



## Terwilliger Center for Innovation in Shelter



# Building Assets, Unlocking Access: How Support Services Can Add to Housing Microfinance

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## About the partnership

Habitat for Humanity Canada, Habitat for Humanity International and the Mastercard Foundation partnered to implement a six-year project in Africa titled "Building Assets, Unlocking Access." This project, carried out by Habitat for Humanity's Terwilliger Center for Innovation in Shelter, provided technical assistance to six leading financial institutions in Uganda and Kenya as they developed housing microfinance products and nonfinancial support services for people living on US\$5 to US\$10 per day. The aim was to enable these people to secure adequate and affordable housing and improve their living conditions.

## About the Mastercard Foundation

The Mastercard Foundation seeks a world where everyone has the opportunity to learn and prosper. The foundation's work is guided by its mission to advance learning and promote financial inclusion for people living in poverty. One of the largest foundations in the world, it works almost exclusively in Africa. It was created in 2006 by Mastercard International and operates independently under the governance of its own board of directors. The foundation is based in Toronto, Canada. For more information and to sign up for the foundation's newsletter, please visit [mastercardfdn.org](http://mastercardfdn.org). Follow the foundation at @MastercardFdn on Twitter.

## About Habitat for Humanity International

Driven by the vision that everyone needs a decent place to live, Habitat for Humanity began in 1976 as a grassroots effort on a community farm in southern Georgia. The Christian housing organization has since grown to become a leading global nonprofit working in more than 70 countries. Habitat for Humanity operates in 12 countries in Sub-Saharan Africa through a number of housing initiatives. It has witnessed a growing demand for financial services that address housing needs among microfinance institutions and clients. For more information, visit [habitat.org](http://habitat.org).

## About the Terwilliger Center for Innovation in Shelter

This project is implemented by Habitat for Humanity's Terwilliger Center for Innovation in Shelter. Habitat established the Terwilliger Center to work with housing market systems by supporting local firms and expanding innovative and client-responsive services, products and financing so that households can improve their shelter more effectively and efficiently. Habitat can have exponentially more impact by improving systems that make better housing possible for millions more families. The role of the Terwilliger Center stays true to Habitat for Humanity's original principles of self-help and sustainability by focusing on improving systems that enable families to achieve affordable shelter without needing ongoing direct support. To learn more, visit [habitat.org/TCIS](http://habitat.org/TCIS).

## Executive summary

Institutions and governments around the world face many challenges as the global population continues to grow. Research estimates that over 1.6 billion people in the world will not have access to adequate shelter by 2025<sup>1</sup>. Given the magnitude of this issue, institutions are developing a variety of innovative approaches to address the problem. Housing microfinance has been one successful initiative, but it is important to recognize that increasing access to capital for housing through microfinance providers does not guarantee that housing quality for the “base of the pyramid” will improve. Housing support services – broadly defined as nonfinancial services that may be bundled with loan products or offered tangentially with household investment in shelter – are a means of addressing the quality of housing for the base of the pyramid.

This report chronicles the different approaches that Habitat for Humanity's Terwilliger Center for Innovation in Shelter has taken over a period of six years to research and develop housing support services within the Building Assets, Unlocking Access, or BAUA, project in Uganda and Kenya, implemented in partnership with the Mastercard Foundation. The report also highlights lessons learned from these housing support services and provides recommendations for future services.

Through the Building Assets, Unlocking Access project, the Terwilliger Center provided technical assistance to six financial institutions on the design and development of housing microfinance products targeting low-income households in need of improved shelter. To address the quality of these housing improvements, the project aimed to develop, validate and pilot scalable housing support services that complemented the housing microfinance loan products. The project provided a unique opportunity to pilot several approaches and see which had the greatest effect on the needs of the low-income housing market. The Terwilliger Center initially pursued an approach that would be integrated within the loan disbursement process of the partner financial service providers. This included quality control measures and the provision of brochures and cost estimate templates to clients. The project team then explored constraints within the broader housing market and piloted interventions addressing these hindrances, including assessments and soft skills trainings for masons, mobile platforms to connect actors within the housing market, grants for firms within the construction value chain, and consumer education initiatives. Thus far, a replicable and sustainable model has been elusive, but the project started witnessing some potential for replicability in emerging institutional-based models in its final year.

The cost of interventions and the capacity of the Terwilliger Center and local partners were major inhibitors to the sustainability of most of the pilots of the BAUA project. It is increasingly apparent that partnerships with a wide variety of actors, including those in the private sector, are necessary to create a sustainable network of housing support services. No single actor can provide the housing support services that will miraculously improve housing quality for all members of the base of the pyramid. The issue itself is multifaceted and unique to each socioeconomic context, so the solutions must represent actors from many industries working together to address different aspects of the issue.

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1 Woetzel, Jonathan; Ram Sangeeth; Jan Mischke; Nicklas Garemo; and Shirish Sankhe (2014). *A Blueprint for Addressing the Global Affordable Housing Challenge: Executive Summary*. McKinsey & Company, Washington, D.C.

Key actors within the network include market facilitators, financial service providers, investors, and actors within the construction value chain. As a market facilitator, the Terwilliger Center provides specific expertise and acts as a catalyst for change within a particular construction value chain. Market facilitators seek to provide the comprehensive vision and holistic approach to creating a system of housing support services. They also play an important role in identifying potential partnerships between different actors to make the provision of housing support services possible. Financial service providers were believed to be ideal for knowledge dissemination, providing information to clients about the available housing support services. However, there does not seem to be an incentive for the microfinance institutions to provide these services, so more research needs to be done on how to ensure participation. Additional actors within the system conduct the interventions that they have the skills and capacity to implement.

Regarding future projects around the world, the Terwilliger Center must consider how different housing support services may interact with one another. The work of the BAUA project is an instrumental first step in researching individual impacts, but the next step should focus on combining initiatives to achieve increased impact. Although the BAUA initiatives are contained to the context of Kenya and Uganda, these lessons are applicable for future programs elsewhere in Africa and other regions. Financial service providers, market facilitators and other market actors can build on this work in the future to create a tailored, comprehensive approach.

## Introduction

Institutions and governments around the world face many challenges as the global population continues to grow. Adequate shelter is one of the basic human rights outlined in the Universal Declaration of Human Rights, but research estimates that over 1.6 billion people in the world will not have access to adequate shelter by 2025<sup>2</sup>. Given the magnitude of this issue, institutions are developing a variety of innovative approaches to address the problem. One successful initiative is housing microfinance, which is based on the principle that people want to improve their living conditions and will do so with their current means. The global low-income housing market is large, with an estimated US\$298 billion spent on shelter by the base of the pyramid in 2010<sup>3</sup>. However, people within this segment often do not have the economic capability to build a home from start to finish. Instead, they tend to make incremental improvements to their homes as they are able to afford more materials. This can be a slow and inefficient process; materials decay, and the work starts and stops as household resources change.

Housing microfinance provides capital for a more efficient process and enables households with inconsistent income flows to access resources for improvements that might not otherwise have been possible. It is important to recognize that increasing access to loans through microfinance does not guarantee that housing quality for the base of the pyramid will improve. To this end, housing support services, broadly defined as the nonfinancial services that may be bundled with loans or tangentially offered at periods of household investment in shelter, are a means to facilitate quality, affordable housing. Examples of housing support services include technical information, professional services and construction technical assistance.

Habitat for Humanity sees a role in catalyzing these efforts by engaging with local microfinance institutions to bring innovation and solutions to the affordable housing market. Habitat for Humanity's Terwilliger Center for Innovation in Shelter provides technical assistance and debt capital to financial service providers to develop appropriate housing products using an array of savings, credit and remittances and incorporating linkages to housing support services. Over time, the Terwilliger Center has refined its focus to take not just a market approach to adequate housing, but also a market systems approach.

2 Woetzel, Jonathan; Ram Sangeeth; Jan Mischke; Nicklas Garemo; and Shirish Sankhe (2014). *A Blueprint for Addressing the Global Affordable Housing Challenge: Executive Summary*. McKinsey & Company, Washington, D.C.

3 World Bank (2010). Global Consumption Database. <http://datatopics.worldbank.org/consumption/> (accessed Nov. 7, 2018).

4 Prieto, Sandra, and Emily Simmons (2017). *The 2016-17 State of Housing Microfinance: Understanding the Business Case for Housing Microfinance*. Habitat for Humanity's Terwilliger Center for Innovation in Shelter, Atlanta, Georgia.

5 Habitat for Humanity International (2018). *KWFT Housing Microfinance Impact Evaluation Final Report*. Genesis Analytics. <https://www.habitat.org/sites/default/files/documents/KWFT-Housing-Microfinance-Impact-Evaluation-Final-Report.pdf>.

When the Terwilliger Center began including technical assistance on housing support services, it did so under the theory that housing microfinance providers can affect housing quality and other home-related issues by incorporating these services as part of the home loan process. The Terwilliger Center viewed the microfinance transaction as an opportunity to offer a critical service right at the time a household is making an investment. As a result, it was a way both to provide responsible financing and to cultivate new markets for services to which the low-income population generally lacks access. However, the Building Assets, Unlocking Access, or BAUA, project provided the Terwilliger Center with a unique opportunity to test and evaluate various forms of housing support services to determine which ones have the greatest impact, whether financial service providers are the ideal implementers, and if not, what other market actors have a natural incentive to participate in the market intervention.

There is no one-size-fits-all solution to housing support services, and many different actors within the low-income housing construction value chain play a role in the interventions. Therefore, institutions should consider ways to address other dimensions of adequate housing, in addition to affordability, even if they do not have the individual capacity to implement a holistic approach. In general, providers should tailor housing support services to the target clients, recognizing that the initiatives are heavily dependent upon the socioeconomic context and needs of clients. Market mapping and research can contribute to the success of the interventions. Ideally, the type of housing support services being designed should rely on a market segmentation that considers the needs, preferences and capacities of the target population. The intersection of those factors will determine the type of housing support service necessary or identify gaps in the value chain where services are applicable.

This report seeks to chronicle the different approaches that the Terwilliger Center has taken to research and develop housing support services within the BAUA project in Uganda and Kenya. In addition, the report provides lessons learned from the various approaches and develops recommendations for future housing support services. First, the report provides background on the BAUA project. Second, it provides an overview of Habitat's initial approach toward housing support services before detailing the BAUA pilots. Third, it discusses outcomes and implications for future housing support services. Fourth, the report analyzes the opportunities and costs of providing housing support services. Finally, it provides recommendations for future initiatives.



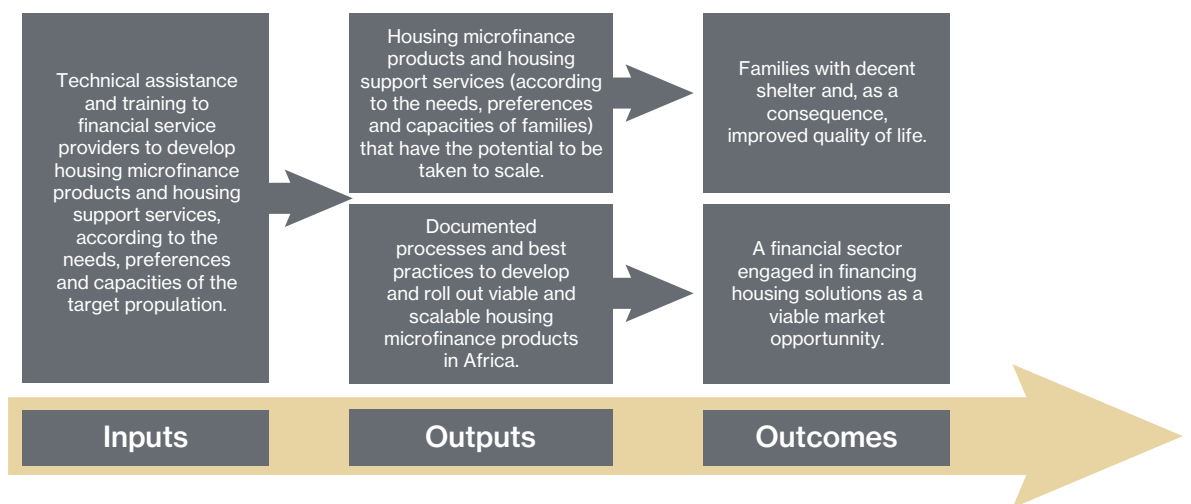
## Background on Building Assets, Unlocking Access

Habitat for Humanity International, in partnership with the Mastercard Foundation, implemented a six-year project to expand access to housing financial services for populations living on on US\$5-10 per day in Uganda and Kenya. Habitat for Humanity’s Terwilliger Center for Innovation in Shelter oversaw the Building Assets, Unlocking Access project, which worked with six partnering financial service providers as they diversified their product offerings to include vibrant and viable housing microfinance products with the potential for scale. The specific project objectives were to:

- Strengthen the institutional capacity of the partner financial service providers.
- Develop, validate and pilot scalable housing microfinance products.
- Develop, validate and pilot scalable housing support services.
- Demonstrate and document the impact of housing finance and housing support services on institutions’ performance and on households and communities in areas such as health, education, greater base of assets and secure tenure.
- Influence the housing and finance industries through disseminating practical knowledge on housing microfinance to other providers in Africa and the broader industry.

The project built the capacity of local financial institutions already serving the low-income market to diversify their offerings to include viable housing microfinance products and services delivered at scale according to the needs, capacities and preferences of the target population. The Terwilliger Center based the project on the theory that the target market would take up demand-driven products, enabling the acquisition of improved shelter and the accumulation of durable shelter assets. Thus, these products would lead to an improved quality of life. Figure 1 provides a more in-depth description of the BAUA project’s theory of change. Throughout the project, the Terwilliger Center took an evolving advisory services approach that adapted based on experiences within the project and around the world.

**FIGURE 1: PROJECT THEORY OF CHANGE**





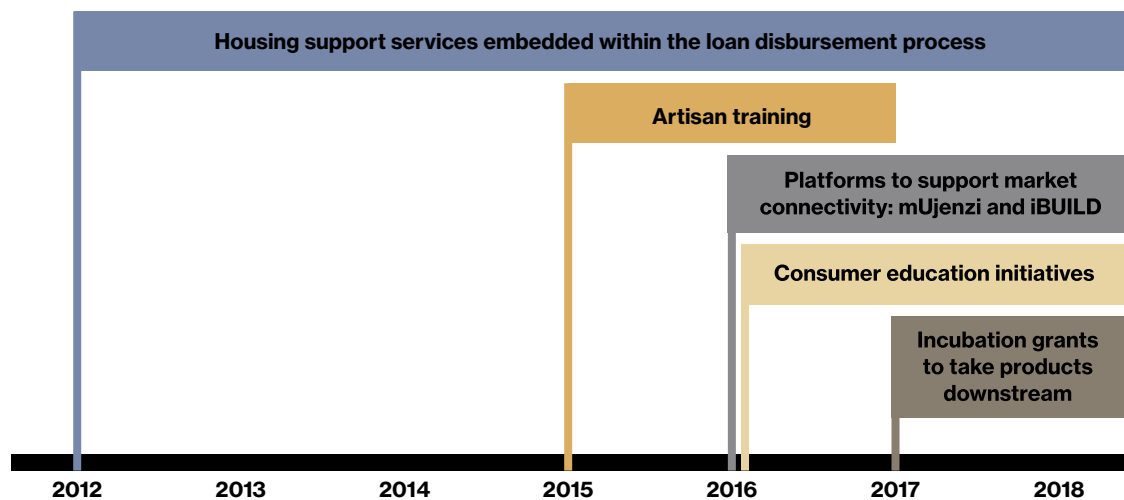
One of the key objectives of the project was to develop, validate and pilot scalable housing support services at six financial service providers across Kenya and Uganda. At the beginning of the BAUA project, the Terwilliger Center conducted market research with potential clients of the financial service providers, focusing on demand, delivery channels and cost recovery strategies. An initial review of the low-income housing markets in Uganda and Kenya revealed that clients faced many challenges from land tenure, lack of adequate construction-related information, inability to manage construction, and complex construction-related regulations. Masons faced several challenges, including lack of consistent work throughout the year, capacity and skill gaps, payment delays by homeowners, lack of association to lobby for better pay, and government regulations that require them to have accreditation.

Over the past six years, the project developed and tested different housing support service delivery models in Kenya and Uganda with varied results. The initiatives began by focusing on housing support services offered by the financial service providers, but as time passed, the project team took a more comprehensive approach by partnering with other actors within the construction value chain as well. These models included services embedded in loan disbursement, artisan training, consumer education, platforms to support market connectivity, and grants to take products downstream.

## Housing support service activities

Combining housing support services with housing microfinance loans was part of the value addition of the Terwilliger Center as it embarked on the provision of technical assistance to financial institutions to design housing microfinance products and services. However, initial attempts to embed housing support services within the loan disbursement process did not provide consistent evidence of sustainability or improvement in housing quality. Unlike the previous technical assistance projects, the BAUA project provided a unique opportunity to pilot several different programs to see which initiatives had the greatest effect on the needs of the low-income housing market in a sustainable manner. Thus far, finding a sustainable model that is replicable on a wider scale has been elusive, but the project recently started witnessing some potential for replicability in emerging institutional-based models. This section will first discuss Habitat's technical assistance on housing support services globally, and then chronicle each of the pilots undertaken during the BAUA project as seen in Figure 2.

**FIGURE 2: BAUA PROJECT HOUSING SUPPORT SERVICES**



## Global overview of housing support services

Assisting institutions in providing sufficient services (financial and nonfinancial housing support) for households to secure adequate and affordable housing is one of the primary goals of the Terwilliger Center. However, the Terwilliger Center and the microfinance institutions it collaborates with have struggled to create sustainable nonfinancial housing support services. According to a 2017 internal study, of the 20 institutions with whom the Terwilliger Center had worked to develop housing support services, only seven continue to provide some form of construction technical assistance, and four of those have reduced their service offerings. In particular, many of the services initially developed required high levels of innovation and heavy investment without proven cost recovery strategies.

In Latin America and the Caribbean, financial institutions had originally partnered with material suppliers, but they have since discontinued the partnerships because of lack of motivation or capacity. In addition, clients stated that they prefer to choose their own suppliers and builders. Finally, many of the forms of housing support services implemented have proved to be time-consuming or financially unsustainable, which is a compelling reason for financial institutions to discontinue the services.

Clearly, more research and innovative solutions are needed to determine the most efficient and sustainable housing support services. In particular, initiatives must account for the cultural context. The BAUA project provided an opportunity for the Terwilliger Center to dive into the complexities surrounding many different types of housing support services in order to create a holistic strategy to address the provision of quality affordable housing in Kenya and Uganda.

## Initial housing support services in Kenya and Uganda

The first housing support services recommended and implemented through the BAUA project followed the traditional approach of recommending microfinance institutions to act as the providers of the support services. Initial forms of housing support services focused on assessing housing quality. Financial service providers added visits to inspect the construction site. These visits included photographing the residence, the applicant and the loan officer; supporting clients in creating a home improvement plan and house sketch; and determining the costs of the improvements using a cost estimate template. The cost and time required to add the visits, however, made them infeasible.

During the implementation phase of these embedded housing support services, it became clear that the financial service providers were reluctant to provide these services directly. Financial service providers were concerned about liability and legal suits resulting from incorrect technical information being offered to clients by staff members who were not construction experts.

Participating financial service providers then implemented, with the support of the BAUA project, a less time- and cost-intensive approach to housing support services, which focused on consumer education. This method included disseminating product brochures with general construction tips, cost estimate templates, and a diagnostic tool for clients. The project also documented the land titling and building plan approval processes in Kenya and Uganda to help clients navigate national requirements. The financial service providers seemed to like this approach because it added little time or cost to their operations, proving to be more sustainable.

During the provision of these “light” housing support services, issues arose with the distribution of the materials. In some cases, the branches did not receive the hard copies of the brochures, so the clients did not obtain them. When the Terwilliger Center conducted an internal evaluation of the CenteHome loan pilot, 83 percent of the clients interviewed stated that they did not receive any advice from loan officers. However, only 29 percent of the clients said they would have wanted advice on material suppliers and construction tips, highlighting that the value of this approach to

clients was less than anticipated. The result of the brochures and assessment visits determined that there was little evidence that the credit offices were effective in sharing the tips with clients.

Based on the less than satisfactory results from bundling the housing support services with the loan disbursement process, the project team reconsidered their approach. The Terwilliger Center began looking at different ways of ensuring households had access to and information on quality building practices, skilled labor and quality materials. The resulting adaptations included alternative ways to link the services with financial service providers and working on initiatives for the construction sector and homeowners with other market actors outside of the partnerships with the microfinance institutions.

## Testing alternative models to improve the housing value chain: Artisan training

After conducting the housing market mapping reports for Kenya<sup>6</sup> and Uganda<sup>7</sup> and determining that financial service providers would not be effective in delivering housing support services bundled with products as discussed above, the BAUA project team recognized the need to consider housing support services that drew upon other actors in addition to the financial service providers. This was primarily due to market mapping results that showed the quality of houses built by the target market was poor and had room for improvement. The reports also found that the low-quality housing standards were a reflection of the artisans' skill level. Thus, the BAUA project team turned to local artisans (*fundis*), because they conduct virtually all home improvements in the region.

Research showed that the *fundis* often lack formal training and knowledge of standards. In addition to the actual building, homeowners often consult with *fundis* for advice on drafting construction plans, sourcing materials, and approximating construction costs. Because of the significant role that local artisans play in the construction process, the Terwilliger Center wanted to address the skill gap in the market and find a way to ensure that the *fundis* were technically competent. Thus, the project team created a pilot artisan training program, focusing primarily on masons because they are the most common type of *fundis* employed in home improvement projects<sup>8</sup>. Additionally, the project team anticipated sharing the lists of masons who participated in the training with the local branches of the financial service providers. Then, the staff at the branches could distribute the lists to the clients.

### Uganda (two districts)

- 70 masons were assessed.
- 66 were certified as competent.
- 66 attended soft skills training.

### Kenya (four counties)

- 140 masons were assessed.
- 112 were certified as competent in various masonry trades.
- 87 of the certified masons went through further soft skills training.

6 Terwilliger Center for Innovation and Shelter (2013). *Building Assets, Unlocking Access: Shelter Solutions for the Poor: Kenya Housing Market Mapping and Value Chain Analysis*.

7 Terwilliger Center for Innovation and Shelter (2013). *Uganda Market Mapping and Value Chain Analysis*.

8 For more information regarding the artisan training, see Habitat for Humanity (2018). *Mason Training Technical Brief*. Available at <https://www.habitat.org/impact/our-work/terwilliger-center-innovation-in-shelter/shelter-solutions-for-people-in-subsaharan-africa>.

The training program was developed in both Uganda (June 2015) and Kenya (May 2016). The artisan training pilots drew masons from two districts in Uganda and four counties in Kenya. In Uganda, the BAUA project team partnered with the Pioneer Technical Institute. In Kenya, the project team partnered with the Kisii National Polytechnic and SIKRI Technical Training Institute. Although the overall objectives of the program were similar in both countries, there was some difference in approach based on the context. The primary objectives of the training program were to:

- Enhance quality, productivity and competitiveness in home construction.
- Make home masons more professional, competitive and market-driven through capacity building.
- Provide appropriate incentives to masons to enable them to approach building construction professionally.



The artisan training program was a multistep process aimed at training masons in critical soft skills to improve their business relationships and quality of construction. The reasoning behind this approach is that many masons were already skilled in certain aspects, so this training should formally recognize these skills and provide training in new skills, competencies and knowledge.

First, the BAUA project team invited masons with three or more years of experience to attend a multiday competency assessment where technical institutions evaluated the participants on brick/block laying, plastering, flooring and setting out. The institutions then provided certification documents to the masons who demonstrated that the quality of their work met the national standards. These documents will help them in the future by demonstrating credibility and allowing them to charge better rates and work on government contracts that require national certifications.

Second, during the hard skills assessment, consultants researched what soft skills the *fundis* thought would most benefit them and help them more effectively deal with their clients and other relationships within their work. The hope was that the training plan created from this research could spawn full courses and trainings taught by the partner technical institutions.

Third, the masons who passed the competency assessment were invited to attend a soft skills training. The soft skills identified for the training differed slightly between the Kenya and Uganda pilot programs. However, both curriculums focused on:

- Communication skills.
- Interpersonal skills.
- Teamwork.
- Contracts and job costing.
- Interpretation of technical drawings and plans.
- Financial education and budgeting.



The Terwilliger Center team used prior experience and research to inform and ensure that the training was relevant and useful to participants. Surveying the masons at the competency assessment about what soft skills they thought would be most valuable for them to learn led to the development of a viable curriculum. This allowed the training institutions to design the soft skills course to leverage the masons' existing knowledge.

A comprehensive evaluation of the training in both Kenya and Uganda showed that these trainings were highly valued by the masons and that they also had a positive effect on the homeowners and partner training institutions. The masons reported that the soft skills training was useful because, before the training, they did not consider communication and interpersonal skills to be important in the negotiation process and construction management. Masons also stated that the training enabled them to receive referrals for more and better-paying jobs.

A major strength of the artisan training pilot program was first identifying the part of the construction value chain that would have the largest overall impact on the construction quality of homes. Focusing on the local masons was a result of the identification process. The project team also considered how to make the program sustainable before the implementation. Partnering with educational institutions was important because it already had been determined that the financial service providers would not be able to sustain a time- or cost-intensive housing support service, such as a training course. However, an institution that already creates curriculums and courses could theoretically continue offering the course without support from Habitat for Humanity after the pilot ended.

The largest challenge to the continuation and sustainability of these short courses is the cost per participant (US\$450). The team did consider potential ways to lower costs, such as shortening the duration of the competency assessment process, which would reduce the money needed for boarding and lodging, but the estimated costs would still be unsustainable for both the masons and the training provider. Additional savings may be achieved if the competency assessment process can be automated using photos of past work. In addition, leveraging government subsidies for technical and vocational training could make the training more viable.

Despite the challenges that prevent continuing the training program in its current form, some of the training institutions have taken steps to incorporate the soft skills lessons into existing classes and to develop a curriculum for competency-based training. This is good because the institutions originally cited a lack of resources and time allocation within existing classes. Therefore, the BAUA project may have served as a catalyst and funder for the institutions to develop a valuable curriculum for the future.

One accomplishment of the artisan training is that it was the first kind of assessment and certification carried out in Kenya. It was an innovative concept of collaborating with government and certification authorities to provide a way for masons to receive formal recognition. In addition, the program allowed *fundis* with on-the-job training to gain the appropriate certification to get

better jobs and contracts. The masons themselves thought the assessment and certification were transparent and empowering processes that increased their opportunity for getting more work, especially on government contracts that require proof of training.

The homeowners in the regions where the pilot programs took place now have access to a pool of certified masons to choose from, and the homeowners have stated they are willing to pay more for the knowledge of quality construction.

Some institutions did take steps to incorporate the certification methods and the soft skills curriculum into future courses, but it is doubtful that the artisan training will be conducted again in either country. Though the program achieved its goals of training masons in soft skills and being valuable to the *fundis* who participated, the pilot programs encountered several difficulties.

An initial challenge was identifying skilled masons who could participate in the pilot program. The project team originally expected financial institutions to identify the participants using referrals from existing clients, but the clients thought this would be a chance to train and certify their family members. The team quickly switched tactics, and the financial service providers hired “mobilizers” from the communities to choose masons who matched the selection criteria.

The Kenya pilot had information disbursement issues. Masons were confused over when they were supposed to arrive for the assessment. This resulted in facilitators assessing larger groups of masons than they had planned for, which strained the assessment. Future training programs should be mindful of the number of people involved in each training session for better contact between the trainees and the facilitators/assessors. It is also important to consider allocating adequate time to the training in order to accommodate all categories of learners.

Internal reports evaluating each of the soft skills trainings identified that the two-day training would benefit from an additional day. The primary reason for this is that there was not enough time during the training to enable the masons to comprehend the key concepts with ease. In addition, differing educational backgrounds and literacy levels hindered active participation.

The project team had initially envisioned sharing the lists of the newly certified and trained masons with the local branches of the financial service providers. Then, the staff at the branches could distribute the lists to the clients. However, this linkage did not occur as expected. In practice, homeowners did not use the newly trained masons. There were several theories as to why: there were not enough trained masons to serve the demand; the homeowners either never received the list of certified masons or could not reach them; a large number of formally trained masons already existed; or the homeowners may have their own trusted masons.

The assessments found that two of the above-mentioned factors seemed to be the case. First, all of the homeowners interviewed in Kenya and the majority of those interviewed in Uganda stated that they prefer to use referrals from friends and family members. In addition, although they were



theoretically willing to pay more for qualified masons, they may not have had the financial means to pay more. Second, in Kenya, there was a breakdown in the distribution chain because of the microfinance institutions' concern over liability if the client was unhappy with the recommended mason's performance, so the institutions were hesitant to distribute the lists of masons. It is important to develop a better understanding of customer behavior and incentives when choosing value-added services.

Key lessons from the pilot program include:

1. Involvement of a government authority or certification provider is an important incentive for *fundis* to participate, because the certifications are credible. In Kenya, the Technical Institute of Kenya took the lead on creating the training course and developing the competency assessment criteria that met industry standards. In addition, the only institutes in Kenya that are allowed by law to offer certificates are the technical institutes, so it was necessary to partner with one to accomplish one of the primary goals of the training.
2. The inclusion of soft skills training after the certification was beneficial for masons because it provided essential skills for the improvement of work relations.
3. The lack of sustainability of this program is tied to the cost. It costs around US\$450 per mason to conduct the training, and the many participating masons stated that the price would need to be partially or fully subsidized for them to take the course, even given how beneficial they thought it was for their future work.

The pilots demonstrated wide interest and support for the trainings, but more research is needed to determine how to improve the skills of *fundis* and incentivize further use of highly skilled *fundis*, since they seem to be one of the crucial factors in construction quality.

## Catalyzing market systems

BAUA identified other key areas in which to pursue interventions in addition to local artisans. In particular, the project team focused on the provision of better connections among homeowners, *fundis*, financial service providers and hardware suppliers, along with the enhancement of products created by firms that served the low-income construction value chain. The team recognized that Habitat would play a role as both a lead partner and a facilitator based on whether a product existed in the market. Within these areas, the Terwilliger Center pursued two mobile platforms and an incubation grant program.

### **mUjenzi**

The concept for mUjenzi was based on the need to have linkages with key housing value chain actors such as material suppliers, homebuilders and construction service suppliers to increase quality and affordability of home construction. The project team noticed the absence of a common platform where the participants in the construction industry could interact freely to facilitate their operations with more convenience. In Kenya and Uganda, knowledge of and access to skilled labor by homeowners depends on referrals and personal relationships. Without such a platform,

*fundis* tend to have limited job opportunities, and construction material suppliers serve only a very limited market despite high demand for their services. The Terwilliger Center sought to facilitate further connections through the development of a new mobile platform called mUjenzi. MUjenzi would connect customers to masons, microfinance institutions and hardware suppliers and provide information about the plan approval and land titling process.

Some of the capabilities of the platform included:

- Lists of the hardware stores' products and prices for potential buyers.
- Job opportunities posted by masons and homeowners.
- Automatically generated job alerts.

The Terwilliger Center partnered with Collabmed Solutions Ltd. to develop the platform. Collabmed put in place a premium mobile number development team with a server manager, systems coder, information architect, tester and server scriptwriter. The company procured a telco premium number code, coded the content, and tested the system. Collabmed also conducted the market test for mUjenzi in Kenya for one week in December 2016.

During the pilot of the platform, the facilitators encountered several challenges. Hardware store owners had some issues with timing out during the registration process because of its length. Neither the masons nor the customers experienced this issue. This may have been due to hardware store owners having additional items in the registration process, such as listing products they stocked. It was recommended that the programmers create an auto-save function at different stages to minimize the system timeout.

There was also an issue with the market test respondents agreeing to enter the program. The platform required participants to input their personal information. Many participants were worried that their personal information could be stolen and used to rig elections, as had happened before on different platforms.

Finally, many respondents doubted the new platform would provide the service and convenience the facilitators promoted it as supplying. This was primarily because of lack of knowledge about the initiative. Large hardware stores, however, did not take part in the pilot because they did not see the benefit in joining since they already had customers and did not need advertising. Like similar user-based platforms, the number of users actively participating on the system limits the efficacy of mUjenzi. The fewer people on all sides who sign up, the less useful it is. Therefore, confidence in the platform and buy-in from potential customers are crucial for its success.

Even with the challenges listed above, 79 percent of the respondents during the market test stated they would use the platform in the future because of its convenience. They also said they would recommend the platform to friends and family members.

One recommendation to increase use would be to organize forums to educate users on the benefits and efficiencies of the platform in assisting the daily routines of the construction industry. These

forums would not only improve the acceptance rates among potential users, but also make the platform more relevant and viable to the market. Marketing campaigns should focus on assuring the users about the security of their personal information and refuting claims about a plan to influence elections.

Another way to increase users of the platform would be to reduce the charges for using it. This could help economically challenged users advance their economic status by benefiting from the program.

Key lessons from the mUjenzi pilot program include:

1. The platform must be user-friendly and provide value for all key stakeholders.
2. Information about privacy protection should be available and clearly explained.
3. This kind of platform needs a large and active user base to succeed. Marketing campaigns may attract additional users, and reducing membership fees will ensure the target market is not excluded from the platform. Both approaches serve to increase the numbers of users.

Although the Terwilliger Center saw value in this system for connecting different aspects of the low-income housing value chain, it decided not to pursue a full rollout of the product past the pilot stage. This was largely because of insufficient capacity to develop the platform to scale. Instead, the center looked for another platform already providing a similar service and created by a private-sector actor.

### **iBUILD platform**

Beginning in November 2017, the BAUA team began a partnership with iBUILD Global Inc. to pilot its platform in Kenya. iBUILD is a mobile application meant to digitize housing support services and increase access to affordable housing in developing countries through the delivery of affordable technical support services. Like mUjenzi, the app seeks to connect homeowners to microfinance institutions and contractors, so that the loan and building processes are more convenient. In addition, the app plans to expand to include a section for construction material suppliers.

The iBUILD project was undertaken in four phases. Phase 1 included completing initial preparation and engaging major stakeholders. Phase 2 focused on user-assisted training sessions. Phase 3 was a monitoring period in which users were actively engaging with the platform. Phase 4 included the wrap-up of case study interviews and the creation of a final report and recommendations.

Some issues arose around recruitment of participants for the pilot. It was soon determined that social media was an effective method to get workers, builders and clients to sign up and participate, but since construction is a highly regulated industry within Kenya, there was a general need to build more lasting partnerships with the main regulatory bodies to verify users.

Early results indicate that the iBUILD pilot was a success. Part of this success may be attributed to the stage of development of the app; the company already created the app and just needed to adapt it to fit the Kenyan context, unlike mUjenzi, which was developed completely from scratch. In

addition, the company already has a workable business model, which reinforces the potential of the app to be a sustainable solution that increases the ease of interacting with and accessing providers along all steps of the construction value chain: financial service providers, hardware stores and contractors. The partnership with BAUA was instrumental in bringing the app to Kenya.

Key lessons from the pilot program include:

1. Social media is an effective way to market the service to potential users.
2. Collaborating with a firm that already had success with the same or a similar product in a different but similar market may prove to be sustainable in the long term because of existing institutional knowledge and a workable business model.

### **Working with firms**

In early 2017, the BAUA project team turned to supporting firms in the construction value chain that could produce better or lower-cost products and services for the low-income market segment. They thoroughly mapped the construction value chains in Kenya and Uganda, and then began exploring ways to link financial service providers with other firms.

In April 2017, the Terwilliger Center invited 15-20 interested firms to apply for an opportunity that would enable them to receive technical and financial assistance in developing and implementing specific market-based solutions that could increase access to and affordability of housing construction products and services. The project team hoped to identify two firms in Kenya and two firms in Uganda. Interested companies were required to demonstrate deep understanding of the demand aspects in the low-cost housing market, clearly articulate gaps and opportunities, and propose solutions to sustainably address the identified gaps.

Six firms submitted applications in Kenya, and four firms submitted applications in Uganda. The Terwilliger Center's market systems team developed the selection criteria used in identifying the most qualified firms (Box 1). Selection committees in Kenya and Uganda then shortlisted the firms, and the market systems leadership team reviewed and confirmed selected companies. The committees reviewed the applications based on the organization's technical capacity, internal management, potential for impact and sustainability, ability and willingness to commit resources, synergy with the project vision, and alignment with Habitat's vision, among other considerations.

**BOX 1: SELECTION CRITERIA FOR THE INCUBATION GRANT****General criteria**

1. Willingness of company to engage in contributing to development-oriented objectives.
2. Willingness of company to cascade downstream to meet low-cost housing demand.
3. Having sufficient financial strength and willingness to make investments or dedicate resources to business operations that will result in improved or expanded capacity to meet low-cost housing demand.
4. Having the ability to compete successfully in end markets for their products or services.
5. Degree to which the company has knowledge on relevant issues and its level of interest to the target groups.
6. Level of company's influence and power in relation to the strategic thrust of Habitat for Humanity.

**Technical capacity**

1. Level and quality of solutions proffered by the company to meet the specific identified needs.
2. Demonstration of scaling competitively priced quality products and services for the low-income segment.
3. Readiness to provide resources within the core business to co-define solutions to development challenges within this project.

**Internal management**

1. Demonstration of formal company registration.
2. Demonstration of statutory compliance.
3. Demonstration of operations for at least three years in the specific sector.
4. Demonstration of a business plan and strategy (preferably written).

**Other considerations and questions**

1. Rural or urban interventions?
2. Company structure: Local or foreign ownership?
3. The proffered solutions by the companies should address scale issues.
4. Market saturation:
  - Number of companies in the market vis-a-vis market demand.
  - Would this new solution/entity be a game-changer and provide a significantly different product or service?
  - Has the solution been pushed by other donors and agencies and failed?
  - Is the market ready for this solution?
  - Is there effective demand for the product/service?

## Firms engaged

**Homgenius:** Homgenius is a Kenyan company that has been manufacturing interlocking concrete blocks since 2013. It actively researched low-cost alternative building technology for the past 10 years, which culminated in the innovation, design and patenting of Homgenius' hydraulic machines that manufacture the interlocking concrete blocks.

**SunTransfer:** Established in 2009, SunTransfer Kenya assembles and distributes off-grid household solar products developed by its German parent company, SunTransfer GmBH, and supplied to SunTransfer Kenya on six to nine months of credit. It has sold, distributed and installed over 50,000 solar lanterns and nearly 5,000 solar home systems.

**Orb Energy Limited:** Orb Energy Limited began operations in Kenya in 2014, with the intent to replicate its successful India model. It designs, manufactures and installs solar photovoltaic and solar water heating systems for residential and commercial customers.

**SolarNow:** Established in 2011 in Uganda, SolarNow operates a large network of rural-based branches that facilitate installation of solar systems for household and institutional clients. It also provides solar-powered irrigation pumps for farm solutions.

**Technology for Tomorrow:** Technology for Tomorrow began operations in 2003 in Uganda. The company produces low-cost interlocking stabilized soil blocks or ISSBs. The ISSBs are used to construct homes, water tanks and granaries.

After a thorough selection process, two firms received grants of US\$10,000: Homgenius and SunTransfer. In addition, the Terwilliger Center engaged with three more firms by offering financial assistance on a cost-share basis: Orb Energy Ltd., SolarNow and Technology for Tomorrow. As recipients of the incubation grant, the firms received technical assistance focused on streamlining business models, refining the product offer, identifying linkages to the base of the pyramid market, identifying linkages with financiers, and sticking to the business rigor. The engagements were originally projected to last six months, but in practice often required a year to facilitate effective implementation. Overall, the firms that received the grants and technical assistance were able to focus on developing and marketing their products to the low-income housing market. These products should enable low-income homeowners to reach their construction goals.

The incubation grant program experienced some challenges. First, there were few applicants, and the quality of the applications was low. Second, the program experienced time constraints during the selection process, which led to the rushed development of work plans and budgets.

To address these challenges in the future, the Terwilliger Center and its partners should start engaging potential firms as early as possible. Once interested firms have been identified, the project team can provide support on the responses to the invitation for application. In addition, the project design process should be revised to provide adequate time to develop work plans and budgets.

Key lessons from the pilot program include:

1. Early engagement of firms may improve the number and quality of applicants.
2. The timeline of the program should be extended for both the selection process and the provision of technical assistance.

## Consumer education through videos and digital platforms

BAUA used lessons from the artisan training program and additional research on housing quality studies to determine that housing quality is more dependent on the homeowner than on the *fundi*. Rather than being a passive actor, the homeowner often drives the home improvement. Thus, a well-trained *fundi* will accede to the homeowner's wishes regarding the building process, materials, etc. Homeowner satisfaction seems to be directly linked to their level of ownership of the project, including the choice of *fundi*. Based on this argument, consumer education will maximize the

chances of securing access to quality housing and thereby improving living conditions.

Thus, BAUA turned to developing consumer education pilot programs. The project team identified that the best partners for providing consumer education would be local municipal housing desk clerks, nongovernmental organizations, community-based organizations, and peer support networks. In addition, the team pursued a variety of consumer education models to determine which approach was the most sustainable. These included in-person trainings, SMS campaigns, and videos through social media platforms.

### **In-person training**

In November 2016, Centenary Bank in Uganda piloted the in-person training. Housing loan clients were required to attend the training before receiving the loan disbursement. The training covered a variety of information about the construction process and provided demonstrations of quality materials. The training helped participants understand how to check the quality of materials, proper ways of storing materials and how to supervise construction work. In addition, the course improved people's knowledge in several technical areas, such as mixing of materials, curing of cement and concrete works, and instituting proper material usage habits. The clients who participated in the training reported saving on costs and becoming more confident in supervising their own construction work.

Although the clients stated they received lots of value from the training regarding supervising work, storing materials and understanding quality material composition, no significant differences were found between the quality of work done by those who attended the training and the work of those who did not. Some explanations for these findings include conflicting priorities for participants, no expectation of a follow-up, lack of knowledge transfer support, and incremental construction on already substandard works. In addition, the in-person training by the financial service provider was time-consuming and cost intensive. Much like the artisan training, a "heavy" housing support services approach like this is not sustainable in the long term for the sponsoring institution.

Key lessons from the in-person training include:

1. There were no significant differences in housing quality between those who completed the training and those who did not.
2. Financial service providers often do not have the capacity or resources to offer the training continually. A partnership with educational institutions might be more sustainable.

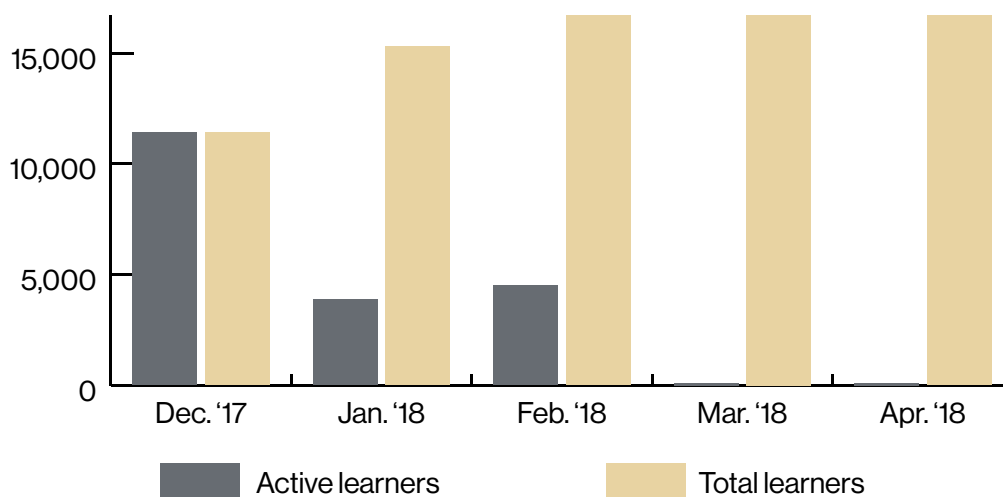
### **Virtual training initiatives**

Working with Arifu, an East African social enterprise that provides both an education technology platform and a content digitization service, the Terwilliger Center implemented an SMS-based consumer education pilot targeting 15,000 learners. The main objective of the pilot was to develop, test and determine the relevance of education to behavioral change. Arifu delivered content of interest to homeowners about home improvements through a series of SMS messages. The tips

were aimed at supporting the homeowner to achieve better home improvement outcomes through informed planning processes, budgeting and more effective management.

The SMS pilot ran for five months, from December 2017 through April 2018, and reached 15,578 learners, with an average of 27 messages requested out of 95 developed messages. The number of learners who participated in each subsequent month decreased substantially (Figure 3). Therefore, facilitators may need to support a monthly activation or provide new content on an ongoing basis to keep learners engaged. The content is still live on the platform and available to learners.

**FIGURE 3: ACTIVE AND TOTAL LEARNERS OF THE SMS PILOT (BY MONTH)**



The pilot demonstrated that consumer education shows potential to influence construction behavior and practices with an overall outcome of improved housing quality. Promotion of the system and better use of products and services is likely to increase customer satisfaction. However, the Terwilliger Center would need to collaborate with a private institution to finance and support continual activation of the services to keep users engaged.

In addition to the Arifu education campaign, the BAUA project team partnered with Great Lakes Media to create a social media campaign in Uganda using Facebook, WhatsApp and Twitter from February to May 2018. The campaign consisted of 15 short videos released over three months related to different aspects of housing. The videos were also distributed to the partner financial service providers in Uganda: Centenary Bank, Opportunity Bank and Pride Microfinance Ltd. In total, the campaign reached 65,432 people, primarily through Facebook and WhatsApp. The project team quickly discovered that Twitter is not effective as a learning platform because the majority of the target audience are not familiar with it.

The team determined that Facebook enabled them to build more visibility for Habitat for Humanity Uganda by engaging more followers for the homepage. Facebook gives a lot of brand visibility for the office by growing the audience and awareness of initiatives. It is recommended that the team continue adding content to sustain growth on the page. In addition, it would be beneficial to partner



with a private institution that can finance longer-term public awareness initiatives on housing and construction practices.

It is clear that housing consumer education implemented in an innovative way, such as using mobile phones, has the potential to effectively reach a sizable number of households and create an opportunity for the provider to engage with both existing and prospective clients. It is also clear that social media platforms offer a way to implement mass consumer education in a more robust, sustainable and market-driven manner than the in-person trainings.

Key lessons from the pilot program include:

1. Digital consumer education initiatives have the ability to reach large numbers of participants, but they require new content periodically to keep the users engaged.
2. These initiatives tend to have fewer costs associated with them, which makes them more sustainable.

The results of these three pilots indicate that consumer education is important to help homeowners identify when quality materials and construction processes are being used. These trainings theoretically enable the homeowners to recognize when the quality of materials or construction is not up to standard and to know when to switch material providers or masons. However, it is unclear whether the consumer education initiatives have improved the quality of housing. The assessors could not find a discernable difference for those who received the in-person trainings, and studies have not been conducted that would enable one to assess the impact of the virtual trainings aside from the number of participants. Given these difficulties, educating homeowners cannot be the only solution to the issue of ensuring quality housing.



## Outcomes and implications for future housing support service initiatives

This report has outlined several initiatives and pilot programs undertaken by the BAUA project team to address gaps in the low-income housing construction value chain and determine the feasibility of housing support services in the Kenya and Uganda context. These initiatives can be separated into five categories: services embedded in loan disbursement, artisan training, consumer education, platforms to support market connectivity, and grants to take products downstream. These categories represent the project team's efforts to address the housing market value chain from all angles.

As discussed earlier, the housing support services embedded in the loan disbursement process were discontinued early on because of high costs and potential liabilities associated with the services, which made them unsustainable. In addition, financial service providers lacked the capacity and time to implement the services. Requiring visits to clients' houses caused delays in the disbursement process. Once the institutions switched to providing brochures and worksheets (a less expensive and less time-intensive method), there were issues with branches distributing the pamphlets. However, given the cost effectiveness of the pamphlets, it does not seem to do harm for financial service providers to keep supplying customers with them in the future. Microfinance institutions will need to determine for themselves whether they want to keep providing the information.

Of all of the initiatives implemented during the BAUA project, the artisan training had the fewest participants but focused most directly on addressing technical competencies regarding quality construction. There is clearly a need for more trained masons, because homeowners prefer to use *fundis* referred to them by friends and family members. The limited reach of this initiative was insufficient to address the scope of this demand. However, if institutions provide more trainings, they could reach more local artisans, and thus receiving a referral from a family member would create no issues.

Unfortunately, the cost involved to train just one *fundi* makes it difficult to offer the training again or increase its scale. Aside from the cost, the system itself seemed sustainable. The project team asked the financial service providers to find the masons, and it partnered with technical institutions and government authorities to conduct the trainings and certifications. This program created linkages that (if cost were not an issue) local actors could maintain without further involvement from Habitat.

A future consideration could include creating online or mobile soft skills training for the *fundis* that could be more cost-effective and sustainable. This would allow more masons to access the training and implement what they have learned. A partnership similar to the virtual consumer education pilots would need to be created. Two issues to be considered or accounted for are (1) that the original curriculum development highlighted that many of the informally trained masons are illiterate or

do not know English, and (2) that these trainings would be able to provide national certification, a major incentive for artisans to attend the in-person pilot programs. More research is needed before pursuing this option.

Regarding consumer education, the in-person training provided by the financial service providers is not sustainable and has not proved beneficial enough for the institutions to continue to offer it. Although the clients stated that they received value from the course, there was no significant change in the housing quality. It does not seem reasonable to continue this course of action.

In terms of scale, the consumer education pilots using SMS and social media platforms reached the largest number of people of any of the BAUA initiatives. There is value in raising the homeowners' knowledge of construction practices, but it is difficult to determine whether housing quality has improved. Given that the evaluation of the in-person training of homeowners did not see improvements in construction quality, it can be assumed that the same is true for the social media campaigns. However, if partnerships with institutions can be solidified where they commit to creating new content to keep learners engaged, this may be an initiative worth continuing. All of this depends on the assumption that social media is a low-cost method to reach large numbers of people and thereby raise the construction literacy in hopes of a gradual improvement in housing quality.

The mUjenzi and iBUILD platforms created to provide ease and convenience throughout the construction process help connect homeowners to financial service providers, hardware stores and masons that they otherwise would not have access to. Although these connections might not directly lead to improved housing quality, the platforms address a break in the construction value chain where clients are not finding service providers. In addition, the information provided on the iBUILD platform has the potential to enable homeowners to make more informed decisions about whom to hire for their construction needs. Regarding the future of these services, it is unlikely that mUjenzi will have a full rollout, since the Terwilliger Center decided to collaborate with iBUILD. The iBUILD platform still needs to address technical issues from the pilot, but there is no reason to think the company will not pursue a full rollout in the future.

Finally, the efforts to help firms take products downstream by addressing quality gaps of housing/construction products created for and sold to low-income markets was beneficial for the five firms that received the incubation grants. They received technical assistance to help develop products and sustainable business plans to continue to provide services to the base of the pyramid. The incubation process itself, however, was challenged by a lack of high-quality applications and limited grant funds.

## Future roles for housing support service providers

One of the overarching issues that needs to be addressed before future provisions of housing support services begin is whether continued involvement from the Terwilliger Center or other market facilitators is considered sustainable. Many of the recommendations above assume that a solution is sustainable when a market facilitator no longer needs to be involved because market facilitators act as knowledge providers and catalysts for change within a particular construction value chain. They provide the comprehensive vision and holistic approach to creating a system of housing support services. Market facilitators have the opportunity to provide research and context-specific advice on how to address gaps. They also have an important role in identifying potential partnerships between different actors to be able to provide housing support services. In the case of the BAUA project, the Terwilliger Center also acted as a funding support to test initiatives.

Housing support services do not appear to offer a compelling business case for financial service providers. They do fill a critical service, however, as financial service providers have the opportunity to be a source of information to clients. For example, if a mobile app lists the institution, the loan officers can inform clients about the app. They also can play consumer education videos and give out brochures, worksheets and lists of local construction services. These low-cost alternatives do not require a large time commitment from the loan officers. However, there does not seem to be any incentive for the microfinance institutions to provide these services, so more research needs to be done on how to ensure participation. It is necessary to find ways to link the use of such platforms with key portfolio performance indicators that clients could have a positive impact on by using the above-mentioned services.

Using a market systems approach means identifying the gaps within the system and determining whether existing actors are providing a similar service or have the capacity to develop an intervention addressing a specific gap. Depending on the housing support initiative being pursued, a variety of other actors have the opportunity to be involved in the process. Some of the actors approached during the BAUA project include government authorities, educational institutions, technology companies and product developers. These partnerships provide opportunities to create services across a wide range of industries to influence as many participants in the value chain as possible. They also have the possibility of being funding sources for sustaining the initiatives.

The Terwilliger Center has a deep appreciation for the market systems approach. No single actor can provide the housing support service that will miraculously improve housing quality for all members of the base of the pyramid. The issue itself is multifaceted and unique to each socioeconomic context, so the solutions must represent actors from many industries working together to address different aspects of the issue. Depending on the gap in the value chain that is being addressed, market facilitators, financial institutions and other actors will combine forces to create a solution.

## Conclusion, recommendations and the way forward

Addressing gaps in the affordable housing market requires a holistic approach. Addressing financing is one side of the issue, but homeowners encounter a variety of nonfinancial challenges. The demand for and implementation of housing support services should be context-based, taking into account the needs, capacities and preferences of providers and users. Because of the great diversity of contexts, needs, capacities and preferences, there is no single approach. Instead, market facilitators must select a few value chains to work with and learn from them. Through the BAUA project, the Terwilliger Center has piloted and researched a variety of approaches to housing support services that will better inform development practitioners, microfinance institutions, housing actors and investors alike.

Of the support services detailed here, more research should focus on improving and implementing the artisan training concept, the iBUILD platform, and the virtual consumer education. That is not to say the other initiatives should be abandoned, but at this time, these three initiatives have the most potential for sustainability and scale.

In particular, it seems clear that targeting the local artisans is one of the best ways to ensure that housing quality improves. Although it is important for homeowners to recognize and be educated on good housing construction, the local artisans are the ones who conduct the work. The in-person artisan training program is not feasible because of the time, costs and partnerships needed for the program to succeed. In addition, the lists of certified masons provided by the financial service providers were not very influential, because homeowners prefer to use referrals from friends and family. Therefore, for the training to be effective and have a widespread impact, almost all of the masons in the region need to go through it. One way to achieve this may be to take the web app concept and re-create the soft skills course for the masons on the platform. Masons would not receive national certification through this method, but they would receive the crucial soft skills to help them better promote their business and interact with clients.

Regarding future projects in the region and around the world, the Terwilliger Center must consider how different housing support services may interact and play on each other. Each of the BAUA pilot projects was implemented and assessed based on its specific impact. The project team did not conduct multiple pilot projects in tandem to determine whether the outcome would change with multiple interventions at different levels at the same time. The work of the BAUA project is an instrumental first step to research individual impacts, but the next step must involve combining initiatives, because this may produce different results. For example, if artisan training and consumer education are conducted for the same community, does construction quality improve?

The work conducted by Building Assets, Unlocking Access has generated a great body of research and assessments that highlights the effect of different housing support services. One must look at these initiatives in the context of Kenya and Uganda, but there are lessons for future programs in other countries and regions. Financial service providers and the market facilitators can build on this work in the future to create a tailored, comprehensive approach.





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