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Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics
Düsternbrooker Weg 120
24105 Kiel (Germany)
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)
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FINANCING AFFORDABLE HOUSING IN YANGON

MAY 2019



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MAY 2019



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6 ADB Avenue, Mandaluyong City, 1550 Metro Manila, Philippines
Tel +63 2 632 4444; Fax +63 2 636 2444
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Foreword

Myanmar has experienced remarkable economic growth during the last few years, with an average growth rate of 8.73% from 1994 until 2017. The robust economic growth is expected to bring about rapid urban growth, particularly in the Yangon Region, the largest city in Myanmar and the biggest contributor to the national gross domestic product. Despite its economic success, a majority of the households in the Yangon Region are living in dwelling units that are temporary structures, necessitating frequent upgrading and retrofitting. Coupled with internal migration and expansion of household size, it is estimated that the aggregate housing shortage in the Yangon Region will be 1.3 million units by the year 2030. To meet the present and future demand for affordable housing, the public and private sectors need to augment their capacity to deliver an average of 100,000 housing units per year over the next 12 years.

In response to the growing challenge of meeting the imminent demand for housing, the Government of Myanmar aims to develop 1 million new housing units by 2030. Further, the development of the environmentally sustainable cities initiative was also included in the government's Twelve Point Economic Policy with the vision of establishing an economic framework that supports national reconciliation, through the balancing of sustainable natural resource mobilization and allocation across states and regions.

At the request of the Government of Myanmar and the Yangon Region Government (YRG), the Asian Development Bank (ADB) has undertaken this study to assess the current housing market situation, identify necessary reform options, and offer practical recommendations to address market failures and to support the YRG in implementing its affordable housing agenda and related policies.

The study was supported by the Urban Climate Change Resilience Trust Fund, which is administered by ADB with financing partners Rockefeller Foundation and the governments of Switzerland and the United Kingdom. Harish Surendra Khare, Rey A. Guarin, Scott Leckie, Win Naing, Soe Min Oo, Ei Ei Thient, and Aye Zaw Pe prepared this study under the guidance and supervision of Kosintr Puongsophol, financial sector specialist, Economic Research and Regional Cooperation Department (ERCD) and Kyaw Thu, infrastructure specialist, ADB Resident Mission in Myanmar. Strategic guidance was provided by Noritaka Akamatsu, former senior advisor, ERCD. Significant contributions and additional assistance was provided by Virinder Sharma, senior urban development specialist, Sustainable Development and Climate Change Department; Stephanie Kamal, public management specialist, Central and West Asia Department; Richard D. Supangan, senior economics officer, ERCD; Maria Frederika D. Bautista, senior operations assistant, ERCD; and Mary Ann Magadia, senior operations assistant, ERCD.

The authors also would like to stress the critical contributions given by officials of the YRG, the Department of Urban and Housing Development, the Ministry of Construction; the Central Bank of Myanmar; the Yangon City Development Committee; the Construction, Housing and Infrastructure Development Bank; relevant country officials; market participants; sector experts; and international donors, including the Department for International Development of the United Kingdom, the Japan International Cooperation Agency, the United Nations Human Settlements Program, and Women for the World who shared their insights and perspectives.



Yasuyuki Sawada

Chief Economist and Director General
Economic Research and Regional Cooperation Department
Asian Development Bank

Executive Summary

Myanmar is in the midst of a historic transition from a closed and isolated command economy to an increasingly open market economy. As it progresses, the country faces several development challenges such as widespread poverty, poor and inadequate infrastructure, low levels of entrepreneurship and industrialization, suppressed private sector, and underdeveloped markets. Among these challenges, Myanmar's housing sector is struggling to cope with rapid urbanization, internal migration, and new demand arising from recent economic growth, particularly in the larger metropolitan districts of Yangon and Mandalay. To address this issue, Schedule 2 of the Constitution has assigned the management of the housing sector, including urban development, to the states and the regions. Therefore, the Yangon Region Government (YRG) has a responsibility for creating an enabling environment for the development and modernization of the housing sector.

One of the key constraints to developing the housing sector and increasing the supply of dwelling units to meet the growing demand of low- to lower middle-income households is the lack of long-term financing. With the support of the Union-level Department of Urban and Housing Development (DUHD) under the Ministry of Construction (MOC), only three financial sources are available. These are the MOC-constituted revolving fund, annual government budget allocation, and project financing from the Construction, Housing and Infrastructure Development Bank (CHID Bank). Given the limited resources, DUHD was able to supply a little over 9,200 units in 2016, which is nowhere close to the actual existing and emerging demand.

This study was carried out to help the YRG to formulate housing market reform options, offer practical recommendations to address market failures, and support the YRG in the implementation of its affordable housing agenda and development of related policies.

Key Findings and Major Issues

The study identified several pressing issues that should be properly and sequentially addressed to improve the current housing situation. Close coordination among relevant stakeholders is crucial so that the housing sector and the housing finance market can be systematically developed. Key findings and major issues are summarized as follows.

- **Large unmet demand for housing.** As the Yangon Region is expanding and industrializing, demand for affordable housing is expected to increase manifold. Factors contributing to the increase in demand include internal migration accompanied with industrial and manufacturing growth; expansion of household

size and overcrowdedness; replacement of older, dilapidated dwelling units; and expansion of informal settlements. However, the Government of Myanmar, through the DUHD, was only able to supply a little over 9,200 units in 2016, which is nowhere close to the actual existing and emerging demand of approximately 100,000 dwelling units per year. The annual output capacity of the private sector is about around 7,000–9,000 units, but none of these catered to the demands of low to lower-middle income households.

As a result, the government's efforts alone are not sufficient, and will never be able to meet the increasing demand for affordable housing. Therefore, the private sector should be encouraged to play a more active role in increasing the supply of affordable housing. As a result of the slowdown in the real estate and property market in recent years, developers are willing to support the government's initiative provided they have the assurance that they will be paid immediately after delivery. The public-private partnership (PPP) model should thus be explored. Modern housing construction techniques, which can shorten construction time and increase the floor-to-space ratio, and building materials that are durable and resilient to climate change can all be considered as part of the terms of reference.

The issue of climate change and disaster risk management must be considered by relevant stakeholders. The supply of dwelling units provided by the government will never catch up with the growing demand if Myanmar's population will remain forever vulnerable to the impacts of climate change and disasters. Recurring impacts of climate change and disasters is one major root cause of urban migration for cities like Yangon, which is less vulnerable than other major cities like Ayeyarwaddy and Mandalay, and offers better economic prospects.

- **Complications of existing legal frameworks.** Since most apartments are built on lease grant land, the unit owners only have the possession right and presently cannot obtain title rights. The strata title law system only exists under the Condominium Law, which was enacted in 2016 and implemented in late 2017 when the implementing rules were signed by the minister for construction. Without the strata title law system, it would be difficult to develop a secondary mortgage market in Myanmar.

The strata title law system allows unit owners (for condominiums, for example) who have title rights to pledge their property with financial institutions in exchange for loans, including mortgage loans. In this case, banks and financial institutions would be more willing to provide loans to home buyers because they can take the property as an acceptable collateral, which could not be done under the existing legal framework.

- **Lack of long-term financing.** The financial system is extremely small and still at the early stage of development. The Central Bank of Myanmar (CBM) administratively sets the interest rates: the maximum lending rate is 13% and the minimum deposit rate is 8%. These are set without factoring in the annual rate of inflation. The fixed interest rate regime discourages competition and product innovation in the banking sector. Long-term housing finance has become available

only recently through CHID Bank and a couple of private commercial banks, which comprises only a minuscule proportion of total credit. Further, most private lenders only focus on premium housing projects, and loans are only available to high-income households. As a result, only CHID Bank is offering mortgage loans to lower-income to middle-income households to purchase affordable housing units supplied by the DUHD.

As interest rates are administratively determined by the CBM, commercial banks are not able to offer mortgage loans with risk-based pricing or charging of differentiated interest rates reflecting the terms of the loan. For example, longer tenor loans should incur higher interest rates, while shorter tenor loans should carry lower interest rates. Because interest rates are fixed, banks are reluctant to provide loans with longer repayment terms. Commercial banks are not able to tap long-term funding because the local currency bond market does not exist yet in Myanmar, making it difficult for banks to efficiently manage their assets and liabilities. The lack of strata title law system prevents commercial banks from accepting apartments as collateral, which is often the case for affordable housing. Since mortgage loans are relatively new in Myanmar, the approval rate remains low, resulting in a significant number of underserved households.

- **Lack of centralized real estate information system.** The centralized real estate information system, or a similar database for assessing and updating the housing situation, currently does not exist in Myanmar. Also, because of the lack of strata title law, registration of the sale and purchase agreements for apartments with the Office of the Register of Deeds are not required. As a result, government agencies and the private sector do not have a complete understanding of the current residential property market in Yangon.

These real estate data are very important for policymakers as they could provide the necessary information and guidance for the CBM to appropriately implement macroprudential measures in a timely manner. For example, the loan-to-value ratio on mortgages can be reviewed by the CBM, depending on property price movements. The private sector, including developers and lenders, would also benefit from a transparent information system by gauging demand accurately, assessing the fair market value, and making rational investment decisions. Before setting up a real estate information center, it is necessary that relevant laws, rules, and regulations are put in place so that appropriate information can be captured reliably. These information can include the number of new units, number of units sold, total mortgage loans, new mortgage loans, and number of building permits issued.

In summary, Myanmar faces significant challenges in its efforts to develop a robust and efficient housing and housing finance market, which are characterized by a multitude of interconnected factors. Among various impediments that the housing sector is facing are the poor legal infrastructure, including laws governing property ownership; high transfer costs; complicated land administration, property registration and titling procedures; inefficiencies in the real estate market, which is skewed toward the supply of high-end housing; and the lack of an organized database and key information on the residential

market, more specifically the demand and supply situation for affordable housing. The following section provides a list of recommendations to address these issues. These recommendations should be jointly discussed, explored, and prioritized by relevant stakeholders at both the Union and regional levels.

Recommendations and Road Map for the Development of a Climate-Resilient Housing Sector in the Yangon Region

This section seeks to identify the most efficient and effective recommendations (strategies) for the YRG to develop its housing and housing finance markets and create an enabling environment that would enhance the supply of affordable housing and increase access to middle-income and low-income housing finance. In this context, the strategy to develop the market should not be seen merely from a “development lens” with a limited focus on low-income and informal-income households. Instead, the thrust should be on developing a sound housing finance system that caters to all income segments and encourages the banks to gradually move down market.

The following recommendations are intended to address priority areas, and should be tackled immediately and simultaneously.

- (i) Constitute a Yangon Region Special Task Force for Housing (a policy think tank) comprising various stakeholders and sector experts, to work on the twin objectives of:
 - (a) augmenting the supply of climate-resilient affordable housing in the Yangon Region; and
 - (b) housing finance market development with a thrust on lower-income and middle-income housing finance, and housing microfinance (HMF).
- (ii) Promote and expand the ongoing public sector-led affordable housing model that builds upon existing CHID Bank–DUHD collaboration.
- (iii) Explore a suite of PPP models to accelerate the supply of climate-resilient affordable housing, and adopt good practices from emerging economies in the region.
- (iv) Encourage microfinance lenders to diversify into HMF products with a focus on savings for housing loan down payment, self-construction and home improvement loans, and loans for rent-to-own housing schemes
- (v) Develop suitable housing finance subsidy products to improve the affordability of low-income households, such as subsidy products for mortgage lending as well as HMF (e.g., savings-linked down-payment subsidy, interest buy-down subsidy, fixed-cum-floating rate subsidy to be channeled through primary lenders).

- (vi) Provide extensive and customized technical assistance and capacity building to select banks and financial institutions (in the area of low-income housing finance) to enable them to:
 - (a) go down market to meet the demand from low-income and informal-income consumers;
 - (b) smoothly transition from short-term lending to long-term financing of retail mortgages; and
 - (c) grow and sustain quality housing loan portfolios with appropriate risk management, self-governed, and responsible lending standards.
- (vii) Develop a housing and real estate information system, a centrally managed platform to accelerate evidence-based housing policy reform, planning, and development; this information system could be expected to serve as:
 - (a) a widely accessible repository and aggregator of housing and real estate-related data, price trend, and housing consumer segmentation; and
 - (b) a knowledge center that provides robust analysis and insights on housing market trends, gaps, challenges, and opportunities.
- (viii) Develop the rental market with suitable incentives to attract private capital and amend the Urban Rent Control Act to ensure that the relevant law does not skew in favor of either the tenants or the landlords.
- (ix) Adopt the strata title law for the New Apartment Law and related mortgage legislation relating to the purchase of apartments. This would assist in the development of a more efficient housing market that is linked to the needs of the population. Under the current legal regime, tenants would not be eligible to hold title deeds to their apartment, leaving them solely with possession and contractual rights as buildings and fixtures on the land are considered as part of the land.
- (x) Establish a Myanmar National Climate Land Bank to allow land resources to be secured for families and communities permanently displaced due to climate change impacts. Without such a Myanmar National Climate Land Bank in place, the growing number of people facing displacement due to the effects of climate change will increasingly have nowhere to go and thus be forced, as climate displaced communities everywhere, into urban slums or new residential options that are wholly inadequate to meet their basic human rights requirements.
- (xi) Provide access to long-term local currency financing as mortgage loans are generally long-term by nature, thus any exposure to exchange rate risk should be avoided. Possible fund-raising options are bank deposits, the local currency bond market, and the provision of liquidity into the banking sector. One possible model is the National Mortgage Corporation of Malaysia (Cagamas Berhad).

Summarizing the different components and recommendations of the report, a proposed road map for the development of climate-resilient housing sector in the Yangon Region is prepared for consideration by the YRG and the relevant stakeholders involved (Figure 6).

This road map seeks an inclusive and sustainable housing sector development for the Yangon Region with possible replication for other states and regions in Myanmar so as to optimize the long-term development impact. This shall be achieved by informing decision makers about PPP housing frameworks that integrate housing, land, and property (HLP) rights and climate resilience measures in support of modernizing the local housing sector policies, strategies, program, and projects. The road map agenda also includes developing

the financing framework through simultaneous steps toward finance sector development and implementation of housing finance specific reforms, regulation, and products leading to the overall desired outcome.

The road map recommends three strategic interventions to be prioritized jointly by regulatory agencies and the private sector to achieve the required outcome:

- (i) Strengthen institutional capacity on developing and implementing inclusive and sustainable housing that is HLP rights based and climate-resilient components integrated.
- (ii) Develop a financing framework for inclusive, sustainable, and easily accessible long-term housing finance.
- (iii) Improve or amend HLP policies and laws and integrate housing guidelines of the road map.

In conclusion, several strategic policies and interventions will be required, at both the Union level and the regional level to support the government's policy to construct affordable housing units for low- to middle-income households with an improved access to long-term housing finance. Collective efforts among ministries, regulatory agencies, and the private sector and proper sequencing of reforms and measures will be critical to the implementation of an inclusive affordable housing agenda and development of related policies.

Abbreviations

CBM	–	Central Bank of Myanmar
CHID Bank	–	Construction, Housing and Infrastructure Development Bank
DFID	–	Department for International Development
DUHD	–	Department of Urban and Housing Development
HLP	–	housing, land, and property
HMF	–	housing microfinance
HREIS	–	Housing and Real Estate Information System
JICA	–	Japan International Cooperation Agency
MFI	–	microfinance institutions
MK	–	Myanmar kyat
MNCLB	–	Myanmar National Climate Land Bank
MOC	–	Ministry of Construction
MOPF	–	Ministry of Planning and Finance
NBFIs	–	nonbank financial institutions
PPP	–	public–private partnership
SECM	–	Securities and Exchange Commission of Myanmar
UDHA	–	Urban Development and Housing Act
UN	–	United Nations
UN-Habitat	–	United Nations Human Settlements Program
YCDC	–	Yangon City Development Committee
YRG	–	Yangon Region Government

I. Assessment of the Housing Market, Housing Stock, and Affordability Gaps

Myanmar is in the midst of an historic transition from a closed and isolated economy to an increasingly open market economy. As Myanmar progresses toward industrialization, the country faces several development challenges such as widespread poverty, poor and inadequate infrastructure, low levels of entrepreneurship and industrialization, a suppressed private sector, and underdeveloped markets. Among these challenges, Myanmar's housing sector is struggling to cope with rapid urbanization, internal migration, and new demand arising from recent economic growth, particularly in the larger metropolitan districts of Yangon and Mandalay.

The Yangon Regional Government (YRG) has been proactive in recognizing the imminent crisis-like situation likely to develop over the next decade, and has initiated several steps to achieve inclusive urban development and provide access to affordable housing for all residents. The smaller towns and rural areas of the Yangon Region as well as the slum and squatter settlements in Yangon are characterized by poor living conditions and unsafe and inadequate housing, which get compounded with the increasing vulnerability of the population to health hazards and disaster and climate risks. This continues to undermine economic growth and poverty-reduction efforts of the government. Further, the unavailability of long-term housing finance constrains the development and viability of market-led solutions to affordable housing. The existing housing finance system caters only to the high income earners and almost entirely excludes the underserved segments comprising poor and low-income households.

This diagnostic study aims to formulate various reform options, taking into account the importance of disaster risk management components; offer sequenced recommendations to address market failures; and advise YRG on the implementation of its affordable housing agenda and development of related policies. These objectives are in line with the country context and the national priority to position the Yangon Region as an engine of economic growth and development.

A. Current Housing Stock, Housing Structure, and Housing Shortage Estimates

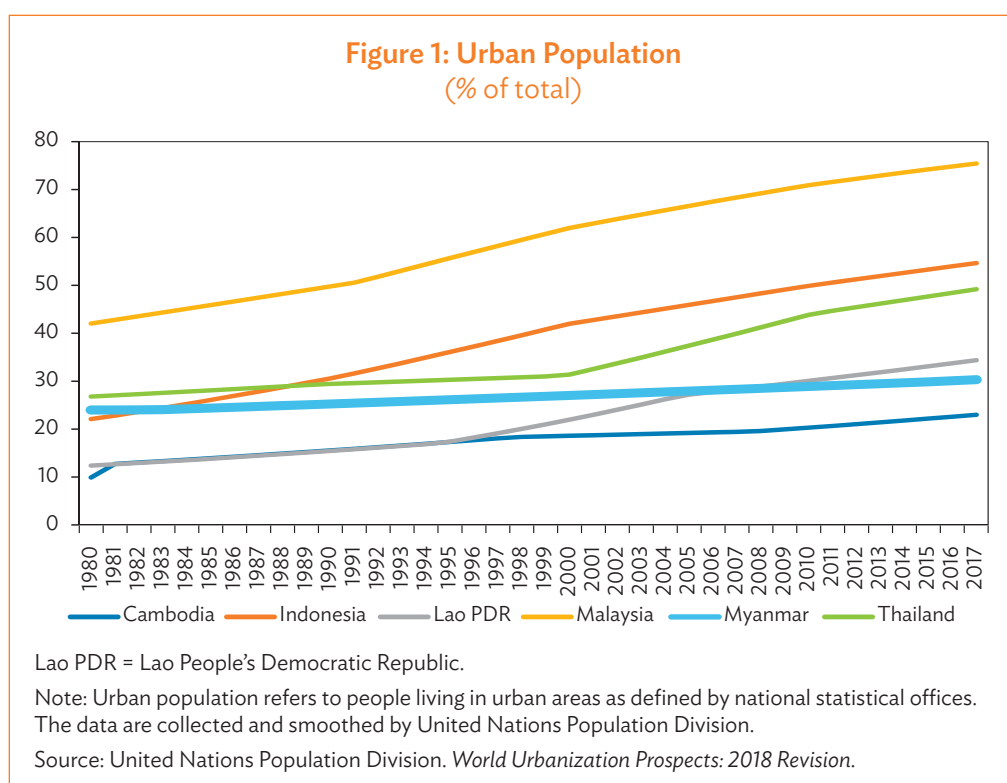
Yangon is the commercial and industrial center as well as the trade hub, with several industrial zones located at its outskirts. It is the largest city in Myanmar and the largest contributor to the national gross domestic product. Table 1 shows the details of the extent of land area and administrative units in the Yangon Region in relation to the Republic of the Union of Myanmar.

Compared with other countries in the region, the percentage of population residing in urban areas in Myanmar remains low. With less than 31% of the population classified as urban (Figure 1),¹ the country remains predominantly rural and the majority of its labor force is involved in agriculture. However, sustained economic growth with accompanying development is expected to bring about increasing levels of urbanization and rapid urban growth.

Table 1: Land and Administrative Units in the Yangon Region

	Yangon Region	Union	Percentage (Yangon Region/Union)
Land area (square kilometer)	10,171	676,553	2
District (number)	4	74	5
Township (number)	45	330	14
Town (number)	21	422	5
Ward (number)	742	3,183	23
Village tract (number)	619	13,602	5
Village (number)	2,129	63,860	3
Population (million)	7.36	51.49	14

Source: Government of Myanmar. 2017. *Myanmar Statistical Yearbook*. Nay Pyi Taw.



¹ World Bank. 2017. Myanmar: Global Financial Inclusion (Global Findex) Database 2017. <https://datacatalog.worldbank.org/dataset/myanmar-global-financial-inclusion-global-findex-database-2017>.

Myanmar's urban population has increased gradually over the past 4 decades from 24% in 1980 to 30% in 2017. The country has witnessed rapid urbanization although the Yangon Region (Table 2) only exhibited a slight increase in the percentage of the population residing in urban areas (70.1% as per the 2014 Census). It must be noted that the composition of the labor force in some parts of the Yangon Region and its towns, which are classified as rural, actually resembles those of urban areas.

Table 2: Population by Urban and Rural across the Four Districts of the Yangon Region

	Population	Urban Population	Rural Population	Urban Population (%)
North Yangon	2,606,670	1,428,659	1,178,011	54.8
East Yangon	2,366,659	2,339,903	26,756	98.9
South Yangon	1,417,724	422,300	995,424	29.8
West Yangon	969,650	969,650	...	100.0
Total Yangon Region	7,360,703	5,160,512	2,200,191	70.1

... = data not available.

Source: Government of Myanmar. *The 2014 Myanmar Population and Housing Census (Yangon Region)*. 2014. Nay Pyi Taw.

Beyond general population growth, the growth of urban areas typically involves a mix of socioeconomic push-and-pull factors that drive rural-urban migration. The components of population growth in Yangon in the 5-year period from 2010 to 2014 demonstrate that internal migration accounted for 81%, while natural increase was responsible for 31.46%.² The labor force movement to fulfill the demands of the manufacturing sector is a significant driver of Yangon's urbanization. Yangon, which contains more than 20 industrial zones, is among the most popular destinations for internal migration.

The current housing stock in the four districts of the Yangon Region can be segregated into different types of housing units reflecting the type of construction and its durability as shown in Table 3.

Table 3: Conventional Households by Types of Housing Units (number)

	Type of Housing Unit								
	Total	Apartment/ Condominium	Bungalow/ Brick House	Semi Pucca House	Wooden House	Bamboo	Hut 2-3 Years	Hut 1 Year	Others
North Yangon	566,167	41,378	40,544	60,132	265,847	138,340	7,517	5,843	6,566
East Yangon	486,790	112,666	47,588	54,772	211,653	47,644	3,781	2,566	6,120
South Yangon	339,205	4,815	12,276	17,031	142,082	152,721	5,319	3,226	1,735
West Yangon	190,782	108,005	16,639	18,706	39,841	5,714	422	230	1,225
Total Yangon Region	1,582,944	266,864	117,047	150,641	659,423	344,419	17,039	11,865	15,646

Source: Government of Myanmar. *The 2014 Myanmar Population and Housing Census (Yangon Region)*. 2014. Nay Pyi Taw.

² United Nations Human Settlements Program (UN-Habitat). *National Habitat Report*. 2016. The Republic of the Union of Myanmar. pp. 16. <http://habitat3.org/wp-content/uploads/Myanmar-National-Hab-Report-FINAL.pdf>.

It can be observed that, although Yangon has an urban population constituting 70%, barely 25% of the households are residing in formal housing units such as condominiums, apartments, and brick houses, which can be categorized as permanent. The dwelling units for 75% of the households are semipermanent or temporary structures, which would require frequent upgrades and retrofitting.

The quality of the housing stock can also be determined from the types of building materials used for the construction of roof, walls, and floors. Certain building materials such as thatch, bamboo, wood, mud plaster (earth), and corrugated sheets can be considered as non-permanent materials, which may require replacement from time to time. Use of these materials also exposes the construction to various climate and disaster risks. The Yangon Region is vulnerable to a range of natural hazards such as cyclones, floods, and earthquakes. The qualitative aspect of housing in the four districts of the Yangon Region, based on the durability of the building materials used, are in Tables 4, 5, and 6.

Table 4: Conventional Households by Main Construction Material for the Roof

	Type of Construction Material for Roof						
	Total	Dhani/Theke/ in Leaf	Bamboo	Wood	Corrugated Sheet	Tile/Brick/ Concrete	Others
North Yangon	566,167	109,125	1,398	824	441,880	11,034	1,906
East Yangon	486,790	28,944	677	1,010	422,298	32,254	1,607
South Yangon	339,205	140,102	578	341	195,914	1,705	565
West Yangon	190,782	3,830	79	481	148,513	37,294	585
Total Yangon Region	1,582,944	282,001	2,732	2,656	1,208,605	82,287	4,663

Source: Government of Myanmar. *The 2014 Myanmar Population and Housing Census (Yangon Region)*. 2014. Nay Pyi Taw.

Table 5: Conventional Households by Main Construction Material for the External Walls

	Type of Construction Material for Walls							
	Total	Dhani/Theke/ in Leaf	Bamboo	Earth	Wood	Corrugated Sheet	Tile/Brick/ Concrete	Others
North Yangon	566,167	45,280	243,311	341	127,014	6,068	129,071	12,082
East Yangon	486,790	15,054	109,011	228	137,272	12,138	206,294	6,793
South Yangon	339,205	75,964	141,940	152	84,597	2,700	30,053	3,799
West Yangon	190,782	5,485	9,728	47	30,381	3,254	140,608	1,279
Total Yangon Region	1,582,944	144,783	503,990	768	379,264	24,160	506,026	23,953

Source: Government of Myanmar. *The 2014 Myanmar Population and Housing Census (Yangon Region)*. 2014. Nay Pyi Taw.

Table 6: Conventional Households by Main Construction Material for the Floors

	Type of Construction Material for Floors					
	Total	Bamboo	Earth	Wood	Tile/Brick/ Concrete	Others
North Yangon	566,167	111,366	4,180	311,766	131,718	7,137
East Yangon	486,790	33,593	2,047	245,879	199,117	6,154
South Yangon	339,205	97,716	1,486	209,498	27,880	2,625
West Yangon	190,782	3,822	413	56,091	128,010	2,446
Total Yangon Region	1,582,944	246,497	8,126	823,234	486,725	18,362

Source: Government of Myanmar. *The 2014 Myanmar Population and Housing Census (Yangon Region)*. 2014. Nay Pyi Taw.

The figures in Tables 4, 5, and 6 make it evident that permanent housing largely comprises the use of concrete or brick masonry for the construction of floors and walls, but often the roof material used is the corrugated sheet (which is the case for more than 76% of all houses). The semipermanent and temporary dwelling units (e.g., huts) are predominantly constructed using wood and bamboo as the material for floors and walls, and corrugated sheets or thatch used as the roof material. The estimation of housing shortages in the Yangon Region would have to take into account the need for replacement and reconstruction, upgrading, and/or retrofitting of the temporary and semipermanent dwelling units.

The ownership pattern of the current housing stock is another factor that would contribute to the demand for new housing. Some 3.5% of the housing stock comprises units that have been supplied free of cost as part of the public housing and welfare measures. Approximately 5% of the housing stock comprises government quarters. Table 7 shows that nearly 25% of the households are renters, and a large proportion of them have an aspiration to move toward ownership provided affordable housing as well as housing finance are made available.

Table 7: Conventional Households by Type of Ownership of Housing Unit

	Type of Ownership						
	Total	Owner	Renter	Provided Free (individually)	Government Quarters	Private Company Quarters	Others
North Yangon	566,167	344,903	156,717	15,620	30,483	9,924	8,520
East Yangon	486,790	271,801	154,948	22,849	20,597	6,244	10,351
South Yangon	339,205	293,928	26,768	7,831	6,887	1,847	1,944
West Yangon	190,782	110,146	49,420	7,556	19,366	2,273	2,021
Total Yangon Region	1,582,944	1,020,778	387,853	53,856	77,333	20,288	22,836

Source: Government of Myanmar. *The 2014 Myanmar Population and Housing Census (Yangon Region)*. 2014. Nay Pyi Taw.

The data and findings from the 2014 Census have been used to prepare a Thematic Report on Housing Conditions and Household Amenities published in August 2017.³ The report captures the overall housing situation across all regions and states in Myanmar by taking into account various dimensions such as (i) household characteristics, including household size and structure; (ii) tenure conditions and dwelling types; (iii) type of building materials based on durability; (iv) household amenities and assets (water, sanitation, energy, and movable assets); and (v) housing adequacy and quality.

The report also developed a consolidated housing quality index, which takes into account the (i) structural adequacy of building materials (used for floor, wall, and roofing) signifying the construction quality; and (ii) service quality, which signifies the household amenities such as source of drinking water, energy and lighting, cooking fuel, and type of toilet. The responses to the census questions for the variables under (i) and (ii) were assigned scores that were consolidated for every household. The consolidated scores were aggregated and ranked from ranked from 1 to 5, with rank 1 denoting the highest comparative level of quality and rank 5 the lowest. Table 8 shows the rank-wise percentage distribution of the housing stock in the Yangon Region in comparison with Union-total and Union-urban.

Table 8: Rank-wise Distribution of Housing Stock in the Yangon Region and Union (%)

Rank # (consolidated housing quality index)	Yangon Region	Union (Total)	Union (Urban)
Rank 1	37.1	10.9	32.3
Rank 2	29.5	20.6	41.4
Rank 3	19.8	42.3	21.0
Ranks 4 / 5	13.6	26.2	5.3

Source: Government of Myanmar, Department of Population. 2017. *Thematic Report on Housing Conditions and Housing Amenities*. Nay Pyi Taw. https://myanmar.unfpa.org/sites/default/files/pub-pdf/41_Housing%20and%20Household%20Amenities.pdf

It can be reasonably assumed that most of the housing units falling into ranks 4 and 5 are likely in a dilapidated condition and would require replacement or reconstruction in the near future. Similarly, the housing units assigned rank 3 will need significant upgrade and/or retrofitting. If all such housing units are considered to be contributing to the housing shortage in the Yangon Region, the resulting number will be estimated to be around 33% of the existing stock of 1.58 million, i.e., 0.52 million units.

Therefore, the calculation of total housing shortage would have to be based on the following contributing factors:

- (i) quality of current housing stock (need for replacement and retrofitting);

³ Government of Myanmar, Department of Population. 2017. *Thematic Report on Housing Conditions and Housing Amenities*. Nay Pyi Taw. https://myanmar.unfpa.org/sites/default/files/pub-pdf/41_Housing%20and%20Household%20Amenities.pdf

- (ii) tenure and ownership (demand from renters and also possibly from owners, in case of title quality issues and limited tenure [leasehold versus freehold]);
- (iii) household size and over-crowdedness (new household formation);
- (iv) urbanization and internal migration (need for new rental or ownership housing);
- (v) expansion of informal settlements (rehabilitation of slums and informal settlements); and
- (vi) homelessness (this is currently estimated at 2.16% of Yangon's total population, or around 150,000 people).

The aggregate housing need (or shortage) in the Yangon Region arising from all of these factors is estimated at 1.3 million units by the year 2030 (detailed breakdown is provided in Table 14). To meet the present and future demand for affordable housing, the public and private sectors need to augment their capacity to deliver an average of 100,000 housing units per year over the next 12 years.

B. Housing Affordability by Income Deciles

The measure of affordability for housing is based on a household's capacity to spend toward ownership or rental housing as a share of their total household expenditure. The commonly acceptable level of affordability is when households are able to allocate 30%–40% of their gross annual income toward their spending on housing. Sufficient residuals are required to cover consumption expenditure such as food, education, health care, and other indispensable goods. Therefore, to determine the current purchasing power or affordability of households in the Yangon Region, the data available on household level income and expenditure need to be carefully examined. This may require certain assumptions to be made to statistically arrive at the average income levels across deciles.

From a lender's perspective, overall housing affordability depends upon:

- (i) household expenditure and consumption pattern;
- (ii) income level and income type (fixed/irregular/seasonal);
- (iii) employment segment (formal/informal/self-employed);
- (iv) household debt (amount, cost, and tenor, long term, or short term);
- (v) land ownership and ownership of movable assets; and
- (vi) age of chief income-earner and number of years of stable work life.

Since 2010, data on household expenditure and income situation have become available through the Integrated Household and Living Conditions Survey in Myanmar (2010) as well as through surveys carried out by the International Labour Organization in close cooperation with Myanmar authorities. As per the Integrated Household and Living Conditions Survey 2010, the average consumption expenditure in Myanmar (per capita, per annum) by income deciles is in Table 9.

In addition, the Japan International Cooperation Agency (JICA) Strategic Urban Development Plan of the Greater Yangon Area provides data on incomes of households residing in the Greater Yangon Area. This is based on a survey of 10,000 households, a representative sample with varying monthly incomes, providing an approximate income distribution as of 2012 (Table 10).

The figures from Table 9 and Table 10 have been suitably adjusted for inflation and extrapolated to the year 2018, and from the resulting per capita household expenditures, the annual household incomes have been derived for each income decile as shown in Table 11. Certain assumptions (including a factor for monthly savings to household income) have been applied to ensure that the resulting maximum household incomes are aligned

Table 9: Average Consumption Expenditure by Income Deciles, 2010

Income Decile	Per Capita (per annum) (MK)	Food Share (%)
1st decile	281,494	74.1
2nd decile	348,782	73.4
3rd decile	391,039	73.3
4th decile	429,125	71.7
5th decile	464,807	71.6
6th decile	504,432	70.5
7th decile	550,423	70.4
8th decile	608,931	69.3
9th decile	698,597	66.6
10th decile	983,550	56.8

MK = Myanmar kyat

Source: Government of Myanmar, Planning Department. 2010. *Integrated Household and Living Conditions Survey in Myanmar (Poverty Profile)*. Nay Pyi Taw.

Table 10: Approximate Income Distribution of Households in the Yangon Region, 2012

Monthly Income Range (MK)	No. of Households	% of Households
< 25,000	10	0.10
25,000–50,000	144	1.48
50,001–75,000	404	4.14
75,001–100,000	1,144	11.72
100,001–150,000	2,106	21.58
150,001–200,000	1,904	19.51
200,001–300,000	1,865	19.11
300,001–400,000	856	8.77
400,001–500,000	500	5.12
500,001–600,000	250	2.56
600,001–700,000	115	1.18
700,001–800,000	87	0.89
800,001–900,000	48	0.49
900,001–1,000,000	115	1.18
>1,000,000	212	2.17
Total	9,760	100.00

MK = Myanmar kyat.

Source: Japan International Cooperation Agency (JICA). 2012. *The Project for the Strategic Urban Development Plan of the Greater Yangon Final Report I*. pp. 2–179. https://libopac.jica.go.jp/images/report/12122529_02.pdf.

Table 11: Decile-Wise Average Annual Household Incomes, 2018

Income Decile	Average Annual Income
1st decile	2,463,072
2nd decile	3,146,229
3rd decile	3,639,991
4th decile	4,266,868
5th decile	5,083,827
6th decile	6,305,400
7th decile	8,027,002
8th decile	10,656,293
9th decile	15,281,809
9.5th decile	21,026,838
10th decile	28,686,875

Source: Consultant's estimates derived using certain assumptions.

with the general income distribution findings of most recent affordable housing applicants of the Department of Urban and Housing Development (DUHD) and observations made by some of the primary lenders, including the Construction, Housing and Infrastructure Development Bank (CHID Bank).

Table 11 includes an equal split of the 10th decile, i.e., the top 10% households have been segregated into 90.01%–95.00% (referred to as 9.5th decile) and 95.01%–100.00% (referred to as 10th decile). This has been done keeping in mind the wide income disparity for the top 10% of the Yangon Region population as can be observed from JICA's survey.

From the above annual household incomes (average), the household level affordability for availing a housing loan can be further derived based on certain assumptions in respect of the borrowing capacity for each decile. The assumptions have been made, keeping in mind the typical market terms that the primary lenders are able to offer at present. However, the assumed terms do not draw a distinction between the typical products available for different income levels, e.g., housing microfinance (HMF) (group and individual), and micro-mortgage products for households in lower-income deciles (Table 12).

Table 12 presents the decile-wise housing affordability on the basis of the actual repayment capacity at the household level, i.e., the monthly surplus or disposable income being used toward housing loan repayment by taking into account a varying debt-to-income ratio for each income decile. The first two deciles have not been considered in this calculation as the household incomes are too low for mainstream primary lenders. However, microfinance lenders may be able to offer housing loans to consumers in the lower-income deciles.

The above income and affordability analysis has been derived using 2010 countrywide survey data. Several assumptions have been applied in the absence of any recent income and expenditure data, reflecting the average household level economic situation specific to the Yangon Region. As such, this analysis may be used in a limited way as a guidance for

Table 12: Decile-Wise Affordability for a Housing Loan at Market Terms, 2018
(MK)

Income Decile	Monthly Household Income (average)	Tenor (months)	Interest Rate (per annum)	Installment to Income Ratio	Monthly Installment	Loan Eligibility
1st	205,256					
2nd	262,186					
3rd	303,333	180	13%	21%	63,700	5,034,596
4th	355,572	180	13%	24%	85,337	6,744,745
5th	423,652	180	13%	27%	114,386	9,040,649
6th	525,450	180	13%	30%	157,635	12,458,880
7th	668,917	180	13%	33%	220,743	17,446,665
8th	888,024	240	13%	36%	319,689	27,287,078
9th	1,273,484	240	13%	42%	534,863	45,653,330
9.5th	1,752,236	240	13%	46%	806,029	68,798,692
10th	2,390,573	240	13%	50%	1,195,286	102,023,834

MK = Myanmar kyat.

Source: Consultant's estimates derived using certain assumptions.

YRG's policy formulation, but it would not be prudent to apply these derived income and affordability figures for the design of any specific housing schemes, eligibility norms for subsidy measures, or for defining any regulatory criteria.

C. Demand and Supply Gap for Affordable Housing

Aggregate Housing Demand in the Yangon Region

As described in the previous section, housing shortages are based on several contributing factors. By applying the consolidated housing quality index, the total housing need arising due to the quality of current housing stock has been already estimated at 520,000 units.

Housing Needs from Demographic Trends and Migration

The recent migration in the Yangon Region can be partly attributed to economic reforms in Myanmar, which led to sharply increased inflows of foreign direct investment and establishment of industries and businesses, thereby resulting in an increase in labor demand. Another driver for migration to Yangon has been the decline in employment opportunities for the landless residents of Ayeyarwady Region, in part also caused by the devastation brought about by Cyclone Nargis in 2008. Generally, the housing needs arising from internal migration tend to overlap with the housing needs generated through demographic trends leading to new household formation. As per the estimates

quoted in JICA's Report on Housing Finance Development Project (2017) (based on analysis of population data from the United Nations World Urbanization Prospects, 2014), the urban population in Myanmar stands to increase from 18.02 million in 2014 to 27.16 million in 2030. This increase of 9.13 million will translate into a need for around 2.08 million housing units by 2030, in addition to any existing shortage as well as old and decrepit housing stocks that need to be replaced. The bulk of the housing need, due to increasing population, will be in Yangon and is estimated at 593,000 units by 2030 as explained in Table 13.

Table 13: Present and Future Urban Population of Major Cities in Myanmar

Name of Urban Center	Urban Population 2014	Urban Population 2030	Necessary Housing Units
Yangon	5,746,000	8,351,000	593,000
Mandalay	1,319,000	1,920,000	137,000
Nay Pyi Taw	333,000	502,000	38,000
Other urban centers	10,625,000	16,387,000	1,313,000
Total Urban Population	18,023,000	27,160,000	2,081,000

Source: JICA. 2018. *Myanmar Data Collection Survey on Housing Finance System Report*. p. 31. http://open_jicareport.jica.go.jp/pdf/12305769.pdf.

Expansion of Informal Settlements

UN-Habitat, Myanmar recently conducted a comprehensive research on the size and typology of informal settlements in urban and peri-urban Yangon. The study investigated housing and living conditions of the poorest segments of the population.⁴ Its findings provide a basis for regularizing and upgrading the informal settlements through incremental sites-and-services schemes. The study identified the following typology of informal settlements in Yangon:

- (i) **Roadside settlements.** Settlements where houses are built along the roadside or on pavements.
- (ii) **River or reek-side settlement.** Houses are built on unoccupied land along rivers and creeks.
- (iii) **Peri-urban land settlements.** Settlements where houses are built on agricultural land.
- (iv) **Resettlement area subdivisions.** Unauthorized subdivisions on resettlement sites from the 1980s.
- (v) **Village tract subdivisions.** Settlements where houses are built on land that is categorized as rural, but has been recently incorporated into the authority of an urban area local government.
- (vi) **Inner-urban infill.** Small, often opportunistic settlements built on or adjacent to developed areas, which are characterized by clustering around areas of employment generation.

⁴ UN-Habitat. Mapping Yangon: The Untapped Communities (Phase I). <http://unhabitat.org.mm/projects/active-projects/mapping-yangon-the-untapped-communities/>.

- (vii) **Slum settlements.** Settlements that are built on illegally occupied public or private land such as vacant land, park land, or underdeveloped sites.

In the latest survey conducted by the General Administration Department (2017), the total area occupied by these informal settlements in Yangon is over 2,000 acres with a population of approximately 475,000 (155,000 households). With the use of remote sensing, it was found that from 2010 to 2016, the number of informal settlements in peri-urban Yangon has increased significantly. According to research by UN-Habitat, Myanmar, as many as 270 out of 423 informal settlements identified were formed from January 2010 to July 2016.⁵ Based on the survey conducted by the General Administration Department, the households residing in Yangon prior to a certain cutoff date have been issued smart cards, validating their domicile status and possibly making them eligible for alternate housing.

D. Estimating Aggregate Housing Need

Table 14 consolidates the abovementioned findings to determine the total demand for housing, with the assumption that much of the current housing needs will convert into demand by the year 2030. The total estimated demand of 1.30 million units translates into an annual requirement of over 100,000 affordable and low-cost housing units for the next 10–12 years.

Table 14: Aggregate Housing Demand for the Yangon Region
(number of units)

	Demand	Source
Quality of housing stock, tenure, and ownership	520,000	2014 Census
Demographic trends, urbanization, and migration (until 2030)	593,000	UN World Urbanization Prospects (2014)
Expansion of informal settlements (current population of 475,000)	155,000	DUHD
Homelessness (currently estimated at 2.16% of Yangon population)	34,000	2014 Census
Yangon Region total housing demand for 2018–2030	1,302,000	Estimate

DUHD = Department of Urban and Housing Development, UN = United Nations.

Source: Asian Development Bank.

Supply of Affordable Housing, Condominiums, and Apartments

The existing housing supply in the Yangon Region can be primarily classified into:

- (i) state-provided affordable housing and government quarters (mainly DUHD, Ministry of Construction); and
- (ii) private sector-led supply of condominiums and landed houses (gated community projects).

⁵ UN-Habitat. The Republic of the Union of Myanmar National Housing Policy White Paper. p. 43. <http://unhabitat.org.mm/wp-content/uploads/2018/04/NATIONAL-HOUSING-POLICY-WHITE-PAPER.pdf>.

In response to the growing challenge of meeting the housing shortage and imminent demand, the Government of Myanmar has put up a million homes plan, which aims to develop 1 million new housing units by 2030. As part of the 1 million housing plan, DUHD has formulated a plan to supply 20% of the total volume, of which 90% will be low-cost housing units (targeting low-income households) and 10% will be affordable housing units (targeting lower middle-income households). The price and unit size of housing provided by DUHD is summarized in Table 15.

Table 15: Size and Unit Price for Different Categories of the Department of Urban and Housing Development Housing

Housing Type Built by DUHD	Size per Housing Unit	Unit Price	Income Eligibility (gross household income per month)
Low-cost house	From 300 to 800 square feet	Up to MK27 million	< MK500,000
Affordable house income eligibility	From 800 to 1,200 square feet	Up to MK64 million	MK0.5 million–MK1.2 million

DUHD = Department of Urban and Housing Development, MK = Myanmar kyat.

Source: Government of Myanmar, Department of Urban and Housing Development.

For the DUHD to provide low-cost housing at a low price point, conditions are applied, including:

- (i) the land on which these housing units are built is public land, and kept so after the sale;
- (ii) The DUHD, as a government organization, does not make any profit and focuses only on cost recovery; and
- (iii) The DUHD has a separate government budget for on-site infrastructure development and connections such as road, water, and electricity, the cost of which is not to be added to the sales price.

According to the DUHD, the cost of infrastructure amounts to approximately 30% of the sales price of low-cost housing units, and this is offered as an implicit subsidy to the low-income purchasers. Therefore, the supply of low-cost housing cannot be easily taken up by the private sector developers as, unlike the DUHD, they rarely have ownership of large land parcels with a low historical cost, and they are unable to subsidize the infrastructure cost and operate without making profits. As such, supply of low-cost housing and affordable housing units in Myanmar almost entirely depends on the DUHD's capacity.

All the low-cost and affordable housing units developed by the DUHD have to obtain building permits from Yangon City Development Committee (YCDC). Table 16 indicates the annual supply from the DUHD during 2010–2016 in respect of completed buildings and units in the Yangon Region and other towns and cities outside the Yangon Region.

Cumulatively, the DUHD has developed less than 60,000 units to date (across Myanmar). Based on its current capacity, the DUHD is able to construct and deliver only about

Table 16: Low-Cost and Affordable Housing Projects Completed by the Department of Urban and Housing Development, 2010–2016

Period	Yangon Region		Other Towns		Construction Cost (MK million)	
	Buildings	Family Units	Buildings	Family Units	Total Cost	Cost per Unit
2010–2011	27	336	6	46	6,075	16
2011–2012	266	1,223	12	130	30,254	22
2012–2013	231	1,204	...	...	43,282	36
2013–2014	186	2,380	77	738	69,927	22
2014–2015	218	5,678	64	1,248	131,442	19
2015–2016	249	6,993	69	2,220	131,336	14
Cumulative (till 2016)	4,915	48,750	1,608	8,449	504,3345	...

... = data not available, MK = Myanmar kyat.

Sources: Myanmar Statistical Yearbook, 2016; and Department of Urban and Housing Development.

10,000 units per year. The construction cost per unit is seen to vary between MK14 million to MK36 million. However, this could be on account of unit sizes, varying building design, density (i.e., low-rise versus high-rise), and specifications relating to the type of building material used.

Although Yangon has the usual mix of small and medium-sized developers as well as very large developers, the combined capacity of the private sector developers is not very significant. The bigger and more affluent developers have joint venture arrangements with international developers, and they are able to mobilize dollar-denominated funding for their upmarket and premium projects.

Table 17 provides data on the building activities undertaken by private developers by types of building and number of applications for building permits submitted and approved every year and completion status. These buildings could include commercial, office, retail, serviced apartments and hospitality projects besides residential projects, and individual home construction (landed houses or bungalows).

More recent data pertaining to building permits granted by YCDC for residential and nonresidential constructions in Yangon during the last decade (2006–2017) are presented in Table 18. Building permits are segregated into low-rise and high-rise buildings (six stories and above).

According to the recent quarterly reports issued by Colliers International,⁶ the total supply of condominiums in Yangon for the year 2017 is expected to be slightly in excess of 7,000 units, whereas the number of landed housing units across the upcoming gated residential projects is likely less than 1,000 units. On average, the annual supply from

⁶ Colliers International. 2017. *Quarterly Review Yangon | Condominium, Q3 2017*. <https://www.colliers.com/-/media/files/marketresearch/apac/myanmar/yangon%20condo%20report%20q3%202017.pdf?la=en-GB>.

Table 17: Private Sector Building Activities in the Yangon Region, 2012–2015

Type of Building	Application and Completion Status	2012			2013			2014			2015		
		New Building	Extension / Repair		New Building	Extension / Repair		New Building	Extension / Repair		New Building	Extension / Repair	
Masonry	Application submitted	2,034	34		4,460	20		5,022	30		4,032	65	
	Application approved	2,154	19		4,357	18		5,157	35		4,032	65	
	Completed construction	660	...		...	...		1,089	...		1,974	...	
Brick nogging	Application submitted	139	24		50	15		298	20		590	35	
	Application approved	42	5		45	13		305	25		590	35	
	Completed construction	2	...		...	...		...	...		...	...
Wooden	Application submitted	9	...		5	...		5	...		10	...	
	Application approved	3	...		5	...		8	...		10	...	
	Completed construction	...	...		...	...		...	...		...	...
Others	Application submitted	140	...		30	...		100	...		250	...	
	Application approved	116	...		25	...		100	...		250	...	
	Completed construction	4	...		...	...		...	...		...	...
Total	Application submitted	2,322	58		4,545	35		5,425	50		4,882	100	
	Application approved	2,315	24		4,432	31		5,570	60		4,882	100	
	Completed construction	666	...		...	...		1,089	...		1,974	...	

... = data not available.

Sources: Myanmar Statistical Yearbook, 2016; and Yangon City Development Committee.

Table 18: Number of Building Permits Issued by the Yangon City Development Committee in Yangon City

Year	Six Stories and Above	Less than Six Stories	Total
2006	764	3,710	4,474
2007	734	2,496	3,230
2008	726	1,882	2,608
2009	588	1,446	2,034
2010	455	1,687	2,142
2011	479	1,504	1,983
2012	293	2,026	2,319
2013	748	3,548	4,296
2014	3,070	4,030	7,100
2015	3,384	3,240	6,624
2016	1,381	2,322	3,703
2017 (June)	330	1,574	1,904
Total	12,952	29,465	42,417

Source: Yangon City Development Committee, Engineering Department.

private developers has been in the range of 7,000–9,000 units, and none of this supply would constitute affordable or low-cost housing. According to DUHD, around 15%–20% of permits issued comes up as real supply in any year.

In conclusion, the total supply of all housing types, from both public and private sectors, is less than 20,000 units per annum. The supply of affordable and low-cost housing units is woefully short of the demand, possibly at less than 10% of demand. On the other hand, there is an excessive supply of premium housing, including condominiums and landed houses in upmarket residential projects, which is evidenced by the weak sales performance, heavy discounts, and general slowdown in new project launches. This skewed supply side situation, coupled with the difficulty in accessing long-term housing finance, excludes a vast majority of the working population in the Yangon Region from the formal housing market.

E. Viability and Effectiveness of Current Housing Measures

The thrust of the government-led housing measures has been to provide access to affordable housing to the target segment comprising lower middle-income and low-income groups, urban poor, and government staff. However, this effort is restricted by the capacity of the government and its principal implementing arm, the DUHD, to supply adequate numbers of housing units.

A significant portion of the government's resources gets consumed in providing accommodation for civil servants. Large-scale production of middle-income housing has only taken place in the capital city of Nay Pyi Taw where the government built more than

60,000 apartments from 2003 to 2011. Other housing interventions have been in sites and services, upgrading of slum and informal settlements, and supply of affordable and low-cost housing (apartments) by the DUHD. While some 250,000 serviced plots have been allocated (for self-construction) to low-income households by the DUHD over the past 2 decades, in recent years, an average of less than 2,000 units are being built each year. Past efforts in the areas of rental housing, other welfare housing measures, and government-funded housing schemes have been discontinued.

Since governments generally cannot afford to fully subsidize the housing needs of a vast majority of its urban population, household savings and adequate housing finance must complement efficient subsidies for the middle-income and lower middle-income households. This can help free up limited budget resources to develop subsidized rental housing, low-cost apartments for ownership, and site-and-services schemes for the low-income households.

In November 2014, the Ministry of Construction set up a revolving fund to support the construction of low-cost housing units. This fund was expected to bridge the 2–3-year period from start of construction to completion of sales, thus the fund would act as a project financing mechanism. The government released MK100 billion to this revolving fund, which enhanced the DUHD's capacity to undertake more housing projects. The DUHD has three main funding sources:

- (i) the revolving fund (which amounts to MK100 billion);
- (ii) government budget allocation, around MK60 billion every year, which is the total housing budget for the Union, states, and regions and is approximately 0.5% of the annual Union budget; and
- (iii) project loan from CHID Bank (this stood at MK82 billion in 2016–2017).

With these funding mechanisms in place, the DUHD has been able to supply a little over 9,200 units in the year 2016, which is an increase of around 33% over the previous year, but still nowhere close to the actual existing and emerging demand. The leverage effect of the revolving fund needs to be analyzed, particularly the cash flows from the sale of housing units that would replenish the fund, so as to understand its potential to increase the annual housing supply from the DUHD.

The housing shortage and emerging need for affordable housing in the Yangon Region is far more acute than the housing situation in the rest of the country. It is evident that the current housing measures are inadequate. The combined supply from the public and private sectors is unable to clear the backlog in housing and cope with the rapid increase in the urban population. The majority of housing is being built by the informal private sector. Therefore, the government policy should focus on how best it can facilitate improvements in this source of housing.

II. Analysis of the Housing Finance Market

A. Macroeconomic Context to Housing Finance

Starting in 2011, Myanmar has launched major political and economic reforms aimed at increasing openness, empowerment, and inclusion. The country also began removing constraints on commerce, trade, and private enterprise that long held back the economy. However, major obstacles still remain, including an underdeveloped finance sector, infrastructure gaps, and limited capacities to manage economic shocks.

Although significant reforms have been introduced in recent years, the Myanmar economy remains centered on agriculture and extractive industries. With a population of 52.89 million, the country has a per capita gross domestic product (GDP) of MK1.55 million.⁷ In 2010, the rate of poverty was estimated to be between 25.6% and 37.5%, concentrated particularly in rural and conflict-affected areas. Agriculture is of vital importance to the overall economy, accounting for 38% of GDP, 23% of exports, and employing some 60% of the national workforce. On top of agricultural exports, the economy has been supported in recent years by increased demand for locally made garments and light manufactured goods. Rising domestic demand has also helped boost growth. According to the Asian Development Bank, Myanmar's economy grew by 6.8% in 2017, and is forecasted to grow by 6.6% in 2018 and 7% in 2019.⁸

The average inflation rate is a concern. Rising levels of demand have fed into higher consumer prices with recorded inflation of 6.8%–7.0% for 2016 and 2017, and a prediction of 7.5% for 2018. The inflation forecast remains significantly higher than the Southeast Asian regional average of around 3.1% for 2017 and 2018. Despite some concerns over the pace of economic reforms, recent developments have improved Myanmar's investment outlook. The new Companies Law, which took effect on 1 August 2018, allows foreign investors to hold up to 35% of shares in a domestic firm, while the company will still be designated as a local operator. Recent measures, such as the reduction of stamp duty when registering property and the adoption of regulations allowing for the establishment of credit bureaus, have improved the investment climate, which may encourage stronger foreign direct investment inflows in 2018–2019, and help broaden the base of investment into more sectors of the economy.

⁷ The World Bank. Myanmar country data. <https://data.worldbank.org/country/myanmar>.

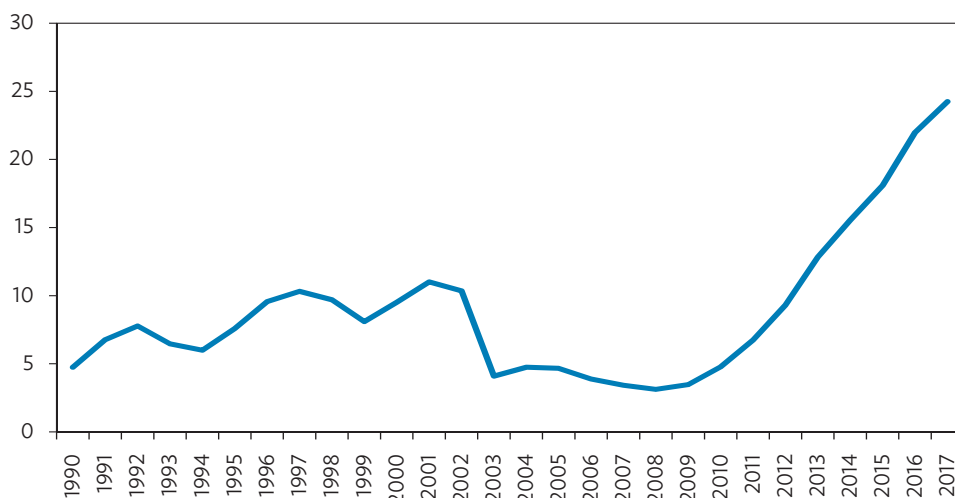
⁸ Asian Development Bank. 2018. *Asian Development Outlook 2018 Update: Maintaining Stability Amid Heightened Uncertainty*. Manila.

B. Overview of the Finance Sector

Myanmar has a small and underdeveloped financial system that does not effectively meet the demands of the country's growing economy. Although financial institutions in Myanmar have grown rapidly over the past few years owing to the huge unmet demand for credit, large segments of the population remain underserved in both urban and rural areas as well as private sector firms.

Myanmar has a low level of penetration of financial services in the world with credit-to-GDP ratio of approximately 23.5%. The formal financial system consists of 24 closely held private commercial banks; 4 fully state-owned banks; and around 200 licensed microfinance institutions (MFIs). There are 43 foreign bank representative offices, and 9 foreign banks received licenses in 2015 to operate as commercial banks. There is only one state-owned insurance company in Myanmar. Private insurance companies have been given conditional approval by the Myanmar Insurance Business Supervisory Board to begin operations. The banking sector dominates the finance sector and accounts for most of the finance sector assets held outside the central bank. State-owned banks are dominant in the banking sector, and the sector operates with limited competition. The banking sector has been growing rapidly since 2009, but started from a low base. The role of commercial banks in providing credit to the private sector has increased significantly from less than 4% in 2009 to more than 24% in 2017 as showed in Figure 2.

Figure 2: Domestic Credit to Private Sector by Banks
(% of gross domestic product)



Source: World Bank. 2017. Myanmar - Global Financial Inclusion (Global Findex) Database 2017. <https://datacatalog.worldbank.org/dataset/myanmar-global-financial-inclusion-global-findex-database-2017> (accessed 11 March 2019).

The supervisory structure for the finance sector has evolved significantly in recent years. Currently, the Ministry of Planning and Finance (MOPF) is mandated to regulate insurance

and MFIs, while the Central Bank of Myanmar (CBM) is responsible for supervising the overall banking system and ensuring financial stability. Meanwhile, the Securities and Exchange Commission of Myanmar, set up in 2015, is mandated to regulate the Yangon Stock Exchange, to supervise and develop Myanmar's capital market. However, these regulatory bodies require additional capacity building of staff with regard to analytical tools, technology, and enforcement powers to carry out their roles effectively.

Access to basic financial services in Myanmar is extremely low. As of 2017, around 23% of adults had access to an account in financial institutions, compared with more than 80% in Thailand and 90% in Malaysia.⁹ Commercial banks offer only a limited range of products. Other than basic savings and deposit accounts and short-term loans, the supply of financial products remains restricted. Electronic payment products and services and consumer credit, including mortgages, are slowly emerging and still not widely available.

C. Regulatory Environment and Impact of Taxation Policies

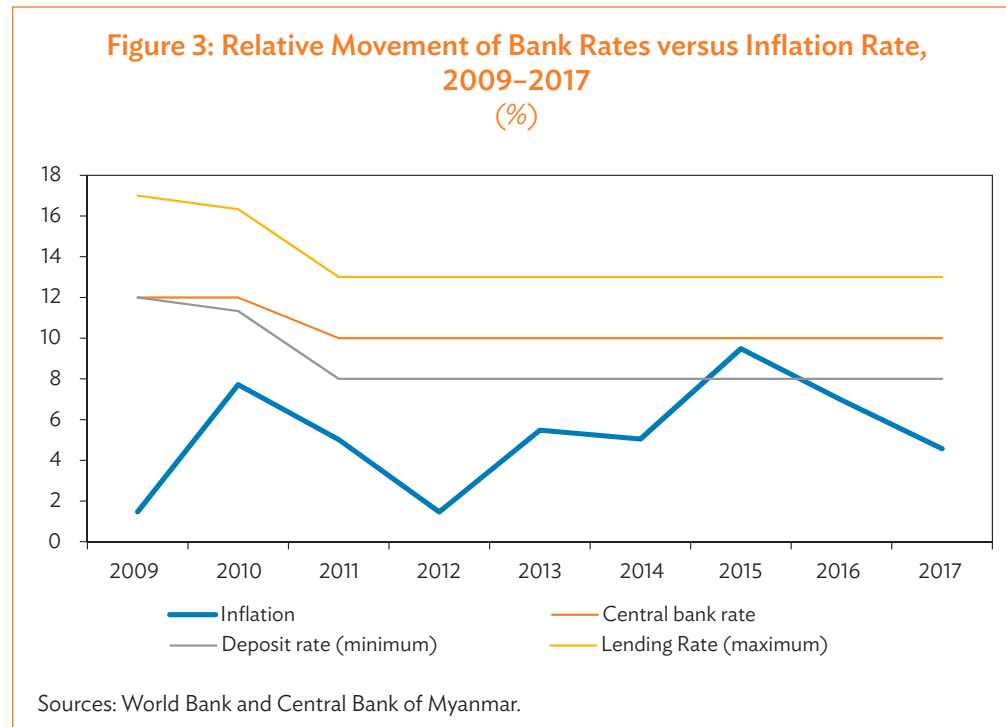
Myanmar's legal and regulatory framework for the financial system, especially the banking system, imposes strict restrictions for domestic banks and remains restrictive for foreign-owned institutions, which are only allowed to offer a limited range of operations with foreign corporate clients, including joint ventures.

The CBM has no distinct rules and regulations to govern residential mortgages and housing finance. Instead, the CBM treats these loans in accordance with the regulations for short-term consumer lending (tenor of up to 1 year) and asset finance. Recently, the CBM relaxed the maximum tenor and allow commercial banks to allocate up to 5% of total loan portfolio to loans with more than 5 years to maturity. The hire-purchase variant of mortgage lending is still widely practiced, though some banks have recently commenced long-term housing finance offering 10-year to 15-year repayment terms for housing loans with prior approval from the CBM. Borrowers opting for a higher purchase mortgage product have to renew the loan contract every year, and have to pay fees of up to 1% toward the renewal. These borrowers make a large down payment of 30%–50%, service only the interest cost during the tenor, and are then required to make a bullet repayment of the principal (or several part prepayments) to eventually close the loan. Further, the restrictions on interest rates (both for lending and deposits) do not allow the primary lenders to innovate or customize their product offering for housing loans. The typical higher down payment requirement and non-amortizing repayment structure of the hire-purchase product also impacts the affordability of borrowers. Such terms are generally accessible only by the upper-income segments.

Currently, interest rates are administratively set: maximum lending rates are at 13% and minimum deposit rate is 8%. The CBM's policy rates and bank rates do not factor the changes in the rate of inflation as shown in Figure 3. Long-term housing finance has become

⁹ World Bank. 2017. Myanmar - Global Financial Inclusion (Global Findex) Database 2017. <https://datacatalog.worldbank.org/dataset/myanmar-global-financial-inclusion-global-findex-database-2017> (accessed 11 March 2019).

available only recently through Construction, Housing and Infrastructure Development Bank (CHID Bank) and a couple of private commercial banks, and this comprises only a miniscule proportion of the total credit. At most banks, only higher-income households qualify for housing loans, since house prices for new urban homes (such as condominiums and landed houses supplied by the formal sector) that can serve as an acceptable collateral for the loan are very high.



Mortgage loans offered by most banks are restricted by the prevailing CBM regulations, resulting in the common use of one of the riskiest loan products—the interest-only, non-amortizing loan—that makes the borrower liable to pay back the full loan amount after a short period. Hire-purchase agreements are another type of loan that banks issue, where the rental fee is included in the interest calculation and the developer remains the owner of the property until the loan is paid. A hire purchase loan contract can be issued for a maximum of 36 months.

The taxation policies of the government also have not been favorable for the growth of the real estate and housing sector, particularly the secondary market. According to the recently approved Union Tax Law, 2018, the law specifies tax rates and identifies the types of taxes earmarked for collection, including taxes levied on income from rental fees and the lease of land, buildings, and apartments. In particular, 10% income tax is assessed on income from rental fees and lease fees of land, buildings, and apartments. Under Section 25 of the Union Tax Law, the income escaped from assessment has to be paid to the Internal Revenue Department at the progressive rates from 15% to 30%. With respect to the real estate market and housing sector, the income that escaped assessment will be calculated based on the difference between the actual transaction value (i.e., market value of land or

property) and the amount evidenced through buyer's income tax records confirming the buyer's known sources of income. This tax makes the secondary sale and purchase of land and houses quite onerous. Therefore, the transacting parties arrive at quasi-legal solutions, such as power of attorney to avoid paying this tax.

Other laws regulate the fees associated with the registration of land and building title changes, as well as stamp duty fees and Yangon City Development Committee fees. The details of these processes and the fees concerned change from time to time and depend on the particular aspects of each case. Table 19 outlines the general arrangements in this regard.

Table 19: Taxes and Fees Associated with the Registration of Land and Building Title Changes

SN	Process	Time Frame	Tax, Stamp Duty, and Fees
1	Apply for the certified map with purpose at the Yangon City Development Committee (need to advertise in the newspaper and survey the field).	~3 months	Approximately MK30,000–MK50,000 for service fees and advertising fees
2	Apply to the assessor together with certified map, sale and purchase agreement, and other related documents.	~1 month	
3	Pay the tax to the Internal Revenue Department through the Myanmar Economic Bank.		Stamp duty ~4% (s-2 and s-3 of the Stamp Duty Amendment Law, 2017) <ul style="list-style-type: none"> Income that escaped assessment (s-25 of Union Tax Law, 2018) 15% (MK1–MK30,000,000) 20% (MK30,000,001–MK100,000,000) 30% (MK100,000,001 and above)
4	Register the sale and purchase agreement at the Registration of Deeds Office	~1 month	Up to MK50,000 <ul style="list-style-type: none"> MK10 for first MK1,000 (1%) MK4 for remaining each MK1,000 (0.4%) Above MK50,000 <ul style="list-style-type: none"> MK2 for each MK1,000 (0.2 %)
5	Apply the name change at the Yangon City Development Committee together with required documents (need to advertise in the newspaper).	~1 month or ~2 months (depending on situation)	MK30,000–MK50,000 for service fees based on area

MK = Myanmar kyat.

Source: Authors' compilation

In summary, housing finance is restricted and only available for high-income households, not just because of a mismatch of incomes and house prices, but also because of an underdeveloped and restrictive financial system that limits the use of housing finance to expand housing affordability.

To expand the formal housing production system in urban Myanmar, the development of a longer-term mortgage-based finance system is critical. Lengthening the loan term for mortgages will significantly increase affordability. Long-term lending will begin to develop once deposit terms will be allowed to lengthen, deposit insurance is established, and other longer-term sources of funding for banks become available in the domestic market and through external commercial borrowing, with proper prudential measures introduced by the CBM. Myanmar requires large-scale formal sector affordable housing development. Longer-term mortgage lending is certainly a prerequisite for opening up the market for affordable housing.

D. Primary Lenders and Structure of the Housing Finance Market

Currently, mortgage lending activity in Myanmar can only be undertaken by the banking sector, and most private commercial banks are keen to take a lead in the nascent housing finance market. As of November 2018, among the 27 private banks, the 6 largest banks command a market share (in terms of deposits) of almost 90% and the top 3 banks account for nearly 70% market share.¹⁰

Financial institutions in Myanmar can be categorized into five tiers.

Tier 1: Large private and semi-government-owned banks. Some of these have recently commenced long-term housing finance and enjoy strong brand and extensive presence through branch network. Challenges include internal capacity and systems, ability to manage product innovation and transition, and manpower and access to long-term funding.

Tier 2: State-owned enterprises banks and other private banks. These are conservative. It is likely that housing finance is not a big priority for them as of now; they may not have regulatory consent to offer long-term housing loan products; and they may be restricted to offering the hire-purchase variant with annual contract renewal.

Tier 3: CHID Bank. This is the one and only specialized lender; growing fast, but has limited impact on affordable housing finance demand.

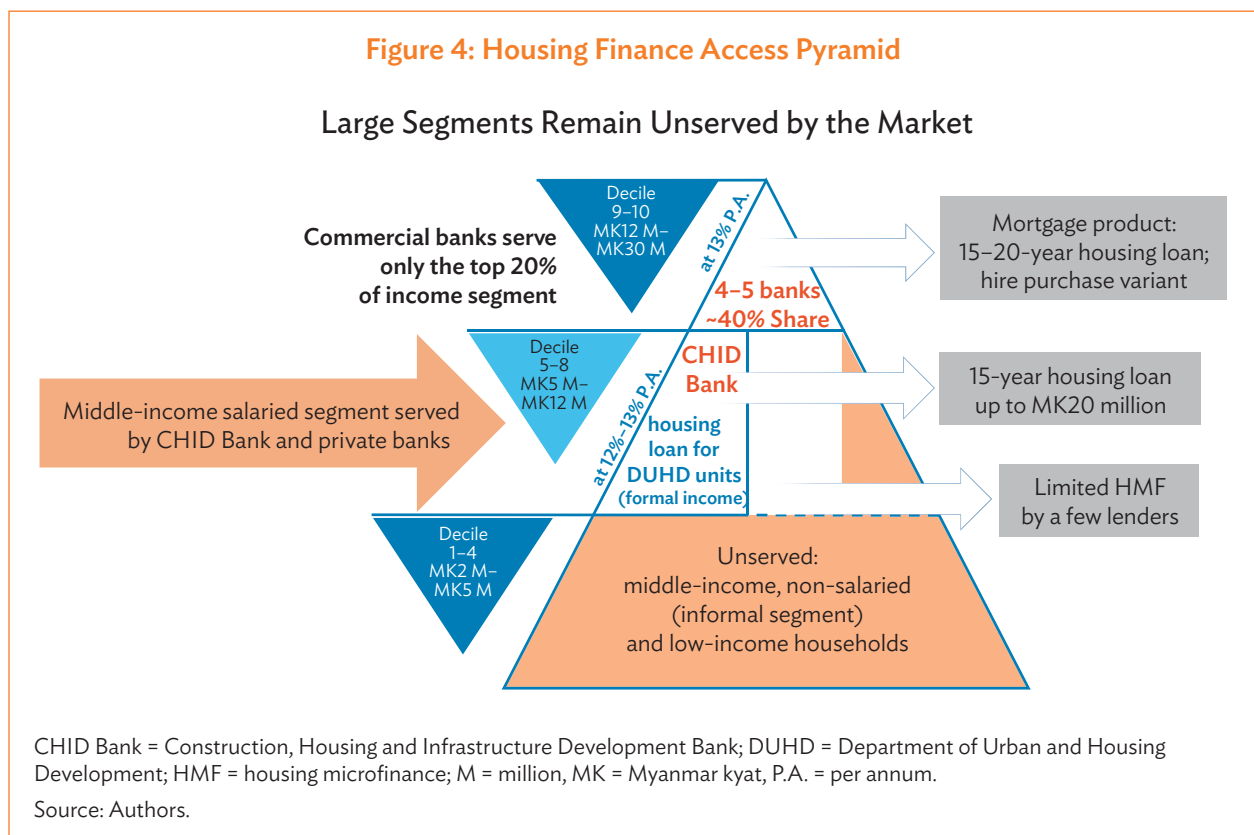
Tier 4: Finance companies. Licenses are issued to several nonbank financial institutions, but these are not yet operational and finance companies may be restricted from offering long-term housing finance products.

Tier 5: Microfinance institutions. Over 200 licensed MFIs operate in Myanmar. Some of these have extensive presence in the Yangon Region, but so far they have not diversified into housing loans.

¹⁰ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. 2018. *Myanmar's Banking Sector in Transition Current Status and Challenges Ahead*. http://www.giz-banking-report-myanmar-2018.com/epaper/Myanmar_Banking_Report_2018.pdf.

The banks and financial institutions that are active in housing finance are currently servicing only the higher income segments, while the CHID Bank is able to cater to the lower middle-income and middle-income households to a limited extent. The market comprising low-, middle-, and informal-income households is largely unserved, although MFIs, nonbank financial institutions, and private banks could potentially meet their housing finance demand subject to a conducive and supportive regulatory and funding environment.

Figure 4 presents a pyramid diagram depicting the relative access to housing finance across various income groups with different categories of lenders and the typical terms offered by them.



During the course of this study, some private commercial banks have recently introduced a long-term housing loan product. Table 20 provides a comparison of the main terms and product features offered by active major lenders in the Yangon Region.

Table 20: Comparative Summary of Housing Loan Products Offered by Banks

Product Parameters	Bank A	Bank B		Bank C		Bank D	Bank E
		Landed/ Condominium	Apartment	Dealer	Individual		
Minimum down payment (% of PV)	30%–50% depending on PV	20%	30%	30%		30%	30%
Property age (end of term)	New DUHD units	Maximum 35 years		New properties			
Minimum PV (MK)		65 million	30 million	20 million			
Repayment terms (years)	8 / 10 / 15	25	15	15		3-15	10
Interest rates (% p.a.)	12%	13%		13%		13%	13%
Application fees and charges (% of Loan)	1%	1.5%		2%+50k	3%+50k	1%–2%	1%
Dealer commission (% of PV)				1%			
Prepayment charges (% of outstanding principal)	1	3% (1–3 years)		10% (1–3 years) 1.5% after 3 years			
Default fees				3% per month (on defaulted principal)			

DUHD = Department of Urban and Housing Development, MK = Myanmar kyat, p.a. = per annum, PV = property value.

Note: The names of these five banks have been withheld to maintain confidentiality

Sources: Product information provided on banks' websites and discussion held with banks.

The terms offered by different lenders are quite distinct except for the minimum down payment, which is 30% for most banks, and the pricing of 13% per annum, which is the maximum interest rate allowed by the regulator. The market for housing finance is evolving quite rapidly, and the lenders are adapting to the growing competition and also responding to the market dynamics. However, owing to various reasons, the mortgage market is not developing in a seamless, structured manner. On the one hand, the real estate market of late has been stagnant and depressed, and the affluent customer segment, which can afford luxury housing, is getting saturated, while there is negligible supply to meet the demand for affordable housing from lower-income and middle-income segments. This slowdown in the property market has significantly strained the financial health of medium-sized and even large private developers, and some of them are facing solvency risk. On the other hand, the CBM has not prescribed any regulatory standards or prudential norms specifically for housing finance products. In the absence of any clear guidelines, the lenders are not confident about the regulator's outlook and perception toward the business opportunity in retail residential mortgages.

In effect, it appears that most private banks have approached CBM on a case-to-case basis to get their respective housing loan products approved and the regulator's "approval/no objection" is based primarily on the bank's capacity to adequately manage the asset liability mismatch risk. The bank's access to long-term resources in the form of deposits and borrowing along with its capital adequacy and liquidity, is one of the main qualifying criteria for obtaining the approval to commence retail housing finance operations. However, this is a somewhat ad hoc approach to the regulation governing housing loans as there are no defined standards or specific "do's and don'ts" for the banks. This could potentially lead to misselling and other industry malpractices (say, arising from collusion between lender and developer) as well as consumer protection issues. The primary lenders may also be vulnerable to different types of consumer frauds, given the challenges in the ownership and registration process.

Most banks agree that it is very important to educate the average customer about the following technicalities and legalities of buying a residential property:

- (i) registration and ownership process, type of ownership/title, stamp duty payable, transfer charges, and tax on undeclared income;
- (ii) sale and purchase agreement, monthly or annual maintenance fees, building permits, and plan-approving authorities; and
- (iii) financing aspect, including the basics of a home loan product and typical terms applicable, and prepayment charges.

In spite of all the systemic weaknesses and inadequacies in the overall ecosystem for residential mortgages in Myanmar, several private banks have commenced lending operations under their home loan product, or they are getting ready to launch very soon. One of the main drivers is the excess liquidity in the banking sector arising from a steady flow of public deposits (since 8% per annum interest rate is considered attractive), with limited avenues for deploying these resources. The opportunity in the form of business loans, financing of manufacturing enterprises, and infrastructure financing gets constrained by the restrictions on the maximum term allowed, which is only 3 years imposed by the CBM. The regulator has also restricted the overdraft portfolio to a maximum of 20% of the total loan book by the year 2020. As such, the banks are eyeing the housing finance market as a good strategy to diversify their loan book with a mortgage-backed secured loan portfolio that earns them the maximum permissible interest rate of 13% per annum.

The development of a robust and fast-growing housing finance market in Myanmar faces several barriers, including legal and taxation issues, a weak finance sector, and a continued decline in the real estate and property market as explained in the previous section. The banks are still impeded by the lack of credit bureau and the absence of necessary financial infrastructure, including collateral registry and mortgage guarantee or mortgage insurance. While there are several insurance providers, the thrust is on life insurance (maximum cover of MK30 million only) and basic property insurance to cover fire and burglary. There is very little awareness toward the risk arising from natural disasters, such as earthquakes, cyclones, floods, and storms, although the Yangon Region is particularly vulnerable to climate and disaster risks. The Myanmar Insurance Association has indicated its willingness to explore new mortgage guarantee and insurance products, which could help improve the risk appetite of the lenders and assist in facilitating securitization transactions among banks.

The CHID Bank is the only specialized lender in the housing sector. The bank was formed in 2013 as a development bank with semi-government ownership with the initiative of the Ministry of Construction. It received a commercial banking license from the CBM in June 2014. The CHID Bank was originally set up to address the basic housing needs of the lower-income and middle-income segments through the implementation of affordable and low-cost housing projects and to meet the requirement for a specialized financial institution that extends long-term housing loans at affordable interest rates. Recently, the CHID Bank has been mandated to provide funding not only for construction and housing, but also for infrastructure development such as roads, bridges, and electricity supply. Prior to July 2018, the CHID Bank was previously called the Construction and Housing Development Bank. The “I” was added as the government recognized the importance of infrastructure development, which is one of the key components to the development of an affording housing sector. The CHID Bank’s mission is to realize the potential for financial resources toward the development of construction, urban, and housing sectors in Myanmar and to enable the citizens to have a chance to own a house by accessing capital through the integration of the government’s responsibility, public’s deposits, and shareholders’ contributions. The following are its main objectives:

- (i) Aggregate and facilitate potential financial (capital) investment necessary to develop the construction and housing sector, from both local and international banks and financial institutions.
- (ii) Support the development of new products such as construction loans, housing loans, and mortgages, by allocating resources with short-, medium-, and long-term maturity.
- (iii) Implement plans for increasing the volume and size of public deposits.
- (iv) Facilitate increase in the amount of long-term financial resources being made available for housing development by leveraging the government budget with private sector investment arising from both domestic and foreign funding.

Through its various financing mechanisms and loan products, the CHID Bank has been supporting the DUHD’s target of producing about 100,000 low-cost and affordable housing units as per the 5-year plan. The CHID Bank’s project financing arrangements for private developers undertaking contract construction of affordable housing projects complement the Ministry of Construction-funded revolving fund available at the DUHD. To improve housing finance access among low-income households, the CHID Bank has entered into collaboration with the Japan International Cooperation Agency to access an official development assistance loan administered by the Myanmar Economic Bank, which will finance retail mortgage loans at low interest rates with terms of up to 15 years. Moreover, in collaboration with Japan’s Ministry of Land, Infrastructure, Transport and Tourism and Japan Housing Finance Agency and Kookmin Bank from the Republic of Korea, the CHID Bank is carrying out capacity building and internal training for its staff, and will implement other technical assistance measures from Japan International Cooperation Agency funds.

The CHID Bank introduced the housing savings account in August 2016 to assist those who have financial difficulties that restrict their access to housing finance. This product helps in developing a habit of savings to build capacity for down payment as well as to have financial trust between the account owner and the bank. As of 31 July 2017, there are 17,498 housing savings accounts out of which 3,368 account holders have been permitted a

housing loan. The CHID Bank assists the qualifying households, who have saved sufficiently for their down payment, to access DUHD's low-cost housing units. Housing savings deposit comprises 17.17% of total deposits as of 31 March 2017.

The CHID Bank has been providing loans to the housing developers by way of project finance (supply side) and to the home buyers by way of retail housing finance (demand side). Housing mortgage loan is provided for low-cost projects in Yangon with the term of 8 years, 10 years, and 15 years. The buyers need to open a housing savings account to save up to 30% of the purchase price for the down payment and 70% can be borrowed as housing mortgage loan from CHID Bank. Table 21 provides the product-wise details of the loan portfolio of the CHID Bank over the past 2 years.

Table 21: Construction, Housing and Infrastructure Development Bank Housing Loan Portfolio (hire purchase, mortgage loan, and other loans)

Loan Portfolio by Products	Project/Product	March 2016		March 2017		July 2017	
		Number of Accounts	MK Million	Number of Account	MK Million	Number of Account	MK Million
Retail housing loan							
Hire purchase – housing	Mya Yee Nandar	131	549	125	366	121	310
Housing mortgage loan	Shwe Lin Pann	258	2,052	336	2,485	346	2,501
	Other projects			40	533	61	873
	Mya Yee Nandar			88	911	150	1,494
Housing mortgage loan	Housing savings			241	1,854	421	3,393
Subtotal		389	2,601	830	6,149	1,099	8,571
Other loans ^a		27	97,482	37	127,880		
Overdraft facility		88	29,755	97	31,373		
Hire purchase – machinery		4	618	3	302		
Total		508	130,456	957	165,704		

MK = Myanmar kyat.

^a Other loans comprise construction loan (land and building), construction loan (government guarantee), Z-step loan (affordable housing).

Source: Government of Myanmar. 2017. *Construction Housing and Infrastructure Development Bank (CHIDB) Annual Report 2017*. Yangon.

Currently, the CHID Bank's retail housing loan portfolio is less than 4% of the total loan book, which suggests that, even though there is huge unmet demand for housing loans, the CHID Bank's volume of retail lending is severely constrained by the lack of supply,

as the DUHD's annual supply of low-cost and affordable housing is just a few thousand units. With the private sector banks evincing interest in offering housing loans to DUHD housing customers, it is likely that the CHID Bank will start facing some competition in the near future. Given the CHID Bank's potential and capacity (including its access to capital and financial resources) to significantly increase its retail lending activity, the real challenge is in inducing the supply of affordable housing, which goes beyond the current DUHD supply. Ideally the following needs to happen simultaneously:

- (i) Private sector developers are encouraged to respond to the significant economic opportunity in affordable housing, more so with bank tie-ups.
- (ii) The CHID Bank should amend the terms of its housing loan product to include low-cost/affordable housing projects other than those developed by DUHD.
- (iii) Private sector banks should be challenged with priority sector targets, which include retail loans for affordable housing as a percentage of total lending.

Within the CHID Bank's product mix for retail housing loans, the housing mortgage loan product comprises ~64% of the total housing finance lending as of March 2017, in respect of less than 4,000 customers. Starting from such a low base suggests the CHID Bank can easily accommodate exponential growth in its retail portfolio for the next several years.

E. Potential for Housing Microfinance and Micro-Mortgages

Microfinance operations in Myanmar only started in the late 1990s. A new legal framework for microfinance was established only in November 2011. The new microfinance law imposes interest rate caps for micro loans and micro savings. It legalizes microfinance operations that had been in place, but not under any legal framework before. On the other hand, it allows local and foreign investors to establish completely private-owned MFIs.

There are several categories of lenders that are active in microfinance:

- (i) cooperative societies,
- (ii) nonbank finance companies (could be subsidiaries of private banks),
- (iii) nongovernment organizations (NGOs),
- (iv) international NGOs,
- (v) specialized agricultural development companies, and
- (vi) state-owned banks (e.g., Myanmar Agricultural Development Bank).

The microfinance law prescribes the following interest rate caps and minimum capital requirements:

- (i) micro loan interest rate cap: maximum 30% per annum (flat),
- (ii) micro savings interest cap: minimum 15% per annum,
- (iii) minimum paid-up capital: MK100 million for non-deposit-taking MFIs, and
- (iv) minimum paid-up capital: MK300 million for deposit-taking MFIs.

However, the enacted microfinance regulation entails some flaws. First, the low capital requirements initially set for MFIs (MK15 million for non-deposit taking MFIs) led to a large number of newly licensed MFIs. Second, supervision is fragmented: banks and nonbanks are under the supervision of CBM, and cooperatives operating in the microfinance sector are under the control of the Ministry of Cooperatives. In the meantime, licensed MFIs are supervised by the Myanmar Microfinance Supervisory Enterprise, under the MOPF. Third, funding stipulations, though relaxed in 2016, remain a bottleneck for most MFIs, since they require prior approval from the Myanmar Microfinance States Enterprise and CBM before accessing any borrowing from local and foreign financial institutions. Besides, in general, the policy and regulatory environment is more favorable toward MFIs focused on rural and agricultural clientele. This limits their ability to service the huge demand from Myanmar's urban poor and unbanked population.

The microfinance industry of Myanmar is not only small but also fragile. Although more than 200 new licenses for MFIs have been granted until 2015, just five large MFIs account for around 80% of the market. Many of them are not allowed to take deposits from their members, leading to concerns relating to liquidity and capital adequacy. Moreover, they lack proper risk management systems, thereby undermining their financial soundness. The financing gap that cannot be met by the MFIs is being catered to by informal channels such as money lenders and pawnshops.

In spite of these shortcomings and challenges, the microfinance industry could be a potential vehicle to address short-term, small-ticket housing needs of informal settlements, semi-urban and rural population of the Yangon Region, particularly for housing repairs, minor upgrade, extensions, retrofitting for climate and disaster proofing, sanitation and water connections. It would be important to have certain minimum prequalification criteria in place based on size of operations, profitability, and soundness to select MFIs, which will be permitted to offer housing microfinance (HMF) products and services. The selected lenders would need to be supported with the necessary capacity building and training for HMF product development and operations. Ideally, funding from a dedicated credit line should be made available at an affordable cost that supports HMF pilot lending and helps mitigate the asset-liability management risks.

F. Domestic Debt Market and Access to Long-Term Funding

Since 2012, Myanmar has taken several important steps to strengthen, reform, and build its domestic capital and debt markets. Some of these developments include:

- (i) legal and regulatory framework for the bond and securities market (SEL 2013 and SER 2015),
- (ii) establishment of the Securities and Exchange Commission of Myanmar (SECM) in 2014,
- (iii) establishment of the Yangon Stock Exchange (YSX) in 2015,
- (iv) establishment of scripless trading and book-entry transfers,

- (v) transformation of government securities market during late 2015–2016, and
- (vi) establishment of benchmark government securities.

The Myanmar bond market is at the early stage of development. As a result, much change is expected over the next few years, with the SECM now already having established some basic securities market practices, and the need to follow up with objectives set out by the government in the Capital Market Development Plan. With these envisaged market developments, a number of key challenges for the bond market are expected to be addressed in a comprehensive manner:

- (i) **Development of issuance framework for municipal bonds.** The key priority for SECM with regard to bond market development is the establishment of practices toward the issuance of municipal bonds. For that purpose, SECM will issue specific notifications in due course.
- (ii) **Regulations for issuance of corporate bonds.** SECM is working toward creating the regulatory environment for public companies to issue corporate bonds and notes in the Myanmar market, and to enable a secondary market for trading in these, likely on YSX.
- (iii) **Listing of debt securities on the Yangon Stock Exchange.** To support the bond market development objectives of SECM, YSX is expected to include the listing, trading, and settlement of debt securities on its market in the near future, in line with the pace of regulatory changes.

With the broad legislative and regulatory environment now in place, the Myanmar bond and securities market and its participants are well placed to tackle the aforementioned challenges. Based on existing laws and rules, SECM may now introduce market features and functions through its own notifications and react to the need to develop market practices in a timely manner.

As the local currency bond market in Myanmar evolves and matures, with active trading of debt instruments, the mortgage market will be a direct beneficiary of this development. The banks and nonbank primary lenders will be able to participate in this market, and gradually be able to access medium-term and long-term funding to grow their mortgage loan portfolios. This will help in diversifying the resource base for these lenders and also may help bring down their cost of funds. In due course, the MOPF should consider setting up an apex financial institution for providing mortgage refinance and facilitating secondary market operations, such as issuance of mortgage-backed securities.

However, this process of raising funds from the domestic debt market could take well over 3–5 years and, in the meantime, the primary lenders would need to be supported with external debt in the form of a liquidity facility and/or credit line.

III. Existing Legal Frameworks and Market Practices on Housing, Land, and Property in the Yangon Region

Housing, land, and property (HLP) law in Myanmar is comprised of a vast array of laws originating with laws put in place during the British colonial period, and which has continued to evolve in various forms ever since. This almost 2-century period has resulted in a multi-faceted legal framework governing HLP matters that is often internally contradictory, inadequate to the tasks at hand, and subject to varying degrees of interpretation and enforcement. This hodgepodge of laws, developed under different systems of governance, has left Myanmar with a complex legal framework for HLP regulation.

The 2008 Constitution of the Republic of the Union of Myanmar is the preeminent law in the country. The Constitution recognizes a series of central HLP rights themes, and, therefore, can be useful as a foundational basis in promoting housing market in the country and in the Yangon Region in particular. Of central importance, it is vital to recall Article 37 of the Constitution, which notes that “The Union: (a) is the ultimate owner of all lands and all natural resources above and below the ground, above and beneath the water and in the atmosphere in the Union; (b) shall enact necessary law to supervise extraction and utilization of State-owned natural resources by economic forces; and (c) shall permit citizens right of private property, right of inheritance, right of private initiative and patent in accord with the law.”¹¹

In addition to Article 37, Chapter VIII of the Constitution outlines fundamental rights and duties, and contains the following provisions that are relevant to the framework of HLP rights:

- **Section 347.** The Union shall guarantee any person to enjoy equal rights before the law and shall equally provide legal protection.
- **Section 348.** The Union shall not discriminate any citizen of the Republic of the Union of Myanmar, based on race, birth, religion, official position, status, culture, sex and wealth.
- **Section 353.** Nothing shall, except in accord with existing laws, be detrimental to the life and personal freedom of any person.
- **Section 355.** Every citizen shall have the right to settle and reside in any place within the Republic of the Union of Myanmar according to law.
- **Section 356.** The Union shall protect according to law movable and immovable properties of every citizen that are lawfully acquired.
- **Section 357.** The Union shall protect the privacy and security of home, property, correspondence and other communications of citizens under the law subject to the provisions of this Constitution.

¹¹ Government of Myanmar. 2008. *Constitution of the Republic of the Union of Myanmar (2008)*. Nay Pyi Taw.

- **Section 372.** The Union guarantees the right to ownership, the use of property and the right to private invention and patent in the conducting of business if it is not contrary to the provisions of this Constitution and the existing laws. (emphasis added)

The Constitution has assigned the management of the housing sector, including urban development, to the states and the regions.¹² Therefore, the regional and local governments are directly responsible for creating an enabling environment for the modernization of the housing sector.

At the international level, Myanmar formally ratified the International Covenant on Economic, Social and Cultural Rights (ICESCR, 1966) on 6 October 2017. The ICESCR is a core element of the international bill of rights and is the premier legally binding international treaty on economic, social, and cultural rights. The voluntary ratification of the ICESCR by Myanmar signifies a very positive development and a recognition by the government that all the people of Myanmar are accorded rights, among others, to an adequate standard of living including food, clothing, and housing.

A. Relevant Laws and Regulations on the Housing Sector

While the Constitution provides guarantee to the right to settle and reside in any place within Myanmar, other relevant laws, policies, and practices affecting housing market development need to be considered. These relevant laws and regulations include, but are not limited to:

The Urban Rent Control Act (1960) was enacted on 4 May 1960, and amended in 1961. In this act, the definition of landlord, tenant, rent controller, and premises are provided in Section 2. Section 12 provides a degree of security of tenure for residents by restricting forced evictions to a series of prescribed acts and omissions by tenants. Section 27 outlines the rules on rent.

The Government Premises (Eviction) Act (1955) was enacted in 1955, and amended in 2012. It covers government-owned buildings, houses, and premises, including housing units provided by the Department of Urban and Housing Development (DUHD). In these government-owned buildings, houses, and premises, the dwellers are not the owners of premises. They have no right to sell or transfer government-owned apartments.

The Lower Myanmar Town and Village Act (1899) governs land rights of private persons in towns and villages (in contrast to the land and revenue arrangements that cover land outside of towns). The act provides that the following rights to land accrue for hereditary

¹² Under No. 8(b) of Schedule 2 of the Constitution 2008, town and housing development was included in the Region or State Legislative List. Schedule 2 made reference to Section 188 of the Constitution, which states that “The Region or State Hluttaw shall have the right to enact laws for the entire or any part of the Region or State related to matters prescribed in Schedule Two of the Region or State Hluttaw Legislative List”.

land: the right to keep under occupant control (to live and to dwell on the land), the right to cultivate, the right to mortgage, the right to sell, and the right to inherit. For government lands, people have rights to keep under occupant control, cultivate, and inherit. The act states that “no rights against the Government shall be deemed to have been or shall hereafter be, acquired by any person over any land in any town or village, except as provided under this Act.”¹³ Similar to the act on land and revenue, land ownership is mostly based on possession, again normally attached to a calculated period of possession. The act provides that landholder’s rights cease after 2 years of abandonment, and also covers eviction procedures from any unauthorized possession and use of state land.

The Land Acquisition Act (1894), which is currently under review, empowers the state to acquire land where land is needed for any public purpose. The act provides for relevant procedures, including the required notice to be given, procedures for objections to acquisition, the method of valuation of land, the process for taking possession of land, court processes and appeals, procedures for the temporary occupation of land, and the acquisition of land for corporations. The act requires the authorities to provide compensation to the original owners of the land at market value. However, in practice, compensation often falls far short of basic minimum standards on just and satisfactory compensation. The act enables the state and companies to compulsorily acquire land where the state and companies assert that such land is needed for public purposes. The act further outlines relevant procedures, including notice periods; procedures for objections to acquisition; the method of valuation of land; the process for taking possession of land; court processes and appeals; procedures for the temporary occupation of land; and the acquisition of land for companies.

The Towns Act (1907) provides for the administrative governance of towns; for example, the division of towns into wards and blocks; and the election, duties, and powers of ward headmen and elders of a block, including the obligation on residents to announce the arrival and departure of nonresidents to a town. The act is complemented by the **Village Act (1908)**, which addresses many of the same governance concerns for villages. The act provides for rules and procedures relating to the administrative structure of villages, including the duties and powers of village committees, village headmen, rural policemen, subdivisional and township officers, as well as the duties of villagers. The Village Act also contains an express obligation on villagers to announce the arrival and departure of nonresidents, including a requirement to seek permission from the village committee for a nonresident to take up residence in a village and to construct a hut, house, or enclosure. The act provides an exception for cultivators to construct dwellings where their vocation is carried out. The act empowers the deputy commissioner to sell and remove illegal property on state land.

The City of Yangon Development Law (1990) mainly deals with the urban redevelopment and mandatory relocation processes. Under this law, Yangon City Development Committee (YCDC) is vested with the authority to “convert Yangon with the characteristics of a city of international standards,” including the official role of relocating informal settlers on the

¹³ Government of Myanmar. Chapter II, Of Rights In Land.

orders of the state. YCDC has extensive duties and responsibilities, including a number of functions previously held by the Housing Department:

- (i) preparation of civil projects and establishment of new towns within the limits of the City of Yangon Municipality;
- (ii) administration of lands within the limits of the City of Yangon Municipality; determining the population that should be allowed to settle properly in the City of Yangon; construction, repair, and demolition of buildings; and demolition and resettlement of informal huts, informal buildings, and informal wards;
- (iii) construction of roads, bridges, and maintenance thereof;
- (iv) stipulation of conditions for traffic and parking of vehicles and slow-moving vehicles;
- (v) construction of gardens, parks, playgrounds, and recreation centers and maintenance thereof; carrying out works for lighting of roads; carrying out works for water supply; and construction of reservoirs and pipelines and maintenance thereof;
- (vi) carrying out works for sanitation; carrying out works for public health; and construction, maintenance, and administration of markets; and
- (vii) stipulation of conditions in respect of roadside stalls.

Section 10 of the law provides that, notwithstanding anything contained in the existing City of Yangon Municipal Act, the State Housing Rehabilitation and Urban and Rural Development Board Act, and other existing laws, powers in respect of formulation and implementation of civil projects, establishment of new towns, and administration of town lands within the limits of the City of Yangon Municipality shall be vested in the committee.

The new City of Yangon Development Law (2018) was enacted on 28 June 2018. It covers 31 sectors and has 337 sections, which also cover various topics such as informal settlers, shortage of freshwater, traffic, electricity, illegal construction, pollution, and the rule of law for the growing population of Yangon. It was hoped that the new law will draw the way toward further economic and social development in Yangon City.

The Special Economic Zone Law (2014), which governs land issues within the special economic zones, addresses the question of land acquisition and places the responsibility on developers and investors to transfer and pay for compensation costs associated with land-based investments. Article 80 reads: “The developer or the investors shall bear the expenses of relocating and paying compensation in accordance with the agreements if houses, buildings, farms and gardens, orchards and fields, plantation on land permitted for land lease or land use are required to be relocated. Moreover, he shall, to relocate the persons so as not to lower their original standard of living, to fulfill the fundamental needs and for facilitating such works, coordinate and carry out with the relevant Management Committee as may be necessary.”¹⁴

¹⁴ Government of Myanmar, Directorate of Investment and Company Administration. 2014. *Myanmar Special Economic Zone Law, 2014*. Nay Pyi Taw. https://www.dica.gov.mm/sites/dica.gov.mm/files/document-files/sez_law.pdf.

The Development Committee Law (1993) was enacted on 1 April 1993 and the Municipal Act, 1898 was repealed by this law. The Development Committees (Amendment) Law was promulgated on 9 December 1997. Under this amendment law, the Ministry of Border Affairs, except within the limits of the City of Yangon and the City of Mandalay development areas, may form development committees in the remaining areas with suitable citizens to carry out the duties and functions of the committee. One of the duties and functions of the committee is “granting permission for construction of private buildings within the Development Committee boundary limit and supervision.”¹⁵

The City of Yangon Municipal Act (1922) was enacted on 1 August 1922. In this act, provisions regarding the buildings are mentioned in Chapter XI, Sections 153–159. Section 153 prohibits the erection or re-erection of buildings without the permission of YCDC. Section 154 is about completion certificates and permission to occupy or use buildings. Section 155 mentions the power of corporation for direct removal of persons from buildings in which works are being unlawfully carried out or which are unlawfully occupied. Section 156 includes provisions regarding buildings unfit for human habitation. Section 157 is about the removal of buildings in ruinous or dangerous state. The construction, repair, and demolition of buildings are also mentioned in Section 7, duties and responsibilities of the committee under the City of Yangon Development Law, 1990.

The Yangon Region Development Law (2013). Under Section 188 of the Constitution of the Republic of the Union of Myanmar, 2008, the region or state Hluttaw shall have the right to enact laws for the entire or any part of the region or state related to matters prescribed in Schedule II of the Region or State Hluttaw Legislative List, including construction matters. According to this provision, the Yangon Region Hluttaw enacted the Yangon Region Development Law on 30 September 2013. Under Section 4 of this law, the Ministry of Yangon Region Development shall form development committees in regions, townships, and sub-townships, outside of the city boundary within the region. In Section 24, the Township Committee is empowered to issue permits for the construction of buildings, extension of buildings, or repair of buildings.

B. Land Types in Yangon

Under Article 37 of the Constitution, the Union is the ultimate owner of the land. Therefore, freehold land is relatively rare. Consequently, the majority of land granted to individuals and firms for development is on the basis of grant land or leasehold land. Both these forms of tenure provide development rights and usage rights for a fixed period of time, as well as subleasing.

Freehold land is located primarily in cities and larger towns; and is transferrable, inheritable, and not subject to land revenue fees. Freehold land is “owned” outright by a Myanmar national (subject to the ultimate and underlying government ownership of all land in Myanmar as stipulated in Article 37 of the Constitution), with no restrictions on leasing,

¹⁵ Government of Myanmar. 1993. *Development Committee Law (1993)*. Yangon. <http://displacementsolutions.org/wp-content/uploads/DEVELOPMENT-COMMITTEES-LAW-1993.pdf>.

transferring, or selling of land. Freehold land can only be repossessed by the Union government when in the public interest, and ownership is evidenced by a title deed.

Grant land is the most common form of land tenure in cities and large towns. Grant land is owned by the government, but individual citizens or Myanmar firms are granted the right to occupy and use the land for a fixed period of up to 90 years. Usage and occupancy rights can be extended upon application, and this is generally approved other than in exceptional circumstances. In the case of Yangon, the land fee is paid to the YCDC upon signing the lease for each lease period. The holder of grant land is free to lease, transfer, or sell usage and occupancy rights of the land to other individual citizens or firms. Indefinite renewal of grant land is possible according to Section 51 A of the Rules under the 1889 land and revenue regulation and Section 29 of the Rules under the 1898 town and village lands act.

Leased land is commonly used for land owned by the state and administered by a municipal or government authority. This includes land to be used for public housing, which is leased out by the YCDC or DUHD. In some circumstances, leased land is also granted to private firms for commercial uses. These arrangements frequently occur in circumstances where leased land is beneficial for both the private firm involved and the government. Indefinite renewal of lease land is possible.

Farmland means land defined as lowland (paddy land), upland (*ya*), silty land (*kaing kyun*), hillside cultivation land (*taungyar*), perennial crops land, nipa palm land (*dhani*), garden land or horticultural land, and alluvial land. Farmland does not include land situated within any town or village boundary used for dwelling, religious building and premises, and public-owned land not used for agricultural purposes. This type of land is governed by the Farmland Law, 2012.

Agricultural land means either land used for cultivation or possessed for an agricultural purpose as defined by the Tenancy Law, 1963. The expression includes paddy land, garden land on which vegetables and flowers are grown, rubber plantation land, and also virgin land occasioned by the diversion of the river current. Whatever the legal context may be, in layman's language agricultural land is normally understood as "rice paddy land" because, traditionally, most agricultural land has been used for planting rice, the staple food for the Myanmar people.

Prior to 1953, citizens as well as foreigners could own agricultural land. However, with the enactment of the Land Nationalization Act in 1953 (now repealed after the enactment of the Farmland Law in 2012), all agricultural land came under exclusive state-ownership. As such, all agricultural land was taken over by the government, and was again put on lease to farmers who automatically became tenants to the land.

In the legal concept, agricultural land and garden land belong to the same category but, for the sake of clarification, they are discussed separately. In the legal context, the term "garden land" encompasses the definition of agricultural land. However, the type of crop(s) grown on it may differ from those usually grown on agricultural land. Besides, the amount of revenue payable to the government for garden land is much higher.

Vacant, fallow, and virgin land is the other common type of land on urban peripheries. The government may grant the right to cultivate or utilize to state-owned economic organizations, joint-ventures, other organizations, and private individuals on a commercial basis such as for agriculture, livestock breeding, mineral production, and other lawful business permitted by the government. This type of land is governed by the Vacant, Fallow and Virgin Lands Management Law, 2012.

Cantonments are a specific type of land acquired by the government for exclusive use by the military, which the military also exclusively administers. When any portion of land has been earmarked for such use, the Ministry of Home Affairs will issue a declaration, which designates such area as the cantonment area, after which the land will be acquired under the Land Acquisition Act. The former owner will subsequently be compensated if such land was, before acquisition, “freehold” or “grant” or “La Ya 30” type land but not otherwise.

For other types of land, there is no need to invoke the Land Acquisition Act and the Ministry of Home Affairs can simply declare such area as the cantonment area. No land revenue is exacted from cantonments, but the land should be surrendered to the government if it is no longer required for military use.

Monastery land, as the name implies, is land belonging to temples, churches, and religious communities. The Ministry of Home Affairs may declare an area of land as monastery land. Once it has been declared as such, the status of the land remains unchangeable for good. No land revenue is exacted from this class of land.

Town land or village land is the land within formal urban centers. Town land is declared by the Ministry of Home Affairs under the Towns Act. It could be classified under either “freehold” or “grant” type land. It is transferable. Approximately 1% of land in Myanmar is classified as town land.

Forest land is common within urban limits and is intended to be reserved primarily for forestry purposes. Reclassification of forest land requires the approval of the Ministry of Natural Resources and Environmental Conservation.

C. Land Classification and Reclassification

Under the current regulations, only certain categories of land can be reclassified as town land. As a result of rapid urbanization in Yangon, reclassification of peri-urban areas into town land would allow for the development of affordable housing and commercial buildings in Yangon. The most common types of land in peri-urban areas are agricultural land, vacant land, and garden land.

Under the Tenancy Law, 1963, agricultural land may be used for other purposes (e.g., for building houses or digging fishponds). Such decisions are given by the state or division peace and development council concerned, upon approval by the Ministry of Agriculture, Livestock and Irrigation, while the state or division peace and development council, based upon such decisions, will issue the official document called “La Na 39” as stated under Article 39 of the Land Nationalization Act (1953). This “La Na 39” type of land is transferable. It could eventually be upgraded to “grant land” by the government.

After enacting the Farmland Law, 2012, the Land Nationalization Act, 1953 was repealed. However, Article 30 of the Farmland Law is similar to Article 39 of the Land Nationalization Act, 1953 and the “La Na 39” is now called as “La Ya 30.”

To change the title of the land from “agricultural land” into “nonagricultural land,” it is necessary to get the permission for land use from the Central Administrative Body of the Farmland in case of the lowland (paddy land) and the permission for land use from the Region or State Administrative Body of the Farmland for the farmland except lowland (paddy land). According to Article 30 of the Farmland Law, individual farmers can apply for a land use change if they hold a land use certificate. The application for reclassification is then considered by the relevant committee, at the Union or state or regional level, in accordance with development plans where these exist. For large-scale reclassification, a decision to reclassify land to town land is initially made by the township administrators, which, in the case of Yangon, is the Yangon City Development Committee. In some circumstances, private developers negotiate directly with farmers to purchase a number of bordering parcels (generally of farmland), and subsequently apply to have these converted to urban land.

At village, township, and district level, land scrutinization committees (also called “reinspection” committees) have been formed to assess applications for reclassification of land, to protect the rights of local communities, and to guard against inappropriate land grabs. These committees are comprised of members of public and government officers. In assessing land reclassification applications, the committees prepare reports for higher-level decision-making bodies and recommend in favor of or against the application. However, applications for the change from farmland or virgin, fallow, and vacant and to townland are determined by the Union-level central committee for farmland, or at state or regional level for other types of land, depending on the size of the reclassification.

Since 2013, individual firms bid for the right to develop large areas of reclassified land under an open tender system. In areas where large areas of land are being reclassified for large developments, and a number of landholdings are being acquired from individual farmers by the government, repossession is required prior to the change of land use. Determination of value of lands is conducted via a process of negotiation between the government and individual landowners.

D. Sale and Purchase of Housing and Rental Practices

In Yangon, most apartment units are built on privately owned lands, which are lease grant lands. Usually, the land lease grant holder makes a contractual agreement to construct buildings six stories or higher with a developer (or contractor) based on 50/50 sharing system. The standard land size is around 2,400 square feet. The Office of the President of Myanmar has declared that new housing is to be constructed only as multi-dwelling units such as apartments and condominiums, rather than as individual dwellings.

Based on this system, the purchaser of apartment units (unit owner) has to execute the sale and purchase agreement with the developer or landowner. Although unit owners have

the right to possess the units, they still need to pay a small amount of rent to the landowner as a result of the aforementioned contractual agreement. If someone wants to purchase the unit from the existing unit owner, he or she may need the signature of the landowner in the sale and purchase agreement of the unit.

The sale and purchase agreement is not required to be registered with the Office of the Registrar of Deeds in Yangon. Unit owners have only rights of possession and they cannot acquire title rights as the strata law system only exists under the Condominium Law. It is important to note that the Apartment Law is being reviewed and revised such that unit owners may be able to obtain title rights for their properties.

The purchasers of units have to provide documents such as a copy of citizen identification card, a copy of a family list, documents relating to the ownership of the unit, sale and purchase agreement made between landowner and developer, and registered general power of attorney to the bank together with their loan application.

However, the CHID Bank has more advantage than other banks in housing finance as it can facilitate tri-party agreements among the CHID Bank (lender), DUHD (housing provider), and the borrower. The purchaser of an affordable housing unit from the DUHD is issued an ownership booklet by the DUHD, which is kept by the CHID Bank as collateral when the borrower takes the loan with the CHID Bank. If the borrower fails to pay back the loan money, the DUHD can evict the borrower based on tri-party agreement under the Government Premises (Eviction) Act, 1955. However, this clause has never been exercised.

In many cases, most people do not own their apartment and they usually lease the apartment from the individual apartment unit owner based on a simple lease agreement that is normally 1 year in duration, with 1 year of rent being paid upfront, thus no guarantor is required. Deposits are usually from 1 month to 3 months' rent, with the landlord deciding the amount based on interior conditions, furniture, and electrical equipment. The brokerage fee is 1 month's rent.

Overall, this brief overview of the main laws that have a bearing on securing access to affordable housing for everyone in the Yangon Region reveals that significant gaps exist within the laws between the HLP rights of the population and the state of law as a tool for securing these. Bridging this gap by ensuring greater attention within legislation to the specific needs of the population, such as security of tenure, access to affordable and adequate housing, protection against eviction, and land acquisition and other concerns will be vital.

E. Building a Vision for a Yangon Region for Everyone: Potential Lessons from Three International Best Practices

Understanding the current status of legislation relevant to the aims and objectives of the present government is vital to identifying where legislative reform will be required and where priority will need to be placed. At the same time, however, any legislative reform within these sectors will indisputably need to be linked to broader political and social

perspectives relating to a short-, median-, and long-term vision of what type of Yangon the people living in the city wish it to become. What follows are three brief overviews of how several other countries have chosen to legislate on relevant HLP matters, all of which would equally be possible in the Yangon Region and throughout Myanmar.

Brazil's City Statute

Law 10.257 in Brazil, known popularly as the “City Statute,” can provide useful guidance to the Government of Myanmar because of its innovative approach to addressing urban poverty and inducing the construction of affordable and accessible housing resources.¹⁶

The City Statute is a federal law passed in 2001 that builds on the Federal Constitution of Brazil to create a new urban legal order to provide land access and equity in large urban cities. It is based on the notion that urban dwellers have a right to the city. The law emerged following years of advocacy by a coalition of political parties and the urban poor themselves. The law is notable as it seeks to ensure that the “social function” of urban land and buildings is put before their commercial value. This has been defined as the prioritization of “use value” over exchange value. The law aims to ensure “democratic city management,” which is defined as “a path to plan, produce, operate, and govern cities subject to social control and participation.”¹⁷

The Philippines' Urban Development and Housing Act

Article XIII, Section 10 of the Constitution of the Philippines explicitly provides that “[urban] or rural poor dwellers shall not be evicted, nor their dwellings demolished, except in accordance with law and in a just and humane manner.”¹⁸ Section 10 then was expanded upon under Republic Act No. 7279, otherwise known as the Urban Development and Housing Act of 1992 (UDHA). Section 28 of the UDHA states that “[eviction] or demolition as a practice shall be discouraged.”¹⁹

The UDHA was declared to:

- (a) Uplift the conditions of the underprivileged and homeless citizens in urban areas and in resettlement areas by making available to them decent housing at affordable cost, basic services, and employment opportunities;
- (b) Provide for the rational use and development of urban land in order to bring about the following:

¹⁶ F. B. Barros et al. 2010. *The City Statute of Brazil: A Commentary*. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/781901468014398230/The-City-Statute-of-Brazil-a-commentary>.

¹⁷ the polis blog. *Implementing the Right to the City in Brazil?* Smart Cities Dive. <https://www.smartcitiesdive.com/ex/sustainablecitiescollective/implementing-right-city-brazil/30417/>.

¹⁸ Government of the Philippines. *The Constitution of the Republic of the Philippines*. Manila. <https://www.officialgazette.gov.ph/constitutions/1987-constitution/>.

¹⁹ Government of the Philippines, National Housing Authority. *Republic Act No. 7279*. Manila. http://www.nha.gov.ph/about_us/2015-pdf/RA7279.pdf.

- (1) Equitable utilization of residential lands in urban and urbanizable areas with particular attention to the needs and requirements of the underprivileged and homeless citizens and not merely on the basis of market forces;
 - (2) Optimization of the use and productivity of land and urban resources;
 - (3) Development of urban areas conducive to commercial and industrial activities which can generate more economic opportunities for the people;
 - (4) Reduction in urban dysfunctions, particularly those that adversely affect public health, safety and ecology; and
 - (5) Access to land and housing by the underprivileged and homeless citizens;
- (c) Adopt workable policies to regulate and direct urban growth and expansion toward a dispersed urban net and more balanced urban–rural interdependence;
 - (d) Provide for an equitable land tenure system that shall guarantee security of tenure to Program beneficiaries but shall respect the rights of small property owners and ensure the payment of just compensation;
 - (e) Encourage more effective people’s participation in the urban development process; and
 - (f) Improve the capability of local government units in undertaking urban development and housing programs and projects.”²⁰

However, under certain circumstances evictions may be allowed, but must comply with eight mandatory requirements, including “[adequate] consultations on the matter of settlement with the duly designated representatives of the families to be resettled and the affected communities in the areas where they are to be relocated.” Further, Executive Order No. 152, issued on 10 December 2002, instructs all government officials to secure a certificate of compliance from the Presidential Commission for the Urban Poor to ensure that procedures for a just and humane demolition, as mandated by the Constitution and as set out in the UDHA, are followed.²¹

South Africa’s Housing, Land, and Property Laws

South Africa has few parallels in terms of legislating housing rights at the national level. In particular, this has occurred in the legislative regulation of forced evictions. Not only have evictions been explicitly addressed in Article 26(3) of the Constitution of South Africa, but subsequent implementing legislation, including the Extension of Security of Tenure Act (Act No. 62, 1997), the Prevention of Illegal Evictions from and Unlawful Occupation of Land Act (which repealed the much maligned Prevention of Illegal Squatting Act), and others have been adopted since the end of apartheid to further refine constitutional protections against eviction. Article 26(3) asserts that “[no] one may be evicted from their home, or have their home demolished, without an order of court made after considering all the relevant circumstances. No legislation may permit arbitrary evictions.”²²

²⁰ Footnote 19.

²¹ Government of the Republic of the Philippines. 2002. *Executive Order No. 152*. Manila. <https://www.officialgazette.gov.ph/2002/12/10/executive-order-no-152-s-2002/>.

²² Government of the Republic of South Africa. *Constitution of the Republic of South Africa, 1996*. Cape Town. <https://www.gov.za/documents/constitution-republic-south-africa-1996>.

The Extension of Security of Tenure Act (Act No. 62, 1997) represents another innovative effort by South African legislators to ensure that basic security of tenure rights are accorded to all South Africans. In a welcome departure from traditional housing law in many countries, the Extension of Security of Tenure Act, very clearly emphasizes in Section 4 the duty of the responsible minister to actively grant subsidies to “enable occupiers, former occupiers and other persons who need long-term security of tenure to acquire land or rights in land.”²³ The act also explicitly outlines the rights and duties of occupiers and owners, emphasizing in Section 5 that all relevant persons shall have the right to human dignity, freedom and security of the person, privacy, freedom of religion, belief and opinion and of expression, freedom of association, and freedom of movement. Section 6 provides explicit rights to security of tenure and the right not to be denied or deprived of access to water or access to educational or health services.

In a world where “informal settlers” are commonly characterized as criminals and where homeless persons face criminal sanctions on the basis of their homelessness, the Extension of Security of Tenure Act not only breathes life into the Constitution of South Africa, but also acts as a reflection of how tenure insecurity, arising from poverty and housing markets that fail to provide legal affordable housing to low-income groups, should be addressed by other nations. The Prevention of Illegal Evictions from and Unlawful Occupation of Land Act sets a benchmark for other countries against which to examine their own policies on eviction. The act, while not prohibiting forced evictions outright (to do so would be impossible in any country), clearly prohibits unlawful eviction and provides for a range of criteria based on just and equitable standards prior to any lawful eviction being carried out. The preamble to the act encapsulates the essence of the law by revealing the balance sought to be struck between landowners and unlawful occupiers, recognizing that “no one may be evicted from their home, or have their home demolished without an order of court made after considering all the relevant circumstances” and that “special consideration should be given to the rights of the elderly, children, disabled persons and particularly households headed by women, and that it should be recognized that the needs of those groups should be considered.”²⁴

These are just three of innumerable examples of HLP legislations that have been put in place to promote the rights of people combined with the goal of creating greater supplies of affordable housing resources. Of course, Myanmar cannot be expected to fundamentally change views overnight on HLP laws, but what can occur, relatively easily, are political decisions to alter HLP legislation in a direction that has at its publicly avowed core: the immediate objective of securing for everyone in the Yangon Region and beyond adequate dwelling, which is affordable, possesses strong security of tenure, and where men and women share equal rights in the entire HLP sector.

²³ Government of the Republic of South Africa. *Extension of Security of Tenure Act, 1997*. Cape Town. <https://www.gov.za/documents/extension-security-tenure-act>.

²⁴ Government of the Republic of South Africa. *The Prevention of Illegal Eviction from and Unlawful Occupation of Land Act, 1998*. Cape Town. https://www.gov.za/sites/default/files/gcis_document/201409/a19-98.pdf.

IV. Vulnerabilities of Myanmar to Climate Change and Disaster Risks

A. General Disaster Profile of Myanmar

Myanmar is one of the most vulnerable countries to natural and climate-related disasters in the world. Based on the International Disaster Database (EM Dat), for the period 1990–2016 as shown in Table 22, climate-related disasters (i.e., floods, landslides, and storms) accounted for 83% of the total disasters while earthquakes were at 13% and epidemics at 2%.²⁵

In terms of the impact of disasters resulting into deaths, storms accounted for 99%; for those resulting in injuries, storms and floods accounted for 99%, while earthquakes accounted to 2%. For most-affected people “requiring immediate assistance during a period of emergency, i.e., requiring basic survival needs such as food, water, shelter, sanitation, and immediate medical assistance,” floods–storms–landslides accounted for 100% (footnote 25). Climate-related disasters also caused homelessness at 96%, while earthquakes only caused 4%. Overall, the impact of climate-related disasters affected 99% with floods (at 53%) followed by storms (at 44%), and landslides (at 2%); while earthquakes contributed 1%.

In terms of economic value, the total damage due to climate-related disasters was estimated at \$4.3 billion²⁶ (89% of total was due to storms at 84% and floods at 5%; earthquake damages were at 11%).

B. Vulnerability to Climate-Related Hazards

The Myanmar Climate Report²⁷ sums up the country’s experiences with hazards perfectly well. This includes the Great Sittwe Cyclone of 1968, the Patheingyi Cyclone of 1975, the Gwa Cyclone of 1982, the Maungdaw Cyclone of 1994, the Cyclone Mala of 2006, the Cyclone Nargis of May 2008, the effect of the Cyclone Koman, and the historical flood of years 2004, 2010,

²⁵ Center for Research on the Epidemiology of Disasters (CRED). The International Disaster Database. <https://www.emdat.be/>.

²⁶ However, government estimates amount to \$4 billion. Government of Myanmar. *Cyclone Nargis 2008: Rehabilitation in Myanmar*. Nay Pyi Taw. https://www.recoveryplatform.org/assets/recoverycases_reports/myanmar/MYANMAR%2021%20Dec%202010.pdf.

²⁷ L. L. Aung et al. 2017. *Myanmar Climate Report*. http://met-xpprod.customer.enonic.io/publikasjoner/met-report/met-report-2017/_/attachment/download/a3bf1468-4e93-486a-aa3f-4bea3871cffa:b8f39ba9ecfbde7d7c6da8ca769f4a1a96d61d39/MyanmarClimateReportFINAL24Oct2017.pdf.

Table 22: Disasters, 1990–2016

Disaster Type	Occurrence	% of Total	Total Deaths	% of Total	Injured	% of Total	Affected	% of Total	Homeless	% of Total	Total Affected	% of Total	Total Damage (\$ Million)	% of Total
Earthquake	6	13	187	0	358	2	33,065	0	6,352	4	39,775	1	514,770	11
Epidemic	2	4	64	0		0		0		0		0		0
Flood	23	49	625	0	110	1	3,524,076	53	104,156	70	3,628,342	53	257,655	5
Landslide	7	15	205	0	31	0	146,351	2	1,200	1	147,582	2		0
Storm	9	19	138,733	99	20,116	98	2,980,485	45	37,000	25	3,037,601	44	4,072,288	84
Total	47	100	139,814	100	20,615	100	6,683,977	100	148,708	100	6,853,300	100	4,844,713	100
Climate related	39	83	139,563	100	20,257	98	6,650,912	100	142,356	96	6,813,525	99	4,329,943	89

Note: Note: Numbers may not sum precisely because of rounding.

Sources: Center for Research on the Epidemiology of Disasters (CRED). The International Disaster Database. <https://www.emdat.be/>

and 2015 were all extreme meteorological and hydrological events. These cyclones generated devastating wind speeds of up to 120 miles per hour and/or storm surges as high as 5.61 meters. The major cyclones making landfall in Myanmar are summarized in Table 23.

Table 23: Major Cyclones that Made Landfall in Myanmar

Date	Cyclones	Maximum Wind Speed (mph)	Surge Height (m)	Deaths
17 May 1884	Sittwe Cyclone	...	...	100
26 April 1936	Kyaukpyu Cyclone	...	...	1,000
10 May 1968	Sittwe Cyclone	...	4.25	1,037
7 May 1975	Pathein Cyclone	...	3.00	304
4 May 1982	Gwa Cyclone	...	3.70	31
2 May 1994	Maungdaw Cyclone	...	3.66	10
19 May 2004	Sittwe Cyclone	100	...	...
29 April 2006	Mala Cyclone	120	4.57	1
2 May 2008	Nargis Cyclone	120	5.61	138,373
10–23 November 2010	Giri Storm	120	...	27

... = data not available, m = meter, mph = miles per hour.

Source: L. L. Aung et al. 2017. *Myanmar Climate Report*. http://met-xpprod.customer.enonic.io/publikasjoner/met-report/met-report-2017/_/attachment/download/a3bf1468-4e93-486a-aa3f-4bea3871cffa:b8f39ba9ecfbde7d7c6da8ca769f4a1a96d61d39/MyanmarClimateReportFINAL24Oct2017.pdf.

In terms of geographical location, the Yangon Region's risk to storm surge is relatively low. According to the Global Risk Data Platform, the Yangon Region's risk to strong winds, i.e., category 4 (209–251 kilometers per hour wind and above) is also low. However, the city is exposed to floods of hazard up to 180 centimeters at least once a year, especially in the low-lying areas of Yangon.

Earthquakes are another major hazard facing Myanmar. Myanmar belongs to an active earthquake belt called the Alpine–Himalayan belt, its southern terminus is at the Andaman Sea spreading system, and its northern end fans out toward the Eastern Himalayan syntaxis.²⁸ The Sagaing Fault is a major tectonic structure running from north to south of Myanmar; it traverses Yangon to the right and passes through Mandalay, Yamethin, Pyinmana, Nay Pyi Daw, Toungoo, and Pegu. The Sagaing Fault (and related structures) has been known to play a major role for large earthquakes in Myanmar.²⁹

The Sagaing Faultline moved in 1930 (May and December), 1931, and 1946. The 1930 7.3 magnitude earthquake caused a tsunami in Bago and killed 500 people. While the Sagaing Fault has not devastatingly moved since then, Myanmar has continuously felt

²⁸ W. Yu et al. 2011. *Geophysical Journal International*. 185 (1), pp. 49–64. 1 April.

²⁹ S. T. Tun. 2015. *Sagaing Fault: A Desk Study Report on Seismotectonic Implications in Myanmar*. Yangon University. https://www.researchgate.net/publication/280310695_Sagaing_Fault_A_desk_study_report_on_seismotectonic_implications_in_Myanmar.

tremors. For each earthquake, Yangon experienced the tremors especially those measuring magnitudes of 3 and above for the past 88 years.

The other nine major faultlines in Myanmar from west to east are the Kaladan–Mrauk–U Fault System, Kabaw Fault System, Pyay Fault, Yenangyat–Chauk Thrust, Tangyidaung Thrust, Tuyin Taung–Gwegyo Thrust, Momeik Fault System, Shan Scarp–Papun Fault System, and the Three Pagodas Fault.³⁰

Meanwhile, a report titled National Adaptation Program of Action on Climate Change (NAPA) published by the Ministry of Environmental and Forestry³¹ highlights three environmental stressors and its impact on the socioeconomic sectors of the country. These are the “(i) climate related hazards/extreme weather events; (ii) deforestation; and (iii) diminishing water resources.”³² The report also elaborated that the country is indeed exposed to the various hazards, and the most relevant one for the housing sector is the flooding due to intense rainfall, storm surges, cyclones, and strong winds as presented in Table 26.

The projected hazards and disasters for Myanmar will be exacerbated by climate change and variability. Table 24 from the NAPA report summarizes the major climate hazards that the country expects to impact on the vulnerable sectors and different geographical areas.

The impacts of these climate hazards have also been foreseen in the sectors of agriculture, energy, water, and public health. While the housing sector was not specifically mentioned in the assessment, it is evidently stated as “human settlements.”

Table 24: Climate Hazards and Most Highly Impacted Sectors

Climate Hazard	Highest Impact Sectors				Highest Impact Areas							
	Agriculture	Water	Energy	Public Health	Rain shadow	Central Dry Zone	Coastal Areas	Catchment areas of major rivers	Mountainous and hilly areas	Ayeyarwady River basin areas	Upper reaches of river systems	Low-lying areas along major river systems
Drought	X	X	X	X	X	X						
Cyclone/strong winds	X	X	X	X			X					
Intense rains	X	X		X			X	X	X	X		
Flood and storm surge	X	X	X	X			X				X	X
Extreme temperatures	X	X	X	X	X	X						

Source: Government of Myanmar, Ministry of Environmental Conservation and Forestry, National Environmental Conservation Committee. 2012. *National Adaptation Programme of Action (NAPA) to Climate Change*. Nay Pyi Taw. <https://unfccc.int/resource/docs/napa/mmr01.pdf>. Adapted

³⁰ Footnote 30.

³¹ Government of Myanmar, Ministry of Environmental and Forestry, National Environmental Conservation Committee. 2012. *National Adaptation Program of Action on Climate Change*. Myanmar.

³² Government of Myanmar, Ministry of Environmental Conservation and Forestry, National Environmental Conservation Committee. 2012. *NAPA to Climate Change*. Nay Pyi Taw. <https://unfccc.int/resource/docs/napa/mmr01.pdf>.

Climate change has had and will continue to impact directly the housing sector, which includes infrastructures (power, water, sanitation, waste, road, and transport). These climate impacts will also be the major drivers for urban migration leading to the problem of increasing demand for urban housing, particularly in the Yangon Region.

C. Impact of Climate-Related Disasters on Housing Supply and Demand

Recurring impacts of climate change and disasters is one major root cause of urban migration for cities like Yangon. The supply of houses provided by the government will have a hard time catching up with demand, if people living in Myanmar will remain forever vulnerable to the impacts of climate change and disasters. Even the targeted 8,000 housing units every year pales in comparison to the increasing number of houses damaged by cyclones every year.

Frequent climate hazards have inevitably adversely affected the poor agriculture-based communities' basic livelihood sources, and sources of water for both domestic and agriculture uses. Similarly, other extreme events, such as strong cyclonic storms with strong rains and wind, have also destroyed their places of dwelling. The constant risk exposure of the communities in these vulnerable areas have forced people to flee to cities like Yangon looking for a better chance at life; but only to find themselves in much worse situations in terms of housing and livelihood opportunities.

Urban migration to Yangon, from Ayeyarwaddy Basin for example, which is the most vulnerable and populated region in the country, is thus highly likely. In the 2014 Population and Housing Census, the Yangon Region shows the highest rates of migration in its total in-migration. Ayeyarwaddy, on the other hand, which is the second most populous areas in Myanmar, shows the negative net migration rate, meaning that the people are moving out to less vulnerable cities such as Yangon. The migration rate in Myanmar is shown in Table 25.

As the recurrence of natural disasters have significant impact on the supply of affordable housing in Myanmar, the government needs to consider the provision of climate and disaster resilient housing or else supply can never catch up with the demand. However, integrating earthquake resilience measures for six-story buildings will incur an additional 10% increase in construction cost and 30% for eight-story buildings. Given the huge backlog of low-cost and affordable housing for urban poor in Yangon, the delivery of basic and livable housing construction and development has become the immediate priority. Thus, the integration of green designs or incorporation of low carbon design considerations during the construction and operation of the house may be little or none at all due to budget constraints.

Currently, the Department of Housing and Development (DUHD) funding for housing comes from the housing budget, revolving funds, and loans from the Construction, Housing and Infrastructure Development (CHID Bank). Limited funding sources constrain the DUHD's capacity to increase the supply of affording housing units. Incorporating climate-resilient

Table 25: Migration Rates for Recent Movements by States/Regions, by Sex, 2014

State/Region of Residence	In-migration Rate (per 1,000)			Outmigration Rate (per 1,000)			Net Migration Rate (per 1,000)		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Kachin	54.9	61.8	48.5	32.1	30.5	33.7	22.8	31.4	14.8
Kayah	49.9	51.3	48.6	29.4	28.1	30.5	20.6	23.2	18.1
Kayin	58.3	61.4	55.5	15.2	14.9	15.6	43.1	46.6	40.0
Chin	13.1	13.8	12.5	47.9	46.4	49.2	(34.8)	(32.6)	(36.7)
Sagaing	14.1	15.2	13.1	30.1	32.7	27.9	(16.0)	(17.6)	(14.7)
Tanintharyi	34.9	39.1	31.0	19.2	18.3	20.1	15.7	20.8	10.9
Bago	18.1	18.7	17.5	52.9	53.6	52.4	(34.9)	(34.8)	(34.9)
Magway	11.1	11.9	10.4	51.3	54.8	48.4	(40.2)	(42.9)	(37.9)
Mandalay	36.5	37.5	35.7	33.9	37.1	31.3	2.6	0.4	4.5
Mon	35.4	39.1	21.2	37.7	37.1	38.2	(2.2)	2.0	(6.0)
Rakhine	9.1	10.3	8.1	39.8	38.4	40.9	(30.6)	(28.1)	(32.8)
Yangon	116.4	113.6	119.0	23.5	24.4	22.6	93.0	89.1	96.4
Shan	27.3	29.3	25.5	16.0	15.4	16.5	11.3	13.9	9.0
Ayeyawady	7.9	8.0	7.9	73.0	72.1	73.7	(65.0)	(64.1)	(65.8)
Nay Pyi Taw	103.9	105.4	102.7	44.2	45.8	42.6	59.9	59.6	60.1

() = negative.

Source: Government of Myanmar. *The 2014 Myanmar Population and Housing Census (Yangon Region)*. 2014. Nay Pyi Taw.

measures in the construction of affordable housing will drive up construction cost, and eventually decrease the number of units that the DUHD can supply each year.

For end users, financing that is available is not that accessible to the targeted informal or low-income households as many of them do not have any savings account or banking experience to begin with. One of the preconditions on availability of savings with a banking institution is a barrier itself. Moreover, the CHID Bank, being the only government bank having this scheme given its limited branch banking operations, is also one barrier to accessibility. Likewise, should the available financing be used for enhancing housing resilience when earthquakes or extreme weather events strike or for green building design provisions, housing finance will remain expensive.

In addition, life and health insurance services are non-existent. Surviving members of the family assume debt servicing should the main borrower die; or become disabled. This arrangement does not address the problem of sustainable financing on the part of the borrower, considering that all members of the family are highly vulnerable to climate and natural hazards and disasters.

Further, the huge damage and cost to the economy of impacts of climate-related disasters have the effect of diverting much-needed resources to develop housing. Table 26 demonstrates the extent of financing costs from short (within 4 months), to medium (within 12 months), and to long term (within 12–36 months). Of the total post-disasters financing needs of MK2.03 trillion, the so-called productive sector eats up 43% and the infrastructure component (which comprises housing, electricity, water and

sanitation, transport, and communication), comes in second at 40%. Of the infrastructure subcomponents, housing takes up 77% of the total infrastructure financing needs, followed by transport (18%), water and sanitation (3%), and electricity (0.6%).

As a result, the government needs to allocate a significant portion of its annual budget to reconstruct the much-needed infrastructures that were destroyed by climate-related disasters. This budget could have been allocated to build more climate-resilient affordable housing units for the lower-income to middle-income households.

Table 26: Summary of Recovery and Reconstruction Needs by Sector
(MK million)

	Short Term (up to 4 months)	Medium Term (up to 12 months)	Long Term (1-3 years)	Total
PRODUCTIVE	324,346.1	298,118.5	255,856.3	878,320.9
Agriculture, fisheries and livestock	229,472.8	166,104.5	...	395,577.3
Water resources management (irrigation and flood control)	4,798.3	15,870.2	180,068.8	200,737.3
Industry and commerce	90,000.0	75,000.0	75,000.0	240,000.0
Banking and Finance	75.0	41,143.8	787.5	42,066.3
SOCIAL	9,932.6	70,489.0	47,179.0	127,600.7
Health	5,332.6	12,631.0	14,383.0	32,346.7
Education	4,600.0	57,858.0	32,796.0	95,254.0
INFRASTRUCTURE	12,222.3	296,755.2	515,447.0	824,424.5
Housing	2,225.0	191,832.0	438,483.0	632,540.0
Electricity	1,019.5	1,762.6	2,209.0	4,991.1
Water and sanitation	1,069.0	17,554.0	7,000.0	25,623.0
Transport	6,553.0	80,456.0	62,755.0	149,764.0
Communications	1,355.8	5,150.6	5,000.0	11,506.4
CROSS-CUTTING	79,849.4	40,228.5	84,500.0	204,577.9
Gender	2,770.9	3,500.0	4,000.0	10,270.9
Environment	0.0	1,700.0	63,000.0	64,700.0
Disaster Risk Management	750.0	13,700.0	17,500.0	31,950.0
Employment and livelihoods	21,328.5	21,328.5	...	42,657.0
Social protection	55,000.0	(110,000.0) ^a	(551,375.0) ^a	55,000.0
Total	426,350.4	705,591.2	902,982.3	2,034,923.9

... = data not available, MK = Myanmar kyat.

^a The proposed medium and long-term needs cash-for-work flood recovery programs will help provide temporary local employment to affected households for the repair and reconstruction of local infrastructure (schools, health clinics, housing, fish ponds, water and sanitation, wells, and other water sources, etc.). The bulk of the equipment and material costs are already covered by reallocations to sectoral reconstruction budgets. A part of this reconstruction budget needs to be reallocated for labor costs under the cash-for-work program.

Sources: Government of Myanmar. 2015. *Myanmar Post-Disaster Needs Assessment of Floods and Landslides, July – September 2015*. <http://documents.worldbank.org/curated/en/646661467990966084/pdf/103631-WP-P157276-PUBLIC-PFLNA-Report-2016.pdf>.

V. Policy Recommendations for the Development of the Housing Finance Market

Myanmar faces significant challenges in its efforts to develop a robust and efficient housing finance market. These challenges are characterized by a multitude of interconnected factors. Among various impediments that the housing sector has been facing are the poor legal infrastructure, including laws governing property ownership; registration and maintenance; transfer costs; land administration and titling procedures; inefficiencies in the real estate market, which is skewed toward the supply of high-end housing; and the lack of an organized database and key information on the residential market, more specifically the demand-and-supply situation for affordable housing. As outlined above, weaknesses in the finance and banking sector, lack of long-term resources for primary lenders, limited avenues for project finance for private developers, and inadequacies in the regulatory framework for housing finance are restricting the tremendous growth opportunity in the mortgage market.

This section seeks to identify the most efficient and effective recommendations (strategies) for the Yangon Regional Government (YRG) to develop its housing and housing finance markets, and to create an appropriate enabling environment that would enhance access to middle-income and low-income housing finance. As observed in the previous sections of this report, most of the urban working population in Yangon City cannot afford the prevailing property market due to excessive supply of premium residences and high-end housing. Consequently, the current housing finance market is very small and nascent as it caters only to the upper-income segments. Some banks have started offering long-term housing finance products, while others still offer the hire-purchase variant with a short tenor.

In this context, the strategy to develop the market should not be seen merely from a development lens with a limited focus on low-income and informal-income households. Instead, the thrust should be in developing a sound housing finance system that caters to all income segments and encourages the banks to gradually move down market. This can be achieved by leveraging public-private partnerships (PPPs) to augment the supply of affordable housing, encouraging microfinance lenders to offer housing microfinance (HMF) products and channeling the government's limited budget resources toward efficient, equitable, and properly targeted housing finance subsidy products which improve affordability of the deserving segments. The government also needs to consider undertaking certain legal reforms, such as amending the Urban Rent Control Act and enacting new laws (for apartments) and developing a climate land bank in semi-urban and rural areas of the Yangon Region, which can add to the supply of affordable housing and help mitigate climate and disaster risks.

The following recommendations are intended to address priority areas that need to be tackled immediately and simultaneously. The recommendations could be undertaken by the YRG with support from international development financial institutions and donor institutions.

Recommendation 1: Constitute a Yangon Region Special Task Force for Housing

The financial system is in a state of transition, and many of the preconditions to develop a mortgage finance system are not yet in place. Several constraints are expected to be addressed within the next few years as Myanmar moves gradually to a more open financial system. However, there is a severe constraint on the capacity of the Ministry of Planning and Finance and the Central Bank of Myanmar (CBM) to undertake all the required regulatory and institutional development tasks. The development of the mortgage market may not be among the higher priorities. In this context, the proposed special task force (STF) or policy think tank is expected to work on the twin objectives of:

- (i) augmenting the supply of climate-resilient affordable housing in the Yangon Region; and
- (ii) developing the housing finance market with a thrust on lower-income and middle-income housing finance, and HMF.

The terms of reference for the STF would include developing an actionable, time-bound road map for meeting the objectives with detailed recommendations, including reforms and other measures through a consultative process. A variety of stakeholders (both public and private) could be brought together to constitute the STF, particularly representatives from the YRG, Yangon City Development Committee (YCDC); CBM; Myanmar Economic Bank (MEB); Myanmar Banks' Association; Department of Urban and Housing Development (DUHD); Construction, Housing and Infrastructure Development (CHID Bank); as well as constructors and developers associations.

Further, a Yangon Region urban summit should also be organized as a key vehicle in developing broad-based legal and policy reforms for the development of affordable housing program. Such a summit could serve a number of important purposes. It would very publicly show the political commitment of the government to structurally tackle many of the issues that matter most to residents in the Yangon Region, such as the conditions in which they, their families, their neighbors, and the broader community live. A summit of this nature would allow different voices to be heard, new ideas to be exchanged, and assist in building a region-wide vision of a better Yangon Region, where everyone has access to an adequate and affordable home.

Recommendation 2: Promote and Expand the Ongoing Public Sector-Led Affordable Housing Model with Construction, Housing and Infrastructure Development Bank–Department of Urban and Housing Development Collaboration

As part of its project preparation work, the Japan International Cooperation Agency carried out a study (October 2017) of the housing finance system in Myanmar that included a household level demand survey for housing loans. Based on the findings of this study, the Japan International Cooperation Agency commenced a Housing Finance Development Project by committing a loan of ¥15 billion to MEB as executing agency for this project. The objective of this project is to develop the housing finance sector by providing long-term and lower interest rate funding and capacity building of financial institutions, such as the CHID Bank, as well as promoting housing provision for low middle income households. The funding will be made available to the CHID Bank, which is the main implementing entity and intermediary for this project. The same will be onlent exclusively for financing low-cost and affordable housing units supplied by the DUHD.

Among various ongoing donor-driven housing programs and initiatives, this project offers a viable and sustainable approach to developing the housing finance market in Yangon through funding support and technical assistance. This public sector-led model for delivery of affordable housing and long-term housing finance linked to savings products presents an excellent platform to induce competition, foster product innovation, and develop capacities for the sustained growth of the housing finance market. As the housing finance market matures, the primary lenders could be encouraged to develop more innovative and customized products for different consumer segments by income and employment. There should also be an opportunity for extending a long-term liquidity facility to continuously support the eligible banks and nonbank financial institutions (NBFIs), which are able to grow their low-income mortgage portfolios. Greater competition among financial institutions will lead to the introduction of more innovative financial products, which will eventually offer more financing options for consumers.

Competition and innovation are key to expanding the market through the following:

- Stimulate medium-sized state-owned financial institutions and private banks with sound asset liability management capacity to move toward long-term housing finance products, develop training infrastructure for manpower and skill development, help generate jobs; initial foray could be for financing the DUHD-supplied low-cost and affordable housing units.
- Induce competition and build capacity among large private banks and CHID Bank willing to take risk in non-formal and lower-income segments and in extending project finance to developers.

- Encourage microfinance institutions (MFIs) and NBFIs to diversify into offering HMF products and grow housing HMF portfolio, particularly to address the self-construction and housing upgradation need.
- Address liquidity and long-term funding issues through CBM participation with possible intermediation of the MEB, CHID Bank, and others.

Recommendation 3: Explore Public–Private Partnership Models for Accelerated Supply of Climate–Resilient Affordable Housing

The underlying advantage of adopting PPPs as an implementation strategy for increasing the supply of affordable housing is in combining the strengths of the private sector with those of the public sector to overcome challenges faced in affordable housing projects.

However, the success of PPP arrangements depends critically on designing PPP structures that make proper allocation of risks, responsibilities, rewards, and penalties among the stakeholders, and also create the right incentives for value creation. The role of the YRG and YCDC should be mainly to create master plans that are transparent and sacrosanct. Most importantly, YRG must facilitate the affordable housing PPP initiatives by providing the necessary trunk infrastructure and linkages consisting of roads, water, sewage, electricity, as well as public transport.

Like many other countries, the issue of availability and cost of well-located land is central to the issue of affordable housing. Depending on project location, land costs can vary anywhere from 20% to 50% of the total project cost. In the Yangon Region, the potential for directing privately owned land toward affordable housing at a low cost is rather limited. Through appropriate PPP structures, private sector developers can be suitably incentivized to participate by adopting one or more of the following:

- (i) **Government land for affordable housing by unlocking unutilized parcels of government-owned lands.** A systematic policy and effort can bring such lands under affordable housing and further be made available to the private sector at a low cost, to develop and build affordable housing projects using private capital and efficiencies under suitable PPP structures. The housing created under this PPP strategy will effectively be in the form of a subsidy consisting of public lands provided by the government to low-income clients.
- (ii) **Land for affordable housing through redevelopment of underutilized urban areas.** In Yangon City and its periphery, there are large tracts of land covered by slums or makeshift temporary structures. Policy reforms accompanied by PPP projects that seek to redevelop such underutilized urban areas through area redevelopment projects can effectively address the affordable housing challenge. These redevelopment projects can co-create affordable housing along with commercial buildings and high-end housing (similar to mixed use development projects either on the same plot of land or in adjacent plots). Market instruments such as transferable development rights can be deployed to incentivize private sector participation in such projects. Redevelopment represents a win-win strategy in which all parties gain by better and more intensive utilization of scarce land resources.

- (iii) **Land for affordable housing through change of land use of privately held agricultural lands.** The rural areas in Yangon state and the peripheral semi-urban areas around Yangon City comprise vast tracts of agricultural land which are either privately held or leased by the state. Based on economic feasibility, the YRG could undertake a change in land use to residential use, especially earmarking such lands for affordable housing projects. The government can then invite bids from interested private developers, the terms of the bid would include a predetermined minimum number of units (calculated on the basis of financial viability of the project) to be delivered by the developer.
- (iv) **Private land for affordable housing in exchange for permission for (a) more intensive utilization of land (higher floor area ratio/floor space index) or (b) to build high-end housing.** Within Yangon City and in its peripheral areas, there are slums and informal settlements in locations where the land is relatively expensive. Even when the lands are privately owned and developed, they often host a number of single- or two-story tenements. Such inefficient utilization of privately owned urban lands is usually the consequence of policy bottlenecks, archaic land use restrictions, and land title issues. Policy reforms accompanied with PPP can redevelop such underutilized urban pockets through area redevelopment projects comprising affordable housing along with commercial buildings and high-end housing.

The PPP approach can bring about efficiency gains in the development of land, construction, and operation and maintenance for climate-resilient affordable housing through the use of technology, and better management and construction practices. In addition, the private sector should be expected to bring economies of scale from large projects. Delivery of projects at a lower cost and, without cost and time overruns, can potentially contribute to the availability of affordable housing. To achieve these positive outcomes, PPP projects will need to be structured, such that they create appropriate incentives for good performance by the private sector developers. Meanwhile, the private sector banks and primary mortgage lenders could provide commercial funding in the form of project finance to cover the land and constructions costs and offer retail housing loans to the allottees.

Recommendation 4: Encourage Microfinance Lenders to Diversify into Housing Microfinance

The microfinance sector in Myanmar is at an early stage of development. There are great opportunities as well as significant challenges for growth. Any successful intervention will require a rapid dissemination of international good practices and a high level of coordination.

Of Myanmar's over 50 million people, only about 23% have bank accounts. A mere 2,000 bank branches serve the entire country compared with more than 7,000 bank branches in Thailand and a similar number of branches in Bangladesh. As such, the demand for microfinance is high. Unmet demand, as estimated by industry experts, exceeds \$1 billion.³³ Past crises in the

³³ E. Duflos et al. 2013. *Microfinance in Myanmar Sector Assessment*. CGAP/IFC. https://themimu.info/sites/themimu.info/files/documents/Report_Microfinance_in_Myanmar-Assessment_CGAP-IFC_Jan13.pdf.

banking and cooperative sectors have eroded public trust in formal savings products. Use of informal providers of credit and transfer services in both urban and rural Yangon is widespread despite the additional risks and expense.

The new Microfinance Law allows local and foreign investors to establish fully private-owned MFIs. Although the financial infrastructure is underdeveloped and there is no active credit bureau serving the MFIs, there are significant opportunities with new generation technologies enabling microfinance. Notably, mobile penetration in Myanmar is now among the highest in Southeast Asia. It has grown from 7% to over 90% since 2012. Conditions are ripe for Myanmar to leapfrog the traditional banking mechanics of branches and ATMs and go digital.

There are only a few examples of successful HMF interventions undertaken by MFIs in the Yangon Region. KB Microfinance Myanmar, a subsidiary of KB Kookmin Bank, Republic of Korea has been offering a house repair and a building loan product since 2017 and, with initial success, they plan to grow this portfolio. Women for the World, a nongovernment organization, has been active in promoting a savings-based housing loan arrangement (with financing from CHID Bank and KB Kookmin Bank) for the purchase of affordable housing units (apartments) allotted to poor and low-income beneficiaries. Women for the World is also active in promoting a “Site and Services” low-cost housing solution, wherein the cost of on-site infrastructure and connections is met by YCDC and/or DUHD.

At present, an HMF market does not formally exist, despite the significant needs for home improvements, extensions, and new house constructions. Fortunately, the infrastructure for expansion of the microfinance system for low-income housing exists in Yangon and the state is reasonably well penetrated by microfinance players.

The thrust should be on building an HMF market to provide financing for the large and unserved housing needs by conducting a region-wide market assessment to understand blockages and to crystallize ideas for developing the liquidity facility to help jump start the market. This would help in leveraging the presence and outreach of several microfinance lenders to initiate the delivery of HMF products with a focus on a savings product for housing loan (down payment) and loan products for home improvement and rent-to-own housing schemes.

Recommendation 5: Develop Suitable Housing Finance Subsidy Products Channeled through Banks and Microfinance Lenders

Statistics relating to the disparity in household incomes across income deciles and poverty data pertaining to the Yangon Region clearly illustrate the lack of affordability of the majority of the population in meeting their basic housing needs. Among the lower-income and middle-income households, while they have a limited capacity to borrow and to make

a down payment, this is often not adequate for them to afford the purchase of a small apartment or to buy a plot of land and construct a new house.

This report has examined in-depth the relative housing loan affordability across income deciles, subject to the market terms offered by the primary lenders. Based on these affordability levels, a matrix with different types of housing assistance or interventions has been proposed to guide the efforts and spending of the Union and regional governments, while ensuring that maximum government support is channeled toward the deserving income categories.

Table 27: Decile-Wise Proposed Government Interventions for Housing Assistance

Income Decile	Type of Housing Assistance from the Yangon Region Government (proposed)
1st decile	Housing grant (for self-help construction/upgrade)
2nd decile	Housing grant (for self-help construction/upgrade)
3rd decile	HMF (group) + fixed subsidy (linked to loan amount)
4th decile	HMF (group) + fixed subsidy (linked to loan amount)
5th decile	HMF (group) + fixed subsidy (linked to loan amount)
6th decile	HMF (individual) + down-payment subsidy
7th decile	HMF (individual) + down-payment subsidy
8th decile	HMF/mortgage loan (from CHID Bank/banks/MFIs) + Down-payment subsidy/interest buy down subsidy
9th decile	HMF/mortgage loan (from CHID Bank/banks/MFIs) + Down-payment subsidy/interest buy down subsidy
9.5th decile	Regular mortgage loan from banks
10th decile	Regular mortgage loan from banks

CHID Bank = Construction, Housing and Infrastructure Development Bank; HMF = housing microfinance; MFI = microfinance institution.

Source: Authors.

As indicated in Table 27, there is a strong case for the government to allocate a portion of their annual housing budget to subsidies directed to the lower-income deciles and poorer sections of the society. The subsidy design and allocation must reflect the nuanced housing needs and affordability, while ensuring proper targeting, efficiency, and transparency.

To address the gap in affordability, the YRG should examine the suitability of various subsidy mechanisms and identify international best practices in the delivery of housing subsidies so as to formulate its own strategy to ensure optimal utilization of its resources, while leveraging private sector capital (from lenders) and avoiding market distortion. It is recommended that detailed analysis and scoping work is done to guide the development of a coherent and efficient suite of subsidy products to meet housing needs across various consumer income segments while enhancing budget effectiveness. A possible strategy is illustrated in Figure 5, this approach ensures heterogeneity and diversity of housing types and housing finance products across income deciles D1–D10.

Figure 5: Proposed Housing Finance Solutions

Year	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
FY2019 onwards:			Housing Microfinance – group and individual/home improvement/slum upgrading							
Channel the government housing budget for piloting housing microfinance and housing finance subsidy products			Self-Construction, site, and services (target informal income segment)							
						Low-cost apartment units supplied by DUHD and private developers under PPP framework				
				Home extension/incremental housing units/resale of existing properties/rent to own						

DUHD = Department of Urban and Housing Development, FY = fiscal year, PPP = public-private partnership.

Source: Authors.

Across emerging market economies and from international experience, credit-linked (i.e., housing finance-linked) subsidy programs enhance program implementation by optimizing targeting and eligibility criteria, enforcing eligibility noncompliance, conducting robust monitoring and evaluation to determine the effectiveness of program impact, and developing subsidy exit strategies.

Ideally, the housing subsidy product should bear the following characteristics:

- (i) simple to administer, regulate, and communicate (ministry/lenders/consumers);
- (ii) transparent (no ambiguity across income levels and geographies);
- (iii) equitable (minimizes the possibility of falsifying income);
- (iv) progressive (ensures lowest-income borrowers get maximum subsidy);
- (v) efficient (maximizes loan by insisting on minimum down payment, i.e., “savings-cum-subsidy”); and
- (vi) market-driven (neutral on property values/lenders’ terms/type of end-use).

There are several types of housing finance subsidy products and, within each type, different innovative variants have been attempted across different countries. The basic products are:

- (i) down-payment subsidy,
- (ii) interest buy down subsidy,
- (iii) fixed-cum-floating rate subsidy, and
- (iv) principal first repayment subsidy.

The down-payment subsidy product is generally considered to be a superior option as it fulfills all of the desirable characteristics and, if designed well, it could establish a direct link to the consumer’s affordability and it could also trigger a minimum aspiration at the consumer level. The down-payment subsidy product can be offered in partnership with primary lenders (such as banks, NBFIs, and MFIs) alongside long-term housing loans, micro-mortgages, as well as HMF.

Recommendation 6: Provide Extensive and Customized Capacity-Building/Training Support to Financial Institutions

Most private and public-sector banks and NBFIs in Myanmar are currently not offering long-term housing finance products. The finance sector players are understandably cautious about venturing into a new line of business that extends beyond their current business model. To develop the housing finance market in the Yangon Region, it is imperative to develop the internal capacities of the primary lenders and to equip them with the necessary skill sets and trained manpower so that they can commence lending operations for financing residential mortgages. Specifically, banks and NBFIs would need customized technical assistance to overcome the following capacity constraints:

- (i) to go down-market to meet the demand from low-income and informal-income consumers;
- (ii) to smoothly transition from short-term lending to long-term financing of retail mortgages; and
- (iii) to grow and sustain quality housing loan portfolios with appropriate risk management, self-governed, and responsible lending standards.

To address the abovementioned capacity constraints, one or more of the following topics need to be considered:

- (i) market entry and sourcing strategy;
- (ii) product design and development;
- (iii) underwriting, including credit, legal, and technical;
- (iv) policies and procedures for lending operations;
- (v) information technology systems and loan accounting software;
- (vi) marketing, promotion, and communication;
- (vii) development plans for pilot-testing, launch and roll out of new and/or improved housing finance products;
- (viii) funding strategy and managing asset liability management risk;
- (ix) internal controls and risk management;
- (x) human resource planning and staff training;
- (xi) incorporating disaster risk management principles in lending operations;
- (xii) compliance with environmental and social management guidelines; and
- (xiii) responsible lending and consumer protection

Recommendation 7: Develop a Housing and Real Estate Information System

Myanmar lacks a comprehensive housing information system that collects and tracks key housing indicators to inform stakeholders of market trends, gaps, and potential, as well as potential risk and exposure to the economy and finance sector. While certain housing databases exist, this data is captured separately by different public and private entities.

To address this issue, the housing and real estate information system (HREIS) could be set up with the following roles/objectives:

- (i) a widely accessible repository and aggregator of housing and real estate-related data, price trend, and housing consumer segmentation; and
- (ii) a knowledge center that provides robust analysis and insights on housing market trends, gaps, challenges, and opportunities.

As part of the enabling environment, HREIS would serve as a repository of reliable, up-to-date, and publicly available housing and real estate-related data, analyses, and sector indicators and finetune the definition key metrics, such as backlog (housing deficit) and housing affordability. More importantly, opportunities exist to use the HREIS evidence-based data platforms with visual geomapping capacity to bring about practical and substantive discussions through more precise analyses of housing backlog, needs, and gaps available by geographical locations and consumer income segmentation.

A more exact understanding of housing needs and gaps would enable the government to significantly improve planning and decision-making for policy and program development and fiscal budget allocation (e.g., distinguishing between demand for ownership housing versus rental housing). The platform would also help in engaging the private sector to guide their process of planning for investment in the affordable housing sector. Finally, the HREIS could be used by the primary lenders in their technical appraisal for housing loans by providing a double-checking mechanism in the assessment of property valuation, thus contributing to the strengthening of the mortgage market.

Recommendation 8: Develop the Rental Market in Yangon with Suitable Incentives to Attract Private Capital and Amend the Urban Rent Control Act

A balanced housing system includes a vibrant rental market that facilitates easy access to a range of housing units at an affordable rental cost. There are several advantages of nurturing such a market that caters to the diverse housing needs of the working and migrant population, including smaller-sized tenements and high-density apartment blocks spread across city and suburban locations. These include:

- (i) improvement in the functioning of the housing market and reduction of the vacancy rate;
- (ii) enhancement of labor mobility and flexibility; and
- (iii) meeting the needs of young people who want to live independently, but not keen on buying a property.

Mobilizing private capital is essential for developing the residential rental market, and this could be achieved through a combination of providing suitable incentives and initiating market reforms:

- (i) Explore PPP model as discussed in recommendation 3.
- (ii) Develop market infrastructure for real estate agents.
- (iii) Tax incentives for small landlords; rent-to-own schemes could be piloted.
- (iv) A good rental law, which balances landlord and tenant rights, is needed.

While the Urban Rent Control Act admirably protects the rights of tenants against mandatory relocations and heavily prescribes the circumstances required for eviction to be legally justified, there are grounds nonetheless to consider the careful revision and amendment of this law.

Whether justified or not, there is a prevailing view among landlords and potential investors in the construction of new rental housing that the rent control protections are skewed in favor of tenants to such a degree that heavy disincentives to maintain and repair buildings are in place. This then leads to buildings across the Yangon Region to become dilapidated and increasingly uninhabitable.

As such, a revision of the present law that maintained as many protections for tenants as possible and yet enabled landlords to achieve a higher return on their investments should have the net effect of improving building or housing maintenance and inducing new investments in affordable housing. However, any such revision should be subject to an independent legal expert oversight, only to be carried out in a manner that fully protects the HLP rights of tenants. It should also take into full account the terms of the International Covenant on Economic, Social and Cultural Rights, which protects tenants' rights and was ratified by the Government of Myanmar in October 2017.

Recommendation 9: Consider the Adoption of a New Apartment Law

Many stakeholders interviewed for the present project indicated the need for the adoption of a new Apartment Law to supplement the Condominium Law and other relevant legislation.

A strata title law and related mortgage legislation relating to the purchase of apartments would assist in the development of a more efficient housing market linked to the needs of the population. The new Apartment Law should consider (i) simplifying transactions relating to the apartments, (ii) allowing tenants to have ownership rights over these apartments, and (iii) providing clear provisions on the creation of mortgage and taking of securities. Under the current legal regime, buildings and fixtures on the land are considered as part of the land. In principle, a title to the building as independent from the land is not recognized. Therefore, tenants would not be eligible to hold title deeds to their apartments, leaving them solely with possession and contractual rights.

Lacking ownership rights to their apartments, the tenants will have little or no access to housing finance. The proposed new Apartment Law should provide a mechanism for allowing tenants to hold title deeds to their apartment units, which are independent from the land. Having ownership rights over the apartment would allow tenants to create securities over the apartment in the form of registered or equitable mortgage. Under the Transfer of Property Act (1882), there are six types of mortgages that can be created over immovable property: simple mortgage, mortgage by conditional sale, usufructuary mortgage, English mortgage, mortgage by deposit of title deeds, and anomalous mortgage.

The interest or right transferred through the mortgage will depend on the form of mortgage. Usually in Myanmar, a default of the mortgagor will force the sale of the apartment to repay the debt owned. The new Apartment Law should be clearly drafted to address the availability of mortgages or refer to the Transfer of Property Act on this issue, and provide the details of enforcement of such security so that apartment owners and lenders do not get trapped in vague regulatory and administrative procedures.

Recommendation 10: Consider the Establishment of a Climate Land Bank

The Myanmar Disaster Management Law (2013), the Myanmar Action Plan on Disaster Risk Reduction, the National Recovery Framework and Plan for the 2015 Floods and Landslides Disaster (2016), and other norms have been adopted in recent years, but these do not explore in any detail the question of securing land resources for families and communities permanently displaced due to climate change impacts.

One publication explicitly notes that there has been insufficient support for sustainable planned relocation and that the Government of Myanmar should “adopt policies for planned relocation and implement them at the local level through training and capacity building to ensure that planned relocation is fully consensual, respects the human rights of relocated individuals, and is accompanied by multi-year funding and support to ensure that relocated households are provided with safe and secure housing, land and access to livelihoods and services.”³⁴ Among the key concerns of families either relocating or needing to relocate because of disasters or the impacts of climate change, the lack of available sites for relocation is one of the primary concerns, as were the limited support available for rebuilding homes, challenges associated with accessing services and education, and limited livelihood opportunities at relocation sites.

Another publication points to the need for more research on the interplay between climate resilience policies and their impacts on land acquisition.³⁵ In policy terms, there is a pressing need in Myanmar to identify and allocate land at a level commensurate with the scale of present and likely future climate displacement in the development of domestic strategies

³⁴ A. Thomas. 2016. *Accelerating Threats from Climate Change: Displacement and Disasters in Myanmar: Field Report*. Refugees International. December. pp. 9 and 14. <https://static1.squarespace.com/static/506c8ea1e4b01d9450dd53f5/t/5845f2e2f7e0ab230f4631cb/1480979178783/2016126+Myanmar.pdf>.

³⁵ C. Finaz. 2015. *A New Climate for Peace: Myanmar Country Risk Brief*. August. p. 1.

and laws to address the problem. Such measures have been increasingly seen by analysts as the only feasible way by which the challenge of climate displacement can be addressed.³⁶

The establishment of a Myanmar National Climate Land Bank (MNCLB) would act as the central institutional tool in this process.³⁷ The aim of the MNCLB would be to set up land for a set-aside program of parcels of state land in a bid to prevent land conflict and resolve climate displacement in a rights-based manner throughout the country. The MNCLB would provide a basis for developing concrete policies that tie together four vital policy threads: conflict prevention, climate change, displacement, and access to land.

The central importance of land for security, stability, and economic development is already well-recognized by the present government and by all organs of civil society, which have commenced identifying state land resources for eventual distribution to landless rural poor households as part of broader land reform efforts. In this context, the establishment of the MNCLB would be a further element of broader land reform measures, which are already underway in the country. Without such an MNCLB in place, the growing numbers of people facing displacement due to the effects of climate change will increasingly have nowhere to go and thus be forced, as climate displaced communities everywhere, into urban slums or new residential options that are wholly inadequate to meet their basic human rights requirements.

Recommendation 11: Mobilize Local Currency Savings to Support Housing Sector Development

Among others, one of the solutions to increase the level of affordability is to lengthen the tenor of mortgage loans, so that housing becomes more affordable as each installment becomes lower. In the case of Myanmar, one of the challenges is to encourage financial institutions to offer longer tenor mortgage loans, while taking into account risks that may arise due to mismatches of assets and liabilities.

Financing in local currency is crucial to the sustainable development of the housing sector in Myanmar because mortgage loans are generally long-term by nature, thus any exchange rate risk should be avoided. Therefore, financial institutions should be able to access long-term financing in local currency. As the property market develops, it is important that financial institutions will not overly rely on foreign currency financing, which seems to be more attractive compared with local currency financing because of the lower cost of funds. A good lesson can be learned from the case of Thailand prior to the 1997 Asian financial crisis.

³⁶ For instance, a publication by Refugees International notes that “The Myanmar government should develop policies, procedures and guidelines for planned relocation” and that “Members of the UN humanitarian country team in Myanmar providing support for relocation of disaster-displaced communities must develop joint internal guidelines for operationalizing their role. This should include working with the Myanmar government and development agencies to try to ensure that planned relocation is accompanied by comprehensive, long-term support and monitoring so that it is sustainable and does not increase vulnerability or protection risks.” A. Thomas. 2016. *Accelerating Threats from Climate Change: Displacement and Disasters in Myanmar: Field Report*. Refugees International. December. p. 3.

³⁷ Displacement Solutions. 2018. *Establishing a Myanmar National Climate Land Bank*. 23 May. https://issuu.com/displacementsolutions/docs/dis5757_myanmar_national_climate_la.

As a result of a series of deregulation measures that were implemented in the early 1990s, several financial institutions were able to borrow at lower rates in foreign currencies and lend to local borrowers (out-in) or lend to overseas borrowers (out-out) at higher rates. Prior to the burst of the bubble in 1997, data on sectoral allocation of credits did not show any signs of overextension to the property or real estate sectors, and in fact funds seemed to be properly allocated to the “productive” sectors. Direct lending to the property sector or real estate businesses was consistently below 5% of total lending. However, it became apparent after the crisis that these so-called productive sectors, such as exporters, had used the funds to invest heavily in the property and real estate sectors, thus turning the entire business group into nonperforming loans overnight as the baht depreciated.

There are several ways in which banks can raise funds. Deposits are the largest source of funds for banks. However, bank deposits can be withdrawn at any time by the depositors, which make it difficult for banks to efficiently manage their assets and liabilities. A possible alternative for banks to raise long-term funding is by issuing corporate bonds in the local market. A bond market does not yet exist in Myanmar, thus, a concerted effort among relevant regulatory authorities is required to develop an efficient and a well-functioning corporate bond market. In fact, a holistic finance sector development road map should be jointly drafted by relevant authorities such as the Ministry of Planning and Finance, CBM, and Securities and Exchange Commission of Myanmar so that properly sequenced initiatives can be implemented in a consistent manner. As financial markets develop, financial institutions will be able to offer more variety of mortgage products that suit the individual needs of the clients.

Other than the bond market, the government may consider establishing an entity that can provide liquidity to the banking sector and act as a lender of second last resort to financial institutions. One possible model is based on the National Mortgage Corporation of Malaysia (Cagamas Berhad). Cagamas Berhad was established in 1986 to promote the broader spread of home ownership and growth of the secondary mortgage market in Malaysia. The company, set up by the Bank Negara Malaysia and commercial banks operating in Malaysia to provide liquidity at a reasonable cost to the primary lenders of housing loans, encourages further financing of houses at an affordable cost. The company also issues corporate bonds and *sukuk* (Islamic bonds) to finance the purchase of housing loans and receivables from financial institutions, selected corporations, and the public sector. Currently, Cagamas is the largest corporate bond issuer in Malaysia, and has been assigned local and foreign currency long-term issuer ratings of A3 by Moody’s Investors Service Inc. that are in line with Malaysian sovereign ratings. The World Bank considers the Cagamas model as the most successful secondary mortgage liquidity facility. By providing more liquidity to the banking system, financial institutions will be able to allocate more funds to support the development of the housing sector in Myanmar.

In Myanmar, certain state-owned enterprises and government departments have accumulated a large amount of long-term savings by way of compulsory contributions by staff members for the past several decades. The administration of these funds is similar to the social security deductions that are used for retirement benefits and pension schemes. For example, the Ministry of Forests in Myanmar has built a large corpus which is deposited with banks, but not in interest-earning accounts, as per the applicable regulatory provisions. Such investible surplus funding could be readily deployed as secondary resources to meet the long-term funding needs of the fast-growing mortgage market.

VI. Road Map for the Development of a Rights-Based and Climate-Resilient Housing Sector

Summarizing the different components and recommendations of the report, a proposed road map is prepared for consideration by the Yangon Region Government (YRG) and various relevant stakeholders involved as shown in Figure 6.

This road map seeks an inclusive and sustainable human settlement development pathway for the Yangon Region with possible replication for other regions in Myanmar. This shall be achieved by ensuring that decision makers are informed on public-private partnership (PPP) housing frameworks that integrate HLP rights and climate-resilient measures in support of modernizing the local housing sector policies, strategies, programs, and projects.

The road map recommends three strategic interventions. Subject to available financing, the YRG can choose which workstreams need to be prioritized for each of these outputs.

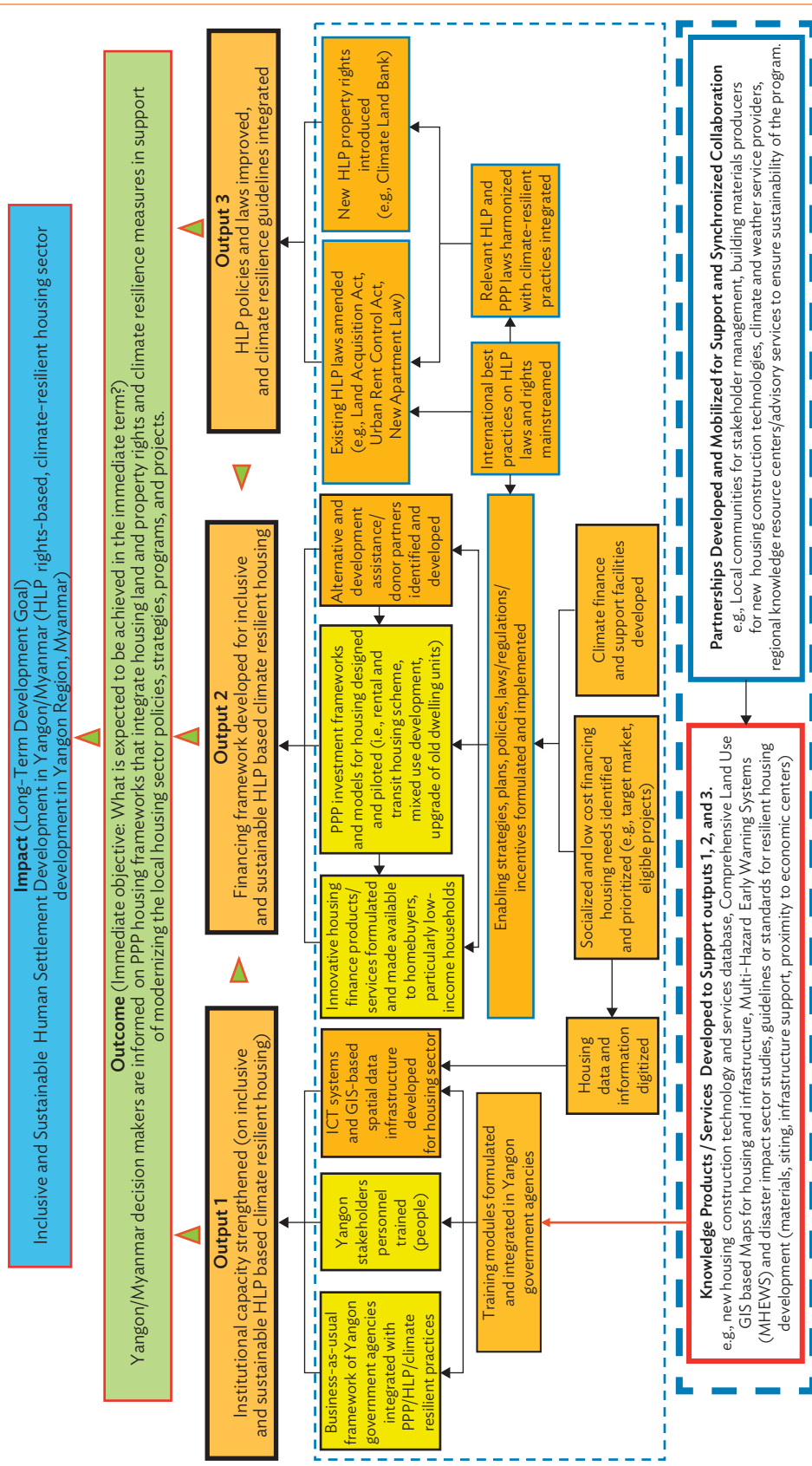
Output 1: Strengthening the Institutional Capacity on Developing and Implementing Inclusive and Sustainable Housing

The workstreams would include the basic integration of PPP and housing, land, and property (HLP) best practices in the current business-as-usual housing framework or guidelines of local government agencies. Another workstream is the development of information and communication technology systems and geographic information system-based Spatial Data Infrastructure for the housing sector where digitized housing data and information shall be uploaded. To ensure smooth implementation, institutional training of public servants in the YRG should be done. Training modules shall be formulated and integrated in local YRG agencies' operations manuals.

Output 2: Developing a Financing Framework for Inclusive and Sustainable Housing

One of the workstreams is the formulation of new and innovative housing finance products and services. Among the financing products identified include, but not limited to, are down-payment and/or interest payment subsidy.

Figure 6: Road Map for the Development of a Rights-Based and Climate-Resilient Housing Sector



GIS = geographic information system, HLP = housing, land and property, ICT = information and communication technology, PPP = public-private partnership.
Source: Authors.

Another workstream is the design and piloting of PPP investment frameworks and models for housing. Once successfully piloted, these can also feed into the new list of innovative housing finance products and services. A third workstream is the identification and development of alternative development assistance or donor partners, which should be able to support the development of the two aforementioned workstreams.

To ensure the sustainability of these three workstreams, enabling strategies; plans; policies; and laws, regulations, and incentives would also need to be formulated and implemented to ensure coherence and convergence across the sector. Inputs to this sub-workstream should reflect and address the identified and prioritized housing needs for the socialized and low-cost financing housing (e.g., target market, eligible projects). Likewise, it should also capture the international best practices on HLP laws and rights identified in output 3.

Output 3: Improving or Amending Housing, Land, and Property Policies and Laws and Integrating Low-Carbon, Climate-Smart, and Disaster-Resilient Housing Guidelines

The key workstream is the amendment of existing HLP laws (e.g., Land Acquisition Act, Urban Rent Control Act, and New Apartment Law). The other is the introduction of new HLP property rights (e.g., Urban Reform Law and Climate Land Bank). To achieve this, a national body or committee on legislative reforms needs to be established. This body shall study and mainstream international best practices on HLP laws and rights, as well as develop laws and procedures to manage mandatory relocations, climate land banking which shall all feed into harmonization of relevant HLP and PPP laws with low-carbon, climate-resilient, and disaster risk-reduction policies. All outputs under these activities shall feed into the two main workstreams above.

A common support workstream to successfully deliver the proposed strategic interventions is the development of knowledge products and services (KPS), as well as of development of partnerships that can be mobilized for support and synchronized collaboration. For the development of relevant knowledge products and/or services, the YRG can explore developing new housing construction technology and services database; a comprehensive land use geographic information system-based maps for housing and infrastructure; a Multi-Hazard Early Warning Systems for various townships etc. These KPS shall feed into the above outputs and workstreams (e.g., training modules).

On the other hand, partnerships can be explored and nurtured with various local communities, building materials producers with new efficient and resilient housing construction technologies, national climate and weather service providers, disaster risk management experts on climate services, etc. This is to ensure the sustainability of programs for climate and disaster compatible jobs, finance, and business. Initiatives under this common workstream can support the KPS as well and other key workstreams.

Conclusion

In conclusion, several strategic policies and interventions will be required, at both the Union level and regional level, to support the government's policy to construct affordable housing units for low- to middle-income households with an improved access to long-term housing finance. Collective efforts among ministries, regulatory agencies, and the private sector and proper sequencing of various reforms and measures will be critical to the implementation of an inclusive affordable housing agenda and the development of related policies. The provision of "affordable housing for all" goes beyond the responsibility of the government. Any such ambitious goal can only be achieved through a market-led process, driven by a competitive private sector and supported by a conducive legal, regulatory, and macroeconomic environment coupled with judicious and efficient use of the government's own resources. The government needs to ensure an equitable and progressive policy framework to facilitate the creation of an enabling environment and a level playing field to maximize the participation from the private sector.

For constructors and developers, it is important that their projects comply with relevant rules and regulations. Meanwhile, they should also stay up-to-date with innovative construction techniques and building materials that are available in the market, which can eventually reduce the overall construction costs. For example, the post-tension slab technique can reduce the height between floors. The total height of the building can still be kept within the regulatory limit. Generally, the cost of a post-tension slab is relatively similar to the conventional slab-and-beam floor system, but the overall construction cost of a building using post-tension slab can be reduced due to a shorter construction period, thus allowing for higher productivity (shorter construction time per floor). This technique, together with the precast concrete (i.e., prefabricated building materials) can be explored for the construction of affordable housing projects, as it can lower construction costs and expedite project completion. Technically, post-tension slab can better withstand an earthquake and is resistant to cracking.

Meanwhile, financial institutions, including microfinance companies, should also mainstream climate-resilient principles as part of their lending operations. This is particularly true for commercial banks as they generally assess the viability and vulnerabilities of residential projects to climate change and natural disasters. As financial soundness and stability of financial systems depend on the projects that they finance, it is important for banks to ensure that their financed or approved projects will be completed without any risk or delay arising due to natural disasters. On the contrary, homebuyers, being unsophisticated borrowers, do not have the capacity to assess whether the house that they are about to buy is located in the safe zone or high-risk areas, thus they will be relying on the assessment done by commercial banks. Other than construction risk,

mainstreaming climate and disaster-resilient principles can also lower the likelihood of default by borrowers. The idea of sustainable banking should be clearly understood and adopted by the commercial banks in Myanmar.

Even though this study focuses on the Yangon Region, where only 25% of the households are residing in formal housing units, and the dwelling units for 75% of the households are semipermanent or temporary structures, it is hoped that relevant recommendations and policy interventions can be adopted across other regions of Myanmar. As the Yangon Region Government and Department of Urban Housing and Development, together with local stakeholders, adopt and implement these recommendations, their experiences can be shared and transferred across other regional governments in a collective effort to achieve the target of supplying one million affordable housing units by the year 2030.

References

- Asian Development Bank. 2018. *Asian Development Outlook 2018 Update: Maintaining Stability Amid Heightened Uncertainty*. Manila.
- Aung, L. L. et al. 2017. *Myanmar Climate Report*. http://met-xpprod.customer.enonic.io/publikasjoner/met-report/met-report-2017/_/attachment/download/a3bf1468-4e93-486a-aa3f-4bea3871cffa:b8f39ba9ecfbde7d7c6da8ca769f4a1a96d61d39/MyanmarClimateReportFINAL24Oct2017.pdf.
- Center for Research on the Epidemiology of Disasters. The International Disaster Database. <https://www.emdat.be/>
- Colliers International. 2017. *Quarterly Review Yangon Condominium Q3 2017*. 23 November. <https://www.colliers.com/-/media/files/marketresearch/apac/myanmar/yangon%20condo%20report%20q3%202017.pdf?la=en-GB>.
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. 2018. *Myanmar's Banking Sector in Transition Current Status and Challenges Ahead*. http://www.giz-banking-report-myanmar-2018.com/epaper/Myanmar_Banking_Report_2018.pdf.
- Displacement Solutions. 2018. *Establishing a Myanmar National Climate Land Bank*. 23 May. https://issuu.com/displacementsolutions/docs/dis5757_myanmar_national_climate_la.
- Duflos, E. et al. 2013. *Microfinance in Myanmar Sector Assessment*. CGAP/IFC. https://themimu.info/sites/themimu.info/files/documents/Report_Microfinance_in_Myanmar-Assessment_CGAP-IFC_Jan13.pdf.
- Finaz, C. 2015. *A New Climate for Peace, Myanmar Country Risk Brief*. August.
- Government of Myanmar. Chapter II, Of Rights In Land.
- Government of Myanmar. 1993. *Development Committee Law (1993)*. Yangon. <http://displacementsolutions.org/wp-content/uploads/DEVELOPMENT-COMMITTEES-LAW-1993.pdf>.
- . 2008. *Constitution of the Republic of the Union of Myanmar (2008)*. Nay Pyi Taw.
- . 2014. *The 2014 Myanmar Population and Housing Census (Yangon Region)*. 2014. Nay Pyi Taw.

- . 2015. *Myanmar Post-Disaster Needs Assessment of Floods and Landslides, July – September 2015*. <http://documents.worldbank.org/curated/en/646661467990966084/pdf/103631-WP-P157276-PUBLIC-PFLNA-Report-2016.pdf>.
- . 2016. *Myanmar Statistical Yearbook*. Nay Pyi Taw.
- . 2017. *Construction Housing and Infrastructure Development Bank (CHIDB) Annual Report 2017*. Nay Pyi Taw.
- . 2017. *Myanmar Statistical Yearbook*. Nay Pyi Taw.
- . Directorate of Investment and Company Administration. 2014. *Myanmar Special Economic Zone Law, 2014*. Nay Pyi Taw. https://www.dica.gov.mm/sites/dica.gov.mm/files/document-files/sez_law.pdf.
- . Department of Population. 2017. *Thematic Report on Housing Conditions and Housing Amenities*. Nay Pyi Taw. https://myanmar.unfpa.org/sites/default/files/pub-pdf/41_Housing%20and%20Household%20Amenities.pdf.
- . Ministry of Environmental Conservation and Forestry, National Environmental Conservation Committee. 2012. *National Adaptation Programme of Action (NAPA) to Climate Change*. Nay Pyi Taw. <https://unfccc.int/resource/docs/napa/mmr01.pdf>.
- . Planning Department. 2010. *Integrated Household and Living Conditions Survey in Myanmar (Poverty Profile)*. Nay Pyi Taw. http://catalog.ihsn.org/index.php/catalog/6256/related_materials.
- Government of the Philippines. *The Constitution of the Republic of the Philippines*. Manila. <https://www.officialgazette.gov.ph/constitutions/1987-constitution/>
- . 2002. *Executive Order No. 152*. Manila. <https://www.officialgazette.gov.ph/2002/12/10/executive-order-no-152-s-2002/>
- . National Housing Authority. *Republic Act No. 7279*. Manila. http://www.nha.gov.ph/about_us/2015-pdf/RA7279.pdf
- Government of the Republic of South Africa. *Constitution of the Republic of South Africa, 1996*. Cape Town. <https://www.gov.za/documents/constitution-republic-south-africa-1996>
- Government of the Republic of South Africa. *Extension of Security of Tenure Act, 1997*. Cape Town. <https://www.gov.za/documents/extension-security-tenure-act>
- Government of the Republic of South Africa. *The Prevention of Illegal Eviction from and Unlawful Occupation of Land Act, 1998*. Cape Town. https://www.gov.za/sites/default/files/gcis_document/201409/a19-98.pdf

- International Recovery Platform. *Cyclone Nargis 2008: Rehabilitation in Myanmar*. Nay Pyi Taw. https://www.recoveryplatform.org/assets/recoverycases_reports/myanmar/MYANMAR%2021%20Dec%202010.pdf
- Japan International Cooperation Agency (JICA). 2012. *The Project for the Strategic Urban Development Plan of the Greater Yangon Final Report I*. https://libopac.jica.go.jp/images/report/12122529_02.pdf.
- . 2018. *Myanmar Data Collection Survey on Housing Finance System Report*. http://open_jicareport.jica.go.jp/pdf/12305769.pdf.
- the polis blog. *Implementing the Right to the City in Brazil? Smart Cities Dive*. <https://www.smartcitiesdive.com/ex/sustainablecitiescollective/implementing-right-city-brazil/30417/>
- Ramos, G. C. 2000. *The Urban Development and Housing Act (UDHA) of 1992, A Philippine Housing Framework*. <http://www.lth.se/fileadmin/hdm/alumni/papers/ad2000/ad2000-12.pdf>
- UN-Habitat. *The Republic of the Union of Myanmar National Housing Policy White Paper*. <http://unhabitat.org.mm/wp-content/uploads/2018/04/NATIONAL-HOUSING-POLICY-WHITE-PAPER.pdf>.
- . 2016. *National Habitat Report. The Republic of the Union of Myanmar*. <http://habitat3.org/wp-content/uploads/Myanmar-National-Hab-Report-FINAL.pdf>.
- United Nations Population Division. 2018. *2018 Revision of World Urbanization Prospects*. 16 May.
- Thomas, A. 2016. *Accelerating Threats from Climate Change: Disasters and Displacements in Myanmar*. Washington, DC. Refugees International. <https://static1.squarespace.com/static/506c8ea1e4b01d9450dd53f5/t/5845f2e2f7e0ab230f4631cb/1480979178783/2016126+Myanmar.pdf>.
- Tun, S. T. 2015. *Sagaing Fault: A Desk Study Report on Seismotectonic Implications in Myanmar*. Yangon University. https://www.researchgate.net/publication/280310695_Sagaing_Fault_A_desk_study_report_on_seismotectonic_implications_in_Myanmar. World Bank. Myanmar country data. <https://data.worldbank.org/country/myanmar>
- . Myanmar: Global Financial Inclusion (Global Findex) Database 2017. <https://datacatalog.worldbank.org/dataset/myanmar-global-financial-inclusion-global-findex-database-2017>.
- Yu, W. et al. 2011. *Geophysical Journal International*. 185 (1). pp. 49–64. 1 April. <https://academic.oup.com/gji/article/185/1/49/604495>.

Financing Affordable Housing in Yangon

Myanmar's housing sector is struggling to cope with rapid urbanization, internal migration, and new demand from recent economic growth. These challenges are most apparent in the Yangon Region, where estimates suggest there will be a housing shortage of 1.3 million units by 2030. This publication assesses the current housing market situation in Yangon. It identifies reform options and offers practical recommendations to support the Yangon Region Government's implementation of its affordable housing agenda and related policies.

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