



**Terwilliger Center for
Innovation in Shelter**

Clearing the Housing Backlog:

An Updated Supply and Demand Study on Unserved Owner-Driven Construction Segment in the Philippines



CRC

The Research and Consultancy Partner
of the University of Asia and the Pacific

Center for Research and Communication Foundation, Inc.

September 2020

Authors: Winston Conrad B. Padojinog, DBA and Erica Myra P. Yap, MSIE

About Habitat for Humanity's Terwilliger Center for Innovation in Shelter

The Terwilliger Center for Innovation in Shelter, a unit of Habitat for Humanity, works with housing market systems by supporting local firms and expanding innovative and client-responsive services, products, and financing so that households can improve their shelter more effectively and efficiently. The ultimate goal of the Terwilliger Center's market systems program is to make housing markets work more effectively for people in need of decent, affordable shelter, thereby improving the quality of life for low-income households. To learn more, visit habitat.org/tcis.

About the Center for Research and Communication Foundation, Inc.

The Center for Research and Communication Foundation, Inc. (CRC) is the research and consultancy partner of the University of Asia and the Pacific (UA&P). It undertakes continuing research on policy issues that are invested in public interest and the common good and conducts studies that focus on issues that bear on the dignity of the human person, the unity of the family, civic responsibility, human solidarity, the promotion of subsidiarity, and the spirit of expertise. CRC also brings to public focus the results of its research and other studies through seminars, public forums, and publications. For more information, visit crc.uap.asia.

Disclaimer: The views expressed in this paper are those of the authors and do not necessarily reflect the point of view of the Center for Research and Communication (CRC) or the University of Asia and the Pacific (UA&P).

This report was developed by Habitat for Humanity's Terwilliger Center for Innovation in Shelter staff: Jessan Catre, Jerick Axalan, Reggie Marie Barrientos, Al Francis Razon, Monica Rashkin, Malaika Cheney-Coker, Jitendra Balani, Naeem Razwani and Julia Ferraz; and, Habitat for Humanity Philippines staff: Lili Fuentes, Marilyn Estrellado, Ariane Aliggayu, and Lala Baldeovar.

Layout and graphic design by Brian Milante.

The team thanks Olivia Nielsen of Miyamoto International, Inc. for her input.

The report was produced with support from the Hilti Foundation.

Cover image:

"Boys play in a makeshift boat in the Taytay River in Pasig, Philippines" by Dominic Chavez/World Bank, licensed under CC BY-NC-ND 2.0.

Table of Contents

Executive Summary	7
1. Introduction	10
1.1 Study Objectives	12
1.2 Methodology of Estimating the Market for ODC	13
1.3 Scope	14
1.4 Definition of Terms	14
2. The Owner-Driven Construction Segment	15
2.1 Latest Housing Policy Environment	16
2.2 Government Performance and Private Sector Response	19
2.3 Housing Demand and Supply Outlook: Special Focus on the <i>Unserved Segment</i>	24
2.4 Discussion on the 2015 Housing Tenure Profile	29
2.5 Estimated and Projected Size of the ODC segment	32
2.6 General Income Profile of the Unserved Market & the ODCs	36
2.7 Estimating the market value of the ODC segment	37
3. Conclusions	41
Annexes	44

List of Tables

Table 1.	Annual Budget Allocation for Housing from 1983-2019	21
Table 2.	Estimated Average Annual Housing Demand and Supply (2010-2018)	25
Table 3.	Housing Backlog Per Segment (in Units) from 2001-2018 and Projected Housing Needs (in Units) from 2019 to 2022	26
Table 4.	Percentage Share Distribution of Housing Tenure Status in the Philippines based on the 2015 Census	30
Table 5.	Percentage Share of Owner or Owner-like Housing Tenure Status in the Philippines per Region, Province, and City based on the 2015 Census	31
Table 6.	Average Percentage Share Distribution of the Unserved Segment per Region (2015-2022)	33
Table 7.	Estimated Regional Percentage Share Distribution of the Owner-Driven Construction Segment per Annum from 2015-2022	34
Table 8.	Percentage Share Distribution of ODCs per Province and City in Their Respective Total Regional and Provincial ODCs from 2015-2022	35
Table 9.	Income Profile of Households Belonging to the Two Lowest Income Deciles	37
Table 10.	Expenditure Profile of Households with Annual Income Below Php 100,000	39
Table 11.	Housing Backlog Across Housing Segments Per Region (2001-2018)	44

Table 12.	Percentage Share Distribution of Housing Tenure Status per Region based on the 2015 Census	45
Table 13.	Total Households Belonging to the Unserved Segment per Region (2015-2022)	46
Table 14.	Estimated Unserved Segment per NCR City (2015-2022)	47
Table 15.	Estimated Number of Households Belonging to the Owner-Driven Construction Segment per Region (2015-2022)	48
Table 16.	Total Households Belonging to the Owner-Driven Construction Segment for Select Provinces (2015-2022)	49
Table 17.	Total Households Belonging to the Owner-Driven Construction Segment for Select Cities (2015-2022)	49
Table 18.	Estimated Percentage Share of ODC Households and ODC Ratio per NCR City (2015-2022)	50
Table 19.	Estimated ODC Segment per NCR City (2015-2022)	51
Table 20.	Income Source Profile (First and Second Decile)	52

List of Figures

Figure 1.	Annual Percentage Share of Socialized and Economic Housing Segments in Total Housing Supply from 2001-2018	22
Figure 2.	Annual Housing Production of Lots and Units from 2001-2018	23
Figure 3.	Annual Total Housing Supply (in Units) from 2001-2018 and Average Yearly Production (For the Past Five Years)	27
Figure 4.	Annual Percentage Share of Each Housing Segment in Total Housing Supply from 2001-2018	28
Figure 5.	Historical Trend of Each Housing Segment's Percentage Share in Total Housing Production from 2001-2018	29

List of Abbreviations and Acronyms

BALAI	Building Adequate, Livable, Affordable, and Inclusive Filipino Communities program
CMP	Community Mortgage Program
CRC	Center for Research and Communication
DHSUD	Department of Human Settlements and Urban Development
FIES	Family Income and Expenditure Survey
GSIS	Government Service Insurance System
HDMF	Home Development Mutual Fund
HLURB	Housing and Land Use Regulatory Board
HUDCC	Housing and Urban Development Coordinating Council
ISF	Informal Settler Families
NCR	National Capital Region
NHA	National Housing Authority
NHMFC	National Home Mortgage Finance Corporation
ODC	Owner-Driven Construction
PSA	Philippine Statistics Authority
RA	Republic Act
SHDA	Subdivision and Housing Developers Association
SHFC	Social Housing Finance Corporation
SSS	Social Security System

Executive Summary

The owner-driven construction or incremental building housing segment is a major demographic of the Philippine housing market that has received little attention from the government and from private housing programs. The segment is described to have the following characteristics: (1) security of land tenure; (2) maximum annual income of Php 90,000 to Php 270,000; (3) ownership of a residence that may start as a “temporary” housing unit but which they are willing to invest in and upgrade; and (4) rural or peri-urban location. Those who belong to this segment tend to be workers in the informal economy with irregular and unpredictable income which makes them vulnerable to disasters, disease, and emergencies.

Thus, Habitat for Humanity’s Terwilliger Center for Innovation in Shelter sees this as an opportunity to serve the ODC segment by helping them gain access to quality building materials in a financially sustainable manner with the help of microfinance institutions, and by helping the construction industry to expand into this large yet untapped market segment.

In the Center for Research and Communication’s previous studies on housing demand and economic impact, the ODC segment conforms to a segment described as “those who cannot afford” because they lack the purchasing power needed to qualify for and access existing financing programs offered by both government and private finance institutions. In this study, the “cannot afford” segment which remains to be untapped is referred to as the *unserved segment*.

To situate the opportunities and positive impact of tapping the unserved, particularly the ODC segment, the Terwilliger Center together with CRC undertook this study to estimate the market size of the ODC housing segment in the Philippines, specifically in Habitat’s priority areas: National Capital Region, the provinces of Negros Occidental, Leyte, Cavite, Laguna, Davao del Sur, and the city of Cebu. Knowing the size and the potential value of the segment will be an important factor in future investments and policy decisions of stakeholders such as public, private, and non-government organizations who come to address the needs of the ODC.

To arrive at the estimates, the study used the latest available data from secondary sources (online database and government publications) and also referenced previous housing studies of CRC, whose 2017 projections on the unserved housing segment size have been updated for this study. Since the study was undertaken while the COVID-19 pandemic is ongoing, the impact of the pandemic is not fully reflected in the results of the study. CS Pro software was used to process the data from secondary sources and derive the different segments at the national and regional level.

Based on the results of the study, 55% of the *unserved segment*, equivalent to 3.1 million households, are estimated to belong to the ODC segment in 2018. This is projected to hit close to 3.3 million by 2022, assuming a steady annual population growth rate. These ODCs are concentrated in regions, provinces, and cities where housing affordability remains an issue. They are high in numbers in Regions VII, XII, and IV-A (particularly the provinces of Cebu, Davao del Sur, and Leyte and the cities of Davao, Cebu, and Bacolod), but are lowest in NCR and Cordillera Administrative Region.

At present, the ODCs' housing needs appear to remain likely unserved because they cannot meet the requirements of formal financing institutions due to their low annual income, do not qualify to participate in community mortgage programs or as balanced housing beneficiaries, or are not covered by priority government housing programs simply because they already have property rights and legitimate dwelling units. With the growing size of the unserved segment, the declining government allocation for housing, and limited production by the private sector of development projects catering to this segment as well as for balanced housing compliance, the housing backlog has persisted in the socialized, economic, and low-cost segments.

In fact, accumulated housing deficits have caused the housing backlog to swell to 5.7 million units in 2018, most of which fall under socialized and economic housing. The *unserved* and socialized and economic segments account for almost 50% of total households in 2015 which is parallel to the 2015 census revealing around 45% do not own or have owner-like possession of properties.

Based on the August 2019 study conducted by Habitat on low-income households, the average cost of renovation or construction for the ODC's housing unit is at Php 8,280 per square meter (US\$ 165 per square meter). Using the minimum cost as a benchmark for the 3.1 million ODCs, the potential construction market value of the segment can reach Php 641.7 billion (US\$ 12.8 billion). However, affordability remains a major issue because the ODC market is constrained to allocate only about 2.04% or Php 6.7 billion (US\$ 134 million) of total annual household expenditures to furnishing and routine household maintenance, which is almost 96 times lower than the construction market value. Bridging this funding gap will have to involve offering affordable financing assistance and schemes and indirect government subsidy which can include the rechanneling of private developer compliances on balanced housing requirements towards this sector.

Deriving from the results of the study, it is concluded that the policy direction of the government related to housing does not directly address the *unserved segment* nor the backlog. Despite the sheer size of the unserved and ODC segments, they have remained mostly outside the purview of government policy and private sector initiatives, whose construction initiatives since 2016 have shifted to mid- and to upper-class housing where profit margins are more attractive, as well as to other non-housing construction projects. The persistence and the widening of the housing backlog reflects this inadequate response and performance of both the public and private sectors.

Nonetheless, the segment remains to be a market worth tapping into due to its promising size and concentration in certain areas, which can provide the necessary scale economies and magnify opportunities and positive impact for the stakeholders (public, private, NGOs) who come to address their needs. It is, therefore, recommended that the government through the DHSUD, LGUs, and private sector developers and NGOs like Habitat collaborate and explore ways to address the needs of ODCs.

Clearing the Housing Backlog: An Updated Supply and Demand Study with Focus on Unserved Owner-Driven Construction Segment in the Philippines

1. Introduction

Habitat for Humanity’s Terwilliger Center for Innovation has identified the Owner-Driven Construction or Incremental Building housing segment as a major demographic of the Philippine housing market that has so far received little attention from the government and from private housing programs. Socio-economically situated above poverty level, members of this housing segment tend to be workers in the informal economy classified as having entrepreneurial and other sources of income such as street vendors and seasonal agricultural or service workers. They take up other odd jobs such as tricycle or *habal-habal* driving in the off-season.

In a rapid study conducted by Habitat for Humanity in Cebu in 2018, ODC respondents described their housing as ranging from “temporary” structures built from wood and light materials, to “semi-permanent” and “permanent” structures, with security of land tenure and built with hollow blocks and metal roofing (Habitat for Humanity’s Terwilliger Center for Innovation in Shelter, 2018)¹.

The rapid study found that the average unit cost for these houses ranged from Php 200,000 to Php 250,000, which are below the recent ceiling range set by the Department of Human Settlements and Urban Development (formerly the Housing and Urban Development Coordinating Council or HUDCC) for socialized subdivision housing, ranging from Php 480,000 to Php 580,000 depending on the floor areas (Housing and Urban Development Coordinating Council, 2018)².

¹ Habitat for Humanity - Terwilliger Center for Innovation in Shelter. (2018). Bahay, Buhay: A survey of owner-driven housing construction practices, financing modalities and aspirations for a resilient home in disaster-prone areas in Cebu Province, Philippines.
<https://www.habitat.org/sites/default/files/documents/Terwilliger%20Center%20-%20Bahay%2C%20Buhay%20Report.pdf>

² Housing and Urban Development Coordinating Council. (2018). Price ceiling for socialized subdivision projects (Resolution no. 1 series of 2018).
<https://hudcc.gov.ph/sites/default/files/styles/large/public/document/Reso%201.pdf>

Another ODC study in Peru found that the average period for completing housing upgrades was 30 years (Terwilliger Center for Innovation in Shelter, 2018)³.

Habitat for Humanity classified this ODC segment as having four main characteristics: (1) security of land tenure; (2) daily income ranging from US\$ 5 to 15 or a maximum annual income of Php 90,000 to Php 270,000 based on the prevailing exchange rate of Php 50:US\$ 1 (according to Philippine Statistics Authority and World Bank data); (3) ownership of a residence which may start as a “temporary” housing unit but which they are willing to invest in and upgrade; and (4) usually rural or peri-urban location. In urban areas, they may be in districts experiencing urban decay.

Unlike salaried blue and white-collar workers, the inflow of household income for the ODC segment is irregular and unpredictable. At times, natural and man-made disasters, which they are usually prone to, and sickness within the household, which they are not prepared for given the absence of adequate social and health insurance protection, can stop or dry up any source of meager income they earn.

In light of these characteristics of the ODC segment, Habitat’s Terwilliger Center for Innovation in Shelter sees this as an opportunity to serve these ODCs by focusing on the following objectives:

- To help ODCs access quality building materials from hardware and construction input companies so that they can improve the quality of owner-built “permanent” units to withstand 7.2 magnitude earthquakes and typhoons with 250 km/h wind gusts;
- To make ODCs’ purchase of quality building materials financially sustainable through access to long-term, low-cost loans, particularly from microfinance institutions; and
- To help hardware and construction input companies to tap and expand into this market segment, which has low margins per individual client but has a

³ Habitat for Humanity’s Terwilliger Center for Innovation in Shelter. (2018). Housing at the base of the pyramid at Metropolitan Lima. <https://www.ctivperu.org/wp-content/uploads/2019/08/housingsituationforbaseofpyramidinMetropolitanLima.pdf>

large and promising market volume, based on a 2020 projected national population of 110 million (Philippine Statistics Authority, *2018 Philippine Statistical Yearbook*, pp. 1-22).

Based on the profile discussed above, this ODC segment tends to conform to and overlap with a particular segment in the Center for Research and Communication’s previous housing demand and supply and economic impact studies. These studies referred to the segment as “*those who cannot afford*” (Padojinog et al., 2017, p. 25)⁴. This particular segment lacks the purchasing power needed to qualify for and has limited knowledge to access available financing offered by government housing finance institutions such as the Home Development Mutual Fund, the Socialized Housing Finance Corp., and other private finance institutions such as commercial, rural, and consumer banks. The HDMF, for example, offers the Countryside Housing Initiatives but this caters only to the limited ODC segment with land titles or those referred to as the “Other Working Group” such as drivers.

Habitat’s Terwilliger Center for Innovation in Shelter, together with the Center for Research and Communication, delved deeper into this unserved or underserved segment in order to inform government agencies, private firms and non-government organizations, businesses, industry, and policymakers of their roles as well as the opportunities available in addressing the intimate human needs of this sector. From the ensuing discussions, it will be revealed that households that belong to the “*cannot afford*” segment remain unserved. Thus, this particular segment will hereon be referred to as the “*unserved segment*”.

1.1 Study Objectives

Dealing with a large-scale segment can magnify the opportunities as well as the positive impact for stakeholders – public, private, and NGOs – who come to address the needs of the ODC. Scale economies can also be enjoyed from tangible and intangible resources and efforts invested on projects catering to this

⁴ Padojinog, W. C., Terosa, C., Janeo, V. Y., Yap, E. M. & Caswang, J. (2017). A Study on the Economic Impact of the Activities of the Housing Industry. Pasig City, Philippines: Center for Research and Communication.

segment. Hence, knowing how large this segment is an important factor in stakeholders' future investments and policy decisions.

Since this segment scale or size is of such importance, the Terwilliger Center together with CRC undertook this study to estimate the market size of the Owner-Driven Construction housing segment in the Philippines and how this is dispersed throughout the archipelago, specifically in Habitat's priority areas: **the National Capital Region; the provinces of Negros Occidental, Leyte, Cavite, Laguna, Davao Del Sur; and the city of Cebu.**

1.2 Methodology of Estimating the Market for ODC

The study used data from secondary sources (online databases and government publications) and also referenced previous housing studies of CRC. The projections, which were last made in 2017, on the *cannot afford (unserved)* housing segment size, specifically those *below the threshold household income* required to afford *socialized housing*, were updated.

This threshold refers to the minimum household income required, for instance, for an annual loan amortization of over 25 years, where 4.5% per annum loan for a subdivision housing unit priced at Php 480,000 should not exceed more than 30% of household income. The threshold annual household income is Php 108,000.

The latest available data such as the population census of 2015 and household growth as of 2019, the price ceilings set by DHSUD for socialized and economic housing and the 2019 production reports (DHSUD, 2019)⁵, the 2015 household family income and expenditure survey, and the housing production statistics from the Housing and Land Use Regulatory Board and the National Housing Authority were used to update the housing demand and supply model for the 2020-2022 period. The first stage of the estimation centered on the latest national and regional estimates of *unserved* households.

⁵ Department of Human Settlements and Urban Development. (2019). Housing Sector Accomplishment Report for July 2016-May 2019. <https://hudcc.gov.ph/sites/default/files/styles/large/public/document/Housing%20Sec%20Accom%20Reportr.pdf>

The next stage focused on deriving from these estimates the corresponding provincial and city subsets that have *the purchasing power and the property rights* characteristics of ODCs using proportional estimation based on the latest **2015 Census of Population by the Philippine Statistical Authority**. As laid out earlier in the objectives, a breakdown was derived for the National Capital Region; the provinces of Negros Occidental, Leyte, Cavite, Laguna, Davao Del Sur; and the city of Cebu.

1.3 Scope

The estimates and projections were derived largely from recently available secondary sources. Since this study is undertaken during the period of the COVID-19 pandemic, the results – particularly the households that belong to certain income categories and their purchasing power based on the latest available surveys in 2015 and data from 2019 – do not fully reflect the impact of the pandemic on the size of the *unserved* ODC segment. But taking into consideration the debilitating effects of the pandemic on employment and consequently household income, the size of this segment may now actually be larger than what was generated in this study. Nevertheless, the results can still provide insights into the magnitude of this unaddressed ODC housing segment.

CS Pro was used to warehouse the raw data of the 2015 family income and expenditure survey. The raw data were programmed using this software to derive the different housing segments. There are limits to what the software can do and the data it can provide. In particular, the software can only do a one-stage column-by-row cross tabulation and cannot further process an already-processed data further. Thus, it can only provide a breakdown of the housing segments either by income class or by number of households. Furthermore, it can only provide a breakdown of the segments either at the regional level or at the national level. It is not capable of generating data simultaneously by income source and by housing affordability of the *unserved* segment at the regional level because it will require an additional step of programming.

1.4 Definition of Terms

- **Owner-driven construction (ODC)** – a housing segment characterized by (1) security of land tenure; (2) daily income ranging from US\$ 5 to 15 or a

maximum annual income of Php 90,000 to Php 270,000 based on the prevailing exchange rate of Php 50:US\$ 1 (according to Philippine Statistics Authority and World Bank data); (3) ownership of a residence which may start as a “temporary” housing unit but which they are willing to invest in and upgrade; and (4) usually rural or peri-urban location

- **Unservd market** – also referred to in past CRC studies as “those who cannot afford” due to their limited access to information and/or purchasing power to qualify for and access available financing offered by government housing finance institutions such as the Home Development Mutual Fund, the Socialized Housing Finance Corp., and other private finance institutions such as commercial, rural, and consumer banks
- **Mass housing** – refers collectively to socialized, economic, and low-cost housing
- **Socialized housing** – housing with price ranges from Php 480,000 to Php 750,000
- **Economic housing** – housing with price ranges from Php 750,001 to Php 1.75 million
- **Low-cost housing** – housing with price ranges between Php 1.75 million and Php 3.0 million
- **Middle-cost housing** – housing with price ranges between Php 3.0 million and Php 6.0 million
- **Upper-class housing** – housing with price ranges from Php 6.0 million and above
- **Housing deficit** – occurs when demand for housing is greater than supply of housing
- **Housing backlog** – occurs following an accumulation of housing deficits
- **Housing surplus** – occurs when supply of housing is greater than demand for housing

2. The Owner-Driven Construction Segment

Before the succeeding discussions on the estimates and projections of the *unserved - ODC segment* are derived, Section 2.1 provides a brief discussion of the current general issues faced by the Philippine housing sector and how these issues are being addressed by the government and responded to by the private

sector. This offers a background of the environment surrounding the ODC segments, specifically the recent policy responses or the lack thereof from the government, and the performance of both the government and the private sectors in terms of budget allocation and housing production decisions. Section 2.2 discusses how the government responds to the housing issues and the production decisions of the private sector.

Section 2.3 focuses on the housing demand and supply outlook, particularly the sources of the housing backlog as well as the updated estimates and projections of the *unserved* segment while Section 2.4 presents a brief analysis of the 2015 Survey of Housing Tenure where the ODC can be extracted from using the estimates and projections derived from the previous section. Section 2.5 shows the estimation of size in terms of households of the ODC segment at the national level and the breakdown of the segment according to the priority areas identified earlier. Moreover, Section 2.6 discusses the likely income source profile of the unserved and ODC segments.

Finally, Section 2.7 presents the potential construction value of the ODC segment and the available budget such segments can afford. Section 3 concludes the study.

2.1 Latest Housing Policy Environment

Since the 1990s, efforts to fill the housing backlog has been a policy issue and objective. The backlog was the result of the accumulation of housing deficits caused by production failing to catch up with demand. Since the early 1990s until shortly after the 1997 Asian financial crisis, various cross-subsidized housing finance programs under the National Shelter Program, which offered long-term, low-interest rate loans were introduced but miserably failed due to mortgage defaults, poor collection efforts and poor mortgage quality, among others (Subdivision and Housing Developers Association and Center for Research and Communication, n.d., pp. 26-33)⁶. The fiscal cost for the government was high (Ballesteros, 2011)⁷. Since then, no similar government-initiated subsidized

⁶ Subdivision and Housing Developers Association and Center for Research and Communication. (n.d.). *The Housing Industry Road Map of the Philippines: 2012:2030*. Manila, Philippines: Authors.

⁷ Ballesteros, M. (2011). Fiscal costs of subsidies for socialized housing programs: an update. *Policy Notes* (No. 2011-14). <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidspn1114.pdf>

housing finance programs of this magnitude has ever been launched, following multi-billion peso bad loans that almost dragged down many participating institutions such as the Home Development Mutual Fund, the Social Security System, and the Government Service Insurance System.

Since the early 2000s, the general strategy to address the housing backlog was two-pronged: (1) to continue government-assisted housing programs that specifically cater to certain sectors such as informal settlers in urban centers, low-income households, or select sectors such as the police and armed forces and public school teachers; and (2) to provide fiscal incentives to socialized and economic housing developers and impose regulatory requirements on other housing developers to allocate a portion of their budgets to socialized housing and other projects.

The first one is provided through government budget allocation, subsidies, or special incentives. One of these is the budget allocated to the National Housing Authority which is primarily tasked to relocate, resettle, or upgrade low-income communities affected by the infrastructure projects, those located on disaster risk zones and direct housing production, land acquisition, infrastructure development, and even maintenance of its housing projects for specific sectors such as the armed forces. NHA's perennial limited budget allocation and seemingly large scope of responsibility can hardly make a dent in the growing housing backlog. Another is the Community Mortgage Program, which is one of the few successful but limited-impact programs where low-income households organize themselves into a legally-recognized and accredited community organization to secure, as a community, loans under concessional terms with fixed interest rates of 6% and payment terms of 30 years (Ballesteros & Vertido, 2004)⁸. Because of perceived community organization conflicts and issues, CMP failed to attract either private sector funding or substantial fiscal budget allocation to its supporting agencies such as the Social Housing Finance Corporation to give it the push it needed to address the backlog.

The second one aims to encourage private sector participation in the housing program through direct fiscal incentives in the form of income tax holidays and VAT-exemption and imposition of balanced housing requirements on developers

⁸ Ballesteros, M. & Vertido, D. (2004). Can group credit work for housing loans? Some evidence from the CMP. *Policy Notes (No. 2004-05)*. <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidspn0405.pdf>

catering to middle to upper-class housing. Fiscal incentives for mass housing – housing classified as socialized, economic and low-cost housing with price ranges between Php 480,000 to Php 750,000 (HUDCC, 2018⁹ and HUDCC, 2018)¹⁰, Php 750,001 to Php 1.75 million (HUDCC, 2015)¹¹, and Php 1.75 million to Php 3.0 million, respectively – are afforded by specific laws such as Republic Act No. 7279 (RA 7279 on Urban Development and Housing Program, 1992)¹² and Batas Pambansa Blg. 220 (BP 220 on Economic and Socialized Housing, 1982)¹³.

Another mode pushing for a private sector-led housing program is the balanced housing or compliance social housing requirement imposed on developers under RA 7279 and expanded under Republic Act 10884 (RA 10884 on Strengthening the Balanced Housing Development Program, 2016)¹⁴. These laws aim to require developers of subdivision and condominium projects to allocate a portion of their resources to putting up socialized housing in new settlements and other modes such as slum upgrading or renewal of areas for priority development either through zonal improvement programs or slum improvement and resettlement programs; joint-venture projects or programs with either the local government units or any of the housing agencies; participation in the community mortgage program, and later expanded to any of the housing agencies for the development of socialized housing programs or socialized housing projects under the Building

⁹ Housing and Urban Development Coordinating Council. (2018). Circularizing HUDC Council Resolution No. 2 series of 2018, entitled “Price Ceiling for Socialized Condominium Projects” (Memorandum circular no. 2 series of 2018).

<https://hudcc.gov.ph/sites/default/files/styles/large/public/document/reso%202%20%28revised%29.pdf>

¹⁰ Housing and Urban Development Coordinating Council. (2018). Price ceiling for socialized subdivision projects (Resolution no. 1 series of 2018).

<https://hudcc.gov.ph/sites/default/files/styles/large/public/document/Reso%201.pdf>

¹¹ Housing and Urban Development Coordinating Council. (2015). Economic Housing Loan and Price Ceiling Adjustment (Resolution no. 2 series of 2015).

<https://hudcc.gov.ph/sites/default/files/styles/large/public/document/HUDCC%20Resolution%20No.%20%20Series%20of%202015.pdf>

¹² Republic Act No. 7279 - An Act to provide for a comprehensive and continuing urban development and housing program, establish the mechanism for its implementation, and for other purposes. (1992).

<https://hudcc.gov.ph/sites/default/files/styles/large/public/document/RA%207279.pdf>

¹³ Batas Pambansa Blg. 220 - An Act Authorizing the Ministry of Human Settlements to Establish and Promulgate Different Levels of Standards and Technical Requirements for Economic and Socialized Housing Projects in Urban and Rural Areas from Those Provided Under Presidential Decrees Numbered Nine Hundred Fifty-Seven, Twelve Hundred Sixteen, Ten Hundred Ninety-Six and Eleven Hundred Eighty-Five. (1982). https://www.lawphil.net/statutes/bataspam/bp1982/bp_220_1982.html

¹⁴ Republic Act No. 10884 - An Act strengthening the Balanced Housing Development Program, amending for the purpose Republic Act No. 7279, as amended, otherwise known as the Urban Development and Housing Act of 1992. (2016).

<https://www.officialgazette.gov.ph/downloads/2016/07jul/20160717-RA-10884-BSA.pdf>

Adequate, Livable, Affordable, and Inclusive Filipino Communities program, with another private socialized housing developer (either the main developer's subsidiary or an accredited socialized housing developer), and an accredited NGO engaged in the development of socialized housing.

In order to rationalize and coordinate the different housing programs and agencies including housing finance as well as the supporting housing development public services, RA 11201 (2019)¹⁵ established in early 2019 the Department of Human Settlements and Urban Development, merging the Housing and Urban Development Coordinating Council and the Housing and Land Use Regulatory Board (HLURB), and attaching under the Office of DHSUD Secretary, the NHA, SHFC, HDMF, and the National Home Mortgage Finance Corporation (Balai Filipino, 2019)¹⁶ – the last three representing the house financing arms of the government for lower-income households belonging to the socialized and economic housing segments. On the other hand, the government relies on private commercial banks to finance the banking needs of both developers and buyers in middle to upper income-segments of housing.

2.2 Government Performance and Private Sector Response

In the latest report provided by the Office of the DHSUD Secretary, the government projects an accumulated housing need of 6.5 million households from 2017-2022 (DHSUD, 2019)¹⁷. The 2017 published study of CRC places the total housing backlog at 6.7 million households (Padojinog et al., 2017, p. 26)¹⁸. Of this, about 12% belong to the *unserved* segment, 19% to the socialized housing segment, and 55% to the economic segment. To eliminate the deficit by 2030, housing production should at least average 670,000 units annually, of

¹⁵ Republic Act No. 11201 - An Act creating the Department of Human Settlements and Urban Development, defining its mandate, powers and functions, and appropriating funds therefor. (2019). <https://www.officialgazette.gov.ph/downloads/2019/02feb/20190214-RA-11201-RRD.pdf>

¹⁶ Balai Filipino. (2019). Department of Human Settlements and Urban Development [PowerPoint presentation]. *Subdivision and Housing Developers Association Membership's Business Forum*.

¹⁷ Department of Human Settlements and Urban Development. (2019). Housing Sector Accomplishment Report for July 2016-May 2019. <https://hudcc.gov.ph/sites/default/files/styles/large/public/document/Housing%20Sec%20Accom%20Reportr.pdf>

¹⁸ Padojinog, W. C., Terosa, C., Janeo, V. Y., Yap, E. M. & Caswang, J. (2017). A Study on the Economic Impact of the Activities of the Housing Industry. Pasig City, Philippines: Center for Research and Communication.

which 80,400 units should address the *unserved* housing segment. Meanwhile, DHSUD targets to serve only 1.5 million poor households by 2022.

Since 2016, government allocation for housing has substantially declined, accounting for about 0.02% of the total 2019 fiscal budget, which is down from the 1.2% registered in 2016 (see Table 1 on the next page). Nonetheless, at the level of the local government units, there have been efforts to implement socialized housing for the urban poor, particularly informal settler families (ISFs), such as the Bistekville projects initiated by the Quezon City local government, and the housing program of Pasig City for the resettlement of informal settlers¹⁹. These projects allow ISFs flexibility in their payment terms through the LGU's refinancing program. However, there were difficulties in managing these projects due to the (1) limited funds of the LGUs to pay upfront for the construction which they derive mainly from real estate taxes, (2) the issue of collections where those availing of LGU housing have to pay through the LGUs which lack the infrastructure and capability to monitor and collect payment due to it being outside their scope, and (3) the absence of a property management program that will monitor and ensure that the properties are well-maintained and meet mortgage quality standards²⁰. How LGUs can be supported to sustain their housing programs is another issue to consider but it is not within the scope of this study.

¹⁹ Ordinario, C. (2019, January 31). The mass housing mess: Why Filipinos continue to struggle with owning a home. *Business Mirror*. <https://businessmirror.com.ph/2019/01/31/the-mass-housing-mess-why-filipinos-continue-to-struggle-with-owning-a-home/>

²⁰ de Villa, K., Generalao, M. & Antonio, R. (2018, June 23). Home for the masses. *Philippine Daily Inquirer*. <https://business.inquirer.net/252910/home-for-the-masses>

Table 1. Annual Budget Allocation for Housing from 1983-2019²¹

Year	Total Budget	Housing Budget	% Share
1983	52,360	1,831	3.50%
1984	64,037	1,182	1.85%
1985	73,311	676	0.92%
1986	108,138	1,541	1.43%
1987	121,622	443	0.36%
1988	142,462	595	0.42%
1989	173,634	403	0.23%
1990	223,473	679	0.30%
1991	248,679	1,158	0.47%
1992	262,042	329	0.13%
1993	276,859	1,673	0.60%
1994	330,203	1,607	0.49%
1995	371,888	3,276	0.88%
1996	416,139	5,153	1.24%
1997	491,783	2,438	0.50%
1998	537,433	2,792	0.52%
1999	580,385	4,114	0.71%
2000	682,460	8,275	1.21%
2001	707,093	1,841	0.26%
2002	742,022	769	0.10%
2003	825,113	3,019	0.37%
2004	867,010	1,599	0.18%
2005	947,554	3,033	0.32%
2006	1,044,831	6,079	0.58%
2007	1,155,509	7,938	0.69%
2008	1,314,613	9,418	0.72%
2009	1,434,146	8,401	0.59%
2010	1,472,977	7,145	0.49%
2011	1,580,017	22,334	1.41%
2012	1,828,981	11,956	0.65%
2013	1,998,376	32,196	1.61%
2014	2,019,062	26,691	1.32%
2015	2,606,000	10,349	0.40%
2016	3,001,800	33,481	1.12%
2017	3,645,954	897	0.02%
2018	4,382,358	717	0.02%
2019	3,999,462	648	0.02%

²¹ Source: Department of Budget and Management (DBM)

Despite the fiscal incentives and the adjustments in the price ceiling for mass housing (i.e., socialized and economic), bulk of the construction activities since 2016 has shifted to upper-class housing where margins are more attractive, as well as to other non-housing construction projects. As Figure 1 shows, developers allocate relatively fewer of their production capacities to socialized and economic housing where the deficits are substantial. In fact, production decisions tend to show a bias against these segments over time.

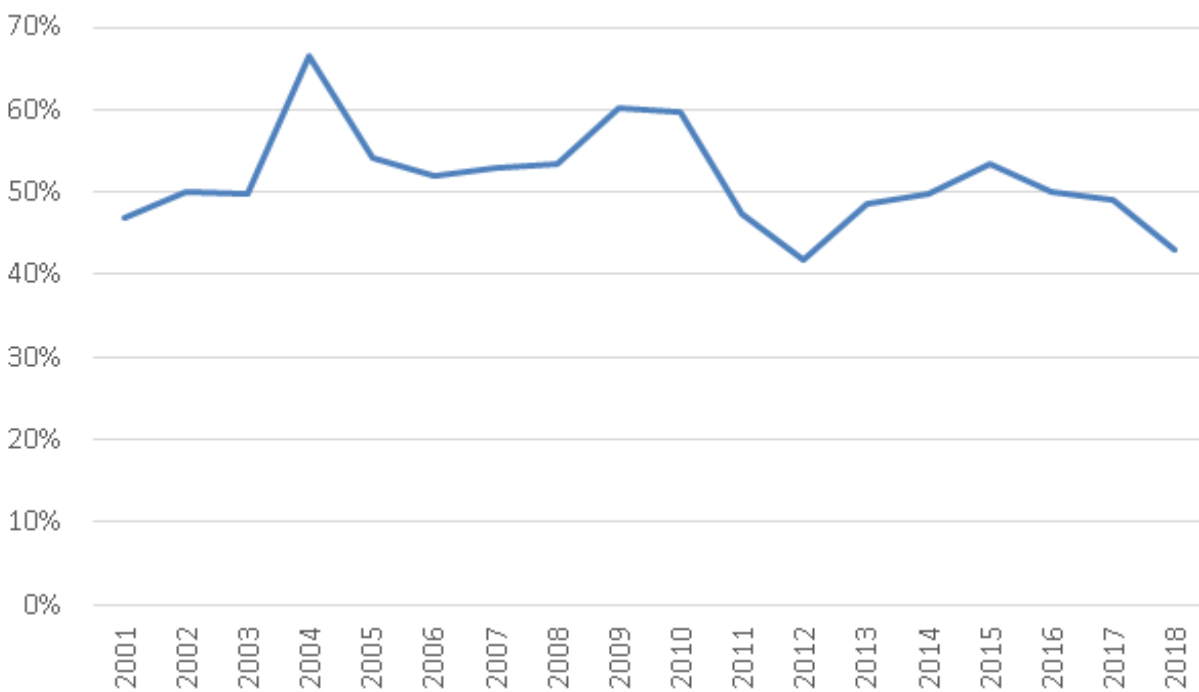


Figure 1. Annual Percentage Share of Socialized and Economic Housing Segments in Total Housing Supply from 2001-2018²²

²² Source: Housing and Land Use Regulatory Board (HLURB)

Meanwhile, industry housing capacity of the private sector since 2010 averaged a little over 200,000 annually, 13.0% of which is balanced housing compliance (see Figure 2). The government, on the other hand, has not increased its commitment to any major housing projects except to continue its usual focus on the relocation or resettlement of informal settler families affected by infrastructure projects and those living along danger areas, very low-income households, and other favored sectors such as the army and public school teachers. In fact, the developers' construction capacities and resources are stretched thinly across other non-housing projects such as the Build-Build-Build infrastructure projects, commercial retail and office, and power plants. In the last two years, many of these projects experienced delays due to the lack of needed manpower skills (Dumlao-Abadilla, 2019)²³. Under such predicaments, overall, housing production capacity will remain way below levels needed to eliminate the backlog by 2030 and will be far behind in time to catch up with and reduce the housing deficit.



Figure 2. Annual Housing Production of Lots and Units from 2001-2018²⁴

²³ Dumlao-Abadilla, D. (2019, December 25). Shortage of skilled workers seen curbing construction sector's growth. *Philippine Daily Inquirer*. <https://business.inquirer.net/286077/shortage-of-skilled-workers-seen-curbing-construction-sectors-growth>

²⁴ Source: Housing and Land Use Regulatory Board (HLURB)

At present, it is clear that the ODC segment has limited access to government housing policy and company housing programs. While there are programs such as the HDMF's Countryside Housing Initiatives, this caters only to ODCs with land titles or what they refer to as the "Other Working Group" such as drivers. Outside this group, the ODC segment's housing needs will remain likely unserved either because they cannot meet the requirements of formal financing institutions or they are not covered by priority government housing programs, simply because they already have property rights and legitimate dwelling units. Moreover, since their ODC housing units are usually dispersed and oftentimes isolated, this segment cannot participate in community mortgage programs or qualify as balanced housing beneficiaries.

2.3 Housing Demand and Supply Outlook: Special Focus on the *Unserved Segment*

Based on projections from 2001 to 2018, the housing backlog persists in the socialized, economic, and low-cost segments. The supply of housing units for these segments has fallen short of meeting the estimated and growing demand for housing by about 5,714,706 units (see Table 3). In contrast to this, the mid-cost housing market (priced between Php 3.0 million to Php 6.0 million) has already realized a surplus of 377,434 units in 2018. Despite the projected increase in households joining this segment starting 2019 and the corresponding increase in demand, the surplus shall persist, which is estimated to stand close to 60,000 units by 2022.

In terms of projected demand from 2019 to 2022, about 3,428,261 additional housing units will be needed based on the projections for segments outside the *unserved* sector (i.e., difference between the total backlog for socialized, economic, and low-cost sectors from 2001-2018 and 2019-2022, assuming there is no production for the latter period). Factoring in the backlog from 2001 to 2018 and the additional projected demand including the *unserved segment* from 2019 to 2022, the total housing needs is estimated to reach 15,076,255 units by 2022.

Table 2 is another presentation of the recent structure of housing demand and supply covering the period 2010 to 2018. More production capacities have been shifting to mid and high-end segments while demand from the mass housing and unserved segments continues to build up. Over time, the perennial deficits in mass housing and the absence of any major policy for the unserved market will swell the backlogs coming from these segments (i.e., mass housing and unserved segments).

Table 2. Estimated Average Annual Housing Demand and Supply (2010-2018)²⁵

	Unserved	Mass Housing	Mid-Cost	High-End	Total average
Average demand	106,536	469,174	37,953	6,751	620,414
Average Supply		183,068	62,955	10,725	256,748
Average (deficit) or surplus	(106,536)	(286,106)	25,002	3,974	(363,666)

By 2018, over 5.6 million households already belong to the *unserved segment*. Without any substantial intervention, this can easily reach almost 6 million by 2022, following an annual 15,771 increase in households or a compounded annual growth rate of 0.27%. Taking into account the deficits in the other segments – socialized, economic, and low-cost – the total deficit or shortage in 2018 stands at 5.71 million housing units (see Table 3). A breakdown of the housing backlog across all segments per region is presented in Annex 1.

²⁵ Source: Housing and Land Use Regulatory Board (HLURB) and Center for Research and Communication (CRC) estimates. Average annual demand is based on estimates of CRC as measured in number of households. Average supply is generated from estimates from the LTS data of the HLRUB. Mass housing pertains to socialized, economic and low-cost housing.

Table 3. Housing Backlog Per Segment (in Units) from 2001-2018 and Projected Housing Needs (in Units) from 2019 to 2022²⁶

Segments	Backlog (2001-2018)	Housing Needs (By 2022)
Unserved	5,623,943	5,933,289
Socialized	-4,808,424	5,117,770
Economic	-303,934	2,110,427
Low-Cost	-602,347	1,914,769
Mid-Cost	377,434	-
High-End	204,044	-
Shortage	-5,714,706	-
Total Housing Needs		15,076,255

This housing backlog is the result of the annual build-up in housing deficits when production falls short of demand. Despite the backlogs, total housing production units in 2018 dipped by almost 26.0% to 204,344 from a high of 274,545 in 2017 (see Figure 3). On average, the yearly production for the past five years from 2014 to 2018 remains minimal at around 234,342 units only. At this rate, it would take a quarter of a century just to wipe out the 2018 backlog of 5.71 million units, which still excludes the *unserved* segment and the natural increase in household population.

²⁶ Source: Housing and Land Use Regulatory Board (HLURB) and Center for Research and Communication (CRC) estimates. Note: The estimated backlog on the row classified as “Shortage” excludes the surpluses in the mid and high-end segments. Numbers in parentheses in the second column under “Backlog (2001-2018)” indicate a negative value or a backlog for the socialized, economic, and low-cost segments which is the result of the accumulation of deficits over time (i.e., demand exceeding supply of housing units). The *unserved* segment is a positive number indicating the number of households that could not afford socialized housing or avail of any housing finance program. This segment is not included in the column’s computation of the housing shortage. The last column under “Housing Needs (By 2022)” pertains to the estimated housing need accumulated from 2019 to 2022, assuming that no new housing units are supplied and produced.

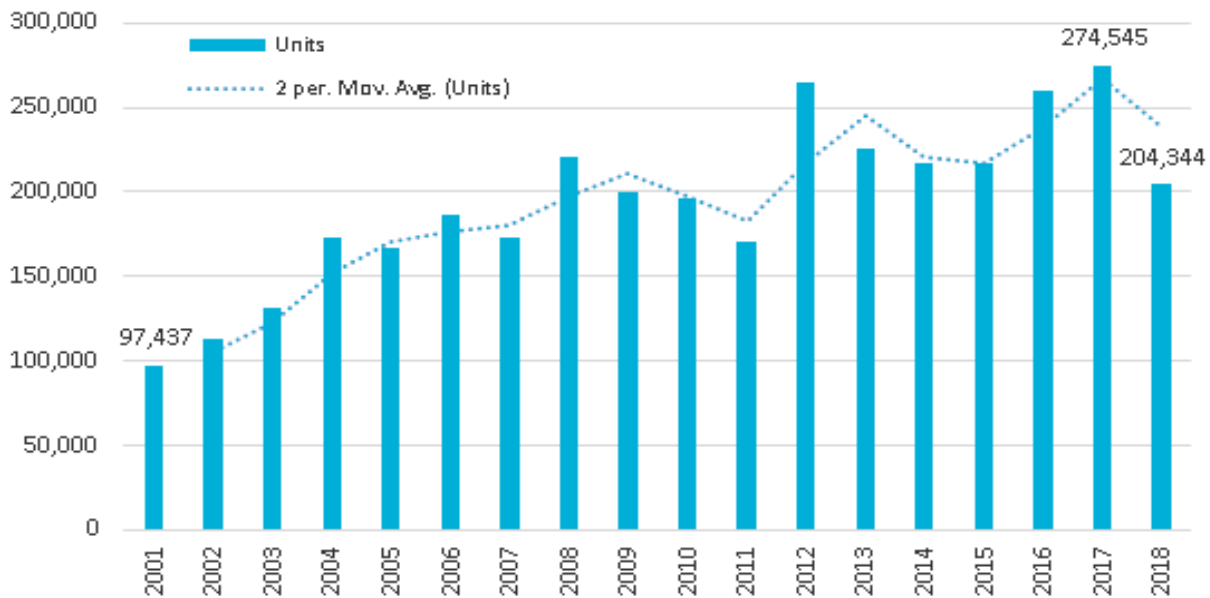


Figure 3. Annual Total Housing Supply (in Units) from 2001-2018 and Average Yearly Production (For the Past Five Years)^[27]

From 2001 to 2018, the economic segment, on average, accounted for the largest percentage of the total housing supply at 41.42% (see Figure 4). The second-largest housing segment was mid-cost at 22.2%, followed by low-cost housing at 17.14%. The socialized segment accounted only for an average of 10.16% of the total housing supply while the high-end segment was at 9.07%. With these production portfolios, addressing the gaping backlog in the socialized segment proves to be a challenge when very few developers would like to cater to it.

²⁷ Source: Housing and Land Use Regulatory Board (HLURB) and Center for Research and Communication (CRC) estimates. Note: Units counted are PD 957 and BP 220 residential units for House & Lots, Lots, House & Lots and Lots, as well as condominiums

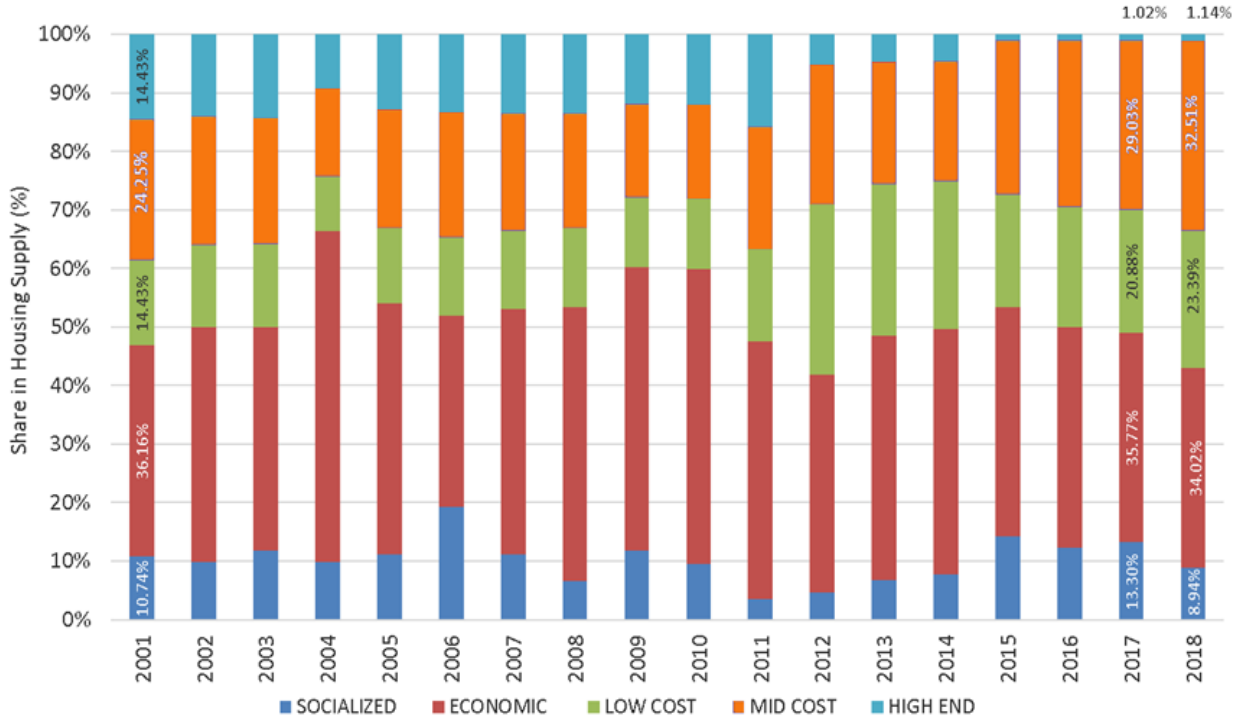


Figure 4. Annual Percentage Share of Each Housing Segment in Total Housing Supply from 2001-2018²⁸

To add to this, the share of socialized housing in total housing production has declined from 14.19% in 2015 to 8.94% in 2018 (see Figure 5). Likewise, the economic segment is on a downtrend since 2014 from a share of 41.90% to 34.02% in 2018, which is close to its lowest record of 32.57% in 2006. In contrast, the mid-cost segment is on an uptrend.

²⁸ Source: Housing and Land Use Regulatory Board (HLURB) and Center for Research and Communication (CRC) estimates

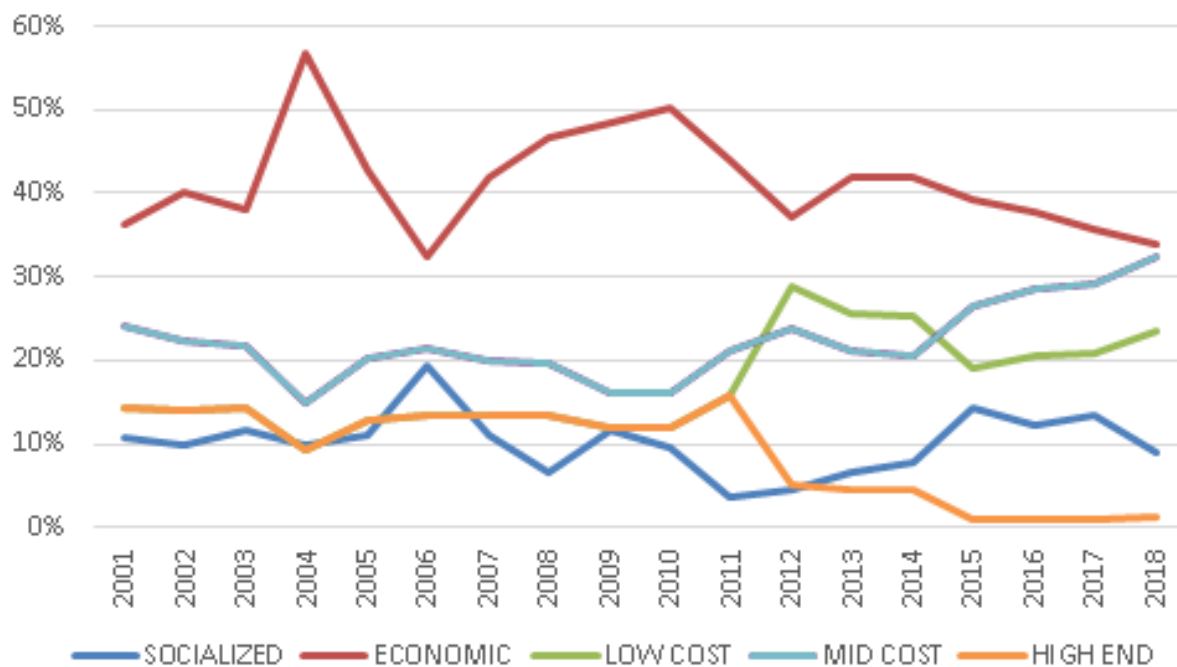


Figure 5. Historical Trend of Each Housing Segment’s Percentage Share in Total Housing Production from 2001-2018²⁹

2.4 Discussion on the 2015 Housing Tenure Profile

Reflective of the large percentage of the *unserved* segment, housing tenure or ownership in the Philippines remains low. Based on the latest PSA 2015 survey on housing tenure, 12.7 million of 22.9 million households (55%) either own or have “owner-like possession” of a house and lot. Conversely, this implies that about 45% or 10.3 million households belong to either one of the six other types of tenure status, which denote relatively less security than full ownership rights of both house and lot (see Table 4). The percentage distribution of housing tenure status per region is in Annex 2. The PSA data related to this table provides a detailed breakdown of tenure status down to the level of the province and the city, which will serve as a basis for estimating the size of the ODC market from the *unserved* segment.

²⁹ Source: Housing and Land Use Regulatory Board (HLURB) and Center for Research and Communication (CRC) estimates and projections

Table 4. Percentage Share Distribution of Housing Tenure Status in the Philippines based on the 2015 Census³⁰

Housing Tenure Status in the Philippines	% Share
Own or owner-like possession of house and lot	55.26%
Rent house/room including lot	12.06%
Own house, rent lot	3.06%
Own house, rent-free lot with consent of owner	21.41%
Own house, rent-free lot without consent of owner	2.01%
Rent-free house and lot with consent of owner	5.88%
Rent-free house and lot without consent of owner	0.29%
Not Applicable	0%
Not Reported	0.01%

Among Philippine regions, a remarkable proportion of households from CAR, Ilocos, Cagayan, Central Luzon, CALABARZON, and BARMM enjoy property security by way of property ownership or owner-like possession, resulting in a percentage significantly higher than the national average of 55.26% (see Table 5). On the other hand, other urban and emerging urban areas such as NCR, Western Visayas, Eastern and Central Visayas where the rate of in-migrations tend to be faster, exhibit lower averages than the national average.

³⁰ Source: Philippine Statistics Authority (PSA) 2015

Table 5. Percentage Share of Owner or Owner-like Housing Tenure Status in the Philippines per Region, Province, and City based on the 2015 Census³¹

Region	Total Number of Households	Own or owner-like possession of house and lot	% Share
National Capital Region (NCR)	3,095,484	1,382,724	44.67%
Cordillera Administrative Region (CAR)	395,748	270,764	68.42%
I - Ilocos Region	1,151,629	801,191	69.57%
II - Cagayan Valley	804,524	594,366	73.88%
III - Central Luzon	2,566,524	1,755,559	68.40%
IVA - CALABARZON	3,395,332	1,982,870	58.40%
IVB - MIMAROPA	682,668	386,010	56.54%
V - Bicol Region	1,216,369	598,165	49.18%
VI - Western Visayas	1,716,307	751,032	43.76%
VII - Central Visayas	1,699,058	948,109	55.80%
VIII - Eastern Visayas	985,418	458,941	46.57%
IX - Zamboanga Peninsula	795,345	375,241	47.18%
X - Northern Mindanao	1,042,814	512,491	49.15%
XI - Davao Region	1,177,409	635,192	53.95%
XII - SOCCSKSARGEN	1,050,654	570,440	54.29%
XIII - Caraga Region	573,998	279,271	48.65%
BARMM	620,385	391,464	63.10%
PH	22,969,666	12,693,830	55.26%
Province	Total Number of Households	Own or owner-like possession of house and lot	% Share
Cavite	877,743	509,931	58.10%
Cebu	1,077,180	553,767	51.41%
Davao del Sur	568,747	324,016	56.97%
Laguna	765,513	447,065	58.40%
Leyte	455,889	195,918	42.97%
Negros Occidental	701,650	255,304	36.39%
City	Total Number of Households	Own or owner-like possession of house and lot	% Share
Bacolod	129,076	65,293	50.58%
Tacloban	50,451	18,592	36.85%
Davao	409,951	230,871	56.32%
Cebu	213,738	92,286	43.18%

³¹ Source: Philippine Statistics Authority (PSA) 2015

The provinces and the cities which are areas of interest in this study tend to exhibit a wide disparity in the proportions of households that have secured property rights. For instance, close to 60% of households in the provinces of Cavite and Laguna enjoy ownership rights or owner-like possession, compared to Negros Occidental and Leyte where less than half of their total households enjoy such rights. Likewise, such wide variations are also exhibited at the city level where, for instance, at least half of households in Davao and Bacolod have property rights, unlike households in Cebu (43.18%) and Tacloban (36.85%).

Perhaps one explanation for this variation is rapid urbanization, which brings about the urban sprawl in the periphery of urban centers, aggravating the already serious housing shortage in the area arising from incremental housing needs (Noorloos et al., 2019)³². Delving deeper into the reasons behind these varying proportions in the Philippines, however, is beyond the scope of this research.

2.5 Estimated and Projected Size of the ODC segment

Table 6 on the next page presents the regional percentage distribution of the *unserved segment* from 2015-2017 and the projected distribution from 2018-2022. Annex 3 shows the same breakdown in terms of the number of households.

The study pays particular interest to the *unserved segment* where the ODC segment is also found. As shown in Table 6, Regions VI, VII, and XII register the first, second, and third largest figures from 2015 to 2017, accounting for 9.11%, 9.76%, and 8.82%, respectively. By 2022, these three regions on average will account for 9.14%, 9.65%, and 8.52% of the unserved segment, respectively. Overall, households belonging to the *unserved segment* are dispersed quite extensively throughout the country, but it is worthwhile to note that this segment is minimal in regions such as NCR, CAR, Cagayan Valley, and Caraga. An estimate of the *unserved segment* in NCR cities is in Annex 4.

³² Noorloos, F. V., Cirolia, L. R., Friendly, A., Jukur, S., Schramm, S., Steel, G., & Valenzuela, L. (2019). Incremental housing as a node for intersecting flows of city-making: rethinking the housing shortage in the global South. *Environment & Urbanization*, 32(1), 37-54. DOI: 10.1177/0956247819887679

Table 6. Average Percentage Share Distribution of the Unserved Segment per Region (2015-2022)³³

Region	% Share (2015-2017)	% Share of Region to Total (2018-2022)
National Capital Region (NCR)	1.91%	2.07%
Cordillera Administrative Region (CAR)	1.44%	1.43%
I - Ilocos Region	4.61%	4.65%
II - Cagayan Valley	3.24%	3.31%
III - Central Luzon	6.24%	6.32%
IVA - CALABARZON	7.66%	7.92%
IVB - MIMAROPA	4.33%	4.33%
V - Bicol Region	7.98%	8.03%
VI - Western Visayas	9.11%	9.14%
VII - Central Visayas	9.76%	9.65%
VIII - Eastern Visayas	7.60%	7.36%
IX - Zamboanga Peninsula	6.03%	6.09%
X - Northern Mindanao	7.34%	7.14%
XI - Davao Region	5.19%	5.19%
XII - SOCCSKSARGEN	8.82%	8.52%
XIII - Caraga Region	3.90%	3.85%
BARMM	4.85%	5.01%
PH	100.00%	100.00%

Of the 5.62 million households comprising the *unserved segment* in 2018, a little over 55.0% or 3.1 million households are estimated to belong to the ODC segment. Assuming a stable annual household population growth, the ODC segment is projected to hit close to 3.3 million by 2022. The estimated size of the ODC segment in terms of number of households per region, province, and city as extracted from the *unserved segment* is in Annexes 5, 6, and 7, respectively.

In terms of the distribution of the ODC, the picture slightly changes from the distribution discussed earlier in the *unserved segment*. This time, the top three (3) regions where the ODCs are found as of 2018 are Regions VII, and XII and

³³ Source: Center for Research and Communication (CRC) estimates based on Philippine Statistics Authority (PSA) 2015 data

IVA (tied), accounting for 9.74% and 8.37%, respectively (see Table 7). Similar to the distribution of the *unserved* segments, ODCs are lowest in NCR and CAR. The estimated percentage share of ODC households in each NCR city and their corresponding ODC ratio is in Annex 8 while an estimate of the ODC segment per city in NCR is in Annex 9. Overall, these ODCs are also concentrated in the same areas where affordability and rapid urbanization are primary concerns.

Table 7. Estimated Regional Percentage Share Distribution of the Owner-Driven Construction Segment per Annum from 2015-2022³⁴

Region	% Share (2015-2017)	% Share (2018-2022)
National Capital Region (NCR)	1.54%	1.68%
Cordillera Administrative Region (CAR)	1.78%	1.78%
I - Ilocos Region	5.81%	5.85%
II - Cagayan Valley	4.32%	4.42%
III - Central Luzon	7.73%	7.83%
IVA - CALABARZON	8.09%	8.37%
IVB - MIMAROPA	4.43%	4.43%
V - Bicol Region	7.10%	7.14%
VI - Western Visayas	7.22%	7.24%
VII - Central Visayas	9.86%	9.74%
VIII - Eastern Visayas	6.40%	6.20%
IX - Zamboanga Peninsula	5.15%	5.20%
X - Northern Mindanao	6.53%	6.35%
XI - Davao Region	5.07%	5.06%
XII - SOCCSKSARGEN	8.66%	8.37%
XIII - Caraga Region	3.43%	3.39%
BARMM	5.53%	5.72%
PH	100.00%	100.00%

³⁴ Source: Philippine Statistics Authority (PSA) 2015 and Center for Research and Communication (CRC) estimates and projections

Table 8 below shows the estimated projections of the ODCs broken down to average percentage share of each province in their respective regions, and the average percentage share of each city in their respective provinces and regions for the period of 2015 to 2022.

Table 8. Percentage Share Distribution of ODCs per Province and City in Their Respective Total Regional and Provincial ODCs from 2015-2022³⁵

Regional ODC	Province	% Share of Province to Region (2015-2022)
IVA - CALABARZON	Cavite	25.43%
	Laguna	21.10%
VI - Western Visayas	Negros Occidental	32.12%
VII - Central Visayas	Cebu	51.98%
VIII - Eastern Visayas	Leyte	40.93%
XI - Davao Region	Davao del Sur	43.75%
Provincial ODC	City	% Share of City to Province (2015-2022)
Negros Occidental	Bacolod City	26.86%
Cebu	Cebu City	18.59%
Leyte	Tacloban City	10.56%
Davao del Sur	Davao City	79.75%
Regional ODC	City	% Share of City to Region (2015-2022)
VI - Western Visayas	Bacolod City	8.63%
VII - Central Visayas	Cebu City	9.66%
VIII - Eastern Visayas	Tacloban City	4.32%
XI - Davao Region	Davao City	34.89%

³⁵ Source: Philippine Statistics Authority (PSA) 2015 and Center for Research and Communication (CRC) estimates and projections

Cavite and Laguna account for 25.43% and 21.10% respectively of the total ODCs in Region IVA. Negros Occidental accounts only for 32.12% of Region VI while other provinces account for larger percentages: Cebu constitutes 51.98% of Region VII ODCs, Leyte makes up 40.93% of Region VIII, and Davao del Sur accounts for 43.75% of Region XI.

The percentage share of cities in their respective total regional ODCs are expectedly lower. Bacolod City accounts for only 8.63% of Region VI, the cities of Cebu and Tacloban for 9.66% of Region VII and 4.32% of Region VIII respectively, and Davao City for 34.89% of Region XI. The study has earlier revealed that the presence of ODCs in cities is expected. Rapid urbanization and in-migration exert pressure on existing properties from within the city and around it (i.e., within the province) to accommodate the huge demand for incremental housing. Such urban-based ODCs are oftentimes found in sections of the cities that are experiencing urban decay and proliferation of informal housing settlements. The areas proximate to cities referred to as *peri-urban* are undergoing a lot of pressure as well. Issues related to land use or the lack of it, the cost of transferring property inheritance, property disputes, and the lack of purchasing power, among others, can force households in the *unserved segment* in these areas to implement renovations that their incomes can afford to capitalize on the opportunities offered by urbanization. Meanwhile, ODCs that are remotely located may rely on whatever available household income they have to affordably improve their housing.

What is clear at present is that the predicament faced by the ODCs are similar to what is experienced by households belonging to the *unserved segment*. Their housing concerns are presently outside the priority radar of both public policy and private developers.

2.6 General Income Profile of the Unserved Market & the ODCs

Table 9 shows the income sources of the lowest two income class deciles (which earn an equivalent average annual income of about Php 92,471 for the first decile and Php 120,867 for the second decile) or an average of about Php 107,000 per annum for both. The average household income of the two deciles is below the Php 108,000 threshold household income level where the unserved segment and the ODCs are also found.

About 4.55 million households belong to the first and second lower deciles that earned a total of about Php 484.90 million. Based on the sources of total income, 39.82% were from salaries/wages, 26.41% from entrepreneurial activities, 28.61% from other sources of income (see Annex 10 for further details), and 6.15% from other receipts. While assured of some income sources, the income level of these two deciles may not be sufficient enough to qualify them for financing under regular commercial terms and conditions imposed by most lending institutions.

Table 9. Income Profile of Households Belonging to the Two Lowest Income Deciles³⁶

Income Source	No. of Households Surveyed	Total Income (PHP)	Average Income (PHP)	Share per Source of Total Income (%)
Philippines	4,545,830	484,902,923,390	106,670	100%
Salaries/Wages	3,659,071	188,252,060,550	51,448	38.82%
Agricultural	22,436,06	66,113,867,133	29,468	13.63%
Non-agricultural	2,594,362	122,138,193,418	47,078	25.19%
Entrepreneurial Activities	3,281,432	128,085,777,604	39,034	26.41%
Other sources of income	4,545,830	138,732,566,606	30,519	28.61%
Other Receipts	2,345,829	29,832,518,629	12,717	6.15%

2.7 Estimating the market value of the ODC segment

Based on a study conducted by Habitat on low-income households last August 2019 in Bogu City, Northern Cebu, the ODC segment's average unit size ranges from 25-55 square meters and the cost of renovation or construction at a minimum (for 25 square meter) is estimated at Php 207,000 (equivalent to

³⁶ Source: 2015 Family Income Expenditure Survey (FIES) (Philippine Statistics Authority)

US\$ 4,140 @ Php 50/US\$ 10) or Php 8,280 per square meter (or US\$ 165 per square meter). Using the minimum cost as a benchmark for the estimated 3.1 million ODCs, the potential construction market value of the segment can be as much as Php 641.7 billion (or US\$ 12.8 billion).

However, affordability remains a major issue. Based on the latest 2015 Family Income and Expenditure Survey, households in these lower-income deciles where the unserved and the ODC market belongs restrict spending on home development. Only about 2.04% or Php 6.704 billion (US\$ 134 million) of total household expenditures is allocated to furnishing and routine household maintenance, which is almost 96 times lower than the construction market value (See Table 10)³⁷. The difference between the potential and actual values illustrates a major funding gap that needs to be filled. Expenditure behavior as measured by the proportion of total expenses allocated to different items in the basket of goods and services varies across income classes. Lower-income households tend to spend proportionately more on basic necessities like food, water, and even basic utilities over other items such as furnishings and household maintenance compared to higher-income households that tend to spend proportionately less on these items.

³⁷ The 2015 FIES data presents the information as income classes. The figures quoted here pertain to those households earning Php 100,000 annually and below. Combined, a total of 4.52 million households belong to these two deciles or segments.

Table 10. Expenditure Profile of Households with Annual Income Below Php 100,000³⁸

Type of Expenditure	Number of Households Surveyed	Total Expenses (PHP)	Average Expenditure (PHP)	Share per Type of Expenditure (%)
Philippines	4,524,270	329,360,988,780	72,799	100.00%
Total Expenditure	4,524,270	322,418,247,663	71,264	97.89%
Total Food Expenditure	4,524,270	190,249,110,103	42,051	57.76%
Total Food Consumed at Home	4,523,408	172,548,474,714	38,146	52.39%
Total Food Consumed Outside Home	3,678,761	17,700,635,389	4,812	5.37%
Alcoholic Beverages	2,410,352	2,638,831,822	1,095	0.80%
Tobacco	2,438,359	6,456,043,720	2,648	1.96%
Other Vegetables-based Products	247,139	180,646,663	731	0.05%
Accommodation Services	57,436	173,961,097	3,029	0.05%
Clothing and Footwear	4,398,887	6,849,967,897	1,557	2.08%
Housing, Water, Electricity, Gas and Other Fuels	4,524,270	56,815,190,764	12,558	17.25%
Furnishings and Routine Household Maintenance	4,552,516	6,704,114,500	1,482	2.04%
Health	4,221,570	7,210,544,071	1,708	2.19%
Transport	4,401,038	12,049,728,249	2,738	3.66%
Communication	3,049,104	2,500,266,832	820	0.76%
Recreation and Culture	2,843,248	1,614,855,804	568	0.49%
Education	2,399,448	4,107,796,839	1,712	1.25%
Miscellaneous Goods and Services	4,522,590	14,828,183,030	3,279	4.50%
Durable Furniture and Equipment	599,115	2,474,066,426	4,130	0.75%
Special Occasions	2,164,304	4,783,424,104	2,210	1.45%
Other Expenditure	3,297,501	2,781,515,744	844	0.84%
Other Disbursements	1,000,953	6,942,741,117	6,936	2.11%

³⁸ Source: 2015 Family Income Expenditure Survey (FIES) (Philippine Statistics Authority)

Bridging this funding gap will involve offering affordable financing assistance and schemes and even indirect government subsidy in the form of rechanneling private developer compliances on balanced housing requirements towards this sector. Affordable financing schemes however may entail longer term payments and lower interest rates. Willingness to avail of such financing schemes particularly those offered by microfinance institutions among the unserved and ODC segments is strong. This is confirmed in the recent presentation document sponsored by Habitat (Razwani, 2018)³⁹ where this segment showed remarkable interest in improving their housing condition.

From the funders' side, the same interest to fill this gap is also present. Despite the obstacles, numerous microfinance institutions in the country are keen on breaking into this segment. A presentation sponsored by Habitat confirms this growing interest among microfinance institutions in serving this segment of the housing market (Rajwani, 2018)⁴⁰.

³⁹ Razwani, N. (2018). State of Housing Microfinance in the Philippines [Presentation]. Terwilliger Center for Innovation in Shelter.

⁴⁰ Rajwani, A. (2018). Rapid Assessment on the Availability of and Potential of Wholesale Funds for Housing Microfinance in the Philippines [Presentation]. Terwilliger Center for Innovation in Shelter, Habitat for Humanity.

3. Conclusions

The study has revealed the following insights:

1. A significant size of households in the Philippines currently cannot participate in any housing finance program. Their household income cannot meet the thresholds normally required by public and private finance institutions for housing loans. As of 2018, the *unserved* segment is estimated to be close to 5.6 million.
2. The accumulation of housing deficits over long periods of time have caused the housing backlog to swell to 5.7 million units in 2018. Most of the demand for housing is concentrated in the socialized and economic housing segments. Many households in these segments can meet the housing finance requirements to purchase housing units on loan, but these units are not available in the market.
3. Combined, the unserved segment and social and economic segments total 11.3 million households, which account for close to half of the total 22.7 million households in 2015. The backlogs are nationwide throughout the different regions. This combined total is close to the latest 2015 census estimates on the types of house ownership, which revealed that around 45% do not “own or have owner-like possession” of properties.
4. The policy direction of the government related to housing does not directly address the *unserved segment* nor the backlog. It relies either on direct housing production through the NHA and some LGU-based projects to cater to specific beneficiaries and in-house financing programs such as SHFC, CMP, and HDMF, among others, or through balanced housing schemes and fiscal incentives extended to private developers.
5. The persistence and the widening of the housing backlog indicates that the response and performance of both the public and private sectors are inadequate. Private sector response to market opportunities and to public policy in housing has failed to address the primary sources of the backlog, which is concentrated in the socialized and economic housing segments. Housing production capacity has not only failed to increase, but construction

resources have also been diverted to higher-end segments where margins tend to be better, and to other non-housing projects such as the government's infrastructure programs and the private sector's commercial offices, retail spaces, and industrial projects. In the end, housing production capacity to address the backlog in the socialized and economic housing segments remains way below the housing demand, causing housing deficits to accumulate and the housing backlog to swell.

6. From the 5.6 million households belonging to the *unserved market*, about 55% or 3.1 million households meet the profile of owner-driven construction segments. They enjoy property rights and have incomes that are below thresholds of lending terms set by financial institutions. From the study, they are concentrated in regions, provinces, and cities where housing affordability remains an issue.
7. These two complementary segments – the *unserved segment* and the *ODCs* – are outside the purview of government policy as well as private sector initiatives. For ODCs, the possession of a valuable asset like property provides both the security and the opportunity for these households to improve their plight given their limited purchasing power, as long as some form of direct assistance and support is given to them. Based on preliminary studies of Habitat in the Philippines, the typical abode of an ODC remains a multi-dwelling facility that lacks important access to necessities such as telecommunications and the internet, inadequate to withstand the effects of severe climate change and natural calamities and, recently, with the COVID19 pandemic, cannot meet the required design to facilitate social distancing and isolation when one or more members are ill or infected.
8. As estimated by the study, the sheer size of the ODC segment and its concentration in some areas can provide the necessary scale economies, magnify the opportunities as well as the positive impact for stakeholders – public, private and NGOs – who come to address the needs of the ODC. Concentrating resources and efforts on a large and focused segment such as the ODC in certain areas can lower down costs and magnify the multiplier impacts.
9. The construction value of the ODC segment comprising 3.1 million households is at least Php 641 billion. However, budget constraints limit this market, as the latest (2015) survey results indicate that this estimated

segment can afford to allocate only Php 6.7 billion to housing development. The intention of the ODC segment to improve their housing condition is there but the funding gap between what they need and what they can only afford remains wide. Nevertheless, a number of microfinance finance institutions are aware of the financing needs of the ODCs and are exploring ways to break into this segment.

10. The national government through the DHSUD, the local government units, and the private sector developers together with NGOs like Habitat for Humanity, can partner and explore how requirements under balanced housing in RA 10884 or under the government's BALAI program can be utilized to address the needs of the ODCs in urban, peri-urban, and other areas where the ODCs are concentrated. This project can unlock opportunities for ODCs beyond what their private properties and limited household income can offer to significantly improve their lot and living conditions in a much shorter period of time.

Annex 1

Table 11. Housing Backlog Across Housing Segments per Region (2001-2018)⁴¹

Region	Unserviced	Socialized	Economic	Low-Cost	Mid-Cost	High-End
National Capital Region (NCR)	116,666	(426,264)	(193,293)	56,039	272,328	86,117
Cordillera Administrative Region (CAR)	80,669	(95,305)	(31,536)	(24,815)	(5,469)	1,069
I - Ilocos Region	261,269	(282,681)	(79,490)	(55,406)	(6,786)	2,384
II - Cagayan Valley	186,009	(232,731)	(59,741)	(30,305)	(11,346)	(1,857)
III - Central Luzon	355,639	(401,867)	32,188	(84,385)	25,519	37,138
IVA - CALABARZON	445,207	(563,634)	245,579	(111,333)	91,799	62,984
IVB - MIMAROPA	243,443	(178,110)	(45,475)	(29,631)	(13,832)	(3,384)
V - Bicol Region	451,371	(350,134)	(5,425)	(31,577)	(910)	3,835
VI - Western Visayas	514,102	(426,954)	11,906	(35,597)	18,396	8,686
VII - Central Visayas	542,637	(335,100)	(27,578)	(57,330)	40,560	8,962
VIII - Eastern Visayas	414,051	(257,786)	7,490	(22,450)	(8,155)	(1,462)
IX - Zamboanga Peninsula	342,308	(234,718)	(20,425)	(16,084)	(2,471)	94
X - Northern Mindanao	401,281	(191,086)	(37,730)	(38,009)	(8,821)	2,023
XI - Davao Region	291,714	(294,213)	(105,476)	(69,583)	(16,729)	(4,275)
XII - SOCCSKSARGEN	479,393	(197,056)	10,212	(17,146)	8,794	1,925
XIII - Caraga Region	216,499	(151,427)	2,142	(28,032)	(4,884)	(193)
BARMM	281,686	(189,360)	(7,279)	(6,703)	(558)	(0)
PH	5,623,943	(4,808,424)	(303,934)	(602,347)	377,434	204,044

⁴¹ Source: Housing and Land Use Regulatory Board (HLURB) and Center for Research and Communication (CRC)

Annex 2

Table 12. Percentage Share Distribution of Housing Tenure Status per Region based on the 2015 Census⁴²

Region	Own or owner-like possession of house and lot	Rent house/ room including lot	Own house rent lot	Own house rent-free lot with consent of owner	Own house rent-free lot without consent of owner	Rent-free house and lot with consent of owner	Rent-free house and lot without consent of owner	Not Applicable	Not Reported
National Capital Region (NCR)	44.67%	37.36%	1.81%	6.35%	3.39%	5.69%	0.61%	0.03%	0.08%
Cordillera Administrative Region (CAR)	68.42%	14.59%	0.64%	6.48%	0.53%	9.21%	0.14%	0%	0%
I - Ilocos Region	69.57%	2.92%	1.70%	17.89%	0.92%	6.83%	0.16%	0%	0%
II - Cagayan Valley	73.88%	2.92%	1.97%	15.02%	0.93%	5.12%	0.17%	0%	0%
III - Central Luzon	68.40%	10.72%	2.11%	11.96%	1.34%	5.23%	0.25%	0%	0%
IVA - CALABARZON	58.40%	17.30%	2.21%	14.09%	1.85%	5.86%	0.28%	0%	0%
IVB - MIMAROPA	56.54%	5.44%	2.29%	26.57%	1.65%	7.28%	0.21%	0%	0%
V - Bicol Region	49.18%	3.52%	3.70%	35.60%	1.93%	5.90%	0.19%	0%	0%
VI - Western Visayas	43.76%	2.43%	4.46%	43.09%	2.48%	3.63%	0.16%	0%	0%
VII - Central Visayas	55.80%	10.08%	4.47%	22.76%	2.02%	4.62%	0.22%	0.01%	0%
VIII - Eastern Visayas	46.57%	2.26%	6.49%	38.19%	1.47%	4.82%	0.19%	0%	0%
IX - Zamboanga Peninsula	47.18%	4.86%	5.02%	34.38%	2.07%	6.18%	0.30%	0%	0%
X - Northern Mindanao	49.15%	6.79%	3.55%	29.33%	2.11%	8.75%	0.31%	0%	0%
XI - Davao Region	53.95%	10.26%	3.88%	21.53%	2.14%	7.91%	0.33%	0%	0%
XII - SOCCSKSARGEN	54.29%	5.49%	2.79%	27.38%	2.32%	7.41%	0.33%	0%	0%
XIII - Caraga Region	48.65%	4.40%	6.14%	31.81%	2.19%	6.52%	0.29%	0%	0%
BARMM	63.10%	1.30%	2.58%	26.44%	2.10%	4.10%	0.33%	0%	0.04%
PH	55.26%	12.06%	3.06%	21.41%	2.01%	5.88%	0.29%	0%	0.01%

⁴² Source: Philippine Statistics Authority (PSA) 2015

Annex 3

Table 13. Total Households Belonging to the Unserved Segment per Region (2015-2022)⁴³

Region	2015	2016	2017	2018	2019	2020	2021	2022
National Capital Region (NCR)	90,045	92,311	93,786	116,666	118,357	119,994	121,568	123,083
Cordillera Administrative Region (CAR)	67,955	69,665	70,778	80,669	81,839	82,971	84,059	85,107
I - Ilocos Region	217,653	223,129	226,696	261,269	265,056	268,722	272,247	275,640
II - Cagayan Valley	152,638	156,478	158,980	186,009	188,706	191,315	193,825	196,241
III - Central Luzon	294,509	301,919	306,745	355,639	360,795	365,784	370,582	375,201
IVA - CALABARZON	361,330	370,421	376,343	445,207	451,660	457,907	463,913	469,696
IVB - MIMAROPA	204,240	209,379	212,726	243,443	246,972	250,388	253,672	256,834
V - Bicol Region	376,340	385,809	391,976	451,371	457,913	464,247	470,336	476,198
VI - Western Visayas	430,015	440,834	447,881	514,102	521,554	528,768	535,703	542,381
VII - Central Visayas	460,686	472,277	479,827	542,637	550,503	558,117	565,437	572,485
VIII - Eastern Visayas	358,423	367,441	373,315	414,051	420,052	425,862	431,448	436,825
IX - Zamboanga Peninsula	284,374	291,529	296,189	342,308	347,270	352,072	356,690	361,136
X - Northern Mindanao	346,282	354,995	360,670	401,281	407,098	412,728	418,142	423,354
XI - Davao Region	245,041	251,206	255,222	291,714	295,942	300,035	303,971	307,760
XII - SOCCSKSARGEN	416,046	426,514	433,332	479,393	486,342	493,068	499,535	505,762
XIII - Caraga Region	184,032	188,662	191,678	216,499	219,637	222,674	225,595	228,407
BARMM	228,673	234,427	238,174	281,686	285,769	289,721	293,521	297,180
PH	4,718,283	4,836,997	4,914,321	5,623,943	5,705,465	5,784,373	5,860,242	5,933,289

⁴³ Source: Philippine Statistics Authority (PSA) 2015

Annex 4

Table 14. Estimated Unserved Segment per NCR City (2015-2022)⁴⁴

City	2015	2016	2017	2018	2019	2020	2021	2022
Manila	12,658	12,977	13,184	16,401	16,638	16,868	17,090	17,303
Mandaluyong	2,919	2,993	3,041	3,782	3,837	3,890	3,941	3,990
Marikina	2,858	2,930	2,976	3,702	3,756	3,808	3,858	3,906
Pasig	5,254	5,386	5,472	6,807	6,906	7,001	7,093	7,182
Quezon City	19,869	20,369	20,695	25,743	26,116	26,478	26,825	27,159
San Juan	833	854	867	1,079	1,094	1,110	1,124	1,138
Caloocan	10,701	10,971	11,146	13,865	14,066	14,260	14,448	14,628
Malabon	2,507	2,570	2,611	3,248	3,296	3,341	3,385	3,427
Navotas	1,772	1,816	1,845	2,295	2,329	2,361	2,392	2,422
Valenzuela	4,452	4,564	4,637	5,768	5,852	5,933	6,010	6,085
Las Pinas	4,128	4,232	4,300	5,349	5,427	5,502	5,574	5,643
Makati	4,482	4,595	4,669	5,808	5,892	5,973	6,052	6,127
Muntinlupa	3,557	3,647	3,705	4,609	4,676	4,740	4,802	4,862
Paranaque	4,744	4,863	4,941	6,146	6,235	6,321	6,404	6,484
Pasay	3,131	3,209	3,261	4,056	4,115	4,172	4,226	4,279
Pateros	413	423	430	535	542	550	557	564
Taguig	5,767	5,912	6,007	7,472	7,580	7,685	7,786	7,883
Total (NCR)	90,045	92,311	93,786	116,666	118,357	119,994	121,568	123,083

⁴⁴ Source: 2015 Family Income Expenditure Survey (FIES) (Philippine Statistics Authority)

Annex 5

Table 15. Estimated Number of Households Belonging to the Owner-Driven Construction Segment per Region (2015-2022)⁴⁵

Region	2015	2016	2017	2018	2019	2020	2021	2022
National Capital Region (NCR)	40,222	41,234	41,893	52,113	52,869	53,600	54,303	54,980
Cordillera Administrative Region (CAR)	46,494	47,663	48,425	55,193	55,993	56,767	57,512	58,229
I - Ilocos Region	151,422	155,232	157,713	181,766	184,400	186,951	189,403	191,764
II - Cagayan Valley	112,766	115,603	117,451	137,420	139,412	141,340	143,194	144,979
III - Central Luzon	201,451	206,519	209,821	243,265	246,791	250,205	253,486	256,646
IVA - CALABARZON	211,016	216,326	219,784	260,000	263,769	267,417	270,925	274,302
IVB - MIMAROPA	115,486	118,392	120,284	137,653	139,649	141,580	143,437	145,225
V - Bicol Region	185,070	189,726	192,759	221,967	225,185	228,299	231,294	234,177
VI - Western Visayas	188,169	192,903	195,987	224,964	228,225	231,381	234,416	237,338
VII - Central Visayas	257,072	263,540	267,753	302,803	307,192	311,441	315,525	319,458
VIII - Eastern Visayas	166,929	171,129	173,865	192,837	195,632	198,338	200,939	203,444
IX - Zamboanga Peninsula	134,167	137,542	139,741	161,500	163,841	166,107	168,285	170,383
X - Northern Mindanao	170,180	174,462	177,251	197,210	200,068	202,835	205,496	208,057
XI - Davao Region	132,195	135,522	137,688	157,375	159,656	161,864	163,987	166,031
XII - SOCCSKSARGEN	225,887	231,571	235,272	260,281	264,054	267,705	271,217	274,597
XIII - Caraga Region	89,538	91,791	93,258	105,334	106,861	108,339	109,760	111,128
BARMM	144,293	147,924	150,288	177,744	180,321	182,814	185,212	187,521
PH	2,607,486	2,673,092	2,715,823	3,107,985	3,153,037	3,196,644	3,238,572	3,278,940

⁴⁵ Source: Philippine Statistics Authority (PSA) 2015 and Center for Research and Communication (CRC) estimates and projections

Annex 6

Table 16. Total Households Belonging to the Owner-Driven Construction Segment for Select Provinces (2015-2022)⁴⁶

Provinces	2015	2016	2017	2018	2019	2020	2021	2022
Cavite	53,668	55,019	55,898	66,127	67,085	68,013	68,905	69,764
Laguna	44,516	45,636	46,366	54,850	55,645	56,414	57,154	57,867
Negros Occidental	60,433	61,954	62,944	72,251	73,298	74,312	75,287	76,225
Cebu	133,620	136,982	139,172	157,390	159,671	161,879	164,003	166,047
Leyte	68,321	70,040	71,160	78,924	80,068	81,176	82,241	83,266
Davao del Sur	57,837	59,292	60,240	68,853	69,851	70,817	71,746	72,640

Annex 7

Table 17. Total Households Belonging to the Owner-Driven Construction Segment for Select Cities (2015-2022)⁴⁷

Cities	2015	2016	2017	2018	2019	2020	2021	2022
Bacolod	16,234	16,643	16,909	19,409	19,690	19,962	20,224	20,476
Cebu	24,846	25,471	25,878	29,265	29,690	30,100	30,495	30,875
Tacloban	7,211	7,393	7,511	8,331	8,451	8,568	8,681	8,789
Davao	46,124	47,284	48,040	54,909	55,705	56,475	57,216	57,929

⁴⁶ Source: Philippine Statistics Authority (PSA) 2015 and Center for Research and Communication (CRC) estimates and projections

⁴⁷ Source: Philippine Statistics Authority (PSA) 2015 and Center for Research and Communication (CRC) estimates and projections

Annex 8

Table 18. Estimated Percentage Share of ODC Households and ODC Ratio per NCR City (2015-2022)⁴⁸

City	No. of Households	% Share per City in Total NCR Households	ODC Ratio*
Manila	435,154	14.06%	0.3778
Mandaluyong	100,356	3.24%	0.4031
Marikina	98,238	3.17%	0.6164
Pasig	180,612	5.83%	0.4807
Quezon City	683,044	22.07%	0.4338
San Juan	28,623	0.92%	0.3669
Caloocan	367,878	11.88%	0.539
Malabon	86,191	2.78%	0.4244
Navotas	60,904	1.97%	0.4909
Valenzuela	153,041	4.94%	0.3819
Las Pinas	141,925	4.58%	0.5218
Makati	154,095	4.98%	0.4343
Muntinlupa	122,286	3.95%	0.4157
Paranaque	163,074	5.27%	0.4545
Pasay	107,619	3.48%	0.3632
Pateros	14,188	0.46%	0.5541
Taguig	198,256	6.40%	0.442
NCR	3,095,484	100%	0.4467

⁴⁸ Source: 2015 Family Income Expenditure Survey (FIES) (Philippine Statistics Authority)

*ODC ratio refers to the share of the number of households with “Own or owner-like possession” of house and lot to the total Tenure Status of the Housing Unit and Lot per City/Municipality

Annex 9

Table 19. Estimated ODC Segment per NCR City (2015-2022)⁴⁹

City	2015	2016	2017	2018	2019	2020	2021	2022
Manila	4,782	4,903	4,981	6,196	6,286	6,373	6,457	6,537
Mandaluyong	1,177	1,206	1,226	1,525	1,547	1,568	1,589	1,608
Marikina	1,761	1,806	1,834	2,282	2,315	2,347	2,378	2,408
Pasig	2,525	2,589	2,630	3,272	3,319	3,365	3,410	3,452
Quezon City	8,618	8,835	8,976	11,166	11,328	11,485	11,636	11,781
San Juan	305	313	318	396	402	407	412	418
Caloocan	5,768	5,913	6,008	7,473	7,582	7,687	7,787	7,885
Malabon	1,064	1,091	1,108	1,379	1,399	1,418	1,437	1,454
Navotas	870	892	906	1,127	1,143	1,159	1,174	1,189
Valenzuela	1,700	1,743	1,771	2,203	2,235	2,265	2,295	2,324
Las Pinas	2,154	2,209	2,244	2,791	2,832	2,871	2,908	2,945
Makati	1,947	1,996	2,028	2,522	2,559	2,594	2,628	2,661
Muntinlupa	1,479	1,516	1,540	1,916	1,943	1,970	1,996	2,021
Paranaque	2,156	2,210	2,246	2,794	2,834	2,873	2,911	2,947
Pasay	1,137	1,166	1,184	1,473	1,495	1,515	1,535	1,554
Pateros	229	234	238	296	301	305	309	313
Taguig	2,549	2,613	2,655	3,303	3,351	3,397	3,442	3,485
Total (NCR)	40,222	41,234	41,893	52,113	52,869	53,600	54,303	54,980

⁴⁹ Source: 2015 Family Income Expenditure Survey (FIES) (Philippine Statistics Authority)

Annex 10

Table 20. Income Source Profile (First and Second Decile)⁵⁰

Sources of Receipts	First Decile		Second Decile	
	Families Reporting (in '000)	Receipts (in millions)	Families Reporting (in '000)	Receipts (in millions)
Philippines	2,273	210,166	2,273	274,737
Salaries/Wages	1,819	74,758	1,840	113,494
Agricultural	1,236	32,986	1,007	33,128
Non-agricultural	1,166	41,772	1,429	80,366
Entrepreneurial Activities	1,706	57,659	1,576	70,427
Crop Farming and Gardening	1,130	29,906	845	27,441
Livestock and Poultry Raising	380	2,342	315	2,627
Fishing	221	8,795	228	10,746
Forestry and Hunting	152	1,955	119	1,880
Wholesale and Retail	317	6,585	442	12,755
Manufacturing	141	1,857	129	2,365
Community, Social, etc. Services	53	687	97	2,132
Transportation Storage Services	136	4,854	211	9,446
Mining and Quarrying	16	394	11	457
Construction	6	162	8	243
Entrepreneurial Activities NEC	13	121	16	336
Other Sources of Income	2,273	63,088	2,273	75,645
Net Share of Crops, Fruits, etc.	154	1,142	165	1,480
Cash Support, etc. from Abroad	200	2,948	310	6,694
Cash Support, etc. from Domestic Source	1,936	27,922	1,871	29,191
Rentals from Non-Agricultural Lands, etc.	7	71	15	210
Interest	4	13	11	37
Pension and Retirement Benefits	60	621	112	1,853
Dividends from Investment	1	1	1	5
Other Sources of Income NEC	66	93	80	175
Family Sustenance Activities	2,147	11,225	2,014	10,474
Total Received as Gifts	2,132	5,646	2,164	7,165
Imputed House Rental Value	2,249	13,406	2,235	18,360
Other Receipts	1,231	14,662	1,115	15,171

⁵⁰ Source: 2015 Family Income Expenditure Survey (FIES) (Philippine Statistics Authority)