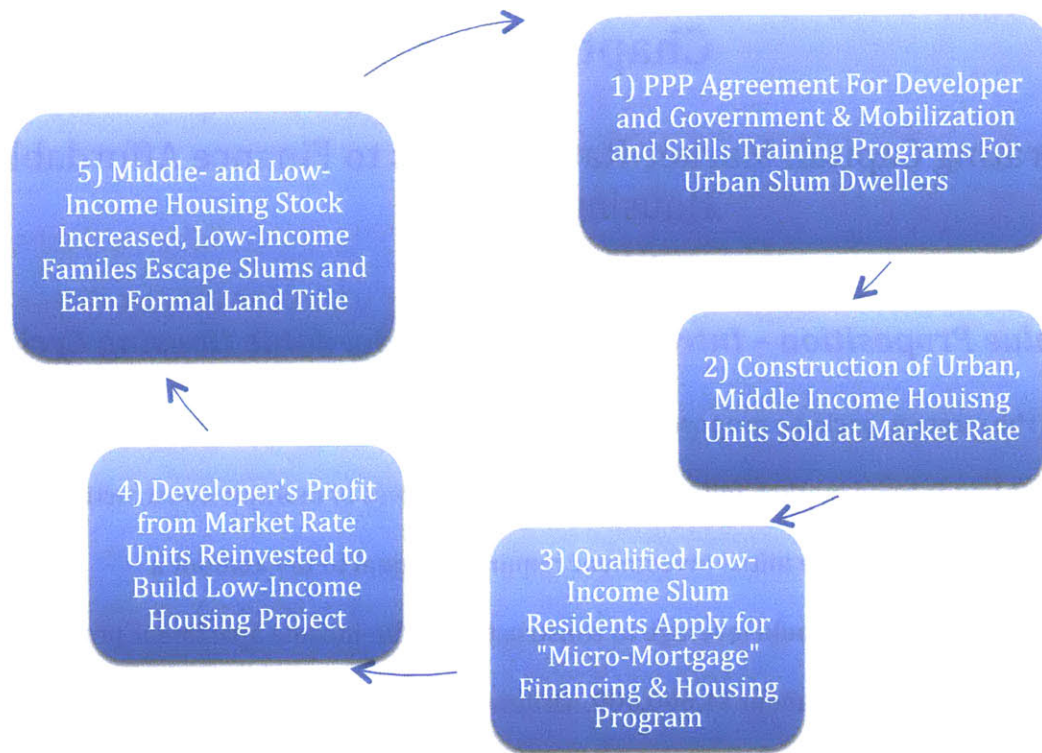


Figure 1 – Affordable Housing Cycle

Step One of the housing strategy begins with partnerships. Reframing the relationship between the developer and the Ugandan government can drastically reduce the revenue tax burden (typically 25%) imposed on conventional developers who build high margin housing for middle- and high-income markets. By formalizing a Public/Private Partnership (PPP) between the government and the developer, a clear understanding of roles, commitments and obligations can be established and controlled by a legal contract to guide the partnership towards mutual goals. Within the PPP agreement, the developer and government outline the financial model used to incentivize the desired outcomes and how to resolve the inevitable problems and changes that arise during the course of a development project. This agreement obliges the government to facilitate the administrative requirements to streamline the construction process and to limit government taxes imposed on revenue generated from middle-income housing projects.

The developer makes a legal commitment to construct an amount of low- and middle-income housing units to an agreed upon standard. All funds will flow through escrow accounts managed by the PPP agreement.

The Ministry of Lands, Housing & Urban Development (Ministry of Lands) has the administrative authority and political weight to act as the government agent in partnership with private developers to facilitate new low-income housing projects. The Ministry of Lands is responsible for facilitating the agreements of the PPP with all relevant agencies of the central government to reduce the instances of illegitimate taxation and to reduce red tape.

Also important at the beginning stages of the housing strategy cycle are additional partnerships with various institutions and organizations that can facilitate the organization and mobilization of low-income residents of Kampala's slums. This program will be known as the "TRREE" service and gets its name from performing Training, Risk Reduction, Education and Entrepreneurial (TRREE) services for low-income clients. In conventional real estate terms, this would be considered the marketing phase of a housing project to attract buyers, but in the context of affordable housing in Kampala, the potential buyers of low-income houses need additional services and training to ensure a successful home purchase. This program is to be carried out by a consortium of civic, educational and NGO institutions networked throughout Kampala. The consortium is fulfilling a value-added service to assist government with poverty eradication programs as well as helping local micro-finance institutions (MFIs) to increase their customer base by preparing qualified customers. Therefore, the consortium will be organized as an independent agency whose operations are funded by the PPP building affordable houses and the network of MFIs who want to serve the low-income mortgage market. More details about this process are outlined below in Section 5.5.

Step Two of the cycle is the construction of high-density, middle-income apartment units located within 8km-12km of the urban core of Kampala. New apartments built for the urban middle-income market are typically in high demand and bought out prior to completion through pre-purchasing deals. The primary purpose of this step as part of the Affordable Housing Cycle is to generate a substantial capital cross-subsidy from the lucrative Kampala real estate market. Through the PPP agreement with the government, the reduced fees and taxes allow the developer to retain and reinvest a large amount profits that would normally return to the government by standard revenue taxes. By allowing the developer to retain these funds, they are able to reinvest the capital into construction of low-income housing estate projects, as agreed to in the PPP agreement. The PPP agreement contains enforcement clauses and required use of escrow accounts to ensure all commitments of the PPP are fulfilled.

Step Three is operating simultaneously while the developer is constructing middle-income apartments, the TRREE program is recruiting and assessing slum residents for comprehensive skills training and basic business mentoring programs. MFIs are also training slum residents in banking skills and micro-loan utilization sensitization. After completing the TRREE program, individuals apply for a “micro-mortgage” with a partnering MFI and have their housing needs, credit profile and likelihood of success evaluated in order to qualify for financing to purchasing a low-income home.

After completing the construction and sales of the market-rate apartments from the project described in Step Two, the developer now has a substantial sum of capital because of the PPP agreement that allows the developer to keep a majority of profits for the purpose of delivering low-income housing. To fulfill the PPP obligation, the developer initiates Step Four of the affordable housing cycle and begins construction of low-income estates on the periphery of Kampala where development costs are low. Once construction is complete,

applicants who have qualified for a micro-mortgage from a local MFI take possession of their new house and begin their transition out of poverty.

The result of the affordable housing cycle is a significant contribution to middle- and low-income housing stocks in the Kampala region. The developer has earned enough profit to begin another project cycle and a number of families that were stuck in the city slums have earned their way towards economic independence and self-determination.

4.2 MODEL #1 – Conventional Middle-Income Development

The following construction model (Model #1) outlines the economics involved to construct conventional middle-income apartment units near the urban core of Kampala. For comparison, the first model presented reflects the typical costs encountered by a local developer who builds apartments without the before mentioned PPP agreement or other development incentives. The typical apartment typology for Kampala is a two-bedroom apartment unit of about 860'sq. for young professionals and new couples. (See Appendix C1) Units come with a full kitchen, living and storage space with dedicated parking on-site and conventional utility hookups to the national power and water network, waste water is processed on-site through a septic and leach field setup. In this model, there are 16 units each four-story apartment block and there are three apartment blocks built on a one-acre parcel of land for a total of 48 market-rate apartment units.

Conventional construction methods for this type of building include a hand-formed foundation, concrete and rebar superstructure, local brick and mortar infill walls and floors with screeded finish, wood trusses with aluminum roofing and hand-built wood doors and steel window frames. Standard interior finishes include floor tiles, moldings, window curtains, built-in closets and cabinetry and standard plumbing and electrical installations.

Typical project delivery in Kampala is done through a “design-bid” strategy where the developer contracts individual consultants. Design and engineering consultants are activated while the land title, construction financing and development permits are secured, then construction is coordinated by a general contractor to manage material purchasing, sub-contractors and overall construction.

Developers of any conventional housing project within the jurisdiction of the Kampala City Council (KCC) must confront and manage the structural failures of the permitting and inspection process conducted by the KCC or risk the imposition of exorbitant costs that can evaporate profit margins. This can be done many ways and is dependent upon the nature of personal relationships between the developer and

KCC authorities. As listed in the table above, the costs for “fees/permits” and “local taxes” amount to \$35,000, but this is a best guess estimate due to the arbitrary process used to levy these costs on developers. While this process is by no means above-board or fully legal, it is the nature of institutionalized corruption in Kampala and in general, those developers who acknowledge this dynamic and plan for it in advance usually have fewer delays and lower fees paid to local authorities to complete their project. The KCC is the top authority controlling development in Kampala and by reaching agreement with the KCC for all permits, fees and taxes related to a housing project, this limits the ability of lower-level



Model #1 Local Standard Model				
Input Cost	48units	per unit	% of total	
Land	\$40,000	\$833	2.4%	
Infrastructure	\$14,000	\$292	0.8%	
Construction	\$350/m2	\$1,344,000	\$28,000	79.7%
Consultants	4%	\$54,000	\$1,125	3.2%
Fees/Permits		\$15,000	\$313	0.9%
Sub Total		\$1,467,000		
Financing	\$1m@19%	\$190,000	\$3,958	11.3%
Marketing		\$5,000	\$104	0.3%
Local "taxes"		\$25,000	\$521	1.5%
TOTAL COST		\$1,687,000	\$35,146	100.0%
Sale Price	per unit		\$52,000	
Total Revenue		2,496,000		
Const. Cost		-1,687,000		
Revenue Tax	25%	-\$624,000	-\$13,000	
Profit		\$185,000	\$3,854	Profit margin 10.97%

bureaucrats with overlapping jurisdictions to impose additional charges for facilitating a construction project. Unfortunately, this is an engrained tradition in Ugandan culture because of the government's low civil-servant wages and sometimes inconsistency with salary payment schedules. (See Appendix C2)

Prior to project completion, marketing and sales of the apartments is initiated through exclusive contracting with a local real estate agency. Many units are usually pre-sold due to the lack of housing supply in Kampala and developers can collect up to 70% of the sale price prior to completion. When the final balance is paid to the developer, the client takes possession of the apartment and receives ownership transfer documents from the developer. Clients initiate their own transfer of title process. By title caveat, owners of all units in the complex are obliged to participate in a homeowner's association and pay a monthly fee for maintenance, landscaping and security services.

As Model #1 illustrates, the high cost of construction financing and government taxation prevent the developer's profit margin from rising above 11% for the entire project. (See Appendix G) This is more than enough profit to encourage the developer to continue building apartments with this model and reinforces the notion that private developers can continue making money by delivering housing units that are unaffordable by a majority of the Kampala population. For this dynamic to change, private developers must be given a financial motivation to take the next step and produce housing products for a broader range of household incomes while preserving their profit margins.

4.3 MODEL #2 – Incentivized Middle-Income Development

Building off the example presented in Model #1, we now look at constructing the same 48-unit apartment project, however, new incentives gained by the developer through

a PPP arrangement with the government are included in Model#2. This will highlight the taxes and fees saved from utilizing government incentives as well as material savings gained from construction innovations.


The most significant savings comes from the PPP agreement with the Ministry of Lands, Housing & Urban Development to reduce development fees and administrative red

tape as well as reduce the Uganda Revenue Authority corporate revenue tax that is normally levied at 25%, but can be reduced to between 12%-15% as an incentive to build low-income housing. (Wagala,

William, Personal interview, 2011) Other savings the government is able to effect for the PPP includes facilitating the fees and permitting process with local authorities as well as providing political support to the developer to reduce the local “taxes” that

include informal charges levied by bureaucrats from lower administrative bodies of the local government. While the government cannot influence private banking institutions to lower interest rates,

the developer’s PPP with the government represents a risk abatement that allows a bank to lend construction financing for a discounted rate from 19% down to 17%. (Wagala, William, Personal interview, 2011)

Model #2 - 48 ALTERNATIVE UNITS				
				
	Model #2	Alternative Model		
Input Cost		48units	per unit	% of total
Land		\$40,000	\$833	2.6%
Infrastructure		\$14,000	\$292	0.9%
Construction	\$320/m2	\$1,228,800	\$25,600	81.1%
Consultants	3.5%	\$43,008	\$896	2.8%
Fees/Permits		\$5,000	\$104	0.3%
		\$1,330,808		
Financing	\$1m@17%	\$170,000	\$3,542	11.2%
Marketing		\$5,000	\$104	0.3%
Local "taxes"		\$10,000	\$208	0.7%
		\$1,515,808	\$31,579	100.0%
Sale Price	per unit		\$52,000	
Total Revenue		2,496,000		
Const. Cost		-1,515,808		
Revenue Tax	15%	-\$374,400	-\$7,800	
Profit		\$605,792	\$12,621	Profit margin 39.96%
SUMMARY OF COST SAVINGS FROM MODEL #2				
Gov't Subsidy		\$294,600	\$6,138	
Const. Saving		\$126,192	\$2,629	
TOTAL		\$420,792	\$8,767	

Construction savings gained in Model #2 are achieved by replacing interior walls, which are typically brick and mortar, with plasterboard and treated wood studs to reduce material costs and increase labor efficiency for wiring and plumbing of the unit. Ceilings are usually finished with a thick cement layer and finished with hand cut patterns, but additional savings are gained by using plasterboard and wood stringers for ceiling treatments. The material and labor savings by incorporating these techniques reduces the overall construction cost by about 9% or \$30 per square meter. (Allibhai, Alykhan, Personal interview, 2011) Other professionals in the Kampala development industry recognize the importance of supporting the development of affordable housing in the Kampala region and as such, many consultants have offered their services at reduced rates to help facilitate the construction of much needed affordable housing stock. (Mzee, Rashid, Personal interview, 2011) Model #2 reflects a combined savings of ½% on all professional consultant fees to bolster revenues for the developer.

When the finished apartments reach the market at the sale price of \$52,000, they will be very competitive with comparable units and most likely will sell out from pre-sale marketing. Similar units with the same proximity to the city center typically range in price from \$50,000-\$65,000 and by comparison, similar apartment units located closer (2-5km) to Kampala city center are listed at \$90,000-\$100,000 when available for purchase. (Mpuga, Adnan, Personal interview, 2011)

The total savings created by construction innovations and cost savings through the PPP agreement make a serious improvement in profit margins for the project. Units built using the strategy in Model #2 are saving US\$8,767 per unit compared to Model #1 for a developer's profit margin of almost 40%! (See Appendix G) This construction efficiency generates over \$600,000 of capital for the developer to engage the next step of the affordable housing development cycle to fulfill the developer's core commitment to the PPP

agreement that makes these tax incentives possible. At this point the developer has recouped their investment to build the apartment project, but profits are deposited into an escrow account and allocated in stages as the developer proceeds on the affordable housing project. The PPP agreement assures the developer that their final profit margin, once the low-income project is complete, will be more than double the developer's take home profit had he only constructed the apartment project without the PPP incentives. The basis for this profit structure will become apparent below in Model #3.

4.4 Reinvesting Capital & Taking the Next Steps

Model #2 is viable in the contemporary context and shows real potential to raise significant capital for the construction of low-income housing. Once this model is proven on the ground in Uganda, a number of factors will affect the model's performance over time. The cost savings on construction methods will spread quickly among developers in the local market to bring construction costs down across the sector and the finished quality achieved by using imported plasterboard may become the standard. This will require developers continue seeking innovations that differentiate their housing products from the conventional while still lowering overall costs. There are other innovations in housing products that have not been applied in a broad context in the Kampala market that can have a similar cost-reduction effect. Using tempered glass bricks and windows to replace conventional brick walls can reduce costs and increase value, as clients desire the "western/modern" look of the construction. Developers can also capture value after delivering housing units to market by creating new property management services or consolidating utility services to deliver a higher level of service quality and consistency and creating alternative income streams. All of these design and service alternatives add value

to conventional apartments in the Kampala market and buyers are willing to pay more for a modern/unique housing product. This is a real factor in project marketing in Kampala, but for comparisons sake, the two construction models listed above present the different apartment units as having the same retail sale price.

It is important to remember that emerging market cities will continue to experience land market distortions and increasing urbanization as population pressures and economic development increase over time. This will maintain the basic economic strategy presented in Model #2 to generate capital by leveraging these development challenges because overall development costs will continue to rise with land values and the increasing cost of utility infrastructure. This will preserve the power of government to provide tax incentives to conventional developers to continue building housing for low-income markets and the resulting profits will continue to attract developers.

Chapter Five

Building Affordable Housing for Kampala

5.1 Interconnected Programs to Support Affordable Housing

The capital generated from building market-rate apartments is held in an escrow account for the sole purpose of financing low-income housing projects as per the PPP agreement. Model #2 presented in Chapter Four generates over US\$600,000 for the private developer to implement low-income housing projects, but the factors involved to deliver successful affordable housing projects in Uganda extend beyond mere construction issues. For affordable housing programs to be successful for the intended clients; serve as a replicable model for others to follow and satisfy the larger social and political interests connected to such programs, additional partnerships are necessary to balance the on-the-ground realities that influence the outcomes of affordable housing from many different directions.

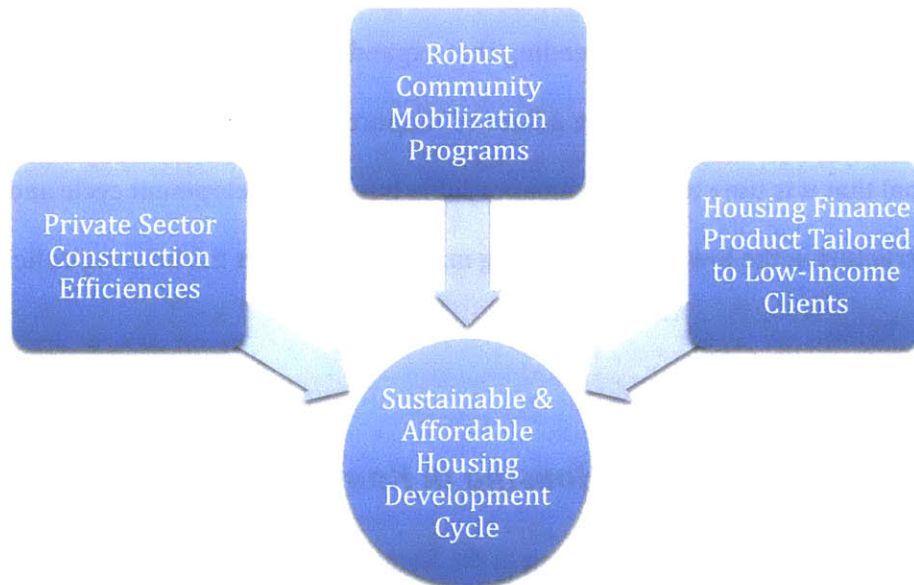


Figure 2 – The “Three” Pillars of the Affordable Housing Cycle

As Figure 2 above illustrates, three pillars of programs need to combine and coordinate in order to facilitate the affordable housing cycle in Kampala:

- 1) Profit-seeking private developers can best achieve construction efficiencies because they have the motivation to consider cost-saving measures at each step of the building process.
- 2) Community mobilization activities through the TRREE program are instrumental for engaging low-income residents and slum dwellers. Local community groups are best suited to inform slum dwellers of opportunities to improve their living situation and assist them with skills training to access formal development assistance programs, should they choose to participate.
- 3) Once low-income city residents are mobilized and prepared via the TRREE program, housing finance tools will be the bridge that facilitates their transition from informal slum dwellers to formal homeowners. The ability of MFIs to offer mortgage loans to low-income clients has improved recently due to new risk-assessment techniques and offshore mortgage fund seeding that expands lending beyond conventional micro-loan parameters. These pillars of support are now present in Kampala and signal that it is time to initiate an affordable housing development cycle and begin restructuring the low-income housing market and impact the housing deficit across the region.

5.2 MODEL #3 - Affordable Housing in Kampala

The delivery of affordable housing in the Kampala region is rather straightforward in terms of construction process, but project management involves many challenges.

Working in rural parts of Uganda and bringing new development and new people to a rural area is a big change for the existing community. The relationship with local residents adjacent to any new affordable housing project begins once a parcel of land is identified for sale and is a key component of due diligence before purchasing to try and understand any opposition to a new project. Disclosing general project intentions and potential benefits to the community are important, but how this is done is specific to each case and involves delicate negotiation. Purchasing land for affordable housing projects requires time and patience as there is no central repository for listing or comparing properties that are for sale. Generally, land values conform to a relative pricing structure that is based on distance from Kampala, proximity to tarmac roads and utilities and the condition of the land title. Is one negotiating with the real owner of the land? Is the land title genuine? Vetting the seller and the historic ownership of property as well as formalizing agreements with land agents and deal closing services are complex legal matters and require competent local legal support to avoid future delays. It is very easy for opportunists to test one's resolve after purchasing property in rural Uganda. There may be baseless claims to ancestral burial rights or frivolous lawsuits by people sensing an opportunity to profit from legal ambiguity. In each case, the protagonist is aware that project delays cost money and they only hope to be paid well in order to stop delaying the project. The legal system in Uganda is quite inefficient and prefers to find mutual resolution to a dispute rather than expending large resources to ascertain exact fault and responsibility to resolve a case. This creates an incentive for anyone to file claims, whether based on fact or fiction, in order to engage the legal process knowing that most likely some sort of payment, the question that remains, is how much, will resolve the case?

Once land ownership is established and project mobilization begins, it is also important to formalize relationships with district authorities that will approve and inspect

the project. Introducing the housing project to elected leaders before it begins is a good avenue for introductions and builds a relationship on mutual respect rather than waiting to seek out local government representatives only when your project encounters a problem. Once property ownership is secure and local relationships have been initiated, then construction of housing can begin.

Building sites for affordable housing are typically located in rural settings where population density is low, but there are always people moving around from one place to another. News of any new project beginning in a rural area will spread quickly and curiosity will bring a steady stream of onlookers and opportunists to find out what is happening. This makes site security very important so that construction materials and investments are secure at all hours, but also to ensure that new squatter claims are not fabricated by local people who try to extort payments from the developer by hastily building a structure on your property and claiming it as a residence. Security risks can be mitigated by immediately fencing the entire property and hiring a caretaker to live on the property and by sourcing local materials and unskilled labor from surrounding communities whenever possible. The more labor and materials that can be sourced nearby the project site not only reduces costs, but drastically increases project security and stability as more people have an incentive for the project to succeed.

The only way to preserve the low list price of affordable housing is to deliver a volume of product to achieve economies of scale and purchase all inputs at bulk discounts when possible. Model #3 below outlines all inputs to develop an affordable housing village of 100 detached, single-family houses on the outskirts of Kampala. (See Appendix G) The village is master planned and subdivided into legal registered plots with individual land title. The village has a basic road network, a football (soccer) pitch, pocket parks/open space and each private plot is roughly 50'x80' or 4,000'sq. Two separate boreholes provide water

from hand pumps, rubbish is burnt at a centralized facility that separates organic waste for composting and there is no power grid connection. The developer agrees to install all of these elements to ensure the basic resources are available to meet a minimum standard for village development and provide a fertile environment for the village to grow up from.

To offset the lack of utility connections, each house is outfitted with a package of appropriate technologies (costing \$140 and included in final sale price) to provide; 1) solar LED lighting with a battery bank and regulator to support phone charging or a radio, 2) a solar water pasteurizer to sterilize borehole water without using fire, 3) a “rocket stove” to preserve local cooking traditions but reduce fuel inputs and noxious off-gassing, 4) rain gutters and downspout for rainwater harvesting. This utility package provides an enhanced living experience for the home-buying clients, but the developer takes no responsibility for the durability of the systems over time. The developer, in negotiations with the government when formulating the PPP agreement, can receive a more favorable financial outcome by leveraging

Model #3 - 100 LOW-INCOME ESTATES			
			
Model #3	Low-Income Estates Model		
	100 Units	per unit	% of total
Input Cost			
Land 14acres	\$88,200	\$882	14.7%
Road	\$6,500	\$65	1.1%
House const.	\$360,000	\$3,600	60.2%
Boreholes (2)	\$18,000	\$180	3.0%
Rubbish	\$2,600	\$26	0.4%
Util Package	14,000	\$140	2.3%
Amenities	\$9,000	\$90	1.5%
Permits	\$4,000	\$40	0.7%
Local "taxes"	\$5,000	\$50	0.8%
Survey	\$6,000	\$60	1.0%
Title Process	\$20,000	\$200	3.3%
Mngmnt	\$65,000	\$650	10.9%
TOTAL COST	\$598,300	\$5,983	100.0%
Sale Price		\$7,000	
Total Revenue	\$700,000		
Const. Cost	-\$598,300	-\$5,983	Const. margin
		\$1,017	17.00%
Balance #2	\$7,492		
Profit	\$109,192		
Rev. Tax 75%	-\$81,894		
Project Profit	\$27,298		
PPP FINAL PROFIT DISTRIBUTION			
Const. Cost	\$598,300		TOTAL DEVELOPER'S MARGIN
Project Profit	\$27,298		
TOTAL	\$625,598		
Developer	60%	\$375,359	24.76%
Government	15%	\$93,840	
TRREE Project	25%	\$156,400	
TOTAL	100%	\$625,598	

the provision of these services. Most governments are very interested in low-cost strategies that provide environmentally friendly services to citizens under conditions that are far too expensive for national systems to be extended.

The house itself is a basic brick masonry three-room house of about 450'sq. with a raised foundation, secure doors and windows and a corrugated iron roof. (See Appendix D1, D2, E1, E2 & E3) Also included with the basic house is a detached out-building with two bathroom stalls built over a ventilated pit latrine and a washing stall for bathing.

The design standards used for this project reflect a balance between minimum standards and material cost. The house is a drastic improvement above typical slum conditions and provides an asset building opportunity for the client. Attached is a breakdown of design comparisons between typical slum housing and new affordable housing villages as proposed. (See Appendix F) In addition to receiving a shell house with improved sanitation and open space for each homeowner; formal land title is issued in the name of the homeowner and the title is used to collateralize the mortgage loan.

Once the project is complete, the community assets of the village (boreholes, soccer pitch, public spaces, rubbish and compost station) will be placed in communal ownership and managed by a committee of representatives elected among the group of new homeowners. Formal governance will be provided by the relevant administrations of the district government. Once construction is complete, ownership/control of the village is handed over to its residents to determine the future course of action.

Overall, the power of this affordable housing example is the low unit cost produced in Model #3. While US\$7,000 is not a price that all slum dwellers in Kampala can pay to immediately solve the low-income housing deficit, it does provide a housing product that can inspire and motivate families to set goals, be resourceful and attempt entrepreneurial activities to earn the opportunity to own a house. The total house price is somewhat

volatile as more than half the total unit cost is dependent on stable material prices, prices that can fluctuate mildly on a monthly basis and have occasional spikes when a particular element such as cement or steel experiences supply issues in the region. This 100 housing unit project in this example is financed completely from capital created from building conventional market-rate apartments in Kampala (Model #2). While the unit cost of the affordable houses is much lower than the conventional market-rate apartments outlined in Model #1, the profit margin per unit is about 6% higher and has potential to provide greater returns to the developer the more units they deliver to market whether working within a PPP agreement or not. As Figure #3 below outlines, the comparison of profits earned between the two different housing models (Model #1 and Model #3) shows that once the

developer can revolve their own capital to build affordable housing units, they can earn more profit by delivering a large volume of low-income units at a lower development cost than if they continue to build middle-income market rate apartments inside the city.

Figure 3

PROFIT COMPARISON BY UNIT CONSTRUCTION COSTS				
\$ Invested	Model #1 Units Built	Profit #1 11%	Model #3 Units Built	Profit #3 17%
500,000	14	\$54,831	84	\$84,991
1,000,000	28	\$109,662	167	\$169,982
1,500,000	43	\$164,493	251	\$254,972
2,000,000	57	\$219,324	334	\$339,963
2,500,000	71	\$274,155	418	\$424,954
3,000,000	85	\$328,986	501	\$509,945
3,500,000	100	\$383,817	585	\$594,936
4,000,000	114	\$438,648	669	\$679,926

5.3 Following the Cash Flow Through the Affordable Housing Cycle

Upon completion of the low-income housing project and after all units are sold, the developer has completed their obligations to the affordable housing cycle outlined in the PPP agreement with the government. The revenue produced after the sale of all 100 houses plus the funds not spent building the low-income village that remain in the original escrow account is projected at over \$700,000. (See Appendix G) The PPP agreement stipulates how these funds get distributed at the conclusion of the housing cycle, and at this point it is

important to highlight additional monetary incentives that can help control the costs of the project and more importantly, preserve the low sale price for the low-income clients. In Model #3, capital created after the cost of construction is recouped represents profit made from the sale of houses to low-income clients. To discourage unreasonable profiteering from the government PPP agreement, profits after construction costs are taxed heavily at 75%. This encourages the developer to utilize as much of the escrow fund to build a quality project, but severely limits the developer's ability to sell the properties at market rates because the developer would only receive 25% of the benefit.

The cost of construction and the after-tax profit from the low-income project gets combined into a lump sum and distributed as per the PPP agreement. By the example in Model #3, the developer receives 60% of this fund as take-home profit for delivering 48 middle-income apartments and 100 low-income houses to the Kampala market. This amount is more than double the take-home profit shown in Model #1 for constructing conventional apartments. There is a significant opportunity cost to the time spend constructing the additional 100 unit low-income village, but savvy developers will become more efficient over time and perhaps develop low- and middle-income projects simultaneously in order to close this gap and increase profit margins even more.

The government receives 15% of the final distribution and when this amount is combined with the revenue gained from the high tax on the low-income project profits, the total amount recouped by the government from the entire project cycle is about 60% of the cost of the original revenue tax subsidy from Model #2 that incentivized the building cycle to begin. This return of profit to the government reinforces the success of the PPP agreement and shows how the affordable housing cycle does not cost government a substantial amount of money to facilitate the program. Despite returning such a significant amount of the original government subsidy, the entire tax break provided to developer to

initiate low-income housing construction is appropriate for generating the construction capital necessary to ensure the developer can build at least two low-income units for every middle-income apartment built.

Because of the value provided to the overall project by the TRREE program, 25% of the final distribution goes to offset their operating costs. The TRREE program should also be funded from other sources that benefit from their services such as, MFIs, government agencies, NGOs and international donors. The true cost of operating the TRREE program is unknown at this time, but establishing a funding mechanism tied to the delivery of affordable housing stock will help scale the TRREE program proportional to the supply of new housing.

The final distribution terms may become standardized over time as the government uses the PPP strategy to deliver housing stock to the market. Preserving equitable partnerships through the use of PPP agreements is central to the ability of the affordable housing cycle to achieve its goals. If greed creeps into the process and dilutes the incentives provided to the three pillars of organizations that must work together, the entire strategy risks failure.

Based on the potential margins for the developer, there is a strong argument to force a shift in private sector housing development to utilize the PPP agreement to capture greater value in the low-income housing market, but this is only one part of the potential opportunity. It has been shown how incentivizing private sector developers can be achieved through reduced taxes, but once the low-income houses are built, how is the developer assured there is a client base to buy the properties in order to cash out their investment and begin building the next unit?

5.4 “Micro-Mortgage” Financing for Affordable Housing

MFIs began as a way for poor people to access capital for a short period of time to initiate informal commercial transactions such as buying rural agricultural products and supplying them to urban markets to capture margins. This strategy has since grown in size and scope over the years into longer-term loans for greater amounts, but interest rates were still in the 18%-36% range because risk remained high as loans were backed by nothing more than group peer pressure as collateral. (Bekalanze, Joel, Personal interview, 2011) As MFIs enter the mortgage market for low-income people, they accept that loan terms are for a higher amount over a longer period of time, but this risk exposure is mitigated by the loan being backed up by a collateralized asset of real estate property. The early success of MFIs in the “micro-mortgage” industry in India is attracting new entrants to the market as others begin to recognize how large this underserved market truly is. (Lalwani, Merchant & Venkatachalam, 2010)

The formal financial market has already found great opportunities to provide profitable services to informal poor communities, and the current trend of micro-finance across the developing world provides a good example of this dynamic. Investors are eager to capture value in these emerging market opportunities as profit margins are high, but they need a mechanism to assess the risk of their investments. Traditional micro-finance has been built around short-term loans for limited amounts at high interest rates for poor people who are entrepreneurial, but lack the ability to access capital from formal institutions. These same MFIs have now developed large networks of clients who have utilized the micro-loan opportunity many times over and in doing so, have built up a “credit profile” that allows MFIs to increase loan amounts with greater confidence for full repayment.

For those not yet affiliated with an established MFI, the banking community once considered low-income people “high risk” because they lacked banking transaction slips, pay stubs or tax documents. Now, some MFIs are pioneering new products for the same low-income market because they are finding that poor people are not all high-risk, but actually “unknown risk” and are beginning to restructure their banking services to include creative ways to assess a persons credit risk profile using field-based verification methods. (Lalwani, Merchant & Venkatachalam, 2010) To capture value in this market MFIs need to continue reducing their credit assessment costs and redesign their collection strategies to be more cost-effective. These needs are increasingly supported by advancements in hand-held wireless technology that allows MFI employees to go to their client’s neighborhoods, reducing transaction costs for all involved.

In Kampala, PRIDE Microfinance Ltd. has been making loans to its established clients to purchase small plots of land, but are blocked from taking the next step to provide individual construction financing that would allow clients to add value to their properties. This is because the charter PRIDE operates under only allows for loan terms of less than 2 years as per regulations imposed by the Bank of Uganda who provides PRIDE with its operating capital. (Bekalanze, Joel, Personal interview, 2011) PRIDE identified real estate as a top priority of their clients many years ago, but has failed to deliver new loan services that can help their clients to reinvest in real estate and have missed on a lucrative market opportunity as a result.

Other MFIs in Kampala do see opportunity in providing low-income mortgages and are trying to find ways around conventional MFI operating regulations imposed by the Bank of Uganda in order to enter the market. As of January 2011, Centenary Bank of Uganda, another MFI, has presented a proposal to its board of directors to create a “micro-mortgage” fund to become the first MFI to enter this market in Uganda. (Woyaga, Patrick, Personal

interview, 2011) To get around the restrictions on MFI loan terms imposed by the Bank of Uganda, Centenary Bank has sought alternative funding for their new mortgage fund from the National Social Security Fund (NSSF) of Uganda. Alternative funding would allow Centenary Bank to offer mortgages for up to 10 years and negotiations are underway to establish the lending rates that would define the mortgage terms. Centenary is hoping that NSSF would offer lending terms that would allow their mortgage product to charge 12% interest to clients. (Mucunguzi, Harriet, Personal interview, 2011) While an interest rate of 12% may seem outrageous to homeowners from western countries, this is actually very advantageous for low-income clients in Kampala as conventional mortgage rates in Uganda typically range from 18%-23% and require proof of income criteria and minimum building standards that limit these mortgage opportunities to only middle- and upper-income clients. (Owanyi, George, Personal interview, 2011) This explains to a certain extent why the mortgage industry in Uganda is not yet very robust, but now it is on the cusp of capturing a large new opportunity in micro-mortgages.

There is a budding housing finance industry emerging in Kampala for low-income clients, but of the three pillars that support a robust affordable housing market, mortgage finance is the pillar that is currently the bottleneck in the entire housing cycle. The institutions and mortgage products are not yet in place and operating efficiently at the moment, but the conditions are converging to give rise to competition in this potentially lucrative market. Housing finance is the key component to unlock opportunities for slum dwellers and low-income residents of Kampala to transition into formal housing and expanded access to commercial opportunities as the Ugandan economy continues to develop and grow its middle class. By anticipating the development of all the components necessary to establish an affordable housing market, all actors involved must see the interconnectivity across sectors that need support and resources to develop into a full

fledged affordable housing market that can reverse the stagnation in the Kampala real estate market and provide growth opportunities for all involved.

5.5 Community Mobilizing Programs – The TRREE Program

The purpose for creating housing opportunities for Ugandans trapped in the slums of Kampala is based on the theory that home ownership can act as a “bridge” to facilitate a permanent transition from living in poverty to climbing up to the middle-class of Ugandan society. Achieving this kind of transformation is much more complicated than mobilizing funds to construct housing; it requires social organization and empowerment programs to ensure that first time homebuyers have the tools to succeed in their first mortgage and earn full ownership of their property. Hernando de Soto postulates that the process of bringing poor people into the formalized global marketplace (land titles, home loans, commercial incorporation) is the first step to poverty alleviation for the bottom of the pyramid, and while de Soto’s economic theories may be based on valid fundamentals, the implications for poor individuals pursuing this path to formalization and subjecting themselves to the risks of open market competition are ominous and threatening. To overcome the negative impacts of a large-scale formalization program in the context of affordable housing, a strategy to stagger this transition and provide low-income people with access to the training and skills that prepare them to transition into formal markets at their own pace, is essential. The TRREE program (Training, Risk Reduction, Education and Entrepreneurship) is proposed to deliver the services that help facilitate this transition for the low-income people who seek affordable housing opportunities.

There are many programs in Kampala that are already organized, operating and delivering specific training and courses that would form the core curriculum of the TRREE

program. With support, financing and organization, all of these programs already operating across the city as well as any new programs created to fill program gaps, can be unified into a consortium that develops a baseline standard for program quality and graduation/certification requirements. By certifying each program operator to provide training for certain skill sets, such as basic business accounting or small business mentoring, successful training programs can compete for funding incentives to expand their capacity to train applicants. There is no need to reinvent programs that already exist, but the primary function of the TRREE program would be to coordinate minimum standards for the consortium, ensure program curriculum meets the needs of MFIs and conventional banks to evaluate the fitness of loan applicants and to test and evaluate the consortium to constantly monitor performance and program quality. The goal of the TRREE program would be to establish a formal certification that would represent a tangible accomplishment for program graduates and something to list on a resume/CV when competing for a job or applying for a loan. The certification would be valued and respected by formal institutions throughout Uganda to help distinguish those informal/low-income people who possess strong talents and skills to fulfill commitments and manage economic affairs.

While the TRREE certification could have broad appeal and application as it gains acceptance, but the purpose for its creation as related to the affordable housing program, is to support the growth of the micro-mortgage industry by providing a value-added service to MFIs that helps them evaluate risk and other criteria of loan applicants to determine their fitness for mortgage loan approval. As mortgage financing has already been identified as the main bottleneck in the overall affordable housing cycle, any serious effort to reverse the housing deficit in Kampala must confront this issue.

A sample of organizations already operating in Kampala include; The Management and Accountancy Training Company (MAT) which provides specialized business training

seminars and courses, Uganda Agency For Development Ltd. (UGAFODE) is a government agency created specifically to empower poor Ugandans with income generation training and small business management skills, and the Makerere University Business School (MUBS) recently opened an entrepreneurship center on its campus to train students in identifying new market opportunities. A newly formed NGO called Shelter and Settlements Alternatives (SSA) is the local liaison for the international NGO Slum Dwellers International, and can serve as a resource for rich data from other cities across sub-Saharan Africa who are confronting similar challenges. This is just a selection of organizations that each specialize in specific training for creating income-generating businesses and there are many more, but some existing programs currently present barriers for low-income people to access their services due to fees charged for services. The TRREE program would work to resolve issues with fee structures to ensure that groups participating in the TRREE program are empowered by the affiliation and not overwhelmed by it.

From the perspective of those living in slum communities around Kampala, participation in the TRREE program would involve a lengthy commitment that requires participation and fulfillment of course requirements to earn advancement in the program. Low-income Ugandans would proceed through a set of training programs that accumulate specific skills over time and the individual's progress can be monitored at each stage to identify indicators that increase the efficiency of the overall program. Given the expense for individuals and relative poor quality of the Uganda public education system, the TRREE program must accommodate basic education courses to ensure those who did not receive an adequate education from public schools have the chance to catch up. While the TRREE program must stop short of individualized programs for people without the most basic education because of the costs involved, there should be an effort made for equal access to the opportunities available through the TRREE program. Language barriers will present

another challenge for equal opportunity in the TRREE program, but as the program grows and evolves, additional language curriculum can be added.

Preparing low-income people with the tools to compete in open markets and fulfill the obligations of a mortgage commitment is a missing component that would allow a massive influx of affordable housing to be absorbed by qualified individuals who seek the opportunity to advance their economic status, but have never been given the chance to do so.

Developing a national system of skills training and empowerment programs for low-income people offers a clear path to loan qualification and equal opportunity for people who want to earn their own house. Of course not everyone will qualify, but creating a transparent system for individuals to compete for increased access to economic opportunities would allow individuals to be rewarded for individual effort, commitment and achievement.

Chapter Six

Incentivizing Affordable Housing – Context & Reflections

6.1 The Affordable Housing Cycle in the Current Context

The context of this housing program integrates well with the basic planning and development goals that the Ugandan government should seek to correct many of the distortions and problems currently creating negative impacts on the Kampala housing market. Building market rate apartment blocks on the remaining small plots throughout the city will increase overall density, infrastructure efficiency and affordability allow the growing middle-class of Uganda to create more intellectual spillovers in the urban core as more people can work, live and recreate within the city and not become displaced.

As Kampala continues its urban expansion, now is the time to incentivize medium to large-scale estate developments on the urban fringe while land values are still reasonable enough to allow low-income housing programs to flourish. (See Appendix H) By formalizing property into the modern tenure system and planning for future development by laying out master plans that accommodate future utilities and infrastructure improvements, the problems of incremental development and non-existent land planning strategies that have created inefficiencies and congestion in the present day city center can be prevented. The institutional capacity to impose formal planning regulations on developers at the design stage is currently unrealistic, especially in the rural districts, because government agents do not have legal leverage to enforce compliance. However, private developers will need to conform to basic design standards for legal lot designs and access easements in order to formally register land plots and sell houses with formal title. While this situation prevents real comprehensive planning to take place, it does ensure that development on the fringes

of Kampala will have basic designs to accommodate future growth and upgrading of utilities and infrastructure.

By establishing an organized land use protocol along the fringes of the current city limits, this may, in the short run, promote problems of urban sprawl such as inefficient utility services and transportation systems and compound the problems with land valuation along established infrastructure routes, but that is inevitable and even more severe if no comprehensive planning strategy is used at all. In the long run, as the urbanization of Kampala expands and covers a larger area, the benefits of land planning and formalization will help steer infrastructure development to serve residents more efficiently and create more desirable bedroom communities around the capital as the city core stagnates in greater congestion.

The affordable housing cycle is a practical response to the urgent needs of the Kampala housing market, but is also rooted in comprehensive planning principals that will ensure new housing developments to don't perpetuate the mistakes that accumulated into the current housing crisis. By creating simple housing on planned estates now, the incremental development of density can be organized and controlled better as government agencies inventory and establish databases of legal lots and approved structures. An aggressive land planning program may encourage land speculation to continue along urban growth corridors, but taking the opportunity now to plan and formalize rural land on the outskirts of the city provides a temporary opportunity to overcome the impact of speculators for low-income families to establish a family base before the expansion of the city pushes them to more remote regions where access to city markets is economically or practically unrealistic.

From the most altruistic international NGO or charity-driven organization to the market savvy investor or for-profit developer, the strategies outlined in this thesis can be

applied to serve a wide range of development goals. For groups seeking to rescue vulnerable groups from the dangers of urban slum conditions, implementing only the affordable village template outlined in this thesis by using donor funds and large subsidies can provide a small-scale tangible program for NGOs or a church-group project and serve as a powerful marketing tool to raise funds and promote community development programs. Watoto Ministries is an Australian Christian group currently investing in family village projects on the outskirts of Kampala. They plan small houses that shelter 6 or 7 orphans with a house mother form a suburbia-like community of homes that provide a positive physical environment for children to grow up in, however the associated dogma imposed on the children by the Ministry is another debate.

The village model with simple houses is very appropriate for low-income Ugandans who have migrated from rural villages as it provides a feeling of traditional “village” values that are culturally engrained, and also provides an urban interface for people to access market opportunities. This kind of housing concept allows people without marketable skills to establish themselves near the city to begin assimilating slowly to urban life while preserving the security of rural farming and self-sufficiency that low-income people depend upon for survival.

Implementing the complete housing cycle could provide a platform for well-funded NGOs or entrepreneurial training programs to combine standard construction and project management training as part of a vocational program. Professors at Makerere University in Kampala are constantly seeking opportunities for their students to receive practical training opportunities and the university has a pressing need for urban apartment project for student housing which fits well with the affordable housing cycle. University funding can initiate the project and costs can be recouped through a guaranteed stream of rental income while creating employment and educational opportunities in addition to increasing student-

housing stock. For the market investor, this thesis has outlined new investment opportunities to capture greater returns by supplying housing stock for the neglected low-income market niche rather than competing with the conventional construction sector for smaller margins in the middle-income market. Regardless of motive, the affordable housing cycle can be used and adapted to satisfy many different needs for residential development projects.

6.2 Profit Motive

Using a profit motive to develop housing projects intended as a humanitarian response to a serious urban health and development problem (informal slums) may be the only way to mobilize a response at a scale capable of correcting the current trajectory of the housing market in Kampala. The drive for profit also drives efficiencies, which is not a top priority that NGOs and other donor groups share. Providing housing opportunities for the low-income market based on an individual's ability to qualify for mortgage financing is a much more equitable way to ensure that people who work hard and earn their opportunities are rewarded for their efforts. NGOs and donor groups often work with a select cohort that benefits from development programs while others are excluded from the opportunity based on membership of affiliation only. Too many decades of misguided international aid and subsidized charity programs have left low-income communities with a certain sense of expectation or entitlement that has stunted individual ambition to escape poverty through hard work. By creating a level playing field that rewards individual effort, certain people rise to the occasion and achieve their goals, such as qualifying for a housing program, and others do not. It is only realistic to accept that not everyone who desires the opportunity to own a house will be able to do so.

6.3 Design Standards

Providing an affordable housing template that meets a standard of quality that would achieve a consensus about the appropriateness of design and materials used is difficult to achieve. The simple low-income house presented in this thesis is the result of prioritizing cost considerations above durability, sustainability and convenience for the residents. If a viable option to slum housing is going to be offered at the true cost of construction, priority should be given to securing formal land title and ensuring that homeowners receive an asset that provides them with confidence to reinvest their money and improve their living condition as they see fit to do over time. If higher standards for design and construction are applied for the basic house model, it will block more low-income people from accessing the opportunity to try and take the first step out of poverty. Design expectations differ among interested parties. Prospective buyers can visit an existing home model to consider for themselves if the opportunity meets their own standards and needs. Projects of comparable quality and standards that have been built in Uganda have received rave reviews from politicians and local leaders because of the focus on property title for low-income people, master planning for future development and the incentives to the individual to continue working hard to improve the basic house into a residence that reflects the unique character of the occupant.

6.4 Threats to the Model

Confronting the challenge of reversing current housing market trends in Kampala that developed over a long and tumultuous history is a daunting task. The affordable housing cycle presented in this thesis requires a basic level of social, political and economic

stability for the process to fulfill its intended purpose. On a basic level, there are many intangible factors and cultural traditions that influence each step of the affordable housing cycle that will operate outside of local control. As of April 2011, Uganda has been in turmoil and experiencing significant social unrest as a growing number of citizens question the democratic credentials of the dominant political party that has ruled the country for over 25 years. While a certain level of social and political unrest is commonplace in this region of the world, recent public opposition to the ruling regime has sustained an antagonistic presence much longer than is ordinary in Uganda.

While this kind of circumstance may sour the confidence of international investors, the housing program proposed in this thesis involves only local investment, local partnerships and local institutions at every step of the process. The fate of the housing program will be the same as the people of Uganda; it will thrive in prosperous times and shut down during times of instability. No one group stands to gain or lose more significantly in the housing program no matter how the country chooses to engage or acquiesce in times of political and social upheaval. But for those living in houses built by this affordable housing program during tumultuous times, they may feel much safer living inside a solid and secure house among other neighbors who are equally invested in their neighborhood and less likely to allow instability to impact their property and investments.

Uganda's legal institutions and other ministries and agencies continue to be plagued with corruption of some form at every level and this creates ambiguity for investors and developers who need to have confidence that contractual agreements can be enforced and government support functions for development, such as the district land offices, can operate with a minimum of extortion exacted on development projects. While corruption is a complicated matter to the outside observer, it is a daily norm in Ugandan society in many contexts. The lack of institutional capacity to enforce regulations and the low and

inconsistent salaries paid to civil servants almost requires government agents to use their authority to supplement their income to provide for their basic needs. But most corruption goes far beyond funding for basic sustenance as the cultural tradition instills a sense that someone should take advantage of any opportunity they have to get ahead by any means because if they don't, the next person to see the opportunity will.

While these are very real threats, they do not pose extraordinary threats to the operation of the affordable housing cycle. Emphasizing local partnerships and outlining the larger political media benefits that affordable housing programs can bring to local political leaders can forge strong relationships where the housing project can gain the support of powerful interests that counteract the threats from corruption. While corruption may be rampant throughout Uganda, people still respect hierarchies of authority which traces back to tribal traditions of the Chief's ultimate authority, making local partnerships a strategic process, but one that can provide great insulation from other forces that can drain the economics an affordable housing project.

Chapter Seven

Applying the Affordable Housing Cycle in a Broad Context

7.1 The Affordable Housing Cycle – The Three Pillars

The affordable housing cycle outlined in this thesis has been developed for the Ugandan context and in response to specific development challenges facing the city of Kampala. Many of the assumptions and decisions that guided the formulation of the affordable housing cycle reflect cultural and regional factors that have accumulated over a long time, but are not unique to Kampala. Other cities in sub-Saharan Africa as well as other developing regions of the world struggle with similar housing issues and can utilize elements of this housing strategy to instigate similar market changes.

The “three pillars” drive this housing strategy; 1) government partnerships that incentivize private sector developers to enter the low-income market and preserve low sale prices, 2) a strategy for organizing, evaluating and training low-income people to compete in formal competitive markets and 3) a micro-finance industry willing to create loan products that fit with the income generation patterns of informal people. For this housing model to be adaptable and successful in other contexts, these three pillars need to mesh well with existing conditions on the ground.

Conditions that are more favorable to the affordable housing cycle include urban areas with weak planning institutions that have unregulated growth patterns and a severe lag in infrastructure investment. This compounds competition for a limited supply of land and restricts commuter access to outlying areas. A chronic housing deficit creates inflated property values that can increase profit margins on conventional construction that has high location value. Pervasive slum communities and informal squatters drive demand for low-

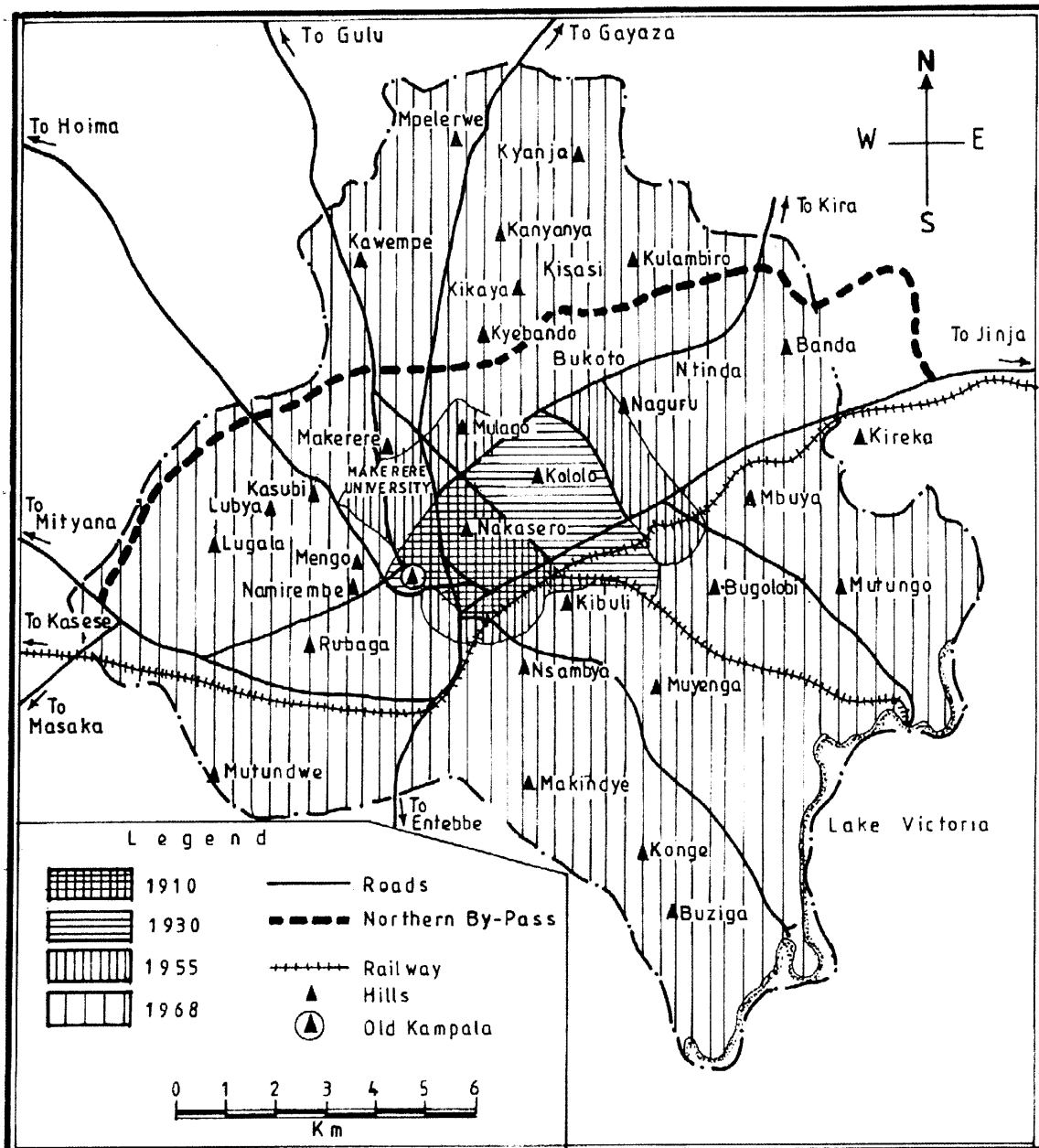
cost housing and the more severe the slum conditions the stronger the market for low-income housing of very simple and basic design and standards. A large urban population of migrant or displaced low-income slum dwellers means the population may be more willing to relocate to areas where development costs are lower. Rural areas need to have enough cultural tolerance to accept new residents from different cultural backgrounds.

Private sector incentives from government partnerships will only work if there is confidence that businesses will receive equal protection in a court of law to enforce contracts. Government incentives to the private sector may come in the form of tax breaks as in the case of Kampala, or other contributions such as land grants can provide incentive for private developers to enter the low-income housing market. The community mobilization elements can be harnessed through almost any existing social network from religious communities to labor unions to neighborhood groups, but there must be a level of democratic values that allows community groups to conduct organization and training programs that are not threatening to government power. Community mobilization programs need to partner with an existing network of lending institutions that can deliver progressive loan products for low-income budgets and lifestyles. Local micro-lenders need to have established memberships of low-income clients and to be willing to innovate how they seed mortgage funds in order to tailor mortgage terms to the variable income streams and unpredictable lifestyles of their clients.

This housing strategy is a solution based on mitigating institutional and economic failures that marginalize a significant portion of a domestic population. The three pillars of the affordable housing cycle are standard roles that can be found to a similar extent in almost any developing world community, but the economics that create the financial incentives for each pillar of the program are dependent on the ability to mobilize low-

income people to be creative and resourceful enough to maintain a basic level of income generation.

Appendix A - Kampala Region and Administrative Growth



Source: Uganda Atlas 1998 and Kibirige (2006).

Appendix C1 – Conventional Middle-Income Apartment Block



Appendix C2

Basis and Assumptions for Economic Model #1 & #2: Kampala, Uganda Urban Apartment Complex – 48 units

Land

Land value for Model #1 based on average price per acre as listed by Eastlands Agency, January 2011 property listing sheet for vacant land between 12-18km from Kampala City Center, proximate to major trunk road.

Infrastructure

Infrastructure for Model #1 based on standard sub-contracted price by Bamzee Engineering Co. for site preparation earthwork, surface drainage swales, septic installations, grading of roadbed and tarmac layer for access road and 60 parking spaces.

Construction

Construction costs for Model #1 is based on average cost per m² for typical construction of apartment blocks in the local Kampala market as per Phillip Sewankambo Mukasa, Building Economist for National Housing Inc. Cost is inclusive of labor and materials for completing entire apartment block, utility connections, site facilities and insurance.

Construction cost for Model #2 based on estimated savings for innovations and material changes for constructing identical buildings as referenced in Model #1. Innovations include prefabricated interior walls and plasterboard ceilings to reduce material and labor costs for installation, plumbing and wiring. Estimated savings based on savings gained from a similar apartment/loft project in Kampala by Alykhan Allibahi of Ylicom Investments Ltd.

Utilities

Utility cost for Model #1 is included in overall construction costs listed above and based on typical national grid connections for power and water and septic and leach field waste water disposal.

Consultants

Consultant fees for Model #1 include all professional services not performed by the general contractor; survey, architectural, engineering and planning services. Costs are estimated at 4% of construction costs. Consultant fees for Model #2 are reduced to 3.5% of construction costs because of local partnerships and consultant's willingness to support low-cost housing projects. (Mani & Bamzee)

Fees/Permits

Fees and permit costs for Model #1 include estimated costs for obtaining all necessary development approvals and permits, inspection fees and land title processing from Kampala City Council. There is no standard fee structure as many fees paid are the result of negotiations with the relevant authority.

Model #2 shows reduced fees because of government partnerships to incentivize the construction of affordable housing. However, even with government support, other layers of local authorities (parish, local council leaders, etc.) may still insist on fees to facilitate a smooth construction progress.

Financing

Budget lists conventional construction financing charges for US\$1,000,000 over twelve months. Loan provided by local branch of Barclays international bank group.

Model #1- 19% is a standard rate for conventional developer loans.

Model #2- 17% is a special rate resulting from government support and local partnerships for facilitating affordable housing.

Marketing

Marketing fees are the same for Model #1 & #2 as per contract with Knight Frank Ltd. Property agents for listing and client recruitment services.

Local "taxes"

Standard "slush fund" for "contributions" to ensure local "big men" and material suppliers do not disrupt construction scheduling. Cost is significantly reduced in Model #2 due to local partnerships and incentivized partnerships with suppliers for additional contracts for low-cost housing projects.

Unit Sale Price

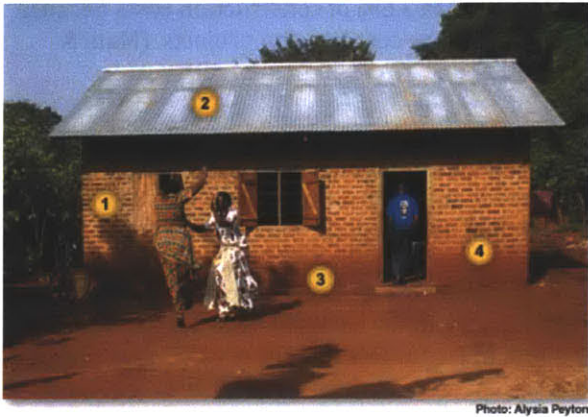
Model #1 & #2 sale price of US\$52,000 is on the low end of the typical sale price range for this type of apartment unit. Sale price for similar units ranges from \$50,000-\$62,000 in the Kampala market, as per Eastlands Agency listings, January 2011.

Revenue Tax

Model #1 has 25% as the standard revenue tax for companies registered in Uganda. (URA)

Model #2 has revenue tax at 15%, which would be the high limit of the negotiated revenue tax as per agreement between the Ministry of Lands, Housing & Urban Development and the Uganda Revenue Authority. The reduced revenue tax is the central component of the partnership between the developer and the government to incentivize construction of low-cost housing.

Appendix D1 – Typical Low-Income House, Uganda



Appendix D2

Basis and Assumptions for Economic Model #3: Kampala, Uganda Affordable Housing Community – 100 units

Land

Land value for Model #3 based on average plot price for vacant land outside Kampala metropolitan area when purchased in bulk (+10 acres) then subdivided- as listed by Eastlands Agency, January 2011. Assumed density of eight, 4,000'sq. plots per acre.

Infrastructure

Infrastructure cost for Model #3 based on price per housing unit for a murram access road network grading and compacting by local contractor using district government earthmoving machinery for a housing project of 100 units.

Construction

Construction costs for Model #3 based on actual construction costs, adjusted for inflation, at Friendship Village, an affordable housing project built by BeadforLife, a Ugandan NGO, in Mukono, Uganda, about 25km from Kampala city center.

Utilities

Utility costs in Model #3 is a per house cost for a variety of decentralized services. Water is supplied by two deep aquifer boreholes with communal pump head located within the project site. Rubbish handling is a per house cost for a communal rubbish burning and composting station. The "utility package" cost includes: 1) a basic solar package (panel, battery & regulator) to provide LED lighting and phone charging, 2) a solar water pasteurizer for sterilization of communal borehole water, 3) a earthen clay rocket-stove for smokeless cooking, and 4) rain gutters and downspouts for rainwater harvesting. Bathroom facilities are provided for each house by an improved ventilated pit-latrine and the cost for construction is included in the overall house construction figure.

Amenities

This budget includes grading, grass seeding and goals for a football (soccer) pitch, five pocket parks with picnic tables distributed throughout the community, signage and public tree planting.

Permits

District fees for building permits & inspections and citizen relocation processing.

Local "taxes"

The peri-urban government administrative structure outside of Kampala has minimal operating budgets and low-level bureaucrats will levy some sort of fee on the low-cost housing project.

Survey

Pre-land purchase land title verification, opening property boundary, master plan and road survey work and individual plot delineation. Installation of survey stones, registration of plat maps with district authorities. (Meridian surveyors/Wana)

Title Processing

Follow-up services by surveyor to facilitate subdivision, prepare individual vector files and facilitating the creation of individual land titles from district land office.

Management

Management includes the project manager, site managers and administrative services to coordinate construction and client liaison services.

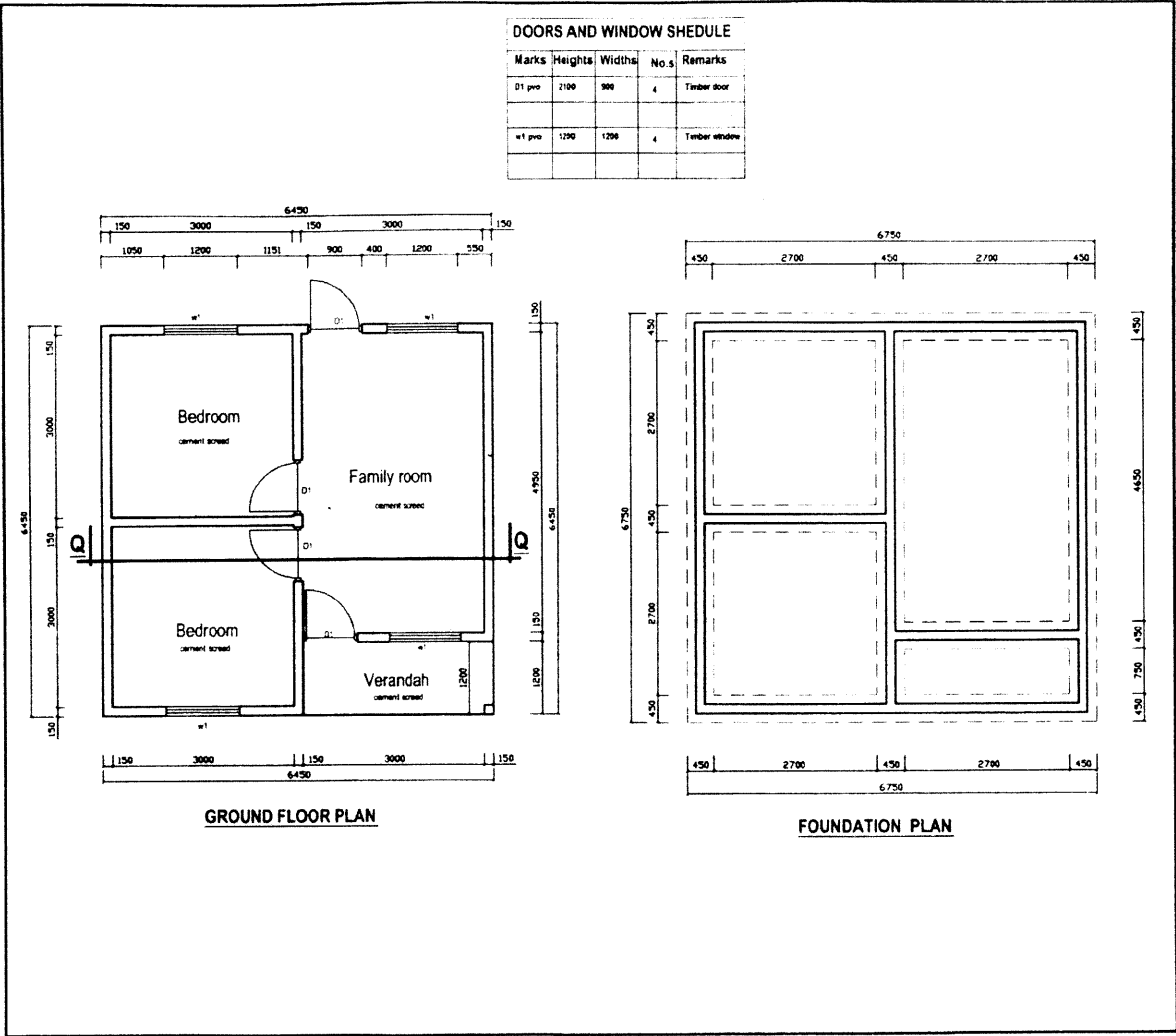
Sale Price

\$7,000 is a very low price for a formal land title and basic shelter near Kampala. At this price, a 10% down payment, and a 10year mortgage at 12% makes monthly payments just below \$60 a month. This is about equal to the typical poverty indicator of people living on \$2/day.

Profit

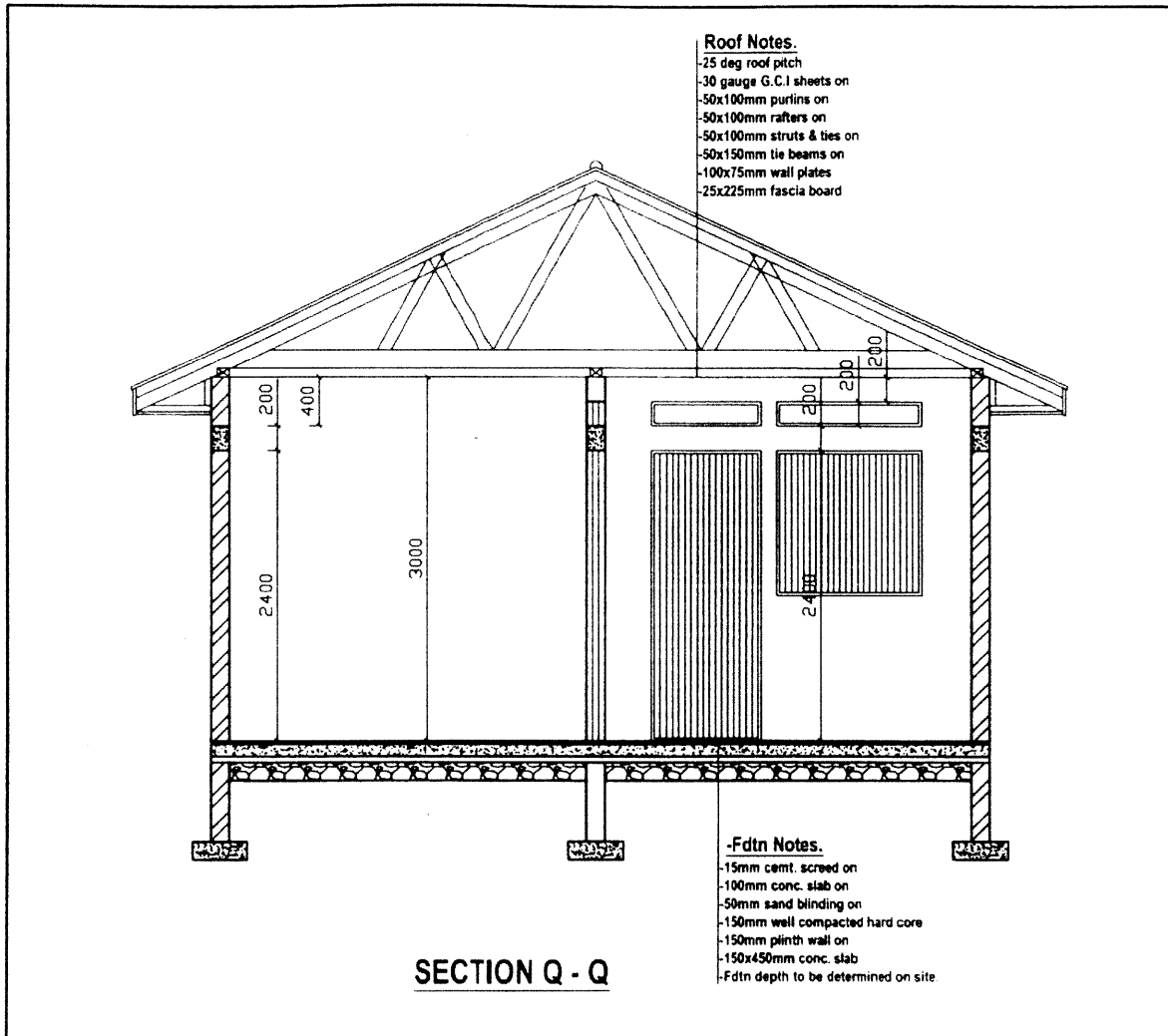
Earning a 17% profit on low-cost housing?

Appendix E1



Source: BeadforLife

Appendix E2



Source: BeadforLife

Appendix E3

Local materials	Unit	Unit cost	Quantity	Total
Bricks	Pcs		8,500	
Sand	Trips		5	
Aggregates	Trips		1.5	
Poles	Pcs		13	
Soft timber	Pcs		8	
Dig pit latrine	ft		30	
Labour				
Sub Total				
Hard ware materials				
Cement	Bags		42	
Iron Sheets	Pcs		30	
Ridges	Pcs		5	
Rings	Pcs		5	
Iron bars	Pcs		7	
Roofing nails	Kgs		6	
Wire nails	Kgs		14	
DPC	Rolls		1.5	
Vent bricks	Pcs		60	
Vent pipe	Pcs		0.5	
Vent cover	Pcs		1	
T-bolts	Pcs			
Screws	pcts		1	
Paint	Tins		1	
Preservative	Ltrs		5	
Hoop iron	Pcs		0.25	
Wire mesh	Pcs		1	
Hinges	Pairs			
Bolts				
Water paint	Ltrs		5	
Sub Total				
Shop materials				
Door sets	Nos		2	
windows	Nos		4	
Toilet doors	Nos		3	
Timber 4x2	Pcs		52	
Sub Total				
GRAND TOTAL				

Source: BeadforLife

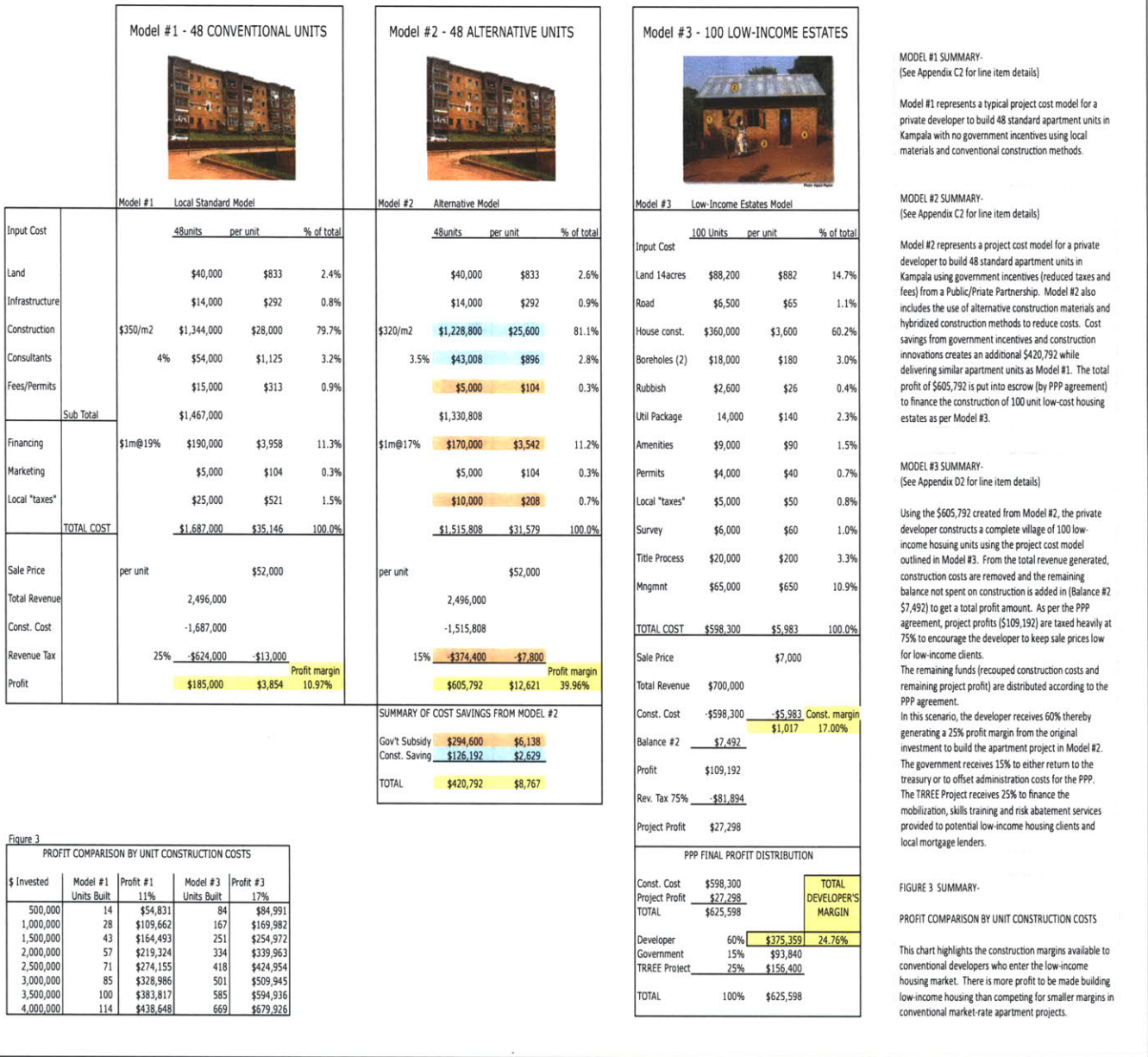
Appendix F

Comparison of Housing Design Standards & Conditions

Slum Conditions Vs. Model #3 Village Units

<u>ATTRIBUTE</u>	<u>SLUM</u>	<u>MODEL #3 VILLAGE</u>
LAND	Squatters, shared/communal, no occupation rights, no food security	Formal ownership rights, title deed, private 4,000'sq. plot, cultivation space
TRANSPORTATION	Inside city limits, walking, multiple transport options at cost	Peri-urban, longer commute time, extra costs, local taxi and regional bus
UTILITIES	None, self procure, long distances to water source, expensive power tap	None, community borehole nearby, rainwater harvesting, solar package for lighting and charging
SANITATION	Overcrowded latrines for a fee, open defecation, wastewater gutters,	Improved, ventilated pit latrine for each family, greywater pour-outs
SECURITY	Weak structural walls, improvised locks, no doors/windows	Complete door and window sets with iron locks, burglar bars on windows
FLOORS	Mud/Earth, unstable, undulating, wet	Elevated cement dry flat floor on compacted foundation infill
WALLS	Mixture of organic materials and improvised masonry	Fired soil bricks with mortar joints from floor to wall plate
ROOF	Patchwork of materials, scraps	Overlapping corrugated iron sheeting
OPEN SPACE	Limited access	Dedicated sports pitch, community pocket parks
COMMERCIAL ACCESS/ PRODUCTION	Limited space, extra rental cost	Private plot, no extra cost
ASSET CREATION	None	Mortgage loan to full ownership

APPENDIX G

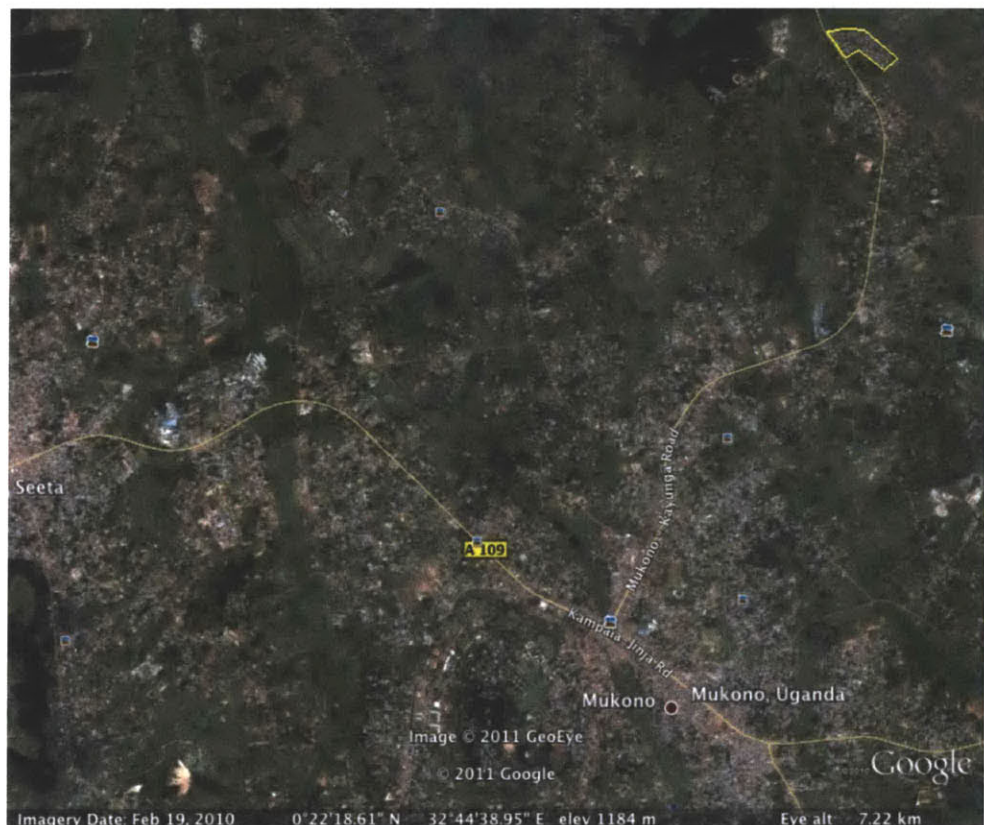


Appendix H

A master planned, low-income residential estate near Takajjunge Town in Mukono District, Uganda. 143 houses (outlined in yellow) with formal land title located 25km/30min commute to Kampala city center.



Location of the same low-income residential estates (outlined in yellow, upper right corner) proximate to the outskirts of Kampala Urban Growth Area. Seeta Town is near the beginning of Kampala District.



Appendix I

PERSONAL INTERVIEWS

January 7-28, 2011, Kampala, Uganda

- Allibhai, Alykhan. Director of Operations, Yluicom investments Ltd., Kampala, Uganda.
- Aziidah, Ngabirano Amanda. Lecturer, Department of Geography, Makerere University, Kampala, Uganda.
- Bekalanze, Joel Masembe. Credit Administrator, PRIDE Microfinance Limited, Metropole House, Kampala, Uganda.
- Bholim, Mohamed Arfaan. Advocate, Mumtaz Kassam & Co. Advocates, Airways House, Kampala, Uganda.
- Byarugaba, Alex. C.E.O., Environmental Solutions Ltd., Kampala, Uganda.
- Joeseeph, Joe V. Property Manager, Crane Management Services Limited, Crane Chambers, Kampala, Uganda.
- Kamukama, Alex. Finance Director, Akright Projects Limited, Kakungulu Satelite City, Kampala, Uganda.
- Mpuga, Adnan. Operations Director, EastLands Agency, Room 352, International Conference Center, Kampala, Uganda.
- Mucunguzi, Harriet. Property Manager, National Social Security Fund, Workers House, Kampala, Uganda.
- Mukasa, George Kasede. Director, Corporate Investment Brokers, 3rd Floor, Social Security House, Kampala, Uganda.
- Mukasa, Phillip Sewankambo. Building Economist, National Housing Construction Company, Kampala, Uganda.
- Mukiibi, Stephen. Lecturer, Department of Architecture, Makerere University, Kampala, Uganda.
- Mukoome, Francis Lukooya. District Chairperson, Mukono District Local Governement, Mukono, Uganda.

Mwesige, Godfrey. Lecturer, Department of Construction Economics & Management, Makerere University, Kampala, Uganda.

Mzee, Rashid. Director, Bamzee Engineering Co., King Fahd Plaza, Kampala, Uganda.

Nangono, Edward Gibson. Relationship Officer- Corporate and Investment Banking, Stanbic Bank, Crested Towers Building, Kampala, Uganda.

Ngabirano, Emmanuel. Technical Director, Bimo Land Projects Ltd., Crown House, Kampala, Uganda.

Obbo, Dennis Fred. Principal Information Scientist, Ministry of Lands, Housing & Urban Development, Parliament Avenue, Kampala, Uganda.

Ofungi, David. Director, DERO Capital, Munyonyo, Kampala, Uganda.

Okwi, Paul. Residential Sales Agent, Knight Frank, Kampala, Uganda.

Olowo-Freers, Bernadette. Former Uganda Ambassador to Germany, Mbuya, Kampala, Uganda.

Owanyi, George E. Mortgage Relationship Manager, Housing Finance Bank, Investment House, Kololo, Kampala, Uganda.

Walaga, William M. Director of Housing, Ministry of Lands, Housing & Urban Development, Kampala, Uganda.

Woyaga, Patrick. Chief Manager of Micro Credit, Centenary Bank, Talenta House, Kampala, Uganda.

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