BUILD CHANGE

DISASTER RESILIENCY IN HOUSING IN THE PHILIPPINES

A MARKET STUDY OF RESIDENTIAL RETROFIT FINANCING

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LIST OF ACRONYMS

ADB	Asian Development Bank
ASHI	Ahon Sa Hirap, Inc.
BSP	Bangko Sentral ng Pilipinas
CBB	Country Builders Bank
CMP	Community Mortgage Program
CSR	Corporate social responsibility
DRRM	Disaster risk reduction and management
FSP	Financial service provider
HDMF	Home Development Mutual Fund
HGC	Home Guarantee Corporation
HS	Housing supervisor
HUDCC	Housing and Urban Development Coordinating Council
ISFs	Informal Settler Families
LGU	Local government unit
M&E	Monitoring and evaluation
MCPI	Microfinance Council of the Philippines, Inc.
MFI	Microfinance institution
MF NGO	Microfinance non government organization
MIS	Management information system
NATCCO	National Confederation of Cooperatives
NCR	National Capital Region
NHA	National Housing Authority
NHMFC	National Home Mortgage and Finance Corporation
NOVADECI	Novaliches Development Cooperative
PIDS	Philippine Institute for Development Studies
PO	Project Officer
PSA	Philippine Statistics Authority
RA	Republic Act
RB	Rural bank
REM	Real estate mortgage
SHFC	Social Housing Finance Corporation
TA	Technical assistance
TESDA	Technical Education and Skills Development Authority
TSPI	Tulay Sa Pag unlad, Inc.
UDHA	Urban Development and Housing Act
WASH	Water, Sanitation and Hygiene

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Build Change is an international nonprofit social enterprise that saves lives in earthquakes and typhoons. Build Change's mission is to greatly reduce deaths, injuries and economic losses caused by housing and school collapses due to earthquakes and windstorms in emerging nations.

EXECUTIVE SUMMARY

Founded in 2004 and present in the Philippines since 2013, Build Change's focus has expanded from post disaster housing and school construction programs to preventative measures including a retrofitting program to structurally strengthen residential houses in regions vulnerable to typhoons and earthquakes.

Build Change is aiming to scale up a housing retrofit program piloted in the Philippines in 2017-18 through government or private sector led socialized housing financing programs. Our initial market assessment in 2017 indicates a demand for home retrofitting exists. Build Change sought to formalize the market study through research aimed at achieving the following results:

- Developing a thorough understanding of the market size of the housing and finance needs of low income households;
- Developing a thorough understanding of housing financing products available in the Philippines from microfinance organizations (including rural banks) and government lending programs, including the regulatory requirements for each lender's profile;
- Comparing the preferences and capacities of low income households with the housing financing products available in the market; and
- Identifying the opportunities and barriers to scale a housing retrofit product among each type of financial institution and then providing recommendations on the partnerships representing the most promising way forward.

Key findings from this research

The estimated market for housing retrofitting is nearly 15.6 million units, which house over 69 million vulnerable people. The majority of these families earn Php 9,000 - 36,250 (USD $170-682) per month. Of the 15.6 million vulnerable units, it is estimated that microfinance institutions can cater to about 8.6 million units, banks and other financial service providers to about 3.6 million units, while 3.4 million units will need some form of subsidy or grant.

There is demand for residential retrofitting and residential retrofit financing. Even low income households understand the risks they are facing in the event of a disaster and appreciate the value of living in safe houses. Government shelter agencies, local government units (LGUs[1]), and financial service providers also understand this reality. For many poor and low income households, however, the immediate need is a liveable housing unit; disaster resistance is a secondary concern. Nevertheless, it is important that housing programs for this market segment strictly adhere to disaster resilient principles and standards.

Financing and land ownership are key constraints to retrofitting the homes of poor and low income households. Land ownership problems are more prevalent in highly urbanized areas such as Metro Manila. Whether land is government or privately owned, there is little incentive for poor and low income households to retrofit their houses. Even if they decide to have their houses retrofitted, the range of financing options is very limited. These homeowners may rely on government relocation programs. On the other hand, low income households with land titles face fewer financing barriers because they have both the motivation and access to various financing options. For these households, a key consideration is suitability of financial products for retrofitting.

Low income homeowners who already qualify for financial products and services of microfinance institutions (MFIs) have a good chance to access financing for house retrofitting. The housing or home improvement loans currently being offered by MFIs can potentially cover home retrofitting. Those currently excluded by these MFIs (i.e., the extremely poor) are facing greater obstacles and may need a different form of financing. This might take the form of a cash grant from the national government or in kind subsidies from the local government.

[1] Local government units (LGUs) refers to a combined hierarchy of three levels of government: provinces, cities and municipalities and barangays (the smallest administrative division representing a village or district).
[2] The exchange rate used in this report is Php 53: USD $1. USD figures are rounded where appropriate.

Key findings from this research (continued)

Financing type depends on market segment. Even within the low income stratum, there is no one size fits all product that can cater to the needs of different segments of the market for residential retrofitting. Different market segments have differing preferences and capacities to repay debt. Low income homeowners already borrowing from MFIs prefer smaller loans (under Php 50,000 or approximately USD $950[2]) so that weekly payments are affordable. This necessitates retrofit projects that are phased or incremental to ensure repayment terms are sustainable and loan terms suit the cash flow needs and repayment capacity of the homeowner.

MFIs can meet low income households' need for home retrofit financing. An MFI with strong buy in and high commitment to social goals and client well being is ideally positioned to serve its clients with a financial product that will help strengthen housing structures. Likewise, disaster resilient homes (and businesses) can fit into the MFI's risk management framework, recognizing that clients' micro enterprises can be severely affected by disasters, a fact that would adversely affect repayment performance.

Generally, Philippine government shelter agencies lack adequate scope in their programs for home retrofitting. Shelter agencies' mandates and resources are mainly directed toward addressing the general housing needs of the poor and low income households and to expanding financial access to this market segment. Social Housing Finance Corporation (SHFC)'s Community Mortgage Program (CMP) and Pag-IBIG loans,[3] meanwhile, offer opportunities to include home retrofitting in their programs, but retrofitting needs to be incorporated in the "language" of these agencies with explicit policy statements or guidelines for adoption. There is also space to include disaster resilient principles in the government's housing programs to ensure that construction of new housing structures adhere to construction and building standards.

Local Government Units (LGUs) are well positioned to provide assistance to the poor and low income households for home retrofitting. Disaster resilient homes can be integrated into their disaster risk reduction and management (DRRM) framework and local development plans. Barriers to this, however, include a lack of technical expertise to assess housing conditions (and the corresponding scope for home retrofitting), and a lack of data to monitor and assess the need for home retrofitting. There are also anticipated challenges in using public funds for private housing due to stringent government procurement policies and procedures

Whether government initiated or led by MFIs, any home retrofit financing program needs to be aided by marketing and consumer awareness activities. Even as low income households express the need to have their houses retrofitted, they will not always prioritize home retrofitting over other spending priorities given scarce funds and resources. Therefore, it will be important to communicate to households the existence of such programs as well as the value proposition of home retrofitting, particularly its ability to save lives, property and businesses in the event of a disaster.

There are already housing financing products on the market. For the low-income segment, housing loans average Php 22,500 (USD $425) at 32% interest rate with a one year term. For higher income segments, loans can average Php 1,000,000 (USD $18,900) with 8% interest rates and 5-15 year terms. These programs provide a considerable supply of housing finance, however low capitalization and lack of risk-sharing mechanisms limit the ability of financial service providers to offer a comprehensive loan product with flexible terms for this market.

Fintech is a growing trend with financial service providers. There are opportunities to integrate digitized tools to support resilient housing into their platforms.

[3] Pagtutulungan sa Kinabukasan: Ikaw, Bangko, Industria at Gobyerno. This is the Philippine Government's Home Development Mutual Fund.

What are quick wins for Build Change?

Institutions and government agencies interviewed for this report indicated an openness to partnering with Build Change on a number of activities. Here are some avenues that Build Change can pursue immediately to speed the scaling up of retrofit projects for low-income households:

- Partnership with MFIs or financial service providers (FSPs) on financial product development (from concept development to pilot testing), demand creation (educational materials for both staff and clients), and staff training (to equip the staff with knowledge and skills for retrofit loan assessment and utilization checks). Build Change can also help FSPs integrate home retrofitting in monitoring and evaluation (M&E) frameworks and tools so that need can be regularly assessed.

- Partnership with LGUs in preparing designs for safe, disaster resilient houses. Within Metro Manila, the City of Marikina (through the Marikina Settlement Office) has a standard disaster resilient housing design to help homeowners lower their cost for design services and comply with building permit requirements. They also recommend building permit applications to the Engineering Department to expedite processes. Build Change can be engaged in providing technical inputs on resilient housing and urban development to LGUs crafting their local shelter plans and local housing codes.

- Partnership with LGUs and SHFC for home retrofitting under the CMP.

- Partnership with associations such as the Microfinance Council of the Philippines (MCPI), the Rural Bankers Association of the Philippines (RBAP) and the National Confederation of Cooperatives (NATCCO) to raise awareness on disaster resilient homes as part of the FSPs' risk management framework. Build Change can organize and provide orientation training to members of these associations.

What are medium and long term opportunities?

Build Change can work on the following in the medium or long term to ensure that home retrofitting is regarded as essential in disaster preparedness and to lower the exposure of low income households to disaster risk.

- Partnership with government shelter agencies that are targeting to close the housing gap through their shelter plans. Build Change can help promote the paradigm of safe houses and retrofitting housing units constructed in project areas.

- Advocacy for the government to earmark funds for housing resiliency (part of a Resiliency Fund, for instance), in general, and specifically for home retrofitting. Advocacy can include opening of financing facilities dedicated for retrofitting through government financial institutions (e.g. Land Bank of the Philippines, Development Bank of the Philippines, the Small Business Corporation, etc.), and not just through the shelter agencies. Government financial institutions can also support scaling of resilient housing financing through capital inflows to MFIs.

- Support initiatives on policy advocacy and development among shelter agencies and LGUs to include the idea of retrofitting housing for low income homeowners into their plans and budget allocation. This may include provision of technical assistance (TA) packages for capacity development programs of local implementors, research and development, plan and project proposal preparation, tool development for assessment and creating models of success

- Together with MFIs, develop other financial products, or a mix of products, that can address constraints currently faced by low income households. This may include savings products for rural banks and cooperatives, or an insurance product that can serve as incentive to get houses retrofitted.

- Work with multilateral organizations [e.g., the Asian Development Bank (ADB), UNICEF] within the DRRM space and include house resiliency in the framework. Build Change can position itself as a provider of training and technical assistance on home retrofitting for low income households. Initial discussions with the ADB indicate the need to demonstrate household level outcomes as a result of retrofitted or stronger houses. Outcomes may include increasing household investments on health and education as a result, perhaps, of less spending on house repairs. Research that can explore these outcomes can be pursued by Build Change. Results of the research can potentially strengthen the value proposition of home retrofitting and home retrofit financing.

- Together with the Technical Education and Skills Development Authority (TESDA), advocate for the nationwide adoption of vocational and training modules on building and construction of disaster resilient homes. Build Change can use and build on existing modules it specifically designed for Region 8

- Explore the idea of a grading system in incremental retrofitting towards disaster resilient homes. This can be patterned after the phased approach to rural sanitation development with the goal of bringing communities to Zero Open Defecation status.[4] Relevant government agencies [Department of the Interior and Local Government (DILG), Housing and Urban Development Coordinating Council (HUDCC)] and LGUs can be engaged in discussions to build buy in and support. When established, this can assist in the targeting, planning and budget allocation of the LGUs.

[4] https://www.developmentbookshelf.com/doi/full/10.3362/9781780449272.009

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I. INTRODUCTION

The World Risk Report (WRR)[5], an assessment of the disaster risk posed by extreme natural events to 171 nations in the period 2012-16, listed the Philippines as one of the world's most vulnerable countries, along with Vanuatu, Tonga, Guatemala, Bangladesh, Solomon Islands and Costa Rica. Overall, countries in Pacific Asia, including the Philippines, remain most at risk from natural disasters, such as earthquakes, volcanic eruptions, strong typhoons, storm surges and tsunamis. The Philippines holds an unfortunate distinction of being located along the Pacific Typhoon Belt and on the seismically and volcanically active Pacific Ring of Fire.

In the Philippines, the economic costs caused by these disasters, including widespread damage to infrastructure, has been huge. But it is the human cost that has been particularly grim. In 2011 and 2012, casualties from tropical cyclones were over 5,000 each year[6]. This figure spiked in 2013 due to super typhoon Yolanda, with 6,300 dead, 28,689 injured and 1,061 missing. These figures do not include casualties from earthquakes, flooding and volcanic activities. UNICEF estimates that 27.6 million Filipinos are vulnerable to the risks of natural hazards, and this disproportionately includes the poorest and the most marginalized in Filipino society.

The World Risk Report stated that many countries, including the Philippines, have increased efforts toward disaster preparedness. The Philippine Disaster Risk Reduction and Management Act, or Republic Act (RA) 10121, shifted the policy environment and the way the country deals with disasters from mere response to preparedness. RA 10121 provides a comprehensive, all hazard, multi sectoral, inter agency and community based approach to disaster risk management through the formulation of the National Disaster Risk Management Framework and Plan. In Metro Manila, preparedness for "The Big One" (a predicted magnitude 7.2 earthquake) intensified in recent years with national government offices and local government units cooperating to raise public awareness on what to do when it ultimately happens.

Still, millions of Filipinos remain at risk and highly vulnerable to disasters. One main reason is the poor quality of their houses that were not designed by engineers, were constructed without building permits and were not built by construction professionals.

It is, therefore, a welcome development that organizations such as Build Change are bringing advanced engineering, technical and training experience to bear in support of these efforts to save lives through disaster preparedness and safer structures (houses, school buildings). Founded in 2004 and present in the Philippines since 2013, Build Change is a non profit social enterprise with the mission to save lives in earthquakes and extreme weather events. In recent years, Build Change's focus has expanded from post disaster housing and school construction programs to preventative measures including a program to retrofit (structurally strengthen) residential houses in regions vulnerable to typhoons and earthquakes.

Disaster resistant homes can save lives. But Build Change believes that that offering home retrofitting, particularly for low income households, presents an opportunity to save more lives on a far greater scale at a much faster pace.

[5] This is a list of countries by natural disaster risk, as measured in the World Risk Index, calculated by the United Nations University Institute for Environment and Human Security (UNU EHS) and featured in the 2016 World Risk Report (WRR 2016) published by the Alliance Development Works/Bündnis Entwicklung Hilft (BEH)

[6] Source: National Disaster Risk Reduction and Management Council.

A. Objectives of the Study

Build Change's strategy has led the organization to explore the possibility of scaling up a housing retrofitting program through socialized housing financing programs that may be offered by local institutions (national government agencies, local government) and financial service providers (banks, cooperatives, microfinance institutions). Initial findings drawn from an initial market scanning in 2017 indicate that there is demand for home retrofitting. Build Change sought to formalize the market study and commissioned a consultant to conduct a landscape check to determine the feasibility of financial products for housing retrofitting in the Philippines. Specifically, the research aimed to achieve the following:

Developing a thorough understanding of the market size of the housing and finance needs of low income households.

- Assessing incentives and constraints for homeowners to get a safe house.
- Evaluating the homeowners' preferences, requirements and capacities.

Developing a thorough understanding of housing financing products available in the Philippines from microfinance organizations (including rural banks) and government lending programs, including the regulatory requirements for each lender's profile.

Comparing the preferences and capacities of low income households with the housing financing products available in the market.

Identifying the opportunities and barriers to scale a housing retrofitting product among each type of financial institution and providing recommendations to Build Change on which partnerships to advance.

B. Research Framework and Methodology

The research, which mainly explored the demand for and supply of home retrofit financing, followed the framework described in the table below (Table 1). In order to provide context, the study checked the state of housing finance in the country, including indications of the market size (housing and home retrofitting) and the availability of financing programs both from the government and private sector. Housing and housing finance related regulations were also tackled to shed light on how the regulatory environment can support financing initiatives for disaster resistant homes.

The research then focused on retrofit financing, or financing structural improvements to make houses of low income households safer in the event of disasters such as earthquakes and typhoons. The study looked into the demand for home retrofit financing among low income households mainly in Metro Manila, including their needs, preferences and capacities, as well as constraints and barriers to having safe houses. The research also explored potential providers of this type of financing.

Both primary and secondary data were used for this research. Secondary data were sourced from a desk review of existing literature on housing and housing finance, and from information provided by key informants. Primary data were mainly qualitative, which were collected using focus groups. Informants to the interviews included officials of the government's shelter agencies, selected local governments in Metro Manila, financial service providers (FSPs) and support institutions. A total of 16 interviews were completed while several focus groups with homeowners were organized with the cooperation of the FSPs that participated in this study.

Table 1: Research Framework

	DEMAND	SUPPLY	
HOUSING FINANCE	Market size (**low income households**) Preferences, requirements, needs and capacities of **low income household**s to access housing financing	Financial products currently available for housing Lenders and regulatory requirements Target market and profile of current clients/beneficiaries	**Opportunities & barriers to offering and scaling a financing product on safe houses and retrofitting**
FINANCING SAFE HOUSES & RETROFITTIING	Potential market size Preference, requirements, needs and capacities of **low income households** to access financing of safe houses or retrofitting Incentives and constraints for homeowners to get a safe house	Financial products on safe houses and retrofitting currently available in the market • Profile of target market and current clients • Terms and features	**Potential features of a financing product on safe houses and retrofitting** **Opportunities & barriers to offering and scaling a financing product on safe houses and retrofitting**

In the table below is the list of institutions that participated in the interviews, while Annex A provides the list of informants. The research instruments used for this study are in Annex B.

Table 2: Institutions Interviewed for this Study

Government Agencies	Local Government Unit	Financial Service Providers	Support Institutions
National Home Mortgage and Finance Corporation (NHMFC)	Marikina City - Marikina Settlement Office	Ahon Sa Hirap, Inc. (ASHI)	Microfinance Council of the Philippines, Inc.
Housing and Urban Development Coordinating Council (HUDCC)	City of Manila - City Urban Settlement Department	Tulay Sa Pag unlad, Inc. (TSPI)	National Confederation of Cooperatives (NATCCO)
Home Guaranty Corporation (HGC)	Quezon City - Housing, Community Development and Resettlement Department (HCDRD)	Country Builders Bank (CBB)	Habitat for Humanity Philippines
Social Housing Finance Corporation (SHFC)		ASA Philippines Foundation	
National Housing Authority (NHA)		Novaliches Development Cooperative (NOVADECI)	

II. The Market for Housing and Home Retrofitting among Low Income Households

A. The Housing Market in the Philippines

1. Housing Demand and Supply

In order to contextualize the housing finance discussion, this section will present facts and figures on housing demand and supply. Table 3 below shows projections for new housing need for the period 2012 – 2030 based on current housing deficits.

Table 3: New Housing Need, 2012 - 2030

Market Segment	Price Range (in PhP)	Units Needed	% of Total Need
Can't Afford/Needs Subsidy		1,449,854	23%
Socialized Housing	400K & below	1,582,497	25%
Economic Housing	400K – 1.25M	2,588,897	42%
Low Cost Housing	1.25M – 3M	605,692	10%
Mid Cost Housing	3M – 6M	No need	
High End Housing	> 6M	No need	
Total Need		**6,226,940**	

Source: www.industry.gov.ph, DTI BOI

In Table 4, statistics indicate that between 2001 and 2011 a deficit existed in supply for socialized, economic and low cost housing (housing costing up to Php 3 million or $56,600).

Table 4: Housing Demand and Supply Profile, 2001-2011

Market Segment	Housing Demand	Housing Supply	Surplus (Deficit)
Socialized Housing	1,143,048	479,765	(663,283)
Economic Housing	2,503,990	541,913	(1,962,077)
Low Cost Housing	704,406	242,246	(462,160)
Mid Cost Housing	72,592	322,995	250,403
High End Housing	18,235	242,246	224,011

Source: www.industry.gov.ph, DTI BOI

By the end of 2011, there was a backlog of 3,087,520 housing units. This figure excludes 832,046 households that cannot afford housing (see Table 5 below). Using Table 3 as a baseline, 25% of the housing backlog is socialized housing and 42% is economic housing. Considering a housing production capacity of 200,000 units per year and no new government housing programs, the total estimated housing backlog is estimated to be 6,546,506 units by 2030 (Table 5).

Table 5: Estimated Backlog by 2030*

Market Segment	
Those who can't afford	**832,046**
Backlog, as of 2011	**3,087,520**
Total Housing Backlog, as of 2011	**3,919,566**
New Housing Need, 2012 - 2030 (345,941 units/year x 18 years)	**6,226,940**
Housing Production Capacity (200,000 units/year x 18 years)	**3,600,000**
Backlog by 2030	**6,546,506**

Source: www.industry.gov.ph, DTI BOI
* If no special housing program is created.

2. House Construction Experience of Low Income Households (Qualitative Findings)

Five focus groups and a few individual interviews were held with homeowners who were borrower clients of FSPs. All were from low income households with typical household sizes between four and six people and whose sources of income were home based micro enterprises such as retail vending. Very few respondents were formally employed or had spouses with regular employment. Monthly household incomes ranged from as low as Php 10,000 (USD $190) to as high as Php 40,000 (USD $750).

Three of the five focus groups had homeowners who already owned their houses. Two groups had homeowners who lived in detached houses, acquired through a housing finance program of a microfinance NGO. The other homeowners had participated in a government housing program for households that previously resided on Smokey Mountain, a former landfill in the City of Manila. Unlike the other two focus groups, these homeowners lived in tenement buildings.

Two focus groups had participants who did not yet own their houses, they were either staying with family or renting. According to these homeowners, barriers to house ownership included financing (insufficient funds to acquire a lot and construct a house) and land ownership.

For those who owned their houses, access to housing financing came through different circumstances. Client borrowers of the microfinance NGO (MFNGO) were offered a housing finance program after the onslaught of Typhoon Ketsana (local name: Ondoy) in Metro Manila and nearby provinces in 2009. The MFNGO followed a set of selection criteria and housing loans were offered to a limited number of long time clients who also had good repayment records with the MFI. The property was donated by the local government, so clients financed house construction only. Actual construction was done by a construction company. The clients were required to submit few documents but had to provide sweat equity[7] equivalent to 400 hours. Most houses were turned over to clients in 2012. The first batch of clients were loaned Php 60,000 (USD $1,130) for seven years, while the second batch of clients were loaned Php 85,000 (USD $1,600) but with an extended term of 10 years. Weekly payments were made along with payments for their regular business loans. Most of the clients from the first batch had fully paid their loans, with some able to make advance payments. According to these clients, their spouses and working children helped make the payments.

Homeowners of the government tenement housing program had loans with the National Housing Authority (NHA). Monthly amortization payments were between Php 200 (USD $3.75) and Php 1,000 (USD $19). The homeowners' issues with NHA, as well as their budgeting woes (e.g., money for payment was used for children's schooling or emergencies) led to payment defaults. This prompted NHA to issue demands for payment but with adjusted terms. Monthly amortizations now range from Php 500 (USD $9.50) to Php 2,000 (USD $38) and homeowners promised to keep their payment obligations with the NHA.

Both types of focus groups had similar experiences with house construction and ownership. Many homeowners in these focus groups were thankful that they were given access to these programs but also shared some of their hardships. According to the client borrowers of the MFNGO, it was not easy to complete the 400 hour sweat equity; several clients backed out due to this requirement. In addition, housing units that were turned over to them did not have doors, windows, toilets and kitchens. Over time, they observed defects and realized that their houses were not resilient and needed improvements (e.g., lacking beams, 'sinking' floors). Although they were involved in certain aspects of construction, clients did not fully know how their houses were constructed and which types of materials were used. These issues were discussed with the MF NGO and the construction company. Ultimately, the homeowners had to improve their own houses with funding through another loan from the MF NGO and from their own savings.

Another focus group had clients of a MFNGO whose houses were built on a government property. They did not pay the government for use of the property. Construction of their houses was mainly self financed, and spouses of these women clients constructed the houses, with some of the materials coming from salvaged items from the river or nearby buildings.

The units turned over to homeowners from the tenement housing were bare, with provision for a loft. The clients made improvements inside, such as installing cabinets and adding rooms. According to these homeowners, they did not have much choice in acquiring these units because the government wanted to relocate them from Smokey Mountain and put them in better homes. Given the opportunity, they wanted to own a lot and construct a single detached house, or perhaps move to their home province.

(See Annex Table 1 for the FGD responses.)

[7] A non monetary investment of their own labour

B. The Market for Safe Houses/Retrofitting

1. Retrofit Market in the Philippines

The 2015 housing data of the Philippine Statistics Authority (PSA) was used to get estimates of the home retrofit market in the Philippines. The table below shows the distribution of the number of occupied housing units by type of building. Of the total number of occupied housing units, 87.8% are single houses and duplex units.

Table 6: Distribution of Occupied Housing Units, By Type of Building

Type of Building	Occupied Housing Units	Number of Households*	Household Population*
Total	**22,421,193**	**22,969,666**	**100,543,973**
Single house	18,093,494	18,502,300	83,221,567
Duplex	1,600,921	1,649,429	6,805,772
Multi-unit residential	2,661,886	2,749,398	10,250,475
Commercial/industrial/ agricultural	36,426	38,413	140,204
Institutional living quarter	3,299	3,462	11,439
Others	4,581	4,718	17,490
Not Reported	20,586	21,946	97,026

* Excludes households in designated relocation areas.
Source: PSA, 2015

Almost half (49%) of the occupied housing units are made of concrete/brick/stone as their exterior walls. If houses with wood and half concrete/brick/stone and half wood outer walls are added, the total represents 82% of the total number of occupied housing units.

Table 7: Distribution of Occupied Housing Units, By Type of Outer Walls

Outer Walls	Number of Occupied Housing Units
Concrete/Brick/Stone	11,035,032
Wood	3,909,408
Half concrete/brick/stone and half wood	3,430,114
Galvanized iron/aluminum	226,647
Bamboo/sawali/cogon/nipa	3,543,338
Others	194,499
Total	**22,421,193**

Source: PSA, 2015; PIDS 2012

The table below (Table 8) shows the various housing typologies by monthly income class. The income class and indicative range of family incomes were based on a 2015 policy paper by the Philippine Institute of Development Studies (PIDS)[8], while the distribution per income segment is based on the 2015 data from the PSA.

Table 8: Monthly Income Class Segments, By Housing Typology

Monthly Income Class	Distribution	Housing Typologies
Rich (>Php 181,280 or USD $3,420)	1.5%	
Upper Income (but not rich) (Php 135,961 – Php 181,280 or USD $2,565-$3,419)		
Upper Middle Income (Php 90,641 – Php 135,960 or USD $1,710-$2,564)	2.2%	
Middle Income Class (Php 36,257 – Php 90,640 or USD $684-$1,709)	16.8%	Half concrete (2-story), large concrete 1-storey, concrete 2-story
Lower Middle-Income Class (Php 18,129 – Php 36,256 or USD $342-$682)	27.0%	Half concrete (2-story), concrete (1-story), wood (2-story), 2-story galvanized iron
Low Income (but not Poor) (Php 9,065 – Php 18,128 or USD $171-$341)	36.1%	Cogon/nipa huts, Half concrete (1-story), galvanized iron, wood
Poor (<Php 9,064 or USD $170)	16.5%	Makeshift/salvaged/improvised material, cogon/nipa huts

Source: PSA, 2015; PIDS 2012

It is likely that housing units belonging to the following populations will need retrofitting: middle income households, lower middle-income households, low income but not poor households, and the poor. Table 9 shows the estimated potential market for home retrofitting, which considers single houses and duplex units with outer walls made of concrete/brick/stone, wood, and half concrete/brick/stone and half wood. (See Annex Tables 2a and 2b for the computation of the estimates.) This indicates a potential market size of 15.6 million housing units, which covers 15.9 million households or 69.9 million individuals.

Table 9: Estimates of Potential Home Retrofit Market

Housing Typology in Target Income Segments	Potential Market	No. of Households	Household Population
Concrete/Brick/Stone Houses	9,353,470	9,540,539	41,903,544
Concrete/Brick/Stone, Wood, Half Concrete/Brick/Stone & Half Wood	15,593,969	15,905,849	69,860,983

[8] Philippine Institute for Development Studies, 2015, "Why We Should Pay Attention to the Middle Class."

2. Insights and Perceptions of Homeowners Regarding Home Retrofitting (Qualitative Findings)

Demand for home retrofitting was confirmed through focus group conversations with homeowners. In the case of the MF NGO's client-borrowers, demand was based on the need to significantly improve their houses since they were poorly designed and constructed in the first place; units were described to be lacking beams with weak walls, floor and roofs. Many homeowners made improvements to their houses but were uncertain if their houses were safe from disasters. Homeowners believed their houses were unlikely to be affected by severe flooding, but a major earthquake could easily topple the structures.

Home improvements were completed incrementally, funded by a mix of borrowed capital and the household's own funds. Clients qualified for an incentive loan from an MF NGO and used the loan to improve the house by installing a toilet or kitchen, strengthening the floor and walls or adding a room or a space for a store. Typical MF NGO policy requires that housing loans do not exceed the amount of the client's business loan, and clients should have the capacity to pay back both loans. Homeowners in the focus groups indicated they secured home improvement incentive loans ranging from Php 15,000 (USD $280) to Php 40,000 (USD $750), with weekly amortization between Php 1,100 (USD $21) and Php 1,500 (USD $28). Loan terms varied and were based on the client's cash flow. Loans were offered with either a 6-month, 12-month or 24-month term.

For the homeowners in tenement housing, home improvements included better toilets, additional cabinets or storage areas, or space for bedroom or a business (e.g., store or computer rental). These homeowners were clients of a MF NGO that provided loans for home improvement. They were paying an average of Php 465 (USD $8.75) per week for 50 weeks. Improvements were incremental and, in certain cases, funded by income or extra cash. The homeowners believed that their tenement building was not safe from a major earthquake, however making disaster-resistant improvements would be complicated. Without funding from the government or NHA, homeowners would have to contribute financially. They believed it would be difficult to convince all homeowners in the building to contribute and cooperate.

Clients of a MF NGO in another focus group lived along the Tullahan river bank. Each time water levels rose, they feared their houses would be destroyed or carried away by strong river currents. Since their houses were made of light materials, they also believed the homes would be easy to fix. They set aside Php 100-200 (USD $2-4) each week from their income for housing repair, for example to replace a missing wood panel on the wall.

Homeowners in the FGDs were quick to say that any home retrofitting loan product should have affordable loan terms aligned with the terms provided by their MFIs: small amortization, weekly payments, and a loan term of at least 6 months. They prefer borrowing from their MF NGOs and would be interested in an incentive loan. However, they cannot afford a lumpsum loan for the full cost of retrofitting. Phased, incremental or progressive retrofitting would make it affordable to borrow from their MF NGOs.

(See Annex Table 3 for the FGD responses)

These conversations indicate that a variety of motivations are driving demand for retrofits:

Houses that were poorly designed and constructed, or constructed using poor quality materials (prevalent among those living in resettlement or relocation sites, informal settlers);

Desire to have stronger more resilient houses after experiencing a disaster (Typhoon *Ondoy* in the National Capital Region); and

Need to keep families safe in anticipation of a disaster (e.g., the Big One in Metro Manila).

For low-income households, the barriers to retrofitting their houses include the following:

Financing;

Land ownership (they do not own the land and/or housing structure). In many cases, the house/land owner does not allow improvements or changes to the structure;

Lack of technical skill on retrofitting (what needs to be retrofitted to make their houses disaster resilient) and access to information about the availability of service providers; and

Competing priorities: When faced with spending priorities, a low-income household will prioritize spending on their children's education or emergencies over home improvements.

III. Housing Finance Programs and Products for Low-Income Households

Based on estimates of the retrofit market, the estimated market share of each type of FSP was distributed across income segments. For instance, 90% of middle-income households are potential clients of banks (including rural banks) and other types of FSPs (e.g., cooperatives). On the other hand, the low-income (but not poor) households are mainly potential clients of MFIs (85%). The poor, or the so-called bottom-of-the-pyramid households, can also access MFI products but will substantially rely on subsidies or grants.

Table 10: Estimates of Potential Home Retrofit Market, By Type of FSP

	MFI Market		Banks & Other FSPs		Subsidies	
Household Type	**Market Share**	**Number of Houses**	**Market Share**	**Number of Houses**	**Market Share**	**Number of Houses**
Upper Income and Rich		-	100%	-		-
Upper Middle Income		-	100%	-		-
Middle Income	10%	270,841	90%	2,437,568		-
Lower Middle Income	70%	3,054,924	20%	872,835	10%	436,418
Low Income but not Poor	85%	4,975,388	5%	292,670	10%	585,340
Poor	10%	266,799		-	90%	2,401,187
Total		8,567,952		3,603,074		3,422,944
Estimated potential house retrofit market	**15,593,970**					

Table 10 shows that the estimated retrofit market for MFIs is about 8.6 million housing units, 3.6 million for banks and other types of FSPs, while 3.4 million will need some form of subsidies or grants.

(See Annex Table 4 for the computation.)

The sections that follow present housing finance programs for low-income households, both by government institutions and non-government entities. Analysis reveals how home retrofit financing may fit into ongoing programs or existing financial products, and identifies supply-side opportunities, potential barriers and constraints.

A. Government Housing Finance Programs

The national government has existing housing programs, but current interventions have fallen short of demand. Closing this housing gap remains a big challenge as the number of informal settler families (ISFs) increases, especially in urban areas along government property and areas set to be cleared with the onset of the government Build-Build-Build program. In addition, those affected and displaced by natural and man-made disasters also need decent and sustainable shelter.

Thus, in addressing the housing gap, government must set new design and payment schemes for low-income households incorporating the idea of Build Back Better. Given the Philippine Disaster Risk Reduction and Management Act (RA 10121), the new design for housing has to incorporate disaster-resiliency in the housing plans and programs of the government. Government housing finance programs must be adaptive to the emerging conditions of low-income households and challenges brought about by the changing times, particularly the onset of displacement as a result of involuntary resettlement and the unpredictable number of disasters affecting the communities.

Existing national government housing financing programs are responding to the housing demand, however there is a need to formulate clear-cut policy guidelines to adopt and incorporate the principle of disaster-resiliency in housing programs.

Box 1. The Philippine Government's Key Housing and Housing Finance Agencies

National Housing Authority (NHA)

National Home Mortgage Finance Corporation (NHMFC)

Social Housing Finance Corporation (SHFC)

Home Guaranty Corporation (HGC)

Housing and Land Use Regulatory Board (HLURB)

Home Development Mutual Fund (HDMF or Pag-IBIG Fund)

Social Security System (SSS)

Government Service Insurance System (GSIS)

First, a look at the national government housing and housing financing agencies. Under the Office of the President, the Housing and Urban Development Coordinating Council (HUDCC) serves as oversight, coordinator, initiator and facilitator of all government policies, plans and programs for the housing sector. HUDCC sets the overall direction and targets for the sector; determines strategies and formulates appropriate policies; and monitors and evaluates the programs, projects and performance of the implementing shelter agencies. Together with its attached key housing agencies, it addresses various issues in the areas of housing finance, housing regulation, housing production and institutional development.

The National Home Mortgage Financing Corporation (NHMFC) has a mandate of increasing the availability of affordable housing loans through the development and operation of a secondary market for home mortgages.

The Social Housing Finance Corporation (SHFC) is the lead government agency mandated to undertake social housing programs that cater to the formal and informal sectors of the low-income bracket. SHFC is in charge of developing and administering social housing program schemes, particularly the Community Mortgage Program (CMP) and Abot Kaya Pabahay Fund (AKPF) , both development financing and amortization programs.

Box 2. Programs Currently Being Implemented by NHMFC

Socialized Housing Loan Takeout of Receivables (SHeLTeR) Program – aims to purchase socialized housing loan receivables from socialized housing developers as well as microfinance institutions, cooperatives, LGUs, national government agencies and civic organizations; offers more affordable terms as it targets the socialized housing market

MAginhawang BUhay dahil sa baHAY (MABUHAY) – allows senior citizens to convert a portion of their home equity into cash in order to address their various needs.

Housing Loan Receivables Purchase Program (HLRPP) – the SHeLTeR and MABUHAY Reverse Mortgage Program

BALAI Bonds 1 – backed by quality socialized and low-cost housing loan portfolio[9].

BALAI Community Mortgage Program (CMP) Bonds – alternative compliance to the balanced housing requirement for housing developers.

The National Housing Authority (NHA) is a government agency responsible for public housing in the Philippines. It is organized as a government-owned and controlled corporation under the Housing and Urban Development Coordinating Council.

Box 3. Various Mandates of the NHA

PD 757 dated 31 July 1975 - NHA tasked to develop and implement a comprehensive and integrated housing program which shall embrace, among others, housing development and resettlement, sources and schemes of financing, and delineation of government and private sector participation.

Under EO 90 dated 17 December 1986 - NHA mandated as the sole national government agency to engage in shelter production focusing on the housing needs of the lowest 30% of the urban population.

Under RA 7279 (UDHA) dated 24 March 1992 - NHA tasked to provide technical and other forms of assistance to local government in the implementation of their housing programs; to undertake identification, acquisition and disposition of lands for socialized housing; and to undertake relocation and resettlement of families with local government units.

Under RA 7835 (CISFA) dated 08 December 1994 - NHA tasked with the implementation of the Resettlement Program, Medium Rise Public and Private Housing, Cost Recoverable Programs and the Local Housing Program of the National Shelter Program.

Under EO 195 dated 31 December 1999 - NHA mandated to focus on socialized housing through the development and implementation of a comprehensive and integrated housing development and resettlement; fast tracking the determination and development of government lands suitable for housing; and ensuring the sustainability of socialized housing funds by improving its collection efficiency, among others.

[9] BALAI is the acronym for Building Adequate Livable Affordable and Inclusive Filipino communities, a broader housing program involving multiple government agencies.

The Housing Guarantee Corporation (HGC)[10] was established under R.A. 876 to extend guarantees on housing loans and other credit facilities to encourage funders and financial institutions to provide financing for home acquisition and mass housing development.

The Home Development Mutual Fund (HDMF), more popularly known as the Pag-IBIG Fund[11], was established as a national savings program and affordable shelter financing for Filipinos working in the formal sector. To this day, the Pag-IBIG Fund works towards providing Fund members with adequate housing through an effective savings scheme. Programs include membership programs, short-term loan programs (including multi-purpose loans and calamity loans) and home lending programs (Pag-IBIG Fund partners with local government for housing).

B. Housing Microfinance Products

This section focuses on financial products being offered by microfinance institutions (MFIs). MFIs have traditionally targeted low-income households with financial products and services. Globally, microfinance continues to grow — serving over 117 million clients in 2015 according to the MIX Market and 139 million in 2017 according to the Microfinance Barometer released by the European thought platform Convergences. In the Philippines, there are three types of microfinance institutions: non-governmental organizations (MF NGOs), rural banks (RBs) and credit cooperatives. RBs and cooperatives are under the regulatory ambit of the Bangko Sentral ng Pilipinas (BSP) and the Cooperative Development Authority (CDA), respectively. MF NGOs are guided by the Microfinance NGOs Act (RA 10693) which sets principles, guidelines and standards for the delivery of microfinance products and services to the poor and marginalized.

Table 11: Key Microfinance Loan Product Features, By Type of MFI

	MF NGOs	Rural Banks	Cooperatives
Average loan size	Php 25,000 (USD $470)	Php 50,000 (USD $950)	Php 25,000 (USD $470)
Minimum loan amount	Php 2,000 (USD $38)	Php 10,000 (USD $190)	Based on share capital
Maximum loan amount	Php 150,000 (USD $2,830)	Php 300,000 (USD $5,660)	Php 300,000 (USD $5,660)
Repayment mode	Weekly	Weekly/Monthly	Weekly/Monthly
Loan term	6 months –1 year	6 months	6 months – 2 years
Interest rate	2% – 5% monthly (nominal)	Risk-based rates	1% – 24% per annum
Security	None / mutual guarantee	Real estate mortgage	Real estate /chattel mortgage

[10] http://www.hgc.gov.ph/guarantybene.html
[11] Pag-IBIG is an acronym which stands for Pagtutulungan sa Kinabukasan: Ikaw, Bangko, Industria at Gobyerno.

1. The State of Housing Microfinance in the Philippines

This section mainly draws on the findings from the study "State of Housing Microfinance in the Philippines" by Habitat for Humanity in partnership with the Microfinance Council of the Philippines, Inc. (MCPI)[12]. The study reported that about a third of the MFI membership of MCPI offered housing microfinance products to their clients. Collectively, these MFIs' clients represent 5% of the total active microfinance borrowers in the Philippines and 6% of the total loan portfolio. The average size of a housing microfinance loan is Php 8,000 (USD $150).

Box 4. Key Findings from Habitat for Humanity's "The State of Housing Microfinance in the Philippines"

15 of 49 MFI-members of MCPI are offering a housing microfinance product to their clients

5% of active borrowers (328,114 clients out of 7.2 million) have benefitted from housing microfinance

Housing microfinance loans represent 6% of the total loan portfolio (Php 2.7 billion out of Php 48 billion or USD $51 million out of $905 million)

Php 8,000 (USD $150) is the average size of a housing microfinance loan

Habitat for Humanity reported that, globally, there is growth in the housing microfinance sector in response to increasing demand. Institutional-level drivers cited included alignment with the MFIs' social mission (improved quality of life of clients) and business strategy (portfolio diversification, incentive for loyal clients). Although the report also cited burdensome regulation as a constraint to scaling housing microfinance, the overall regulatory environment for institutions in the Philippines has been conducive. BSP Memorandum Number M-2008-015 from the Central Bank (BSP) approved housing microfinance as a product and established the basic characteristics of a housing microfinance loan. The Central Bank's BSP Circular Number 678 of 2010 sets forth the rules and regulations for the approval and provision of housing microfinance.

[12]Habitat for Humanity Terwilliger Center for Innovation in Shelter, 2017. "The State of Housing Microfinance in the Philippines."

Box 5. BSP Circular No. 678 of 2010 – Basic Characteristics of a Housing Microfinance Product

Purpose	House construction House and/or lot acquisition Lot acquisitions should be for housing/business home improvement/repairs
Eligibility	Existing microfinance clients New clients who will normally be eligible for microfinance loans based on banks' policies Borrowers who have qualified for the Credit Surety Fund credit enhancement program provided they qualify with the banks' policies
Loan Amount	Up to Php 300,000 (USD $5,660) for house construction and/or lot acquisition (must show tenure security) Up to Php 150,000 (USD $2,830) for home improvement/repairs Incremental loan amounts to support incremental building
Loan Value	Up to 90% of the appraised value in case of real estate mortgage (REM) Acceptable valuation in cases of usufruct, leases, etc. Capacity to pay based on household cash flow analysis
Payment	Frequent amortization With savings component Loan payments should not exceed a reasonable percentage of clients' income as determined by cash flow analysis Capacity to pay determined through a clear credit process
Terms	Up to 15 years for house construction and house and/or lot acquisition, subject to banks' credit policies Up to five years for home improvement/repairs

2. Housing Finance Products of Selected MFIs

In its "The State of Housing Microfinance" report, Habitat for Humanity reported that many financial service providers in the survey have increased their housing microfinance portfolio relative to their overall portfolio[13]. In the Philippines, it was also observed that a number of MFIs have diversified their portfolio to include housing and housing-related microfinance products. This section provides an overview of these products. Five institutions representing different types of MFIs were interviewed for this research, and shared information about their housing microfinance programs.

[13]Habitat for Humanity. "The 2016-17 State of Housing Microfinance: Understanding the Business Case for Housing Microfinance."

All five MFIs are operating in the National Capital Region (NCR).

- **Tulay Sa Pag-unlad, Inc. (TSPI)** was founded in 1981 and is considered a pioneer in the Philippine MFI sector. TSPI operates as a MF NGO with over 160,000 clients, offering products including a suite of loan products (micro-business, agriculture, education, housing, WASH) and micro-insurance through their affiliate TSPI Mutual Benefit Association (MBA). TSPI also offers non-financial services such as business development, financial education, spiritual transformation and agriculture enhancement.

- **Ahon Sa Hirap, Inc. (ASHI)** is one of the early replicators of the Grameen Bank microfinance methodology. It began operations in January 1989 and was initially funded by Asia Pacific Development Center (APDC) based in Malaysia. ASHI offers two main financial products: loans and micro-insurance. They have general, microenterprise, agricultural, incentive, and special loans. ASHI's loan products are bundled with different funds that members contribute to: voluntary, compulsory and special funds. Their non-financial services include leadership training, financial education, and relief and rehabilitation projects. At the end of May 2018, ASHI had a total membership of around 67,000 clients.

- **Country Builders Bank (CBB)** is a product of the consolidation of two rural banks in 2012, and the merger with First Macro Bank in 2017. CBB works through 36 branches in Metro Manila, Cavite, Laguna, Rizal and Bulacan and currently has about 5,000 microfinance clients. The bank offers loans for business, micro-enterprises, agriculture, housing and home improvement.

- **ASA Philippines Foundation** is a non-profit, non-stock corporation specializing in microfinance. It started operations in 2004 with a branch in Camarin in Caloocan City. ASA Philippines gives micro-entrepreneurs access to microfinance loans based on individual liability. The institution is now the biggest MF NGO in the Philippines serving 1.6 million borrowers with a portfolio totaling Php 15.7 billion (USD $296 million) through a network of more than 1,000 branches.

- **Novaliches Development Cooperative (NOVADECI)** is a 42-year old cooperative that was established to address the problems of market vendors in Novaliches. Today, it is a multi-awarded cooperative serving more than 40,000 members through diversified products and services that include health and medical services, mutual benefit services, savings and loan products, pharmacy and education programs.

Target Clients. MF NGOs do not offer loans for housing construction except for a few special projects related to disaster reconstruction or relocation projects. Regular housing-related loans are offered as an incentive to trusted, good-performing clients who have availed themselves of the institution's products and services for a considerable period of time. Furthermore, the foremost consideration for clients who can access this type of financing is the client's 'capacity to pay;' MF NGOs target only those who have relatively higher income and stable source. These are normally clients with established and varied economic activities or with other sources of income such as someone employed full time but also generating income from a small business on the side.

For rural banks, housing loan products are targeted for their microfinance clients. However, this is very limited. Regular housing-related loans target the upper end of the low-income segment up to the middle class. These are clients with stable source of income such as regular employment, foreign remittances, stable businesses, and assets that are registered in their names.

Loan Products. Private sector housing financing for the low-income segment is very limited. When available, home improvement loans are the most common type of loan offered by these institutions. These loans are usually very small amounts intended to improve household health and sanitation, if not for minor house repairs and beautification. While there are MFIs that offer up to Php 100,000 (USD $1,890) for house repairs, the average loan amounts are usually below Php 50,000 ($950). It often comes with short repayment terms that may extend up to one year. Very few institutions offer loans for housing repairs or home improvement beyond one year, or two years at the most. Interest rates average about 3% monthly.

Table 12: Housing-Related Loan Products of Selected MFIs in the Philippines

	TSPI	ASHI	ASA Philippines	Country Builders Bank	NOVADECI
Loan Type	Housing Loan (for current Business Loan clients)	Incentive Loan	Incentive (Subsidiary) Loan (from 2nd cycle up)	Stand-alone loan	Housing Loan
Loan Use	On-site full house construction or repair	Health and sanitation, house repair/ improvement	Home improvement (incremental build)	House construction or repair	House construction and repair
Minimum and maximum loanable amount	Min: Php 5,000 (USD $94) Max: Php 100,000 (USD $1,880)	Min: Php 5,000 (USD $94) Max: Php 40,000 (USD $750)	Min: Php 10,000 (USD $190) (should not exceed amount of regular loan) Max: Php 50,000 (USD $940)	Up to Php 40M (USD $750K)	Dependent on member's share capital. Max: Php 5M (USD $94,300)
Average loan amount	Php 35,000 (USD $660)	Php 10,000 (USD $190)		Php 1M (USD $18,900)	

	TSPI	ASHI	ASA Philippines	Country Builders Bank	NOVADECI
Loan Term	Maximum of 1 year (50 weeks) for loans Php 10,000 (USD $190) and below Maximum of 2 years (100 weeks) for loans Php10,001 to Php30,000 (USD $190-$570) Maximum of 3 years (150 weeks) for loans Php 30,001 (USD $570) and above	12 weeks, 25 weeks, 50 weeks, 100 weeks depending on client preference	23 or 46 weeks	Up to 15 years depending on client preference and Credit Committee Analysis	5 years
Loan Interest	1.5% per month	46% annual diminishing	30% annual diminishing	Risk-based – lower than MF-NGO rates (depends on client risk level)	8% annual diminishing
Loan Security	For loans above Php 70,000 (USD $1,320) (with collateral): **i.** Real Estate Mortgage (REM) **ii.** Notarized Housing and Sanitation Loan Program (HSLP) Loan Agreement **iii.** Notarized Contract of Usufruct, if lot is not under the name of the client of legal spouse	Group guarantee (peer pressure, peer support)	None	Real Estate Mortgage	Real Estate and Chattel
Special Housing Projects		APRROOT program (post Typhoon Ondoy) – type of special loan			

MF NGOs such as TSPI, ASHI and ASA Philippines offer home improvement or home repair loans as an incentive loan for loyal clients. TSPI also offers on-site full house construction so long as the loan amount stays within the limit. The maximum loan amount is higher for TSPI at Php 100,000 (USD $1,880) with ASHI at only Php 40,000 (USD $750) and ASA Philippines at Php 50,000 (USD $940). Incentive loans should not exceed the regular business/enterprise loans. ASHI and ASA Philippines' home improvement loans are non-collateralized while TSPI requires security for loans above Php 70,000 (USD $1,320).

These MF NGOs do not have reliable data on whether home improvement or repair loans were used to retrofit or strengthen houses. Information may exist in loan application forms but is not captured by the MF NGO's management information system (MIS) and therefore is not aggregated and reported.

Box 6. Key Features of TSPI's Housing Microfinance Loan

Dedicated Staff.

TSPI's housing loan is a specialized loan for a client's house construction, repair or improvement. It is delivered through TSPI's network of branches but is managed by dedicated branch-level staff, including a Housing Supervisor (HS) and Project Officer (PO). The HS and PO handle and assess applications forwarded to them by the branch operations group. TSPI engages a foreman on a contractual basis to assess the proposed program of work, prepare simple floor plans and cost estimation.

TSPI-Supplier Relationship.

TSPI taps local suppliers who can provide materials at the lowest cost. Clients can also recommend suppliers to TSPI. TSPI requires that suppliers offer cheaper prices, do not charge for deliveries and are registered with the Bureau of Internal Revenue (BIR). Purchase orders are paid by TSPI directly to the supplier.

Close Monitoring.

TSPI staff conduct close monitoring of construction projects to ensure that houses will be completed to the satisfaction of their clients. Prior to loan release, the foreman arranges regular visits to monitor implementation of the program of work. These visits are reported to TSPI. The PO also visits construction sites for documentation purposes. Construction should be finished within 15 days.

For rural banks, housing microfinance is guided by the Central Bank's BSP Memorandum Circular M-2008-015 and the rules and regulations stipulated in Circular 678 released in 2010. Housing microfinance allows a maximum loan amount of Php 300,000.00 (USD $5,660) for housing construction and maximum loan amount of Php 150,000.00 (USD $2,830) for house repairs. This is aligned with the loanable amounts allowed for microfinance loan products. Beyond these loan amounts, real estate mortgages (REM) are required but microfinance borrowers do not normally have real estate properties that can be pledged as collateral.[14] In the case of CBB, house construction or home repair loans are stand-alone loans, which can be taken out without any other bank loan with the institution. Since loans can be used for house construction, CBB offers up to a maximum of Php 40 million (USD $750K). CBB requires REM as collateral for these loans.

The concept of housing cooperative also presented a different approach to housing finance. Behavioral change and change in ownership perspectives is needed to shift to communal ownership of facilities and common areas with accompanying shared liabilities as opposed to individual ownership and individual liabilities. It worked in selected areas but is challenging in other areas. Cooperative housing's main objective is provision of decent and affordable housing, whether these facilities are disaster-resistant depends on how the project was designed. One of the fundamental challenges, however, is sustaining the operations of a housing cooperative. Unlike multi-purpose cooperatives, the scope of a housing cooperative's activities is limited, thereby limiting opportunities to generate income and sustain operations.

[14] On August 17, 2018, Republic Act No. 11057, also known as the Personal Property Security Act was signed into law. The new law aims to give micro, small and medium enterprises (MSMEs) better access to financing by expanding the list of assets acceptable to banks and other financial institutions as collateral. The new law allows the use of other personal properties (e.g., inventory, equipment, vehicles, bank accounts, accounts receivable) as bank collateral.

Results/Outcomes

Housing finance is less than 10% of the loan portfolio of FSPs. The reach of these financing programs is limited by the client's capacity to pay, which is a FSPs primary consideration. Nevertheless, with the stringent selection of clients and consideration of client cash flows in relation to loan terms, these financing programs were found to be successful with very good repayment rates and high loan turnover, thus contributing to the FSP's financial bottom line. Moreover, because of the limited access to housing loan facilities, FSPs including rural banks admit that other loan products taken out by their clients may be diverted for house construction or home improvements. There are no exact figures, however, as loan utilization is not strictly monitored.

Even with the BSP circulars to boost housing microfinance, it is notable that there is still low uptake for the product among rural banks. Banks are generally risk averse for this type of loan, especially when land ownership is a key issue among borrowers. Less than 10% of participating banks offered housing microfinance in 2015.

These programs provide a considerable supply of housing finance in the low-income market which implies that there is huge demand for housing finance. However, low capitalization and lack of risk-sharing mechanisms limit the ability of FSP's to offer a comprehensive loan product with more flexible terms to this market. Loan products with longer loan terms to match this market's cash flow are considered high risk, even with the current stringent requirements. Furthermore, longer loan terms also require additional capital infusion to keep the MFI's liquidity afloat, given that other loan products have high turnover.

3. Retrofit Finance: Preferences and Capacities of Low-Income Households

Habitat for Humanity's research on housing microfinance in the Philippines showed that 88% of MFI clients plan to improve their houses while 85% are interested to finance these improvements through microfinance loans[15]. These findings reveal a significant market for home improvement loans for MFIs, and the natural tendency for clients to borrow from providers where they have current loans or established relationships. Respondents in the focus groups and interviews for this research, for example, preferred to finance home retrofitting through loans from their current MFIs, with terms and features similar to those of their current loans.

Clients of MF NGOs see a home retrofitting loan as part of an incentive loan for home improvement or repair. Only one of the three MF NGOs in this study offers home improvement loans that are not linked to a regular business/enterprise loan. As such, a loan for home retrofitting will normally not exceed the amount of a regular business loan, which are typically below Php 50,000 (USD $940), depending on which loan cycle the client is in. These loans will most likely not cover the full cost of retrofitting, which will necessitate phased or incremental retrofitting of houses.

Rural bank clients and housing cooperative members have access to larger loans for house construction or retrofitting, but these normally should be secured by collateral. For bank clients, loan amounts may reach Php 500,000 (USD $9,400) with loan terms up to 5 years. Loans from the cooperative usually depend on the member's share capital and credit standing.

(See Annex Table 5 for the focus group discussion responses)

[15] Habitat for Humanity Terwilliger Center for Innovation in Shelter, 2017, "The State of Housing Microfinance in the Philippines."

IV. Opportunities and Barriers to Financing Home Retrofitting for Low-Income Households

A. Demand-Side Opportunities and Barriers

To analyze the market for home retrofit financing, Table 13 summarizes the opportunities, barriers and constraints by market segment, including product preferences, incentives, motivations and drivers for uptake. Market segments are classified according to income level classifications used previously in this report: poor, low income (but not poor), lower middle-income, middle-income, upper middle-income, upper income and rich.

Table 13: Opportunities, Barriers & Constraints to Home Retrofit Financing, By Market Segment

Market segment	Description	Who is catering to them	Opportunity for uptake of retrofit financing	Barriers and constraints to uptake of retrofit financing	Preferences (product, terms, etc.)	Drivers, incentives, motivation
Poor	Bottom of the pyramid (BOP) Income of less than Php 9,065 (USD$ 171) Highly irregular, unstable sources of income Houses: makeshift/ salvaged/ improvised material, cogon/nipa huts	Government cash transfer programs LGU livelihood programs Programs with bilateral or multilateral funding A few MF NGOs CSR programs of private corporations	Low if without grants or subsidies Housing programs for this segment can consider disaster-resiliency of their houses	Retrofitting is not a priority; many are still without (permanent) homes Large scope of retrofitting needed – more costly; newly-constructed, disaster-resistant homes are needed No/low capacity to repay a loan No/low savings capacity In most cases, they do not own the land.	Highly subsidized loans, or grants	Grants and subsidies

Market segment	Description	Who is catering to them	Opportunity for uptake of retrofit financing	Barriers and constraints to uptake of retrofit financing	Preferences (product, terms, etc.)	Drivers, incentives, motivation
Lower middle-income and low income (but not poor)	Php 9,065 – Php 36,256 (USD $171-$684) Seasonal sources of income, some employment Houses: cogon/ nipa huts, half concrete or wood (1-2 story), concrete (1-story), galvanized iron, wood	MF NGOs Rural banks with MF programs Cooperatives Associations LGUs	Low to medium – will rely on financing from the MFI where they have micro-enterprise loans Can also tap savings with MFI Can also benefit from partial LGU financing support (cash or in-kind) Peer pressure (if homeowner belongs to a MFI group/ center)	Low capacity to pay, particularly if this is an additional loan In many cases, scope of retrofitting may be big Home retrofitting may not be a priority (compared to other spending priorities) or not a perceived need In most cases, they do not own the land	Same terms and conditions as loan with MFI – small amortization, weekly payment, 6 months or longer term Some subsidy from the LGU	Land ownership Subsidies Affordable and/or preferential loan terms from the MFI Home-based businesses are protected from disasters Access to affordable construction design and plans (for retrofitting) Affordability and convenience in securing building permits
Middle-income class	Php 36,257 – Php 90,640 (USD $684-$1,710) Stable sources of income Houses: half concrete (2-story), large concrete 1-storey, concrete 2-story	MF NGOs Banks Cooperatives Government FIs	Medium to high – has access to various financing options	Home retrofitting may not be a priority or there is no perceived need (house was constructed properly) May have land ownership issues		Land ownership Home-based businesses are protected from disasters
Rich, Upper income, and Upper middle-income class	At least Php 90,641 (USD $1,710) income Highly stable and reliable sources of income Houses: concrete large, 1 to 2-story	Cooperatives Banks Government FIs	Medium to high – has access to various financing options, can be self-financed	Home retrofitting may not be a priority or there is no perceived need (house was constructed properly)		

Households at the bottom of the pyramid are most vulnerable to disasters. Their houses tend to be in dire need of retrofitting, or, in most cases, new house construction. Any form of financing will rely on subsidies, conditional cash grants or corporate social responsibility (CSR) programs of private corporations.

Low-income homeowners who are clients of MFIs are a captured market for retrofit financing. There may be a need for demand-generation activities as these households may not see home retrofitting as a need. A value proposition is to make the house safe to protect both the household and the business or micro-enterprise.

The client's outstanding loans with the MFI may limit the loan amount for retrofitting, and this can be an issue if the scope of retrofitting work is substantial. This can be addressed through phased or incremental retrofitting with the following key considerations:

- The scope or program of retrofitting work should be carefully explained to the homeowner;
- Retrofitting work should be well planned so as not to cause serious inconvenience to the household or disrupt the operations of any home-based enterprise;
- Each phase should be completed in as little time as possible; and
- MFIs should monitor use of the loan to ensure that the house is strengthened by following the retrofit plan and using the resilient construction methods.

Savings products by rural banks and cooperatives for home retrofitting can also be explored. There is also the possibility of local governments providing cash or in-kind subsidies, but will require advocacy efforts to encourage allocation of resources for disaster resilient homes and communities.

Middle-income and rich homeowners do not face immense financing constraints for home retrofitting, and may not find the need for it since their houses are more likely to be well constructed based on standard designs and plans.

B. Supply-Side Opportunities and Barriers

Existing loan products enabled some low-income households to start building their houses incrementally. These projects did not involve complex architectural designs or engineer-supervised construction projects but rather relied on inputs from relatives or friends who had some knowledge about construction. While this has provided low-income households with the opportunity to build, expand, and beautify their houses, self-built houses have also proved to be structurally vulnerable to natural disasters, especially typhoons and earthquakes.

In Section A we established that there exists a significant demand for retrofitting and related financial products. Yet retrofit financing is a new concept to the private sector and there are not currently financial products that specifically address home retrofitting or strengthening. More commonly, loan products are directed towards home repairs, construction, and improvement. These loans are normally treated as incentive or top-up loans given to borrowers with good a credit history and long-standing relationships with the institution. The objective of these loan products is more health and sanitation-related, for example construction of toilets, sinks and installation of water connections, or for aesthetic purposes. Even if loans were intended for home retrofitting, MFIs have not been able to track or report these.

Access to loans for home improvement repair are given to current MFI borrowers after two or more successful loan cycles. These loans are given in addition to a regular business/enterprise loan, which in practice limits the amount of money available for retrofitting.

Typical home improvements range from beautification, such as floor tiling and house painting, to minor repairs, such as replacement of light wall materials with concrete hollow blocks or light roofs materials with galvanized iron sheets. Home improvement loans are also used to expand houses for economic purposes. Neither the wholesale or retail finance markets have earmarked funds to support housing resilience. While people are generally aware of the importance of disaster-resistant housing, it is less appreciated as a major disaster risk reduction strategy, especially for the low-income segment.

Some post-disaster housing projects financed by the private sector have integrated disaster-resilient concepts in partnership with shelter NGOs, for example some of the housing cooperatives assisted by the National Confederation of Cooperatives (NATCCO) in their post-Haiyan projects. However, not all post- disaster housing projects considered resilience for various reasons.

Table 14 presents the range of opportunities, barriers and constraints facing MFIs in offering home retrofit financing. Overall, MFIs view retrofitting for safer houses as a way to mitigate risks and reduce client vulnerability during times of disaster. Presently, most MFIs only provide post-disaster relief aid and assistance, which can be cash or in-kind. Annually, funds are allocated for this purpose. Changing MFI mindsets from post-disaster to pre-disaster support presents an opportunity to offer home retrofit financing. However, MFIs do not have the technical expertise to assess houses and recommend the appropriate retrofit solution, and this is important in order to ensure the suitability of the loan amount and appropriate use of the loan for retrofitting.

Securing the buy-in from top management is an important first step in successful product development. MFIs interviewed for this report demonstrated strong buy-in to the concept of a financial product for home retrofitting. They view this as a risk-mitigating measure as most of their client's businesses run from their homes. After a major disaster, MFIs suffer from declining portfolio quality as clients are unable to repay their loans.

It is important to integrate the incremental or phased nature of housing construction for low-income families into the design of housing finance programs. The products currently provided by MFIs can be redirected into retrofit loans dedicated to strengthening houses. While additional investments from fund providers might be necessary to make those products more appealing to clients, it reduces the risks for both the clients and the financing institution, particularly given the percentage of business activities conducted within the confines of clients' homes.

Additionally, home retrofit loans provided by MFIs as an incentive or top-up loan must adhere to strict standards of consumer protection, particularly in preventing client over-indebtedness. A home retrofit loan should be given to a client who has the capacity to repay both this loan and a business/enterprise loan.

Table 14: Opportunities, Barriers and Constraints to Home Retrofit Financing: Microfinance Institutions

Financial Service Providers	Target market/ clients	Opportunity to offer retrofit financing	Barriers and constraints to offering retrofit financing	What will it take to offer retrofit financing
MF NGOs	Mostly low-income households	Aligned with social mission Observed need of target clients Current clientele is a captured market Can mitigate risks and reduce client vulnerability Can replace or complement post-disaster relief operations for affected clients Can be bundled with regular business loans as an incentive/ home improvement loan Demand creation can be integrated in credit process and methodology	Limited exposure in medium- to long-term loans due to funding constraints Offering is limited to loan products Limited loan amounts Staff lack the technical expertise in assessing houses for retrofitting and in demand creation Currently not tracking clients' specific usage of home improvement loans	Support in demand creation (promotion, awareness raising) – communicating key messages to target clients Capacity building on product development and assessing demand among clients Training or capacity building on home retrofitting (assessment of structures, etc.) and demand creation Technical support in actual retrofitting Staff dedicated to housing, home improvement and retrofit financing Capital investments; availability of funds for medium- to long-term lending

Financial Service Providers	Target market/ clients	Opportunity to offer retrofit financing	Barriers and constraints to offering retrofit financing	What will it take to offer retrofit financing
Rural banks	Mixed income class - from low- to middle-income to rich households Mixed and stable sources of income (employment, enterprises, remittances, etc.)	Currently offer home improvement loans with real estate mortgage loans, and housing microfinance loans No constraints in loan terms (short-, medium- or long-term) and amounts Product range may include loans and savings	Staff lack the technical expertise in assessing houses for retrofitting and in demand creation Limited opportunity in the credit process for demand creation activities	Support in demand creation (promotion, awareness raising) – communicating key messages to target clients Capacity building on product development and assessing demand among clients Training or capacity building on home retrofitting (assessment of structures, etc.) and demand creation Technical support in actual retrofitting Staff dedicated to housing, home improvement and retrofit financing
Cooperatives	Mixed income class - from low- to upper middle-income households Mixed and stable sources of income (employment, enterprises, remittances, etc.)	Currently offer house construction and home improvement loans Can offer short- to medium-term loans, high loan amounts Product range may include loans and savings General assemblies can be platforms to raise awareness – make disaster resilient homes a campaign	Staff lack the technical expertise in assessing housing structures for retrofitting and in demand creation Limited opportunity in the credit process for demand creation activities	Support in demand creation (promotion, awareness raising) – communicating key messages to members Capacity building on product development and assessing demand among members Training or capacity building on home retrofitting (assessment of structures, etc.) and demand creation Technical support in actual retrofitting Capital investments; availability of funds for medium- to long-term lending

Shelter agencies at both the local and national level have recognized the demand for home retrofitting as they search for solutions to urban settlement woes that take into consideration disaster risk reduction and mitigation. However, home retrofitting is not a priority, even for the low-income segment. Shelter agency resources are primarily geared towards lowering the government's enormous housing deficit. Accordingly, it is not surprising that there are no known programs and funding on home retrofitting for low-income households.

There is an opportunity to bring the concept of home retrofitting within the framework of disaster risk reduction and management of local governments. The national government mandates each local government to have their own DRRM plans and operationalize these with designated funds and other resources.

Actual retrofitting of houses can prove challenging for the government. In particular, housing location – whether built near danger zones, fault lines, flood prone areas with poor drainage, etc. – each presents its own specific challenges for building and retrofitting safe houses. Additionally, local governments are not equipped with the technical expertise to assess houses and identify how they can be retrofitted to improve resilience to disasters. This low level of awareness and capacity among local governments also affects demand and awareness among homeowners. There is a critical need to address knowledge, capacity and expertise gaps.

Table 15: Opportunities, Barriers and Constraints to Home Retrofit Financing: Government

Finance Providers	Current housing finance programs for low-income HHs	Opportunity to offer retrofit financing	Barriers and constraints to offering retrofit financing
Government shelter agencies (HUDCC, SHFC, Pag-IBIG, NHMFC, HGC, NHA)	Community Mortgage Program of the SHFC Shelter Program and HLRP of NHMFC NHA Housing Program Pag-IBIG Housing Loans	SHFC's CMP provides financing for home improvement which can be tapped for retrofit financing HLRP of NHMFC can provide a liquidity buffer to financial institutions who will offer retrofit financing Pag-IBIG's loan facilities can provide financing for residential retrofitting.	No earmarked funds for resilient housing. Funds available are allocated for housing production Knowledge and expertise on home retrofitting.
Local government (LGUs)	In house financing for house construction	Disaster resilient housing can be integrated in local shelter plans and DRRM plans Resources and funds can be allocated to assess houses and provide subsidies (cash or in-kind) for house retrofitting of low-income households	Knowledge and expertise on home retrofitting – how to assess housing structures to determine scope of retrofitting Currently lack earmarked funds for resilient housing Lack of data on number of houses needing retrofitting

V. Recommendations

This study recommends that Build Change carry out the following programs and/or activities to scale up home retrofitting and home retrofit financing in the country.

Institutions and government agencies interviewed for this report indicated an openness to partnering with Build Change on a number of activities. Here are some avenues that Build Change can pursue immediately to speed the scaling up of retrofit projects for low-income households:

- Partnership with MFIs or financial service providers (FSPs) on financial product development (from concept development to pilot testing), demand creation (educational materials for both staff and clients), and staff training (to equip the staff with knowledge and skills for retrofit loan assessment and utilization checks). Build Change can also help FSPs integrate home retrofitting in monitoring and evaluation (M&E) frameworks and tools so that need can be regularly assessed.

- Partnership with LGUs in preparing designs for safe, disaster resilient houses. Within Metro Manila, the City of Marikina (through the Marikina Settlement Office) has a standard disaster resilient housing design to help homeowners lower their cost for design services and comply with building permit requirements. They also recommend building permit applications to the Engineering Department to expedite processes. Build Change can be engaged in providing technical inputs on resilient housing and urban development to LGUs crafting their local shelter plans and local housing codes.

- Partnership with LGUs and SHFC for home retrofitting under the CMP.

- Partnership with associations such as the Microfinance Council of the Philippines (MCPI), the Rural Bankers Association of the Philippines (RBAP) and the National Confederation of Cooperatives (NATCCO) to raise awareness on disaster resilient homes as part of the FSPs' risk management framework. Build Change can organize and provide orientation training to members of these associations.

Build Change can work on the following in the medium- or long-term to ensure that home retrofitting is regarded as essential in disaster preparedness and to lower the exposure of low-income households to disaster risk.

- Partnership with government shelter agencies that are targeting to close the housing gap through their shelter plans. Build Change can help promote the paradigm of safe houses and retrofitting housing units constructed in project areas.

- Advocacy for the government to earmark funds for housing resiliency (part of a Resiliency Fund, for instance), in general, and specifically for home retrofitting. Advocacy can include opening of financing facilities dedicated for retrofitting through government financial institutions (e.g. Land Bank of the Philippines, Development Bank of the Philippines, the Small Business Corporation, etc.), and not just through the shelter agencies. Government financial institutions can also support scaling of resilient housing financing through capital inflows to MFIs.

- Support initiatives on policy advocacy and development among shelter agencies and LGUs to include the idea of retrofitting housing for low-income homeowners into their plans and budget allocation. This may include provision of technical assistance (TA) packages for capacity development programs of local implementors, research and development, plan and project proposal preparation, tool development for assessment and creating models of success.

- Together with MFIs, develop other financial products, or a mix of products, that can address constraints currently faced by low-income households. This may include savings products for rural banks and cooperatives, or an insurance product that can serve as incentive to get houses retrofitted.

- Work with multilateral organizations [e.g., the Asian Development Bank (ADB), UNICEF] within the DRRM space and include house resiliency in the framework. Build Change can position itself as a provider of training and technical assistance on home retrofitting for low-income households. Initial discussions with the ADB indicate the need to demonstrate household-level outcomes as a result of retrofitted or stronger houses. Outcomes may include increasing household investments on health and education as a result, perhaps, of less spending on house repairs. Research that can explore these outcomes can be pursued by Build Change. Results of the research can potentially strengthen the value proposition of home retrofitting and home retrofit financing.

- Together with the Technical Education and Skills Development Authority (TESDA), advocate for the nationwide adoption of vocational and training modules on building and construction of disaster resilient homes. Build Change can use and build on existing modules it specifically designed for Region 8.

- Explore the idea of a grading system in incremental retrofitting towards disaster resilient homes. This can be patterned after the phased approach to rural sanitation development with the goal of bringing communities to Zero Open Defecation status.[16] Relevant government agencies [Department of the Interior and Local Government (DILG), Housing and Urban Development Coordinating Council (HUDCC)] and LGUs can be engaged in discussions to build buy-in and support. When established, this can assist in the targeting, planning and budget allocation of the LGUs.

[16] https://www.developmentbookshelf.com/doi/full/10.3362/9781780449272.009

Annex A. List of Interviews

Agencies/Institutions	Informants
National Home Mortgage and Finance Corporation (NHMFC)	Mr. Rodel Leocario
Housing and Urban Development Coordinating Council (HUDCC)	Ms. Maria Antonette McStay
Home Guaranty Corporation (HGC)	Mr. Teresito Cayo A. Butardo
Social Housing Finance Corporation (SHFC)	Ms. Jeannie Furiscal Ms. Charito Lontayao
National Housing Authority (NHA)	Ms. Wilma D. Hernandez
Marikina City - Marikina Settlement Office	Mr. Arvin Santos
City of Manila - City Urban Settlement Department	Mr. Danilo C. Isiderio
Quezon City -Housing, Community Development and Resettlement Department (HCDRD)	Mr. Eduardo Giolagon
Ahon Sa Hirap, Inc. (ASHI)	Ms. Estrella Andres
Tulay Sa Pag-unlad, Inc. (TSPI)	Mr. George Angeles
Country Builders Bank (CBB)	Mr. Reggie Ocampo Mr. Eric Valenzuela
ASA Philippines Foundation	Mr. Kamrul Tarafder Mr. Roderick Beato
Novaliches Development Cooperative (NOVADECI)	Ms. Marlene Sindayen
Microfinance Council of the Philippines, Inc.	Mr. Allan Robert Sicat
National Confederation of Cooperatives (NATCCO)	Mr. Alex Almendral
Habitat for Humanity Philippines	Mr. Naeem Razwani

Annex B. Research Instruments

Market Research on Disaster Resistant Homes

FGD Guide (Homeowners)

Introduction:

Say: "Good morning/afternoon. Thank you for coming. My name is _____. We are conducting a focus group discussion to help assess the housing needs of people like you.

Before we start, I want to inform you that your participation is voluntary and all of your responses will be confidential and will be used by Build Change for the said purpose. Would you like to ask me anything else about this activity? Do you agree to participate in this activity?"

Warm-up Questions (Demographics):

Ask participants the following:

1. Name/nickname
2. Main source of income
3. Household income
4. Household size
5. Ownership of house
   a) Do you own your house or are you renting?
   b) How long have you been staying in your house?

A. Construction of Current House

Core Questions	Probe Questions
1. How was your house built?	a) Who constructed your house? b) When was it constructed? c) Did you follow a design or a construction plan? d) What necessary permits did you have to get?
2. How did you finance the construction of your house?	a) Where did you get the funds to finance the construction of your house? b) If loan, from whom did you borrow? c) What were the terms of the loan? What is the loan term and how much amortization do you have to pay? d) What is the status of this loan (fully paid, partially paid, with arrears, etc.) e) If savings, how did you accumulate these savings?

3. What was your overall experience with the construction of your house?	a) What worked well during the construction of your house? (e.g., finished on time, had cost savings, etc.) b) What problems or issues did you encounter with regards to: construction, plans and design, permits, government requirements, financing?
B. Construction of New House	
Core Questions	**Probe Questions**
4. For those who do not own a house, what issues/challenges are you facing?	a) What is keeping you from owning a house? b) What funding issues are you facing?
5. What are your plans for a new house?	a) Where do you plan to construct your house? b) Who will prepare the design and plan? a) Who will construct the house? b) Where will you get the funds for the construction?
C. Improvements and Retrofitting of Houses	
Core Questions	**Probe Questions**
6. What improvements or changes have you done to your house?	a) Why did you make these improvements/changes to your house? b) How were the improvements financed or funded? c) If no improvements or changes have been made, why? What issues/problems are you facing?
7. What can you say about retrofitting of houses to make it disaster-resistant/resilient?	a) Do you think your house is safe or resistant against disasters? Why/why not? b) Do you think this is important? Why/why not? c) Is this a priority for your family? d) What type of retrofitting does your house need? e) What will it take to do this type of retrofitting to your house? Who will retrofit?
8. How do you think retrofitting of your house can be financed?	a) How will you finance retrofitting of your house? b) Are you going to spend or invest on something like retrofitting of a house? Why/why not?

D. Financing Retrofitting for Safe Houses	
Core Questions	**Probe Questions**
9. Preferred source of financing and terms for construction of a new house	a) Loans from formal sources? Which formal source of loans? b) Loans from informal sources? c) Government? d) Savings or investment? e) Loan amount and amortization f) Interest rate g) Loan term/tenor h) Mode of payment
10. Preferred source of financing and terms for retrofitting of a house	a) Loans from formal sources? Which formal source of loans? b) Loans from informal sources? c) Government? d) Savings or investment? e) Loan amount and amortization f) Interest rate g) Loan term/tenor h) Mode of payment
11. If retrofitting would cost Php 150,000, will you still have your house retrofitted?	a) Why/why not? b) Source of funds?
Closing:	
Say: *"We are done with our activity. Thank you again for your time and active participation. Your views and insights will be very useful to our study."*	

Market Research on Disaster-Resistant Homes

Key Informants Interview Guide (Government)

TOPIC	QUESTIONS
HOUSING FINANCE PROGRAMS FOR LOW-INCOME HOUSEHOLDS	1. What is/are your housing finance program/s that target low-income households? *Probe:* Past programs with the same target households 2. Which specific segment of the low-income population do these programs serve? *Probe:* Marginalized sectors, by geographic location, etc. Does the program serve low-income households in Metro Manila/NCR? 3. What are the terms and conditions of this program? *Probe:* Eligible loan use, tenor, amount, interest rate, etc. Documents available 4. What is the performance of this program? What have been the results/ outcomes so far? *Probe:* Number of borrowers, loans released, loans outstanding, repayment rate, etc. Reports available 5. What are key lessons from these programs? *Probe:* What worked? What did not work?
DEMAND FOR HOUSING FINANCE AMONG LOW-INCOME HOUSEHOLDS	1. Which other government or private sector institutions that are providing this type of financing to this type of households? 2. What do you think is the market size or the demand for this type of financing among low-income households? *Probe:* Market size if Metro Manila or NCR only Studies or data and where we can get them
NEEDS, PREFERENCES AND CAPACITIES OF LOW-INCOME HOUSEHOLDS	Based on your understanding of the characteristics of low-income households, what are their needs, preferences and capacities for a housing finance program? 1. What type of financing do they need? 2. What do they prefer or like in terms of loan features, terms and conditions? *Probe:* Amount, tenor, payment mode, interest rate, etc. 3. What do they not like? 4. What are the barriers they face when trying to access housing finance programs? 5. Which financial institutions do they prefer for housing finance?

FINANCING SAFE HOUSES OR RETROFITTING FOR LOW-INCOME HOUSEHOLDS	1. Are there existing financing programs for building of safe houses or retrofitting? What are these? *Probe:* Target households Loan terms, features and conditions 2. Do you think there is demand among low-income households for a financing program for safe houses or retrofitting (to make them disaster-resistant)? *Probe:* If yes, why? What is the market size? Market size if Metro Manila or NCR only? If no, why not? How can demand be created? Data or materials available? 3. For low-income households, what can be their preferences and capacities if given access to a financing program for safe houses or retrofitting? *Probe:* Potential loan terms, features and conditions 4. How can we incentivize low-income households to make their houses safe, or to retrofit their houses? *Probe:* Incentives to access financing programs Subsidies? Who will provide subsidies? 5. What can be their barriers to access and how can they overcome these?

REGULATIONS ON HOUSING FINANCE PROGRAMS FOR LOW-INCOME HOUSEHOLDS	1. What government laws or regulations apply to the type of financing that you are providing? 2. What government laws or regulations that may apply to financing safe houses or retrofitting?
OPPORTUNITIES FOR PARTNERSHIP WITH BUILD CHANGE	1. What role can organizations like Build Change play in: a. Creating demand for safe houses or retrofitting among low-income households? b. Providing technical expertise? c. Financing?

Annex Table 1: Insights and Experiences of Homeowners Regarding House Construction

FGDs and Interviews with Clients of Financial Service Providers

	MF NGO 1 (FGD #1)	MF NGO 1 (FGD #2)	MF NGO 2 (FGD)	MF NGO 3 (FGD)	RB (Interviews)	Cooperative (FGD)
Number of participants	13	5	12	14	3	8
Socio-economic profile	Mostly engaged in small retail businesses. Seasonal source of income. Average household size of four. Monthly incomes range from Php 14,000 to Php 21,000 (USD $260-$400).	Engaged in retail business. Average household size of four.	Engaged in home-based micro-enterprises. Spouses have regular employment. Average household size of six. Monthly incomes range from Php 10,000 to Php 40,000 (USD $180-$750).	Poor to low-income but not poor. Engaged in micro-enterprises and other seasonal livelihoods. Houses made of salvaged materials, half-concrete, half wood walls.	Middle-income class Sources of income are room rental and pension. Husband of one of the respondents receives pension of Php 37,000 (USD $700).	(Not available. Participants in the FGD were Board members and staff – who are also members of the cooperative)
Status of house ownership	Most own their houses through the MF NGO's housing finance program. Only three are yet to transfer to their house.	Only half of them own their houses, including the land. Others do not have land and funds for house construction.	They own units in the tenement housing built by NHA for Smokey Mountain dwellers.	They constructed their houses but lots are owned by the local government.	They own the house and lot (titled).	47% of the members of the cooperative own the house and lot. The rest are still renting.
Overall experience with new house construction	Original housing program beneficiaries provided sweat equity equivalent to 400 hours. Houses built were not strong, with defects that needed improvements. No beams, toilets, doors and "sinking" floors. Did not have to submit any documentary requirements for house construction. "Ang sarap matulog sa sariling bahay." (It feels good to sleep in your own house.)		Turned over units were bare but with a provision for a loft. Prefers permanent houses, even outside Metro Manila, but cannot afford to purchase a lot and construct a house. They didn't have a choice with the tenement housing.	Construction of houses did not follow any plan or design. "Pang-mayaman lang po yang design design." Improvements are incremental – sometimes using materials (wood, GI sheets, etc.) salvaged from the river.	House was old – belongs to parents and built many years ago. After house was razed by fire, had it re-built.	
Financing house construction and improvements	Construction through loan from the MF NGO's housing finance program. Loan amounts: Php 60,000 (USD $1,130) for 7 years (1st batch) and Php 85,000 (USD $1,600) for 10 years (2nd batch). Took out additional loans from the MF NGO for house improvement, but the rest of improvements were self-financed. Some have fully paid the loans with the MF NGO – with a few making advance payments. Spouse and working children helped pay the loan.		Loan from NHA. Monthly amortizations were adjusted due to defaults in payment by most homeowners [e.g., from Php 1,080 (USD $20)/month to Php 2,000 (USD $37)/month. They were not happy with NHA's policy of applying payments on interest only. Defaults were due to dissatisfaction with NHA, and priority given to children's school expenses. Made incremental improvements to the units (floor, walls, toilet, additional rooms) through loans from the MF NGO [about Php 465 (USD $9) weekly amortization for 50 weeks]. Some improvements were self-financed.	Construction of houses was self-financed. Improvements were self-financed ("Bina-budget po namin.") and/or through a portion of the business loan from the MF NGO.	For the pensioner-respondent, house construction was financed by a loan from the rural bank: about Php 500,000 (USD $9,400) with loan term of 5 years. Succeeding loans from the bank were for house extension – for room rental business.	Some 196 cooperative members had houses constructed through a housing program of the cooperative, in partnership with SHFC and Habitat for Humanity. Housing unit cost was Php 80,000 (USD $1,500) with loan term of 5 years and interest rate of 12% per annum.

Annex Table 2a. Estimate of Home Retrofit Market (based on housing units with outer walls made of concrete/brick/stone)

	No. of Housing Units	
Number of Concrete/Brick/Stone Houses		11,035,032
% of Single and Duplex Houses		88%
Estimate Number of Single & Duplex Concrete/Brick/Stone Houses		**9,710,828**
Upper Income and Rich Households	1.49%	
Upper Middle-Income Households	2.19%	
Middle Income Households	16.75%	1,626,564
Lower Middle-Income Households	26.99%	2,620,953
Low Income but not Poor Households	36.08%	3,503,667
Poor Households	16.50%	1,602,287
Total		**9,353,470**

Annex Table 2b. Estimate of Home Retrofit Market (based on housing units with outer walls made of concrete/brick/stone, wood, and half concrete/brick/stone and half wood)

	No. of Housing Units	
Number of Houses with Outer Walls made of Concrete/Brick/Stone Houses, Wood, Half Concrete/Brick/Stone and Half Wood		18,374,554
% of Single and Duplex Houses		88%
Estimate Number of Single & Duplex with outer walls made of Concrete/Brick/Stone Houses, Wood, Half Concrete/Brick/Stone and Half Wood		**16,169,608**
Upper Income Class and Rich Households	1.50%	
Upper Middle Income Households	2.19%	
Middle Income Households	16.75%	2,708,409
Lower Middle Income Households	26.99%	4,364,177
Low Income but not Poor Households	36.20%	5,853,398
Poor Households	16.50%	2,667,985
Total		**15,593,969**

Annex Table 3: Insights and Experiences of Homeowners Regarding Home Retrofitting

FGDs and Interviews with Clients of Financial Service Providers

	MF NGO 1 (FGD #1)	MF NGO 1 (FGD #2)	MF NGO 2 (FGD)	MF NGO 3 (FGD)	RB (Interviews)	Cooperative (FGD)
Improvements completed for current house	There were significant improvements since turned over units were bare. Added toilets, windows and doors. Financing house improvements through the MF NGO's Incentive Loan. Loan amounts should not exceed the General Loan. Loan amounts range from Php 15,000 to Php 40,000 (USD $280-$750). Loan term: 6 months, 1 year, 2 years. Weekly amortization ranges from Php 1,100 to Php 1,500 (USD $20-28).		Improvements to floor, walls, toilet, kitchen and the loft. Rooms and cabinets were added. Made incremental improvements to the units through loans from the MF NGO [about Php 465 (USD $9) weekly amortization for 50 weeks]. Some improvements were self-financed.	Very low-cost, incremental improvements only – e.g., to replace dilapidated wood or part of the house destroyed by heavy rains. One MF NGO member is having her house renovated. Cost is about Php 40,000 (USD $750).	Improvements were mainly for the room rental business – (vertical) extensions or additional rooms. These house improvements or extensions were financed through loans from the bank.	Two participants in the FGD had houses renovated. The rest are still renting and cannot make improvements to the housing structure.
Insights regarding retrofitting houses for disaster-resiliency	Important because walls and floor are not strong to withstand strong typhoons and earthquake.	Interested to have their houses retrofitted.	Tenement building should be retrofitted to make it disaster resilient.	Important because houses are not strong and they live beside a river. The river overflows – houses have been damaged in the past due to this. Issue is that the lots on which their houses stand belong to the city government, and they can be asked to move out anytime.	Important not just for the safety of the household – but also for the room rental business.	The cooperative's Board and management find it important that members have disaster resilient homes.

Annex Table 4. Estimate of Home Retrofit Market, By Type of Financial Service Provider

Market Segment	Income Distribution	Number	MFI		Banks & Other FSPs		Subsidies	
			% Share	Number of Housing Units	% Share	Number of Housing Units	% Share	Number of Housing Units
Upper Income and Rich Households	1.50%							
Upper Middle-Income Households	2.19%							
Middle Income Households	16.75%	2,708,409	10%	270,841	90%	2,437,568		
Lower Middle-Income Households	26.99%	4,364,177	70%	3,054,924	20%	872,835	10%	436,418
Low Income but not Poor Households	36.20%	5,853,398	85%	4,975,388	5%	292,670	10%	585,340
Poor Households	16.50%	2,667,985	10%	266,799			90%	2,401,187
Total		**15,593,970**		**8,567,952**		**3,603,073**		**3,422,945**

Annex Table 5: Homeowners' Retrofit Financing Options and Preferences

	FGDs and Interviews with Clients of Financial Service Providers					
	MF NGO 1 (FGD #1)	MF NGO 1 (FGD #2)	MF NGO 2 (FGD)	MF NGO 3 (FGD)	RB (Interviews)	Cooperative (FGD)
Financing options for home retrofitting	Loan from the MF NGO (incentive loan for house improvement) and self-financing.	Loan from the MF NGO (incentive loan for house improvement) and self-financing.	If building will be retrofitted, homeowners have to contribute. But this is problematic because they do not expect all homeowners to cooperate and to afford the contribution. MF NGO is the preferred source of financing (loan).	Loan from the MF NGO (incentive loan for house improvement).	Loan from the rural bank or another lending institution and self-financing (pension) – but does not want to borrow yet because she is still paying two loans (one with the bank).	Loan from the cooperative (cooperative partners with Pag-IBIG or other financial institutions).
Preferred terms and features	Affordable and based on their cash flow. The same terms as current incentive loan with the MF NGO - Loan amounts range from Php 15,000 to Php 40,000 (USD $280-$750). Loan term: 6 months, 1 year, 2 years. Weekly amortization ranges from Php 1,100 to Php 1,500 (USD $20-28). Can still add between Php 200 to Php 300 (USD $4-6) weekly [Php 800 to Php 1,200 (USD $15-24) per month] to current amortization.	Can still add about Php 1,000 (USD $19) to current weekly amortization (or Php 4,000 (USD $75) per month).		Affordable. Preferably the same terms and features as business loan with the MF NGO: small weekly amortization, 6-month loan term.	The same terms and features as housing loan with the bank (amount: between Php 400,000 and Php 600,000 (USD $7,500-$11,320); loan term is 5 years; interest rate is 14% per annum).	The same terms and conditions as loan with the cooperative: amount is based on share capital, monthly payment, long-term loan (at least 5 years).

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