



Centre for Affordable
Housing Finance
in Africa



**A REVIEW OF THE DATA
LANDSCAPE IN AFRICAN HOUSING
ECOSYSTEMS**
Nigeria
July 2021

CONTENTS

LIST OF FIGURES	iii
LIST OF TABLES	iii
ACRONYMS	iv
Acknowledgements	v
1 Introduction	1
1.1 Data quality assessment framework	4
1.2 Structure of this report	5
2 Context - the housing and housing finance sector in Nigeria	6
3 An assessment of data availability	7
3.1 Overview of data availability and quality	7
3.2 Headline Market Shaping Indicators	9
3.2.1 Land and Infrastructure	9
3.2.2 House construction and investment	13
3.2.3 Sales and Rental	18
3.2.4 Maintenance and Management	24
3.2.5 <i>Context Category</i>	25
3.3 Bottom 40 indicators	28
4 Developing an engagement strategy: An institutional approach	30
4.1 National Bureau of Statistics	30
4.1.1 Macroeconomic data	31
4.1.2 Social and demographic data	32
4.1.3 Other statistical publications and data	32
4.1.4 Data sourced from NBS	32
4.2 Central Bank of Nigeria	33
4.2.1 Macroeconomic data	33
4.2.2 Financial sector data	34
4.2.3 Other publications	34
4.2.4 Data sourced from CBN	34
4.3 Government ministries key to the housing data landscape	35
4.3.1 Federal Ministry of Finance, Budget and National Planning	35
4.3.2 Federal Ministry of Lands, Housing and Urban Development	35
4.3.3 Federal Ministry of Works and Housing	36
4.3.4 Data sourced from FMFBNP, FMLHUD and FMWH	36
4.4 Other important public sector entities	36
4.4.1 State governments	37
4.4.2 Federal Mortgage Bank of Nigeria	37
4.4.3 Nigerian Investment Promotion Commission	38

4.4.4	Federal Housing Authority.....	38
4.5	Private sector and NGOs.....	38
4.5.1	Banks and mortgage refinancers	38
4.5.2	Nigeria Mortgage Refinance Company	39
4.5.3	Abbey, FirstTrust, and Platinum Mortgage Banks.....	39
4.5.4	Private sector and Industry associations	39
4.5.5	Housing developers	41
4.5.6	Credit bureaus	41
4.5.7	NGOs	41
4.5.8	Other sources	42
4.5.9	Data sourced from the private sector and NGOs.....	42
4.6	Multinational developmental finance institutions (DFIs)	43
4.6.1	Databases and portals	43
4.6.2	Publications.....	43
4.6.3	Data sourced from DFIs	44
5	Conclusion	44
6	Appendix A: Legislation	46
6.1	Government	46
6.1.1	Statistics Act of 2007	46
6.1.2	Land Use Act of 1978	47
6.1.3	Federal Lands Registry Act of 1992.....	47
6.1.4	Nigerian Urban and Regional Planning Act of 1992.....	48
6.2	Banks, funders, and other lenders.....	48
6.2.1	Banks and Other Financial Institutions Act of 1991 (As amended) & Central Bank of Nigeria Act of 2007	48
6.2.2	Federal Mortgage Bank of Nigeria Act of 1993.....	49
6.2.3	Asset Management Corporation of Nigeria Act of 2010	49
6.2.4	Investments and Securities Act of 2007	50
6.3	Developers/ builders	50
6.3.1	Builders (Registration, etc.) Act of 1989.....	50
6.4	Estate agents' sector	50
6.4.1	Estate Surveyors and Valuers (Registration, etc.) Act of 1975.....	51
6.5	Additional legal requirements around public access to data and research	51
6.5.1	Freedom of Information Act of 2011	51
7	Additional sources	51
1.1	Websites.....	51

LIST OF FIGURES

Figure 1: The headline market-shaping indicators.....	3
Figure 2: Data quality assessment framework	5
Figure 3: Key data producers and custodians in Nigeria	7
Figure 4: High level characterisation of data quality for indicators	8
Figure 5: Quality assessment: scoring.....	9
Figure 6: Land and Infrastructure Indicators	10
Figure 7: Construction and Investment Indicators	13
Figure 8: Sales and Rental Indicators	18
Figure 9: Ease of doing business registering property assumptions.....	23
Figure 10: Maintenance and Management Indicators	24
Figure 11: Enabling Environment Indicators.....	25
Figure 12: Economic Environment and Demand Indicators	26
Figure 13: Indicators populated with data from the NBS	33
Figure 14: Indicators populated with data from the CBN.....	35
Figure 15: Indicators populated with data from the FMFBNP, FMLHUD and FMBWH	36
Figure 16: Indicators populated with data from the private sector and NGOs	42
Figure 17: Indicators populated with data from DFIs	44
Figure 18: Key Considerations that frame next steps	45

LIST OF TABLES

Table 1: Data gaps for land and infrastructure indicators	10
Table 2: Populated land and Infrastructure indicators.....	11
Table 3: Quality assessment: land and infrastructure indicators.....	12
Table 4: Data gaps for construction and investment indicators.....	15
Table 5: Populated Construction and Investment indicators	16
Table 6: Quality assessment: Construction and Investment indicators.....	16
Table 7: Data gaps for sales and rental indicators	19
Table 8: Populated sales and rental headline indicators	19
Table 9: Quality assessment: sales and rental indicators (1)	21
Table 10: Quality assessment: sales and rental headline indicators (2).....	22
Table 11: Data gaps for maintenance and management indicators	24
Table 12: Populated maintenance and management indicators.....	24
Table 13: Quality assessment: maintenance and management indicators.....	25
Table 14: Data gaps for Enabling, Economic and Demand Related indicators	26
Table 15: Populated Enabling, Economic and Demand Related indicators	26
Table 16: Quality assessment: Enabling, Economic and Demand Related indicators	28
Table 17: Data gaps for Bottom 40 indicators	29
Table 18: Populated Bottom 40 indicators	29

ACRONYMS

AfDB	African Development Bank
B40	Bottom 40th percentile of the market
BOFIA	Banks and Other Financial Institutions Act
CAHF	Centre for Affordable Housing Finance in Africa
CBN	Central Bank of Nigeria
C-GIDD	Canback Global Income Distribution Database
CPI	Consumer Price Index
DFI	Development Finance Institution
DHS	Demographic and Health Survey programme, run by USAID
EAB	World Bank's Ease of Doing Business
EFInA	Enhancing Financial Innovation & Access (EFInA)
FDI	Foreign Direct Investment
FMFBNP	Federal Ministry of Finance, Budget and National Planning
FMWH	Federal Ministry of Works and Housing
FMBN	Federal Mortgage Bank of Nigeria
FHFL	Family Homes Funds Limited
FFS	Financial Sector Supervision Report
FSR	Financial Stability Report
GDP	Gross Domestic Product
HDI	Human Development Index
IFC	International Finance Corporation
ILO	International Labour Organisation
IMF	International Monetary Fund
LASRETRAD	Lagos State Real Estate Transaction Department
MFF	Millard Fuller Foundation
MBAN	Mortgage Banking Association of Nigeria
NRE-DCMP	National Real Estate Data Collation and Management Programme
NBS	Nigeria National Bureau of Statistics
NIESV	Nigerian Institute of Estate Surveyors and Valuers
NIPC	Nigerian Investment Promotion Commission
NMGC	Nigerian Mortgage Guarantee Company
NMRC	Nigeria Mortgage Refinance Company
NGO	Non-Governmental Organisation
NLSS	Nigeria Living Standards Survey
NPC	National Population Commission
NPL	Non-Performing Loan
PMD	Reall's Portfolio Monitoring Database
POS	Point of Service
PPI	Production Price Index
PPP\$	Purchasing Power Parity dollars
REDAN	Real Estate Developers Association of Nigeria
SDG	Sustainable Development Goals
USAID	United States Agency for International Development
WB	World Bank

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The Review of the Data Landscape in African Housing Ecosystems interrogated the availability of housing-relevant data in Kenya, Uganda, Tanzania, Mozambique, Nigeria, Ghana, Côte d'Ivoire, and Morocco. The study, undertaken by CAHF, 71point4 and Reall, has produced the following outputs:

- Data Landscape Reports for all countries, including a review of legislation and institutions involved in each country in support of housing data, and action plans for going forward
- Databases of the 115 Headline Market Shaping indicators in 2020, for all countries – this will be collected annually, and extended to new countries over time.
- Data Quality Assessments for all countries
- Country profiles for Kenya, Uganda, Tanzania, Mozambique, Nigeria and Ghana
- Market Shaping Indicators Metadata Document providing definitions and data collection recommendations for the 115 Market Shaping Indicators

Reall has produced a dashboard of the data for Kenya, Uganda, Tanzania, Mozambique, Nigeria, Ghana, Côte d'Ivoire, and Morocco – see www.reall.net/msi. CAHF is in the process of producing a thematic dashboard, interrogating the data further, for all eight countries.

Undertaken by CAHF, 71point4 and Reall, the Data Agenda for Housing in Africa is further supported by CAHF's and Reall's donors:



In Nigeria, the partners worked with the NMRC and NRE -DCMP



In Nigeria, our partnership is with the Nigeria Mortgage Refinance Company (NMRC). We would like to gratefully acknowledge the contributions and support of the NMRC and National Real Estate Data Collation Management Programme (NRE-DCMP).¹ We hope this review of Nigeria's Housing Data Landscape supports ongoing efforts by stakeholders to increase the availability of the data and market analytics necessary to enable increased investment in housing finance.

¹ Hosted by the NMRC and organized in collaboration with the NRE-DCMP and the Housing Development Programme, a strategic workshop held in February 2020 focused on the deploying of data to support the provision of affordable housing in Nigeria. <https://nmrc.com.ng/press-release/#paginate-2>

1 INTRODUCTION

Data is critical in the development of any sector. It informs policy decisions by government as well as investment decisions made by private sector participants including funders and developers. In light of this, CAHF's Data Agenda is core to its mission of making Africa's housing finance markets work.² The Agenda seeks to identify and disseminate available data, and encourage provision of additional data where data gaps exist, to support better investment decision-making for affordable housing.

Various organisations generate and collect data and could potentially provide access to data useful for housing investment decision-making. Within the private sector, participants such as developers, real estate agents and finance providers will maintain data on their own activities. But they might be reluctant to share data because of competitive concerns. Where data is made available by for-profit entities at no cost, it may be provided sporadically and partially, and often with the objective of building reputational capital in higher income segments of the market. Non-uniformity of data provided by various companies and unsynchronised releases reduces the usability and value of this data.³

Industry-wide data sharing initiatives can sometimes succeed, but there is a material risk of free-riding, with some participants failing to submit data while making use of data provided by others. Often, participants in data sharing initiatives fatigue, as more pressing business concerns are prioritised.

There is an opportunity, however, in working with regulators to make the data that they collect available in the public domain. Activities and participants across the formal property value chain, including property development, housing finance and resale market activity are typically tightly regulated. Developers must submit applications for planning approval to authorities prior to commencing construction. Banks and other financial institutions operate under license and must comply with various regulations, enforced by central banks and other regulators. Sale of land and property is also regulated, with transactions recorded on centralised registries typically maintained by the state. The entities that authorise activity and regulate the participants within the housing and housing finance value chains will generate vast amounts of data as a natural consequence of their oversight activities. Legislation that empowers the state and regulators to collect data (or compels data submissions directly) can drive efficiencies and generate more complete data.⁴ To the extent that regulated entities comply, data collection underpinned by legislation overcomes the challenges of data representativity, uniformity, and vintage. Data must be provided in a standardised format by all entities from whom it is requested ensuring cross-sectional representativity as well as uniformity. In addition, the currency or vintage of the data is preserved because data is often collected at regular intervals.

The perceived neutrality of regulators allays concerns about intellectual property and competitive advantage. In addition, regulators typically disseminate sensitive data collected from companies in a sufficiently masked or aggregated format.⁵

That said, while regulators may have useful data on hand, they may not prioritise data dissemination. They typically do not collect data with a market-development objective in mind and may be unaware of the potential value to market participants of the data they have. In part, the objective of CAHF's Data Agenda is to highlight this potential value to data curators, and encourage them to gather and disseminate more data, more often.

At the same time as exploring the current data landscape, it is important to recognise how profoundly the world of data is changing. New technologies facilitate automated processes, that in turn allow for data to be extracted and reported on in real time, reducing the compliance burden for reporting entities and the time between data generation and publication. For instance, online development application processes implemented in municipalities around the world allow users to extract metadata on turn-around times, as well as data on throughput and outcomes. Likewise, financial sector regulators are shifting to real time transaction monitoring, automating the transfer of data between providers and regulators. New technologies also enable entirely new forms of data to be collected at scale and allow for data to be processed and analysed at lower cost. They create a new set of possibilities for the way regulators and authorities

² For more detail on the Data Agenda for Africa, see <http://housingfinanceafrica.org/projects/a-housing-finance-data-agenda-for-africa/>

³ Non-uniform data and unsynchronised data releases constrains one's ability to take sector/nationally representative views. Of course, if only a sample of companies release their data, the value of the data reduces further as it is not representative.

⁴ Most of the time, legislation establishes and empowers a regulator to acquire data from those under its authority; however, legislation itself can also directly impose reporting requirements on the parties that it governs.

⁵ Compliance data should be masked and/or aggregated before being disseminated in the public domain. Data provided to regulatory authorities is often sensitive in nature such that market players would never disseminate it of their accord due to intellectual property and competition concerns. Aggregated/masked compliance data addresses these concerns by providing a view of the whole market as opposed to that of a single market player.

monitor the activity of participants in the value chain. They also might change the way private sector participants regard data and the costs and benefits of sharing it.

A significantly more limiting feature of data collected and maintained by regulators and other government authorities is that this data, by definition, characterises formal housing activity only. In the vast majority of countries on the continent, most households do not live in dwellings that are administratively visible or formally registered with any authority. Dwellings are built on land that may not be formally demarcated without any formal planning permission and without any connection to municipal servicing infrastructure. While we may regard many of these dwellings as slums, the households who have built them have clearly invested in them, often incrementally over extended periods of time.

Typically, household surveys are the primary data source used to quantify and characterise informal housing activity. However, new technologies to generate and process alternative forms of data can provide more accurate and detailed characterisations of informal housing activity. For instance, the automated processing of detailed imagery can provide accurate and current data on the number of informal dwellings, the size of these dwellings and the materials used to construct them. At the same time, improved technologies reduce the costs of collecting data directly from households and improve the accuracy of data collection processes. In addition, distributed ledger technologies, including blockchain based land registries can enable that data to be maintained over time. Beyond simply providing a richer characterisation of informality, this data fundamentally changes its nature. While a principal characteristic of informality is its ability to 'escape enumeration', it now lies within sight. Data creates administrative visibility and provides a basis for formalisation, notwithstanding the lack of regulatory compliance.

CAHF's Data Agenda seeks to encourage all participants in the value chain, particularly regulators, administrators and municipal officials to explore the role they can play in market development through sharing more data, more often. While the indicators are useful in and of themselves, the detailed exploration of the sources of data and the processes that generate the data are arguably more important in helping CAHF and its partners to understand the market than the indicator data itself. A discussion about data is often a starting point to a more meaningful engagement between CAHF and critical players along the housing value chain. Often, where data is not available or severely limited, underlying administrative or regulatory processes are inefficient or poorly aligned with the needs of the market. This poor alignment is often the underlying cause of informality. Viewed in this lights, CAHF's Data Agenda challenges existing notions of formality and seeks to explore how new data could enable improved visibility, laying the foundation for better governance, more appropriate regulations and sustainable participation of the financial sector.

In light of this it is critical that data discovery work does not become a case of the indicator tail wagging the market assessment dog. While the analysis seeks to populate indicators, it is vital for CAHF to engage critically with data that is available and that is uncovered during the data discovery process, and not to ignore it because it is not flagged as an indicator.

CAHF, 71point4 and Reall have undertaken a review of the data landscapes in eight countries, producing detailed **country data landscape reports** as a first step in facilitating further in-country engagements around data. These reports explore the availability and quality of data required to populate a set of priority indicators that characterise activity along the **Housing Value Chain**.

The process involved reviewing the legislation associated with the housing delivery process, and considering what regulatory data requirements that might produce useful administrative data for better understanding the housing sector. Special attention was given to whether there were any obligations in the legislation to make the data public. In addition, in line with Reall's mandate of serving lower income households in the first four income or wealth deciles (the so-called Bottom 40* of the market), a number of indicators relating specifically to this segment have been included in the process.

115 Headline Market Shaping Indicators have been identified across the value chain and critical contextual areas. These indicators provide a useful gauge of activity and where standardised, can enable an assessment of activity over time and across countries. These 115 indicators are listed for each category of the value chain and context in **Figure 1** below.⁶ The indicators themselves are not cast in stone. They will be revisited as more data audits are conducted over time and in more countries, and as CAHF develops a more nuanced understanding of the activities and data footprints of various players who participate in the housing value chain.

⁶ For more detail on the Headline Indicators, their underlying conceptual frameworks, and their associated metadata, see <http://housingfinanceafrica.org/documents/headline-indicators-framework-indicators-and-definitions/>. The set of indicators has been designed to provide a high-level perspective on the functioning of housing markets while also remaining cognisant of challenges related to data availability.

Figure 1: The headline market-shaping indicators⁷

A Data Agenda for Housing in Africa: 115 Headline Market Shaping Indicators have been identified across the value chain and critical contextual areas



Required indicators are populated using a range of data sources. Many household or demand-side indicators are populated using household survey data typically collected by statistical bureaus and international organisations such as

⁷ These indicators have gone through multiple iterations as we've sought to agree on the most relevant and most likely available, that best describes the affordable housing market in the country under study. The Data Audit and Quality Assessment exercise explored in this report pursued some slightly different indicators. The experience in collecting those, led to the refinement of the 135 indicators explored in the report to the 115 expressed in this list. These 115 indicators will be collected annually

the World Bank. While household surveys are very useful, they suffer from limitations intrinsic to the instrument; they are prone to sampling and non-sampling errors, including questions being misinterpreted by respondents, or respondents withholding data they regard as sensitive. They are also expensive to conduct. Administrative data, where available, can be very useful in characterising formal housing supply. This might include data collected by planning authorities on building applications submitted and units completed. Indicators relating to lending activity and loan performance are collected by central banks using compliance returns submitted by regulated financial services providers.

In many cases indicators are difficult to populate using publicly available data, and CAHF has, to date, relied on proxies. These can be a poor reflection of actual experience. In particular, data relating to actual development costs and processes are typically not available and must be collected directly from participants in the housing value chain. Often data collection is limited to a single respondent and there is no way to assess whether this data is representative of the sector.

Reall has also supported the effort by providing access additional data on costs as experienced by Reall partners who develop affordable housing. As a funder of affordable housing projects, Reall specifies data that must be submitted by its partners for monitoring and evaluation purposes. While data reported by Reall partners may not be representative of the market as a whole, it is a very useful starting point, allowing a richer understanding of the experiences of developers and to generate evidence with which to assess existing policies and regulatory processes in the affordable housing market.⁸

Indicators relating to lower income households are of particular interest to donor-funded partners such as Reall, and are naturally a priority for CAHF, with its focus on affordable housing. The specific definitions of lower income households (what income threshold should be used?) and affordable housing (affordable to which households?) are, of course, more complex to grapple with. As noted, Reall has identified households in the lowest four deciles as being of primary interest. This aligns with the World Bank's adoption in 2013 of shared prosperity as one of its twin objectives, the other being an end to extreme poverty. According to the World Bank, the goal of shared prosperity "entails fostering the income growth of the bottom 40 percent of the population in every country".⁹

While finding data on key indicators for the market as a whole can be challenging, it is all the more so for Bottom 40 households. The primary source for this data would be household budget surveys that explore income and / or expenditure, and at the same time gather data on dwelling conditions and access to services.

Gathering data on incomes of poorer households is particularly challenging. Household units may not be stable, with household members leaving and joining households in response to changing economic circumstances. In addition, income itself can vary significantly over time. Survey respondents may also incorrectly report income, either because they do not want to report income accurately or because they cannot. Increasingly, survey collection of income data relies on daily diary studies which track income and expenditure in detail over a period of time. While this reduces measurement error, data is expensive to collect and may be updated infrequently.

In order to overcome challenges with measuring income and expenditure, some approaches to measuring poverty rely on asset ownership. Asset ownership is easier to measure and is thought to have a fairly direct relationship to income or expenditure. It is also more stable. In addition, asset-based indicators are contained in a number of survey instruments including [Demographic and Health Surveys](#) which are widely available and regularly repeated.

While the World Bank relies on income or expenditure to measure Bottom 40 households, in many cases this data is simply not available. In addition, where it is available, survey instruments may not explore data points that are required to generate specific indicators. Some flexibility both with regard to the determination of the Bottom 40 as well as the measurement of indicators is therefore required.

1.1 Data quality assessment framework

As noted, the purpose of this review of the data landscape for Nigeria's housing ecosystem is to assess the availability and quality of data pertaining to a set of identified indicators. This analysis explores existing secondary data, not all of it

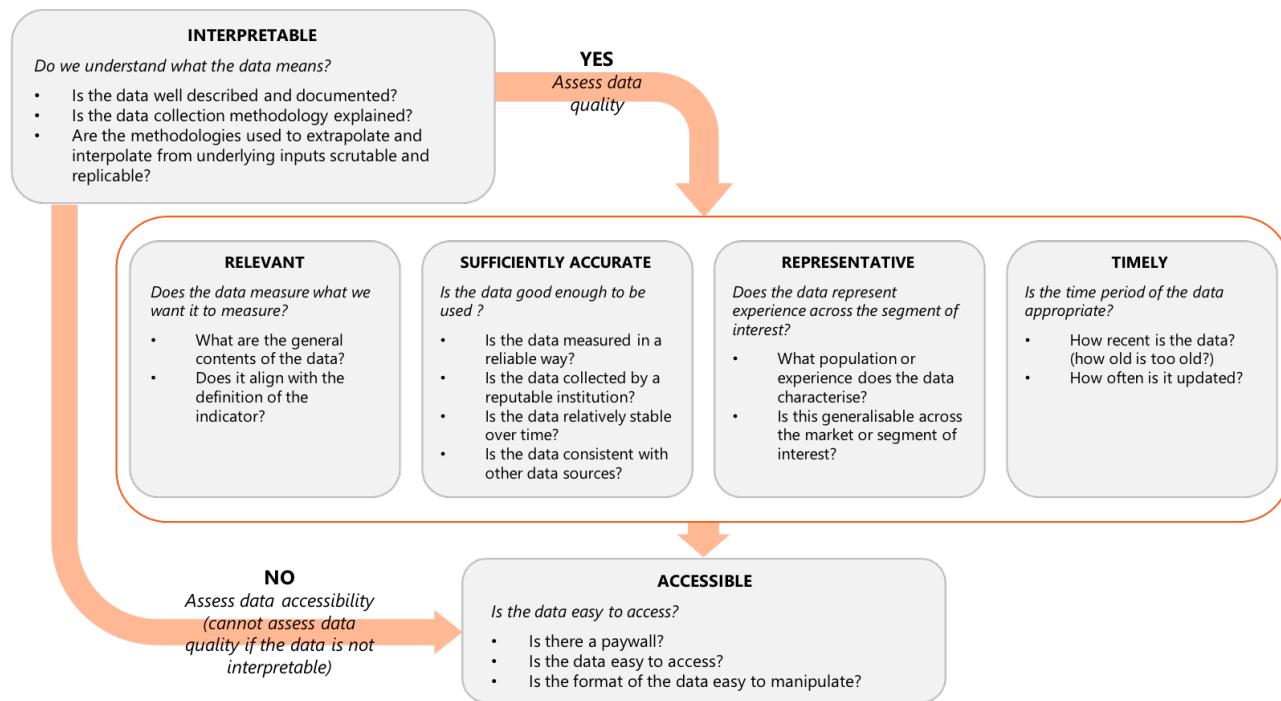
⁸ The Reall MS indicators are designed to draw attention to specific areas of the Housing Value Chain that warrant further investigation. The MSI framework aims to achieve three goals, namely developing an understanding of a country's housing market, identifying areas where intervention will be productive, and measuring the impact (broadly defined) that Reall partners are having on the markets in which they operate.

⁹ See "Growth for the Bottom 40 Percent The World Bank Group's Support for Shared Prosperity AN INDEPENDENT EVALUATION" available for download at <https://openknowledge.worldbank.org/bitstream/handle/10986/28906/120635-WP-PUBLIC.pdf>

collected and published for the purposes that it is now being used. Data quality is assessed in this context; it is not a comment on the inherent accuracy of the data, but an assessment of the extent to which the data meets the purposes of understanding housing markets as framed by the Data Agenda and Headline Market Shaping Indicators.

The quality of each indicator is assessed using a data quality assessment framework summarised in the schema below.

Figure 2: Data quality assessment framework



As a precursor to any assessment, there must be useful information about the data – what we call metadata – describing underlying components of the data and how it is generated. Without this, the data is not interpretable, and other dimensions of quality including its relevance or fit with the underlying need, its accuracy, representativeness and currency cannot be assessed. A further basis used to assess the data relates to the ease of access. While this is not, strictly speaking, a dimension of data ‘quality’ itself, it is included in the assessment framework.

We have applied this framework to all indicators except for standard macroeconomic or demographic data as the collection methodologies for these data follow internationally agreed standards and recommendations (e.g. the [System of National Accounts](#)) and the data collection efforts are often guided by multinational institutions such as the [United Nations Population Division](#).

1.2 Structure of this report

This report describes the data landscape for Nigeria’s housing ecosystem. It maps the overall data environment and identifies the primary institutions that generate, collect, transform, maintain and disseminate data pertaining to housing and housing finance in Nigeria. It provides some assessment on the availability and quality of available data and identifies data gaps based on the experience of the CAHF-71point4 team in collecting data to populate key indicators relating to the affordable housing market.

The report also suggests a number of strategies or interventions that might improve data quality and close data gaps over time.¹⁰ Optimising existing processes and systems that enable data collection, transformation, maintenance and publication is likely to require the active cooperation of key data custodians. CAHF will need to engage strategically with these custodians and develop partnerships with institutions who share CAHF’s objectives.

¹⁰ It is entirely possible that some data that the team did not access is in fact available in the public domain. We would welcome feedback in that regard.

This document commences with an overview of the housing and housing finance sectors in Nigeria. It documents findings with regard to identified indicators and assesses the quality of available data. It also draws attention to gaps in the availability and quality of data and suggests initial recommendations and opportunities for closing gaps.

While the findings of this report are based on the team's experience in gathering data as well as some engagement with key data landscape participants, some data sources may have been over-looked. We would welcome input and direction in identifying additional data sources so that these can be incorporated into the report, and ultimately, in the landscape of data available to support investment in affordable housing in Nigeria.

2 CONTEXT - THE HOUSING AND HOUSING FINANCE SECTOR IN NIGERIA¹¹

The disruptive impact of COVID-19 is broad, extensive and pervades the entire economic value-chain in Nigeria. This was worsened in the first quarter of 2020 by the crash in oil prices to its lowest levels in decades. The combination of the reduced forex earnings through the oil sector, pressure to service external debt and the continued pandemic environment has contributed to the challenge of housing in Nigeria.

Nigeria is undergoing rapid urbanisation at a rate of 4.2 percent, with an overall population growth rate of 2.6 percent. It is anticipated that 75 percent of the population is expected to live in urban areas by 2050. The World Bank states that: "Estimates of output in the formal housing sector range from no more than 100 000 per year to an optimistic 200 000 per year, which covers only a fraction of the at least 700 000 units required per year to keep up with growing population and urban migration."¹²

The widening gap between the housing demand and supply is caused by a multiplicity of factors including land acquisition, high cost of building materials, scarcity of accessible affordable housing finance and lack of proper land regulation and policy. The Nigerian government in its efforts to ameliorate the negative impact of the pandemic and oil crisis, revised the Economic Sustainability Plan (ESP) to provide appropriate and sustainable solutions for the country.

Since 2014, the [Nigeria Mortgage Refinance Company](#) (NMRC) has led efforts to promote the creation of a strong legal framework and standards to support the activities of key players in the mortgage market. This includes the development of uniform underwriting standards for both the formal and informal sectors of the economy.

One of the notable government interventions has been the creation of [Family Homes Funds Limited](#) (FHFL) which is a public-private partnership between the [Federal Ministry of Finance](#) and the [Nigerian Sovereign Investment Authority](#). FHFL is helping to ease access to affordable housing in Nigeria. Family Homes Fund (FHF) has recently been appointed by the CBN to manage the execution of the social housing component of the ESP that is expected to produce 300,000 additional units each year.

The lowest cost house built by a formal private developer in Africa is found in Luvu-Madaki, in Nasarawa State, close to the Nigerian capital of Abuja. Built by the [Millard Fuller Foundation](#) (MFF), the 32m² one-bedroom semi-detached units sell for 2.9 million NGN (US\$8040), through the [Family Homes Funds](#) (FHFL) who bulk-purchased the project from MFF.

Tenure of security and title system is formal, requiring the consent of a governor of a state on all transactions since the Land Use Act No. 6 of 1978 (LUA) has vested all lands in the governor. Although most title deeds are in a computerised format in a central repository that enables checking of encumbrances, there are no electronic databases for maps, recording of boundaries, checking plans and providing cadastral information.

There has been increased recognition of the importance of data which has culminated in the establishment of the National Real Estate Data Collation and Management Programme (NRE-DCMP). This initiative is as a result of steps taken by the [Real Estate Developers Association of Nigeria](#) (REDAN) in collaboration with the Central Bank of Nigeria (CBN), Nigeria Mortgage Refinance Company (NMRC) the [Federal Ministry of Works and Housing](#) (FMWH), [National Bureau of Statistics](#) (NBS), [Federal Mortgage Bank of Nigeria](#) (FMBN), National Population Commission (NPC), [Mortgage Banking Association of Nigeria](#) (MBAN), and Pison Housing Company amongst other institutions. FMBN, NMRC, CBN and REDAN have teamed up to adopt the NMRC Housing Market Information Portal (HMIP) as the repository for housing market information in the country.

¹¹ This overview is largely drawn from the Nigeria Yearbook profile, as outlined in the 2020 Housing Finance in Africa Yearbook by CAHF

¹² The World Bank. Nigeria Affordable Housing Project. Pg. 3

The published “Nigeria Housing Finance Ecosystem” report summarizes the results of the analytical work on housing market finance undertaken in 2019 and 2020 by the FSS2020 and major stakeholders in Nigeria’s housing industry. The work aims to inform the policy dialogue about how best to develop a sustainable housing finance market in Nigeria and improve the effectiveness of interventions aimed at stimulating the housing market and providing quality housing to the population.

3 AN ASSESSMENT OF DATA AVAILABILITY

All institutions in Nigeria’s housing value chain generate data, whether for private or public use, or simply as a by-product of their business. Of those that generate and disseminate pertinent data, key institutions are listed in **Figure 3** below.

Figure 3: Key data producers and custodians in Nigeria

REGULATOR / GOVERNMENT DEPARTMENT	PRIVATE INSTITUTION / INDUSTRY BODY	NGO	DFI
National Bureau of Statistics	Central Bank of Nigeria	NRE-DCMP	Reall
National Population Commission	Federal Ministry of Finance, Budget and National Planning	Mortgage Banking Association of Nigeria	Real Estate Developers Association of Nigeria
Federal Ministry of Works and Housing	Federal Mortgage Bank of Nigeria	Nigerian Institute of Town Planners	EFINA
Family Homes Funds	Lagos State Real Estate Transaction Department	Nigerian Institute of Estate Surveyors and Valuers	CAHF
Nigerian Investment Promotion Commission			World Bank / IFC
			AfDB
			DHS Program

The official agency that collects and disseminates statistics in the country is the [Nigeria National Bureau of Statistics](#) (NBS). The NBS publishes demographic, socio-economic, and other economic statistics on a range of downloadable reports, or open data platforms available on its website. The National Population Commission is a “principal commission of Nigeria, responsible for producing data about the Nigerian people and economy”

Data on Nigeria’s housing finance sector is largely collected by the [Central Bank of Nigeria](#) (CBN) and shared on various platforms. The Nigeria Mortgage Refinance Company developed and hosts the Housing Market Information Portal (HMIP) which is a decision-making tool that supports the growth of affordable housing and housing finance markets in Nigeria. Data generated by the World Bank as well as the Demographic and Health Survey (DHS) programme run by USAID is also drawn on widely. Data from commercial banks can also be accessed through the respective agencies’ annual reports and financial statements available on their websites. While it can be time-consuming to collate these data sources, they provide crucial information on the growth of the mortgage market in the country.

3.1 Overview of data availability and quality

A review of data published by these institutions has allowed 71Point4 to populate available data according to the Headline Indicator Market Shaping Framework. **Figure 4** illustrates this data collection activity per component by including a high-level characterisation of data quality for indicators that were populated.

Figure 4: High level characterisation of data quality for indicators¹³

VALUE CHAIN				CONTEXT		
Land & Infrastructure	Construction & Investment	Sales & Rental	Maintenance & Management	Enabling Environment	Economic Environment	Demand
LAND ASSEMBLY • 8 indicators: Available data from international sources not rated. Local data not nationally representative LAND TITLE • 7 indicators: Available data largely from the Doing Business Indicators, therefore not rated. INFRASTRUCTURE • 8 indicators: Available data from international sources not rated. Data that is locally sourced is well documented and well-defined, measurement in line with requirement. DHS Survey data is documented and well defined						
STOCK • 6 indicators: Available data primarily from DHS Survey. Income-related data, however, is from a private source with a proprietary methodology which lacks a detailed description. FLOW • 4 indicators: No data available for the four indicators INDUSTRY • 5 indicators: No data available for the five indicators BUILDING MATERIALS • 2 indicators: Available data based on information from one website— may not be nationally representative. PROCESS • 2 indicators: Available data directly from Reall partner and five developers. No nationally representative data.						
OWNERSHIP • 7 indicators: Data from International Sources not rated. National Survey Data updated every few years. RENTAL • 2 indicators: Data not nationally representative and Limited rental data, no B40 focus. TRANSACTIONS • 8 indicators: Available data by international bodies is not rated FINANCE • 19 indicators: Available data varies in quality: some provided by a regulatory authority; some from individual lenders may not be representative. AFFORDABILITY • 4 indicators: Available data compiled with proxies and estimates; lack of information on methodology or underlying data sources.						
HOME IMPROVEMENTS • 2 indicators: Available data point is nationally representative. MUNICIPAL MANAGEMENT • 2 indicators: Available data lacks detailed source description and collection methodology; not clear when data will be updated FINANCE • 2 indicators: Available data is good: provided by a regulatory authority.						
OPERATING ENVIRONMENT • 6 indicators, all fulfilled. Data is provided by international bodies.						
MACROECONOMIC INDICATORS • 14 indicators: There are two missing indicators. Available Data is provided by international bodies.						
DEMOGRAPHICS • 7 indicators, all fulfilled. Data is provided by international bodies. Income-related data, however, is from a private source with a proprietary methodology which lacks a detailed description.						

Quality improvements are possible for indicators relating to **Land and Infrastructure** if the number of registered title deeds could be sourced directly from the Land Registry Office. Better metadata on the methodology used to gather data on minimum plot sizes, along with a larger sample size for sourcing the data points, would also improve the quality of the data for this component of the value chain.

The main quality concerns relating to **Construction and Investment** indicators relate to the interpretability, accuracy, representativeness, and accessibility of the data. Quality improvements will require sourcing more representative data at a national level rather than from one website or a single face-to-face interview, along with detailed metadata and/or methodologies on how the various data elements were collected.

Quality improvements are possible for indicators relating to **Sales and Rental** by sourcing more representative rental and house price data along with detailed metadata on how this information was collected. Other data elements could also be improved on with more detailed metadata and collection methodologies tracked, such as the number and performance of mortgages and the prevailing mortgage rate in Nigeria.

There are only six indicators associated with **Maintenance & Management**. No data is available relating to building permit applications; as with similar indicators relating to house construction, it will be necessary to engage with the Federal Ministry of Works and Housing (FMWH) to fill this gap with administrative data. The indicator sourced from the National Bureau of Statistics (NBS) on household expenditure dedicated to home improvements could be improved if the NBS made available disaggregated CPI weights for the different expenditure items.

Much of the data associated with the **Context**¹⁴ category is produced for other purposes beyond the housing sector and is therefore readily available. There is nonetheless a significant gap in information on affordability, with limited data on household incomes. In that regard, CAHF relies principally on data disseminated by C-GIDD¹⁵, a private entity, which uses proprietary methodologies to generate this data.

¹³ These indicators have gone through multiple iterations as we've sought to agree on the most relevant and most likely available, that best describes the affordable housing market in the country under study. The Data Audit and Quality Assessment exercise explored in this report pursued some slightly different indicators. The experience in collecting those, led to the refinement of the 135 indicators explored in the report to the 115 expressed in this list. These 115 indicators will be collected annually

¹⁴ This comprises the indicators contained in the Demand, Enabling and Macroeconomic Environment sub categories as per Figure 5

¹⁵ The Canback Global Income Distribution Database (C-GIDD) contains selected macroeconomic data series which presents the analysis and projections of economic developments at the global level, updated annually. CAHF purchases data on rural and urban household income profiles based on customised market segmentation. For more information, or to download the data directly, visit www.cgidd.com

In some cases, closing data gaps and improving data quality merely requires the dissemination of data that is already collected. In other cases, closing data gaps requires more detailed scoping and engagement with data curators to get a better understanding of the data landscape of certain market players.

Beyond this, additional data collection and/or curation activities may be required to generate specific data elements required to populate missing indicators. Where underlying administrative processes that generate required data are paper-based, this may entail implementation of broader system and process changes.

The sections that follow below discuss these findings in more detail.

3.2 Headline Market Shaping Indicators

The subsections below explore data gaps and data quality in more detail for each component of the HVC. The populated indicators have been reviewed using the data quality assessment framework described, and each quality assessment table includes a high-level characterisation of data quality as per **Figure 5** below.

Figure 5: Quality assessment: scoring

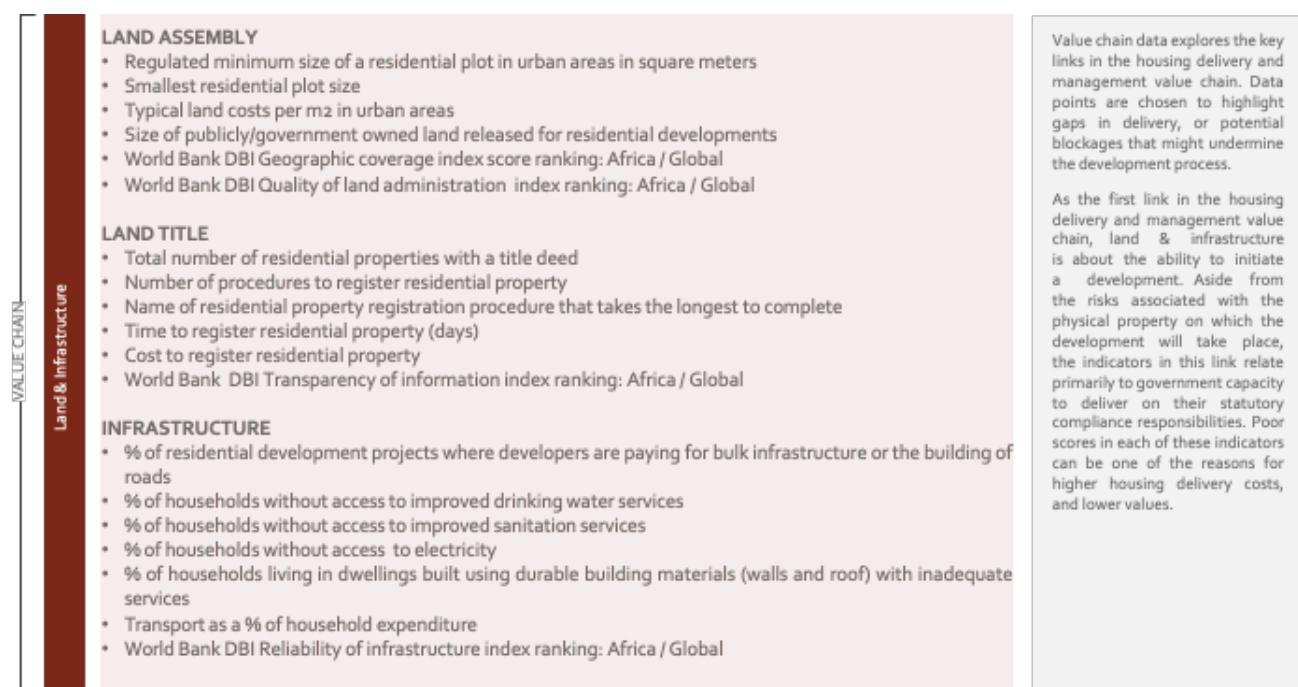
Data Quality	Score
	Excellent
	Good
	Moderate
	Poor

3.2.1 Land and Infrastructure¹⁶

This sub-category of the Land and Infrastructure link contains indicators divided into the three components of Land Assembly, Land title and Infrastructure. **Figure 6** below shows the component that each indicator is associated with, and a brief description of the Land and Infrastructure link.

¹⁶ For sake of brevity, we refer to the land assembly/acquisition, bulk infrastructure, and titling HVC link as land and infrastructure

Figure 6: Land and Infrastructure Indicators



These indicators have gone through multiple iterations as we've sought to agree on the most relevant and most likely available, that best describes the affordable housing market in the country under study. The Data Audit and Quality Assessment exercise explored in this report pursued some slightly different indicators. The experience in collecting those, led to the refinement of the 135 indicators explored in the report to the 115 expressed in this list. These 115 indicators will be collected annually.

Table 1 lists indicators that could not be populated due to missing data together with the suggested source of this data.

Table 1: Data gaps for land and infrastructure indicators

Indicator	Suggested source
Average land costs per m ² - Partner	Quantity surveyors / Contractors / Developers / Reall Partner
Smallest residential plot size	Federal Ministry of Works and Housing
Total number of residential properties with a title deed - National	Federal Ministry of Works and Housing
% of households living in dwellings built using durable building materials (walls and roof) with inadequate services	Nigeria National Bureau of Statistics

As per the table above, the data gaps for the land and infrastructure link hinder our understanding of the government's commitment to the provision of housing as well as levels of formality within the housing sector. The data gap for the *Average land costs per square meter in the main urban city* indicator arises because there is no data on land costs. This gap could be closed through engagements with quantity surveyors, contractors, and housing developers.

At the state level, land registration and administration procedures are undertaken by the Land Use and Allocation Committees (for urban land) and land allocation advisory committees (for non-urban land). For example, in the Federal Capital Territory (Abuja), the Department of Land Administration under the Federal Capital Territory Administration (FCTA) is responsible. Each of the 36 State governments oversees their respective land administrations and Certificate of Occupancy allocation in their states.

The other gap in the land and infrastructure link is the *Total number of residential properties with a title deed*. This data is not published, but it could be made publicly accessible by the Land Registry Office as the authoritative body for immovable property registration. Given that land administration is independently determined by the State Governors of the 36 states, as described above, perhaps the National Real Estate Data Collation and Management Programme (NRE-DCMP) could be best placed to collate this under their initiative.¹⁷

¹⁷ The NRE-DCMP is a programme initiated by the CBN and REDAN, designed to eliminate the silo approach to data collection, collation, and management in Nigeria's housing sector. More information on this programme is provided in Section **Error! Reference source not found.**

Populated indicators together with their data sources are listed in **Table 2** below.

Table 2: Populated land and Infrastructure indicators¹⁸

Indicator	Value	Year	Sources
Regulated minimum size of a residential plot in urban areas in square meters - Urban	464,5	2019	PropertyPro; NigeriaPropertyCentre
% of land for residential development acquired from the private sector - Partner	100%	2018	Millard Fuller Foundation
Number of procedures to register residential property - Partner	9	2020	Millard Fuller Foundation
Name of property registration procedure that takes the longest - Partner	Processing and collection of C of O	2020	Millard Fuller Foundation
Transport as a % of household expenditure - National	6.4%	2019	Nigeria National Bureau of Statistics
% of households without access to improved drinking water services - National	29%	2017	World Bank
% of households without access to improved drinking water services - B40	55%	2018	Demographic Health Survey
% of households without access to improved sanitation services - National	61%	2017	World Bank
% of households without access to improved sanitation services - B40	83%	2018	Demographic Health Survey
% of households without access to electricity - National	44%	2017	World Bank
% of households without access to electricity - B40	84%	2018	Demographic Health Survey

The data quality assessment for the populated headline indicators relating to land assembly is contained in

Table 3.

¹⁸ Available data from international sources (World Bank DBI) not rated in the quality assessment.

Table 3: Quality assessment: land and infrastructure indicators

INDICATOR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Regulated minimum size of a residential plot in urban areas in square meters - Urban	Data collected by CAHF consultant from Property Pro and Nigeria Property Centre Websites who quote plot size recommended by Nigeria's Land Division	●	●	●	●	●	●	●
Transport as a % of household expenditure - National	Data provided by NBS in Consumption Expenditure Pattern in Nigeria 2019 Report	●	●	●	●	●	●	●
% of households without access to improved drinking water services - National	Data provided by World Bank API	●	●	●	Nationally representative, in line with definition	Published in 2019, updated regularly	Data available for download – multiple formats, easy to access	Data is documented and well-defined and measurement is in line with requirement
% of households without access to improved drinking water services - B40	Data provided DHS Standard Household Survey 2018 – DHS wealth quintiles used to identify Bottom 40 households and access to services	●	●	●	Nationally representative, in line with definition	Published in 2017, updated every few years	Data available for download – microdata, easy to access	Data is documented and well-defined, measurement in line with requirement
% of households without access to improved sanitation services - National	Data provided by World Bank API	●	●	●	Nationally representative, in line with definition	Published in 2017, updated every few years	Data available for download – microdata, easy to access	Data is documented and well-defined, measurement in line with requirement
% of households without access to improved sanitation services - B40	Data provided DHS Standard Household Survey 2018 – DHS wealth quintiles used to identify Bottom 40 households and access to services	●	●	●	Nationally representative, in line with definition	Published in 2018 – microdata, updated every few years	Data available for download – multiple formats, easy to access	Data is documented and well-defined, measurement in line with requirement
% of households without access to electricity - National	Data provided by World Bank API	●	●	●	Nationally representative, in line with definition	Published in 2018, updated every few years	Data available for download – microdata, easy to access	Data is documented and well-defined, measurement in line with requirement
% of households without access to electricity - B40	Data provided DHS Standard Household Survey 2018 – DHS wealth quintiles used to identify Bottom 40 households and access to services	●	●	●	Nationally representative, in line with definition	Published in 2018 – microdata, updated every few years	Data available for download – multiple formats, easy to access	Data is documented and well-defined, measurement in line with requirement

A number of indicators related to property registration are usually sourced from the World Bank Ease of Doing Business (EDB) Report. This data has some quality shortcomings that stem from a restrictive set of assumptions around the characteristics of the property in question. These assumptions are required to ensure data is comparable across countries and over time, but reduce the data's relatability to the reality on the ground, particularly as it relates to residential housing.¹⁹

Data reported by Reall partner (Millard Fuller Foundation) may not be representative of the market as a whole but it is a very useful starting point, allowing a richer understanding of the experiences of developers. These data points can be

¹⁹ A Kenyan housing developer interviewed in Nairobi during September 2019 indicated that they had never managed to have building permits processed within the timelines specified in Ease of Doing Business data.

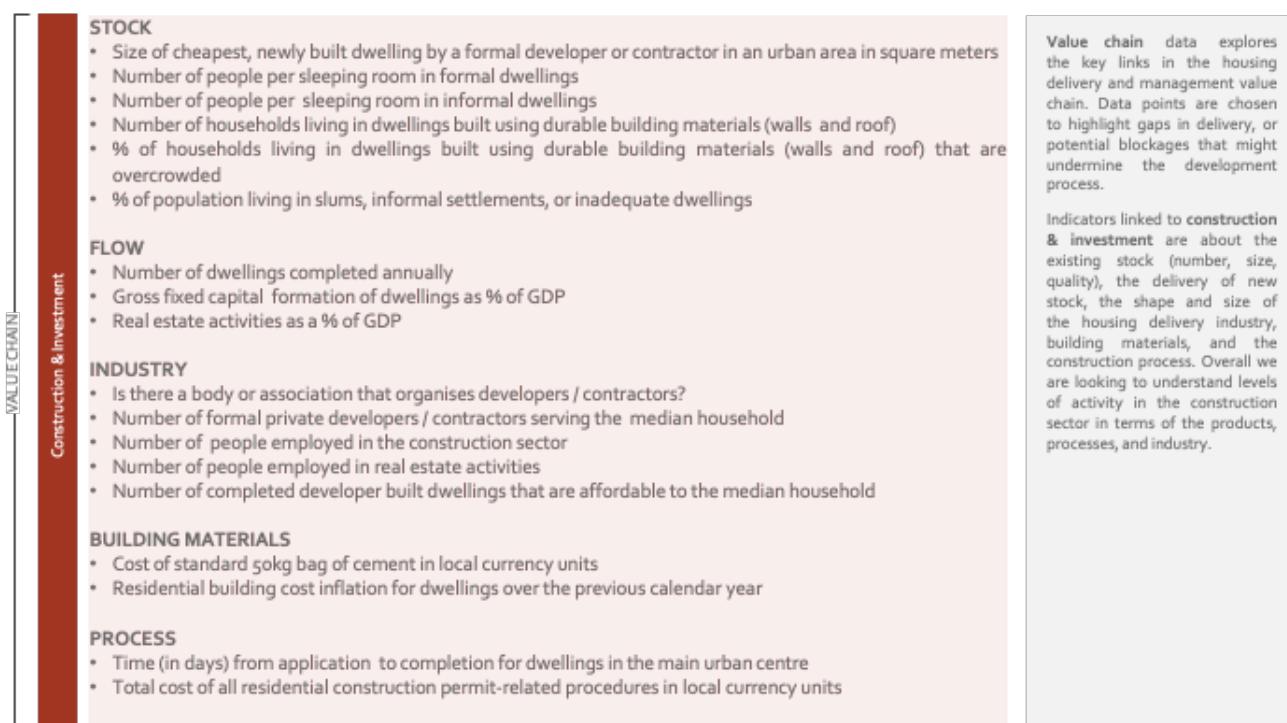
strengthened by the planned NRE-DCMP *Administrative Survey* which aims to collect information across the states that measures metrics affecting the issuance of title documents.

Data used to generate the *Minimum size of a residential plot in urban areas in square meters* indicator was collected by a CAHF consultant from two websites, namely Property Pro and Nigeria Property Centre. Both websites cited the Nigerian Land Division's recommendation that 50 x 100ft as an appropriate size for a plot of land suitable for house construction that can accommodate a standard house with a small compound.²⁰ This is merely a recommendation and is not a legal requirement; however zoning standards will differ from state to state.

3.2.2 House construction and investment

The Construction and Investment sub-category contains indicators divided into the five components of Stock, Flow, Industry, Building Materials and Process. **Figure 7** below shows the component that each indicator is associated with, and the rationale for collecting indicators linked to construction and investment.

Figure 7: Construction and Investment Indicators



These indicators have gone through multiple iterations as we've sought to agree on the most relevant and most likely available, that best describes the affordable housing market in the country under study. The Data Audit and Quality Assessment exercise explored in this report pursued some slightly different indicators. The experience in collecting those, led to the refinement of the 135 indicators explored in the report to the 115 expressed in this list. These 115 indicators will be collected annually.

Value chain data explores the key links in the housing delivery and management value chain. Data points are chosen to highlight gaps in delivery, or potential blockages that might undermine the development process.

Indicators linked to construction & investment are about the existing stock (number, size, quality), the delivery of new stock, the shape and size of the housing delivery industry, building materials, and the construction process. Overall we are looking to understand levels of activity in the construction sector in terms of the products, processes, and industry.

²⁰ See: <https://www.propertypro.ng/blog/what-you-should-know-about-land-sizes-in-nigeria-plots-acres-hectares/>

Table 4 lists indicators that could not be populated due to missing data together with a suggested source of this data.

Table 4: Data gaps for construction and investment indicators

Indicator	Suggested source
Residential construction sector as a % of GDP - National	Nigeria National Bureau of Statistics / Central Bank of Nigeria / World Bank / IMF
Gross fixed capital formation of dwellings as % of GDP - National	Nigeria National Bureau of Statistics / Central Bank of Nigeria / World Bank / IMF
Number of dwellings completed annually - National	Federal Ministry of Works and Housing / National Bureau of Statistics / Real Estate Developers Association of Nigeria / Family Homes Funds (FHF)
Residential rental sector as a % of GDP	Nigeria National Bureau of Statistics
Number of formal private developers / contractors serving the bottom-end of the market	Real Estate Developers Association of Nigeria / Nigeria Estate Surveyors Valuers Association
Number of completed developer built dwellings that are accessible to the bottom-end of the market	Real Estate Developers Association of Nigeria / Nigeria Estate Surveyors Valuers Association/ Nigeria National Bureau of Statistics
Number of people employed in the residential construction sector	Nigeria National Bureau of Statistics/ Family Homes Funds
Number of people employed residential rental sector	Nigeria National Bureau of Statistics/ Family Homes Funds
Average residential building cost inflation for dwellings over 5 years	Nigeria National Bureau of Statistics

As shown in

Table 4 above, the missing indicators for the housing construction link impair our understanding of the investment in the housing sector, the adequacy of housing as well as the impact of housing on the economy. The NBS may be able to assist with providing data on the *Ratio of residential construction and rental sectors to GDP*. Similarly, the NBS would be best placed to report on the Gross fixed capital formation of dwellings as % of GDP. This GFCF data may already be available in aggregated format and may only require disaggregating to show for residential dwellings. Data on *the number of completed developer built dwellings that are accessible to the bottom-end of the market* could potentially be collected from quantity surveyors, contractors, and developers. There is an opportunity to collate data on *Number of dwellings completed annually* and the *Number of completed developer built dwellings that are accessible to the bottom-end of the market* through various initiatives that are being undertaken by stakeholders that include the Federal Ministry of Works and Housing, Real Estate Developers Association of Nigeria and Family Homes Funds (FHF).

Populated indicators together with their data sources are listed in **Table 5** below.

Table 5: Populated Construction and Investment indicators

Indicator	Value	Year	Sources
Size of cheapest, newly built dwelling by a formal developer or contractor in an urban area in square meters - Urban	32	2019	Demographic Health Survey
Number of people per sleeping room in formal dwellings - Urban	2,11	2018	Demographic Health Survey
Number of people per sleeping room in informal dwellings - Urban	2,44	2018	Demographic Health Survey
Number of people per sleeping room in formal dwellings - B40	1,68	2018	Demographic Health Survey
Number of people per sleeping room in informal dwellings - B40	2,55	2018	Demographic Health Survey
% of population living in slums, informal settlements, or inadequate dwellings - Urban	50%	2014	World Bank
Number of households living in dwellings built using durable building materials (walls and roof) - National	2 129 609	2019	Demographic Health Survey; C-GIDD
Cost of standard 50kg bag of cement in local currency units - National	NGN 2 550	2018	Nigeria Price
Total cost of all residential construction permit-related procedures in local currency units - Partner	NGN 3 401 200	2018	Reall PMD
Time (in days) from application to completion for dwellings in the main urban city - Main City	540	2019	CAHF interviews with five developers

The data quality assessment for the populated headline indicators relating to construction and investment is contained in **Table 6**.

Table 6: Quality assessment: Construction and Investment indicators

INDICATOR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Size of cheapest, newly built dwelling by a formal developer or contractor in an urban area in square meters - Urban	Data collected by CAHF consultant through interview with CEO of Millard Fuller	○	Lacks information on data collection methodology by CEO of Millard Fuller	Measurement methodology cannot be verified			○	○
Number of people per sleeping room in formal dwellings - Urban	Data provided by World Bank and DHS Standard Household Survey 2018; formality is defined with reference to main building material of floor, wall, and roof	●	●	●	●	●	●	●
Number of people per sleeping room in informal dwellings - Urban	Data provided by World Bank and DHS Standard Household Survey 2018; formality is defined with reference to main building material of floor, wall, and roof	●	●	●	●	●	●	●
Number of people per sleeping room in formal dwellings - B40	Based on DHS Standard Household Survey 2018 - formality is defined with reference to main building material of floor, wall, and roof; monthly household expenditure used to identify Bottom 40 households	●	●	●	●	●	●	●
Number of people per sleeping room in informal dwellings - B40	Data provided by World Bank and DHS Standard Household Survey 2018; formality is defined with reference to main building material of floor, wall, and roof	●	●	●	●	●	●	●
% of population living in slums, informal settlements, or inadequate dwellings - Urban	Not rated							
Number of households living in dwellings built using durable building materials (walls and roof) - National	Formality data sourced from DHS Household Survey 2018 and number of households sourced from C-GIDD - formality based on floor, wall and roof material	○	●	●	●	●	○	○
Cost of standard 50kg bag of cement in local currency units - National	Data collected by CAHF consultant from Nigeria Price website	●	●	●	●	●	●	●
Total cost of all residential construction permit-related procedures in local currency	Not rated							
Time (in days) from application to completion for dwellings in the main urban city - Main City	Data collected through personal interviews with selected developers	○	Lacks information on data collection methodology	Measurement methodology cannot be verified		○	○	○

The main quality concerns for interpretability relate to data on *Size of cheapest, newly built house by a formal developer or contractor in an urban area in square meters* and *Time (in days) from application to completion for residential units in the main urban city*. In both cases, the indicators were populated with data collected through personal interviews with the Millard Fuller Foundation CEO and selected developers respectively. Therefore, the data collection methodology cannot be verified and is prone to sampling bias. The data collected from Millard Fuller Foundation (i.e. an individual entity) is only representative of the company, while the data collected from the five developers interviewed by CAHF characterises the selected sample, and not necessarily the country as a whole. In addition, there is no indication whether the number of days refers to an average, minimum, or maximum value. REDAN as the umbrella body for the organised

private sector responsible for housing development maybe best placed to report nationally on the experiences of developers in housing construction.

CAHF employs in-country consultants to gather the data required to populate the *Number of formal private developers / contractors* and *Cost of standard 50kg bag of cement in local currency units*. In both cases the consultant did not provide sufficient metadata to assess the accuracy and representativeness of the data points. It appears that the data used to populate the indicators was, in both cases, sourced from a single website, and might therefore not be nationally representative.

Ideally, data collected from individuals and selected private sector institutions and websites should be collected by a centralised, government institution (such as the NBS, or the FMB) to ensure that the data is nationally representative and avoids sampling bias. Another aspect to consider is the timeliness of the data sources and the frequency with which it is updated. Although most of the source data is recent (besides the Proshare Company data), many of the institutions including Budgit, Nigeria Price as well as Millard Fuller are not required by law to continue hosting the data in the public domain and may discontinue provision of data in the future.

3.2.3 Sales and Rental

The Sales and Rental sub-category contains indicators divided into the five components of Ownership, Rental, Transactions, Finance and Affordability. **Figure 8** below shows the component that each indicator is associated with, and a brief description.

Figure 8: Sales and Rental Indicators²¹

VALUE CHAIN	Sales & Rental	Sales & Rental Indicators	
		Component	Indicators
		OWNERSHIP	<ul style="list-style-type: none"> • Price of the cheapest, newly built dwelling by a formal developer or contractor in local currency units • Does a publicly disseminated residential real estate price index exist? • % of households that own their dwelling • % of dwellings with female or joint ownership of a dwelling • % of dwellings with female ownership of a dwelling • World Bank DBI Equal access to property rights index ranking: Africa / Global
		RENTAL	<ul style="list-style-type: none"> • Typical rental price for cheapest, newly built dwelling by a formal developer or contractor in local currency units • % of households that rent their dwelling
		TRANSACTIONS	<ul style="list-style-type: none"> • Does government or industry publish any data on land prices in the main urban centre? • Number of formal estate agents • Resale transactions as a % of all residential transactions • Number of new residential transfers • Number of residential resale transactions • Number of residential transfers financed with a mortgage • World Bank DBI Land dispute resolution index ranking: Africa / Global
		FINANCE	<ul style="list-style-type: none"> • Does an operational mortgage refinancing company exist? • Value of residential mortgages issued per annum in local currency units • Value of residential mortgages outstanding in local currency units
		AFFORDABILITY	<ul style="list-style-type: none"> • % of households that can afford the cheapest, newly built developer by a formal developer or contractor • Max. dwelling price affordable to 840 households based on market mortgage finance terms • Max. dwelling rent affordable to 840 households • Max. dwelling price affordable to typical households based on market mortgage finance terms • Max. dwelling rent affordable to the median household.
			<p>Value chain data explores the key links in the housing delivery and management value chain. Data points are chosen to highlight gaps in delivery, or potential blockages that might undermine the development process.</p> <p>Indicators linked to sales and rental explore the relationship between supply and demand, access to finance, levels of home ownership, housing affordability, and engagement in the property market.</p>

These indicators have gone through multiple iterations as we've sought to agree on the most relevant and most likely available, that best describes the affordable housing market in the country under study. The Data Audit and Quality Assessment exercise explored in this report pursued some slightly different indicators. The experience in collecting those, led to the refinement of the 135 indicators explored in the report to the 115 expressed in this list. These 115 indicators will be collected annually.

Table 7 lists indicators that could not be populated due to missing data together with a suggested source of this data. While the data gaps relating to Construction and Investment indicators discussed above relate to the supply side of housing markets, those relating to Sales and Rental are applicable to the demand side. The missing indicators impair our understanding of property transactions, affordability, and access to finance.

²¹ These indicators have gone through multiple iterations as we've sought to agree on the most relevant and most likely available, that best describes the affordable housing market in the country under study. The Data Audit and Quality Assessment exercise explored in this report pursued some slightly different indicators. The experience in collecting those, led to the refinement of the 135 indicators explored in the report to the 115 expressed in this list. These 115 indicators will be collected annually

Table 7: Data gaps for sales and rental indicators

Indicator	Suggested source
% of dwellings with female or joint ownership of a dwelling	Nigeria National Bureau of Statistics /
% of dwellings with female ownership of a dwelling	Nigeria National Bureau of Statistics /
% of households that rent their dwelling - B40	Nigeria National Bureau of Statistics /
Number of formal estate agents - National	Real Estate Developers Association of Nigeria / Nigerian Institution of Estate Surveyors and Valuers /
Resale transactions as a % of all residential transactions - National	Federal Ministry of Works and Housing / Central Bank of Nigeria / Nigeria Mortgage Refinance Company (NMRC)
Number of new residential transfers - National	Federal Ministry of Works and Housing
Number of residential resale transactions - National	Federal Ministry of Works and Housing / Nigerian Institution of Estate Surveyors and Valuers
Number of residential transfers financed with a mortgage - National	Central Bank of Nigeria / Nigeria Mortgage Refinance Company (NMRC)/ Federal Mortgage Bank of Nigeria
Number of residential mortgages issued per annum - National	Central Bank of Nigeria / Federal Mortgage Bank of Nigeria/ Nigeria Mortgage Refinance Company (NMRC)
Non-performing residential mortgages as a % of total outstanding residential mortgages - National	Central Bank of Nigeria / Federal Mortgage Bank of Nigeria/ Nigeria Mortgage Refinance Company (NMRC)
Mortgages as a % of properties - National	Central Bank of Nigeria / Federal Mortgage Bank of Nigeria/Nigeria Mortgage Refinance Company (NMRC)
Highest LTV on a residential mortgage	Central Bank of Nigeria

In its capacity as financial sector regulator, the CBN will require financial institutions to submit data on lending activity and the size and performance on their loan books. The CBN may already be collecting data on the *number of residential mortgages issued per annum*. If so, this data gap may be relatively easy to close. The *Ratio of mortgages to properties* and the *Value of residential mortgages issued per annum in local currency units* could be disseminated by the CBN with other published mortgage data.

Various data custodians part of the National Real Estate Data Collation Management Programme (NRE-DCMP) may be best positioned to provide data on the *Number of new residential transfers*, *Number of residential resale transactions*, *Rate of churn*, and *Number of transactions financed with a mortgage*. The provision of this data would benefit the efforts of all stakeholders by aiding the understanding of property transactions, the efficiency of these processes, and the performance of the formal housing sector.

The Real Estate Developers Association of Nigeria may be able in the best position to collate price and size data from real estate agent members for rentals and sales. Similarly, reputable real estates, contractors and property developers could be consulted to provide this data publicly. Although this would provide useful information, there is a significant risk of sampling bias in both cases if activity in the affordable segment of the market is not well captured.

Populated indicators together with their data sources are listed in

Table 8 below. The data for the indicators was primarily collected from government entities (CBN and commercial banks), multinational institutions (World Bank) as well as private sector entities and individuals with field expertise.

Table 8: Populated sales and rental headline indicators ²²

²² Available data from international sources (World Bank DBI) not rated in the quality assessment.

Indicator	Value	Year	Sources
% of households that own their dwelling - National	62%	2018	World Bank; Nigeria National Bureau of Statistics
% of households that own their dwelling - B40	31%	2018	Demographic Health Survey
Typical rental price for cheapest, newly built dwelling by a formal developer or contractor in local currency units - Urban	NGN 188 000	2018	Yearbook Consultant (Calculated)
% of households that rent their dwelling - National	22%	2019	World Bank; Nigeria National Bureau of Statistics
Does an operational mortgage refinancing company exist? - National	Yes	2019	Nigerian Mortgage Refinance Company
Does a foreclosure policy exist? - National	Yes	2020	Nigeria Model Mortgage Foreclosure Law
Number of residential mortgage providers - National	57	2020	Central Bank of Nigeria
Value of residential mortgages outstanding in local currency units - National	269 683 863 000	2019	Central Bank of Nigeria; Nigerian Mortgage Refinance Company
Number of residential mortgages outstanding - National	32260	2019	Central Bank of Nigeria; Nigerian Mortgage Refinance Company
Value of residential mortgages outstanding as % of GDP - National	0.19%	2019	Central Bank of Nigeria; Nigerian Mortgage Refinance Company
Prevailing residential mortgage rate - National	21%	2019	Federal Mortgage Bank of Nigeria; Central Bank of Nigeria
Maximum residential mortgage term - National	20%	2018	Buildcon Global
Number of end-user finance loans disbursed or mobilised for purchases of dwellings - Partner	35	2019	Reall PMD
% of the adult population that borrowed formally - National	3%	2018	EFlnA
Price of the cheapest, newly built dwelling by a formal developer or contractor in local currency units - Urban	NGN 2 900 000	2018	Millard Fuller Foundation; Shelter Origins
Maximum dwelling price affordable to B40 households based on market mortgage finance terms - B40	NGN 1 946 280	2019	C-GIDD; CBN; CAHF; NMRC; DHS
Maximum dwelling rent affordable to B40 households	NGN 34 031	2019	C-GIDD

The data quality assessment for the populated headline indicators relating to sales and rental is contained in the tables below. In some cases, there are some concerns about the interpretability, relevance, accuracy, and representativeness of the data.

Table 9: Quality assessment: sales and rental indicators (1)

INDICATOR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
% of households that own their dwelling - National	Based on NBS General Household Survey, Panel 2018/19 with approx. 5000 respondents	●	●	●	Nationally representative, in line with definition	●	●	●
% of households that own their dwelling - B40	Based on DHS Standard Household Survey 2018 - respondents asked whether they own a house jointly, alone or do not own; monthly household expenditure used to	●	●	●	Nationally representative, in line with definition	●	●	●
Typical rental price for cheapest, newly built dwelling by a formal developer or contractor in local currency units - Urban	Data collected from calculations by CAHF consultant using RI index and online surveys on rental yields	○	●	●	Data aligns with other sources, rental yield figure used to calculate indicator may not be totally accurate	●	●	●
% of households that rent their dwelling - National	Based on NBS General Household Survey, Panel 2018/19 with approx. 5000 respondents	●	●	●	Nationally representative, in line with definition	●	●	●
Number of residential mortgage providers - National	Data sourced from CBN website under list of primary mortgage institutions	●	●	●	Nationally representative, in line with definition	●	●	●
Value of residential mortgages outstanding in local currency units - National	Data sourced from NMRC	●	●	○ As per communications between NMRC and CAHF, further validation of data is required	Nationally representative, in line with definition	●	●	●
Number of residential mortgages outstanding - National	Data sourced from NMRC	●	●	○ As per communications between NMRC & CAHF, further validation of data is required	Nationally representative, in line with definition	●	●	●
Value of residential mortgages outstanding as % of GDP - National	Mortgage data sourced from contact at NMRC , GDP data sourced from World Bank API	●	●	○ As per communications between NMRC and CAHF, further validation of data is required	Nationally representative, in line with definition	●	●	●
Prevailing residential mortgage rate - National	Lower bound mortgage rate is 6%, available from the National Housing Fund of the FMBN. The upper bound is taken as 36% which is the max interest rate from Fidelity Bank. More information can be found in the "Interest and Term" tab. The information is for the week of Aug 21 2020.	●	●	●	Nationally representative, in line with definition	●	●	●
Maximum residential mortgage term - National	Data collected from Buildcon Global's website	●	●	●	Data provided by one real estate website - may not be nationally representative	●	●	●
% of the adult population that borrowed formally - National	Based on 2018 EfinA Access to Financial services in Nigeria Survey - publication gives adults that borrowed and borrowed formally in the past 12 months	●	●	●	Nationally representative, in line with definition	●	●	●

Table 10: Quality assessment: sales and rental headline indicators (2)

INDICATOR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Income distribution thresholds - National	Based on C-GIDD income distribution database	● Proprietary methodology, lacks detailed description	● Measurement in line with requirement	● Data collected by a reputable source	● Nationally representative, in line with definition	● Published in 2019, updated annually	● Data available for download – multiple formats, protected by pay-wall	● Lack of information on methodology and underlying data sources
Price of the cheapest, newly built dwelling by a formal developer or contractor in local currency units - Urban	Data collected through phone calls with two well-established, low-income developers	● Lacks information on data collection methodology by developers		Measurement methodology cannot be verified			● Data not accessible remotely	● Data is not accessible remotely and cannot be verified
% of households that can afford the cheapest, newly built developer by a formal developer or contractor - Urban	Calculated using data from C-GIDD (income distribution), CBN (mortgage term), CAHF consultants (price of cheapest house), NMRC (average down payment on a mortgage)	● Calculation methodology is well documented and defined	● Measurement error in underlying data (price of cheapest house, down payment on mortgage)	● Unclear how cheapest house price is measured	● Nationally representative of urban population, in line with definition	● NMRC data published in 2014, CBN & CAHF data published in 2018, C-GIDD data published in 2019	● Calculated by CAHF and published annually in country yearbook profile	● Measurement error in underlying data
% of households that can afford the cheapest, newly built developer by a formal developer or contractor - B40	Calculated using data from C-GIDD (income distribution), Buildcon (mortgage term), CAHF consultants (price of cheapest house), NMRC (average down payment on a mortgage) and DHS Survey (Bottom 40)	● Proprietary methodology, lacks detailed description	● Mortgage term is maximum term offered by most commercial banks	● Unclear how cheapest house price is measured	● Nationally representative of urban population, in line with definition	● C-GIDD data published in 2019, DHS, Buildcon & CAHF data published in 2018, NMRC data published in 2014	● Calculated by CAHF and published in country yearbook profile	● B40 cannot afford cheapest house, regardless of measurement error in underlying data
Maximum dwelling price affordable to B40 households based on market mortgage finance terms - B40	Calculated using data from C-GIDD (income distribution), Buildcon (mortgage term), CAHF consultants (price of cheapest house), NMRC (average down payment on a mortgage) and DHS Survey (Bottom 40)	● Proprietary methodology, lacks detailed description	● Mortgage term is maximum term offered by most commercial banks	● Unclear how cheapest house price is measured	● Nationally representative of urban population, in line with definition	● C-GIDD data published in 2019, DHS, Buildcon & CAHF data published in 2018, NMRC data published in 2014	● Calculated by CAHF and published in country yearbook profile	● Unclear how cheapest house price is measured
Maximum dwelling rent affordable to B40 households	Based on C-GIDD income distribution database	● Proprietary methodology, lacks detailed description	● Measurement in line with requirement	● Data collected by a reputable source	● Nationally representative, in line with definition	● Published in 2019, updated annually	● Data available for download – multiple formats, protected by pay-wall	● Lack of information on methodology and underlying data sources

A number of indicators related to property registration are sourced from the World Bank Ease of Doing Business (EDB) Report. These quality concerns do not apply to the indices constructed by the EDB (e.g. *Equal Access to Property Rights Index* and *Land Dispute Resolution Index*) as they relate to the institutional environment of the country, not administrative procedures and costs.

Figure 9: Ease of doing business registering property assumptions

Case study assumptions

To make the data comparable across economies, several assumptions about the parties to the transaction, the property and the procedures are used.

The parties (buyer and seller):

- Are limited liability companies (or the legal equivalent).
- Are located in the periurban (that is, on the outskirts of the city but still within its official limits) area of the economy's largest business city. For 11 economies the data are also collected for the second largest business city.
- Are 100% domestically and privately owned.
- Perform general commercial activities.

The property (fully owned by the seller):

- Has a value of 50 times income per capita, which equals the sale price.
- Is fully owned by the seller.
- Has no mortgages attached and has been under the same ownership for the past 10 years.
- Is registered in the land registry or cadastre, or both, and is free of title disputes.
- Is located in a periurban commercial zone (that is, on the outskirts of the city but still within its official limits), and no rezoning is required.
- Consists of land and a building. The land area is 557.4 square meters (6,000 square feet). A two-story warehouse of 929 square meters (10,000 square feet) is located on the land. The warehouse is 10 years old, is in good condition, has no heating system and complies with all safety standards, building codes and legal requirements. The property, consisting of land and building, will be transferred in its entirety.
- Will not be subject to renovations or additional construction following the purchase.
- Has no trees, natural water sources, natural reserves or historical monuments of any kind.
- Will not be used for special purposes, and no special permits, such as for residential use, industrial plants, waste storage or certain types of agricultural activities, are required.
- Has no occupants, and no other party holds a legal interest in it.

As noted, the World Bank's EDB property registration indicators may not be entirely applicable to residential property. CAHF may wish to engage with the World Bank to assess their appetite for collaboration on conducting an Ease of Doing Housing Business survey modelled on the existing doing business research approach.

Although most sources are either authoritative bodies or reputable sources, a common data shortcoming is caused by sampling bias. The data collected from various commercial banks, interviews with low-income developers, and Vconnect are only reflective of a selected sample, presenting the possibility that relevant data was omitted whilst determining the exact data point.

Interpretability concerns stem largely from the lack of information on data collection methodology of the indicators *Ratio of non-performing mortgages to performing mortgages*, *Ratio of mortgages to GDP*, *Prevailing mortgage rate*, *Price of the cheapest, newly built house by a formal developer or contractor in an urban area in local currency units*, and *Average rental price for cheapest, newly built house by a formal developer or contractor in an urban area in local currency units*.

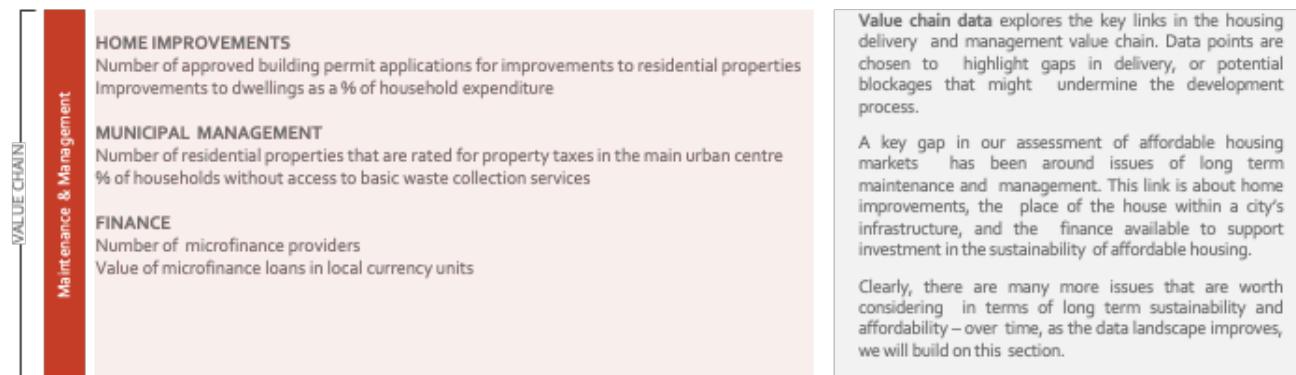
Other quality concerns relate to house price data collected by CAHF consultants. Although the cheapest house price is a very valuable indicator, there is no documentation on the methodology used to obtain it, and it is unclear whether the data is accurate. As a first step, CAHF should formalise a methodology for collecting house price and rental data related to the cheapest newly built house. This is necessary for improving data quality and verifiability for a specific country, but also to ensure comparability across countries. The quality of indicators relating to prices could be enhanced using sales data provided by members of the Real Estate Developers' Association of Nigeria (REDAN). Alternatively, one could employ web scraping techniques on a real estate classifieds website²³ or better yet, engage with owners of listing sites to provide the data as part of their own reporting. The risk with REDAN and classifieds data relates to sample bias. REDAN members may not be active in the lower-income segments of the market. Likewise, classifieds data may not sufficiently cover affordable housing markets.

²³ See e.g., [Quantifying Residential Rental Markets in Africa: Methodology Report](#)

3.2.4 Maintenance and Management

The Maintenance and Management sub-category contains six indicators divided into the three components of Home Improvements, Municipal Management and Finance. **Figure 10** below shows the component that each indicator is associated with, and brief description of the indicators linked to Maintenance and Management.

Figure 10: Maintenance and Management Indicators



There are only six indicators related to maintenance and management; No data is available relating to the number of approved building permit applications for improvements, access to basic waste collection services for the urban Bottom 40 population and the performance of microfinance loans. As with similar indicators relating to house construction, it will be necessary to engage with the State Governments, Federal Ministry of Works and Housing and the Nigeria National Bureau of Statistics to fill this gap with administrative data.

Data on the *Number of residential properties that are rated for property taxes in the main urban city* should be simple to collect with assistance of each State Government and/or the Federal Ministry of Works and Housing. Some clarity would be required on defining the 'main urban city,' as this could either be the most populous city (Lagos) or the Federal Capital Territory (Abuja).

Table 11: Data gaps for maintenance and management indicators

Indicator	Suggested source
Number of approved building permit applications for improvements to residential properties - National	State Governments / Federal Ministry of Finance / Federal Ministry of Works and Housing / National Bureau of Statistics
Number of residential properties that are rated for property taxes in the main urban centre - Main City	State Governments / Federal Ministry of Finance / Federal Ministry of Works and Housing / National Bureau of Statistics
% of households without access to basic waste collection services - B40	UN Stats / National Bureau of Statistics / World Bank / DHS
Value of microfinance loans in local currency units - National	Central Bank of Nigeria

The indicator on the *percentage of households without access to basic waste collection services - B40* could not be populated. This indicator measures the share of Bottom 40 urban households without access to basic waste collection services. Basic waste collection services are defined as a reliable waste collection service, including both formal municipal and informal sector services. The team was able to find data on household expenditure relating to home improvements from the NBS as outlined in the table below.

Table 12: Populated maintenance and management indicators

Indicator	Value	Year	Sources
Improvements to dwellings as a % of household expenditure - National	5.0%	2019	Nigeria National Bureau of Statistics
% of households without access to basic waste collection services - National	60%	2016	Nigeria National Bureau of Statistics
Number of microfinance providers - National	1013	2018	Central Bank of Nigeria

The data is sourced from the NBS in its monthly CPI and Inflation Rates publications. There is some measurement error because the data groups furnishings, household equipment, and routine maintenance together. The quality of this link's existing data can be improved if the NBS made available disaggregated CPI weights for the different expenditure items.

Table 13: Quality assessment: maintenance and management indicators

INDICATOR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Improvements to dwellings as a % of household expenditure - National	Based on 2019 CPI and Inflation Rates report published by the National Bureau of Statistics	●	●	●	Nationally representative, in line with definition	●	●	●
% of households without access to basic waste collection services - National	Based on NBS 2015/16 Household Survey	●	●	●	Nationally representative, in line with definition	●	●	●
Number of microfinance providers - National	Data sourced from list of microfinance banks provided by the Central Bank of Nigeria	●	●	●	Nationally representative, in line with definition	●	●	●

3.2.5 Context Category

Context data explores the overall, enabling environment for affordable housing, the economic environment, and demand-side characteristics. These indicators extend beyond the housing sector and highlight the dependence that successful affordable housing investment has on the broader context. The indicators are further divided into three sub-categories of Enabling Environment, Economic Environment and Demand. Figures 11 and 12 below list the indicators and their associated component and description.

Figure 11: Enabling Environment Indicators

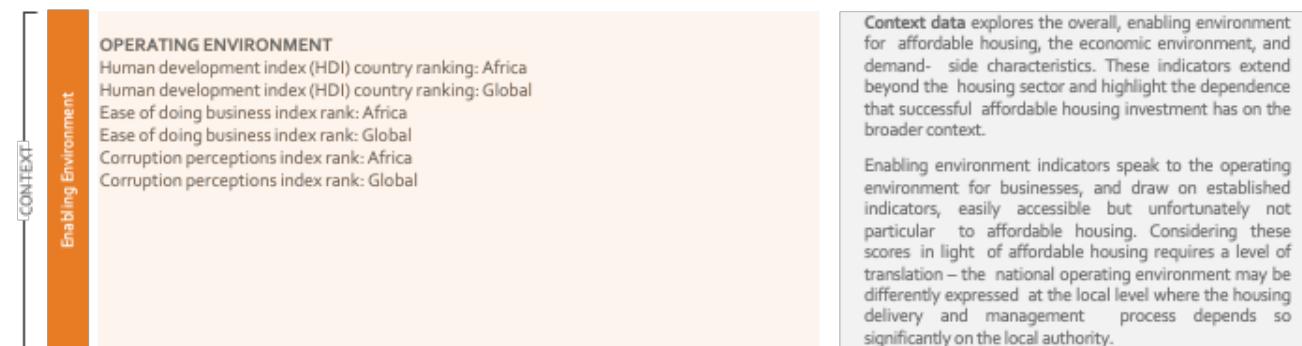


Figure 12: Economic Environment and Demand Indicators

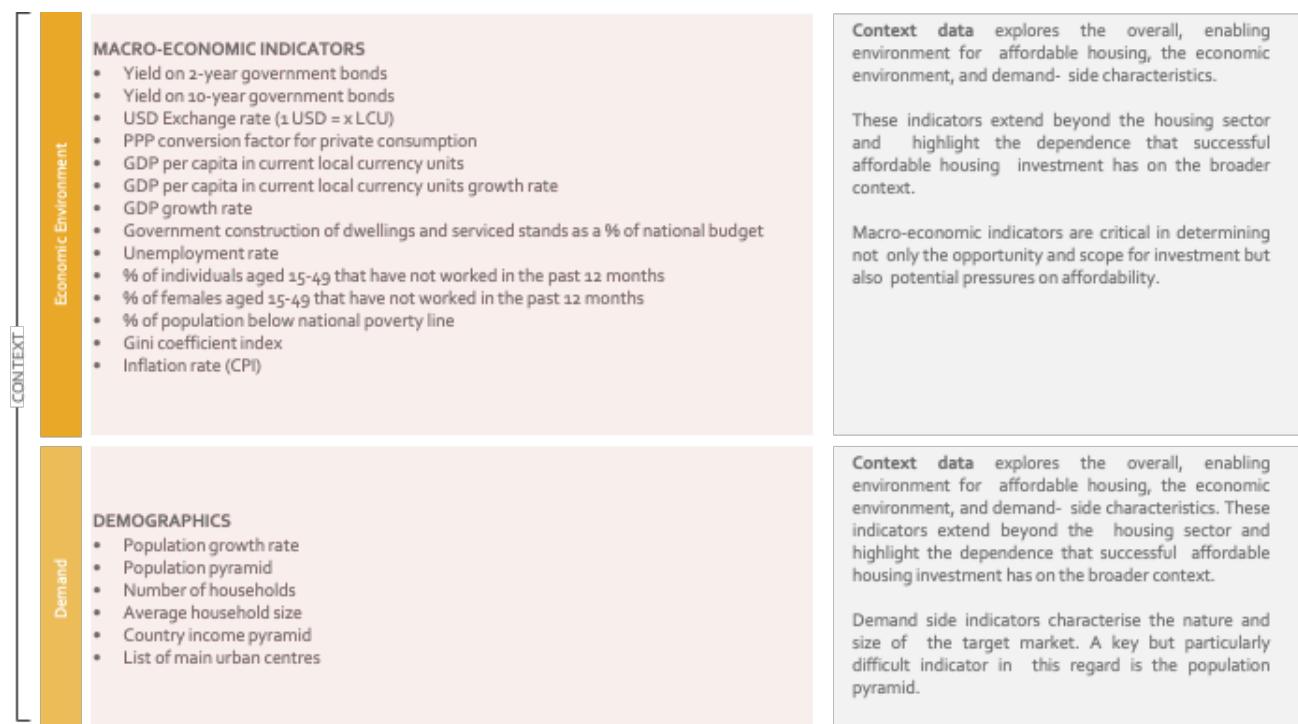


Table 14 lists the two indicators that could not be populated due to missing data together with a suggested source of this data.

Table 14: Data gaps for Enabling, Economic and Demand Related indicators

Indicator	Suggested source
Government construction of dwellings and serviced stands as a % of national budget	Federal Ministry of Finance/
% of females aged 15-49 that have not worked in the past 12 months	Nigeria National Bureau of Statistics

Data on the value of national budget can be obtained is typically disseminated by the Federal Ministry of Finance, Budget and National Planning. Data on the value of government construction of residential dwellings and serviced stands will be more difficult to obtain and would likely require engagement with the Ministry responsible for the delivery of housing and or specific municipalities. Alternatively, this information could be provided by [BudgIT](#), a civic organisation that simplifies and disseminates budget data in Nigeria. BudgIT is already familiar with the underlying data and its mandate is to improve budget data accessibility in Nigeria.²⁴

Populated Enabling, Economic and Demand indicators together with their data sources are listed in **Table 15** below.

Table 15: Populated Enabling, Economic and Demand Related indicators

Indicator	Value	Year	Sources
Enabling Environment			
Human development index (HDI) country ranking: Global - National	161/189	2019	World Bank
Ease of doing business index rank: Global - National	131/190	2020	World Bank
Corruption perceptions index rank: Global - National	149/180	2020	Transparency International
Economic Environment			

²⁴ BudgIT was founded in 2011 and is an organisation that seeks to simplify the budget and matters of public spending for citizens in Nigeria. For more about BudgIT visit their website [here](#)

Yield on 2-year government bonds	4,9%	2019	Central Bank of Nigeria
Yield on 10-year government bonds	8,5%	2019	Central Bank of Nigeria
GDP growth rate- National	2,1%	2018	World Bank
GDP per capita in current local currency units- National	NGN 659 159,14	2018	World Bank
PPP conversion factor for private consumption - National	110,22	2018	World Bank
Unemployment rate - National	8,4%	2017	World Bank
% of individuals aged 15-49 that have not worked in the past 12 months – B40	29%	2018	Demographic Health Survey and World Bank
% of population below national poverty line - National	46%	2017	World Bank
Gini coefficient index - National	43	2018	World Bank
Demand			
Population size - National	200 963 599	2019	World Bank
Population size - B40	78 349 896	2018	World Bank
Population size – Main City	13 463 000	2018	United Nations
Population growth rate - National	2,6%	2018	World Bank
Population growth rate - Urban	4,2%	2018	World Bank
Population pyramid - National	Populated	2019	PopulationPyramid.net
Number of households - National	41 746 424	2019	C-GIDD
Number of households – Urban	22 229 694	2019	C-GIDD
Average household size - National	4,4	2018	Demographic Health Survey
Average household size - B40	4,79	2018	Demographic Health Survey
List of main urban centres - Nigeria	Lagos, Kano, Ibadan, Kaduna, Port-Harcourt, Benin City, Maiduguri, Zaria, Aba, Jos	2018	CAHF

Many of these indicators rely on standard macroeconomic or demographic data, the quality of which we do not assess.²⁵ For the balance, the quality of data underpinning social and economic infrastructure is generally good. Nevertheless, there are a few shortcomings related to the relevance of the underlying data (mismatch with indicator definitions) as well as the interpretability and accessibility of the data (proprietary methodology, protected by pay-wall). The data quality assessment for the populated indicators is contained in the table below.

²⁵ These include GDP growth rate, GDP per capita in current local currency units, Gini coefficient, PPP conversion factor, Percentage of population below national poverty line, Proportion of urban population living in slums, informal settlements, or inadequate housing (SDG 11.1.1), Population growth rate, Urbanisation rate, Unemployment rate (% of total labour force, national estimate), USD Exchange rate (1 USD = x LCU), Human development index (HDI) country ranking, Human development index (HDI) country score, Yield on 10-year government bonds, Yield on 2-year government bonds, Yield on 3-month government bonds, Population pyramid, List of main urban centres, Number of households

Table 16: Quality assessment: Enabling, Economic and Demand Related indicators

INDICATOR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
% of individuals aged 15-49 that have not worked in the past 12 months - B40	Data provided by World Bank and DHS Standard Household Survey 2018 – DHS wealth quintiles used to identify Bottom 40 households and unemployment; World Bank data used to identify size of Bottom 40 population	● Data is documented and well-defined	● Data does not match indicator definition exactly	● Data collected by a reputable source in line with global standards	● Nationally representative, in line with definition	● Published in 2018 – microdata, updated every few years (DHS) or annually (World Bank)	● Data available for download – multiple formats, easy to access	● Data does not match indicator definition
Population pyramid - B40	Data provided by World Bank and DHS 2018 survey – DHS wealth quintiles used to identify Bottom 40 households and Bottom 40 population pyramid shares per gender-age group; World Bank data used to identify size of Bottom 40 population	● Data is documented and well-defined	● Measurement in line with requirement	● Data collected by a reputable source in line with global standards	● Nationally representative, in line with definition	● Published in 2018 – microdata, updated every few years	● Data available for download – microdata, easy to access	● Data is documented and well-defined, measurement in line with requirement
Number of households - Urban	Based on C-GIDD income distribution database Proprietary methodology, lacks detailed description	● Proprietary methodology, lacks detailed description	● Measurement in line with requirement	● Data collected by a reputable source	● Nationally representative, in line with definition	● Published in 2019, updated annually	● Data available for download – multiple formats, protected by pay-wall	● Lack of information on methodology and underlying data sources
Average household size - National	Based on DHS Standard Household Survey 2018	● Data is documented and well-defined	● Measurement in line with requirement	● Data collected by a reputable source in line with global standards	● Nationally representative, in line with definition	● Published in 2018, updated every few years	● Downloadable – microdata, easy to access	● Data is documented and well-defined, measurement in line with requirement
Average household size - B40	Data provided DHS Standard Household Survey 2018 – DHS wealth quintiles used to identify Bottom 40 households	● Data is documented and well-defined	● Measurement in line with requirement	● Data collected by a reputable source in line with global standards	● Nationally representative, in line with definition	● Published in 2018 – microdata, updated every few years	● Data available for download – multiple formats, easy to access	● Data is documented and well-defined, measurement in line with requirement
Country income pyramid - National	Based on C-GIDD income distribution database Proprietary methodology, lacks detailed description	● Proprietary methodology, lacks detailed description	● Measurement in line with requirement	● Data collected by a reputable source	● Nationally representative, in line with definition	● Published in 2019, updated annually	● Data available for download – multiple formats, protected by pay-wall	● Lack of information on methodology and underlying data sources

From a timeliness perspective, the outdatedness of some of the indicators is a shortcoming. Notably, improvements in the quality of existing data could also be realised. Some definitional mismatches are listed below:

- Proportion of individuals aged 15-49 that have not worked in the past 12 months)
 - Measures the percentage of individuals aged 15-49 that have not worked in the past 12 months and are not currently attending school.
 - This data can be sourced directly from the DHS survey; however the Statistics Bureau may have more recent data available. Note the age bracket that is targeted - this is to align with the DHS questionnaire.

The limitations of the indicators with respect to interpretability and accessibility arise from the reliance on C-GIDD data for deriving the country's income distribution. As a result of its proprietary collection methodology, C-GIDD data is a "black-box" and there is no way to assess its quality. In addition, users must pay to access it.

3.3 Bottom 40 indicators

The Bottom 40 are defined as the bottom 40% of a country's income distribution. In some cases, Bottom 40 indicators can be generated as long as there is a reasonably accurate estimate of the level of income associated with this segment of the market. For example, to calculate the share of land costs as a fraction of Bottom 40 incomes, land cost data collected from one source (e.g. Surveyor General) can be combined with average Bottom 40 income or the upper income threshold that delineates this segment of the market.

In other cases, indicators characterise Bottom 40 households directly. Examples of such indicators include the percentage of Bottom 40 households that have access to drinking water. These indicators are typically sourced from survey data. Survey instruments would need to include data on household income together with required household

characteristics. For instance, to calculate the proportion of the Bottom 40 population that does not have access to drinking water, survey respondents would need to provide data on both household income and access to this service.

In some cases, income data may be isolated from housing related data. Populating housing market indicators for the Bottom 40 households would not be possible.

As noted, it can be difficult to gather data on income. While the World Bank uses estimates of household expenditure as a proxy for their Bottom 40 analysis of Nigeria, C-GIDD provides income estimates. While we have made use of that data to calculate some indicators, we have concerns about its accuracy principally because C-GIDD does not provide a detailed overview of its methodology. In other cases, Bottom 40 indicators have been populated using data from the Demographic and Health Survey (DHS). That survey includes a [wealth index](#) which has been used as a proxy for income. This wealth index is based on asset registers, access to services and building materials used to construct the dwelling. These three sources of data use different methodologies to identify the Bottom 40. Thus, the indicators do not necessarily apply to the exact same population in each instance.

A list of data gaps for Bottom 40 indicators is provided in **Table 17** below.

Table 17: Data gaps for Bottom 40 indicators

Indicator	Suggested source
Income distribution thresholds	C-GIDD
% of households that rent their dwelling - B40	Nigeria National Bureau of Statistics /National Population Commission
% of households that can afford the cheapest, newly built developer by a formal developer or contractor - B40	C-GIDD/Bank of Ghana
% of households without access to basic waste collection services - B40	UN Stats / Nigeria National Bureau of Statistics / National Population Commission/World Bank / DHS

The data gap relating to the *Bottom 40: Proportion of population living in households without access to basic waste collection services* indicator could be closed using the General Household Survey-Panel Wave 4 survey from 2018/19. That survey includes household expenditure which could be used as a proxy for income. There is no person-weight provided with the data set and therefore only the number of households without access to waste collection services can be calculated. Improvements in the input for this indicator could be possible through engaging with the survey data provider to query a person-weight.

Table 18: Populated Bottom 40 indicators²⁶

Indicator	Value	Year	Sources
% of households without access to improved drinking water services - B40	55%	2018	Demographic Health Survey
% of households without access to improved sanitation services - B40	83%	2018	Demographic Health Survey
Bottom 40: Population pyramid	Populated		DHS; World Bank
% of households without access to electricity - B40	84%	2018	Demographic Health Survey
Number of people per sleeping room in formal dwellings - B40	1,68	2018	Demographic Health Survey
Number of people per sleeping room in informal dwellings - B40	2,55	2018	Demographic Health Survey
% of households that own their dwelling - B40	31%	2014	Demographic Health Survey
Maximum dwelling price affordable to B40 households based on market mortgage finance terms - B40	NGN 1 946 280	2019	C-GIDD; CBN; CAHF; NMRC; DHS

²⁶ N/A: Due to the fact that partner did not build any houses in the previous year

Maximum dwelling rent affordable to B40 households	NGN 34 031	2019	C-GIDD
% of individuals aged 15-49 that have not worked in the past 12 months - B40	29%	2018	DHS; World Bank
Population size - B40	78 349 896	2018	Demographic Health Survey
Average household size- B40	4,79	2018	Demographic Health Survey

Many Bottom 40 indicators map quite closely to some of the headline indicators. Their quality shortcomings have already been discussed in the preceding sections. An assessment of quality is provided below for remaining indicators. Improvements in the quality of the existing data are possible through redefining indicators in line with the DHS survey, engaging with the NBS to provide a person-weight in order to use the waste collection question in the GHS data, and ensuring the provision of more detailed metadata to enable verification.

4 DEVELOPING AN ENGAGEMENT STRATEGY: AN INSTITUTIONAL APPROACH

The assessment of data availability and data quality has highlighted a number of critical data gaps and limitations with regard to available data. CAHF will need to engage with a number of institutions to close data gaps and improve data quality. This section of the document explores the data produced or curated by various institutions (public sector, private sector, NGOs, and DFIs), based on the analysis prepared by the project team.

Many of the public institutions listed in **Figure 3** are regulatory authorities that monitor the activity of participants in the value chain. Where relevant, the regulations that govern the collection and dissemination of data by these institutions is explored²⁷, together with an overview of the institution and some commentary on the quality of data each institution disseminates.

Given the number of institutions and the breadth of data they collect and disseminate, the overview is not exhaustive. The discussion focuses on the most important information that is available, guided by the headline market shaping indicator framework. Special attention is paid to the data curated by the National Bureau of Statistics and the Central Bank of Nigeria as these two institutions are the most important players in a country's data landscape.

4.1 National Bureau of Statistics

Together with central banks, statistics bureaus form the core of a country's data landscape, collecting and publishing a range of data in various ways. The data landscape of statistics bureaus typically includes data on building and construction (such as the number of approved residential building plans or value of capital invested in dwellings per year), prices of construction inputs, housing costs and rentals. Statistics bureaus also collect demographic data generated by nationally representative household or business surveys. These data are often summarized in a statistical abstract that is available for download from the statistical bureau's website. In addition, in some cases raw data is made available.

The [National Bureau of Statistics](#) (NBS) plays this important data provision and curation role in Nigeria. The NBS was established as a body corporate and set out as an autonomous public authority responsible to the Presidency by the [Statistics Act of 2007](#). The Statistics Act of 2007 replaces the Statistics Act of 1990, repeals the Statistics Act of 1957, and dissolves the administrative body known as the Federal Office of Statistics.

Along with the establishment of the NBS, the Act also sets out the establishment, objectives, and functions of the National Statistical System (NSS). The key objectives of the NSS are to raise public awareness about the importance and role of statistical information to society; to collect, process, analyse, and disseminate statistical data; and promote the use of best practice and international standards in the production, management, and dissemination of statistics.

The Act mandates the NBS to exercise professional independence in the way it collects, processes, analyses, reports, and disseminates statistical information. The Act establishes the NBS as the main national agency responsible for the

²⁷ A complete list of legislation of relevance to Nigeria's housing data landscape is provided in Appendix A: Legislation at the end of this document

development and management of official statistics, the authoritative source and custodian of official statistics in Nigeria, with the following key functions:

- Co-ordinate the NSS
- Advise Federal, State and Local Government on matters relating to statistical development
- Develop and promote the use of statistical standards and methodologies in the NSS
- Collect, compile, analyse, interpret, publish, and disseminate statistical information
- Develop and maintain a comprehensive national data bank by encouraging unit of line ministries and agencies to develop their sectorial data bank and forward it to the NBS

Part VI Section 25 of the Act requires all private Nigerian and Foreign institutions wishing to conduct statistical surveys on a national scale to first obtain the approval of the NBS for the appropriateness and methodology of such surveys, and to provide the Statistician-General with the dataset and copies of the report on the collected data. In terms of dissemination, Part VI Section 27 requires that data producers shall be required to process, disseminate, and make accessible to users as a 'public good', data collected or compiled using public funds. They are also required to, within confidentiality provisions, release micro level data sets for further analysis.

The NBS published a [document](#) outlining the two categories of data sources on housing, building and construction activities in Nigeria, namely administrative data, and survey and census data. The four main administrative statistics are sourced from: Federal Ministry of Works and Housing and their State counterparts; Town and Area Planning Authorities; Major construction firms and housing corporations; and Property Development Authorities. The publication also outlines the attempts made by the NBS to collect data on building and construction through surveys and censuses, with the last major attempt made in the 1980s.

Although the NBS does not provide data on building plan approvals and completions, it does host valuable macroeconomic, social, and demographic data needed to gauge housing demand and the impact of the sector on the broader economy. A full list of NBS products can be found in their [online resource library](#).

4.1.1 Macroeconomic data

The NBS hosts a wide range of macroeconomic data in their [e-library](#) in the form of publications and excel spreadsheets. This data includes CPI and inflation, economic overview reports, international trade, business and finance data as well as GDP data.

CPI and Inflation data are released monthly in both excel and publication format. The data is recent, with the oldest report being from May 2020. The CPI data is presented at various aggregation levels. A composite CPI comprised of an "all-items index" as well as an "all items less farm produce" index is presented first. Thereafter, the CPI is disaggregated into different item categories (i.e. transport, health, education, etc.), urban and rural categories as well as into states. This level of aggregation is useful as it allows for high-level analysis of inflation and basket weights by goods/services. The price inflation and weight for housing, water, electricity, and gas can be ascertained, although this is not broken down further to allow for housing-specific data.

Economic Reviews are hosted on the NBS website, although they are outdated and are not frequently published – the latest report was published in 2016. These reports are made available in publication format only and are not accompanied by additional documentation or raw data. The reports provide an overview of sector growth, particularly oil, as well as a CPI analysis. A significant portion of the reports is also dedicated to international trade (import and export data). The report also makes economic projections using key macroeconomic indicators such as GDP, inflation, exchange rates, treasury-bill rates, imports and exports, and total trade.

International trade data is comprised of international trade reports and terms of trade reports, published on a quarterly basis up until the first quarter of 2020. International trade data is hosted in the form of Foreign Trade in Goods Statistics whilst terms of trade data are hosted in the form of Commodity Prices Indices and Terms of Trade. This data is available in both excel and publication format.

Business and Finance data is comprised of various reports disseminated at regular intervals. The most recent and frequently published is the Federal Account Allocation Committee (FAAC) report, released on a monthly basis and accompanied by data tables in excel format, with the latest data relating to April 2020. The Nigerian Capital Importation report is also frequently published, released on a quarterly basis, and accompanied by data tables in excel format – most recently in Q1 2020. Capital importation data is broken down by sector, destination, bank, and origin. Another useful publication is the Internally Generated Revenue at State Level Report, last released in the fourth quarter of 2019.

Gross Domestic Product data is hosted by the NBS in the form of quarterly reports, rebased GDP reports, sectoral reports, and state GDP reports, although only the quarterly reports are released frequently. The most recent quarterly publication was released in the first quarter of 2020 and is accompanied by data in excel format. The quarterly GDP data is extensive and disaggregated to show the GDP by activity. Although real estate is included in this GDP breakdown, it is not disaggregated further to distinguish between commercial and residential real estate, presenting a limitation in the analysis of governmental investment in residential housing.

4.1.2 Social and demographic data

The social and demographic data curated by statistics bureaus can be used to garner detailed insights on the demand side of housing markets. Surveys typically include questions on materials used to construct dwellings, access to services, housing tenure, and household size.

The NBS has several social and demographic reports and datasets in their [e-library](#). This includes Millennium and Sustainable Development Goal (MDG/SDG) reports, household surveys, gender and youth surveys, labour surveys, social and demographic statistics, and multiple indicator cluster surveys.

The most valuable social and demographic data resource hosted by the NBS is the Nigeria General Household Survey (GHS) Panel. The GHS-Panel is part of a larger, regional project in Sub-Saharan Africa to improve agriculture statistics. The 2018/19 GHS-Panel is the fourth round of the survey with prior rounds conducted in 2010/11, 2012/13, and 2015/16. The report provides valuable data on key household indicators including tenure security (e.g. ownership or rental), distributed by age, sex, residence type (urban, rural) and region as well as statistics on access to basic services such as education and healthcare. Additional data provided by the report includes household expenditure breakdowns and unemployment data. As one of the most comprehensive reports, the GHS-Panel Report is useful for the assessment of living standards and poverty in Nigeria. There is no supporting documentation or raw data on the NBS website to accompany the report, though the report does contain detailed tabulated data. The provision of raw microdata would assist interested parties in following their specific research agendas; this data along with the accompanying documentation is available from the World Bank [microdata library](#).

The Nigerian Living Standards Survey (NLSS) is a household-based survey conducted by the NBS in collaboration with the World Bank, used as the basis for measuring poverty and living standards in Nigeria. The latest survey was conducted between September 2018 and October 2019 and is representative at the state level with a sample size of 22,110 households.²⁸ The survey collected data on household and individual demographics, access to education, health and basic services, employment, assets, and income. The survey is used to measure the prevalence of poverty in Nigeria using consumption expenditure data (rather than income data) and to estimate a wide range of socio-economic indicators including benchmarking of the SDGs. Raw survey data is available and can therefore be interrogated in detail.

4.1.3 Other statistical publications and data

The NBS hosts various additional reports and publications, primarily in publication format. These include:

- Annual Statistics Abstract, last released in 2012
- Sector summary reports, including real estate and construction, last released in 2012 (one-off publications)
- National Survey of MSMEs, last released in 2017 (one-off publication)
- Selected Banking Sector Data, last released in 2019

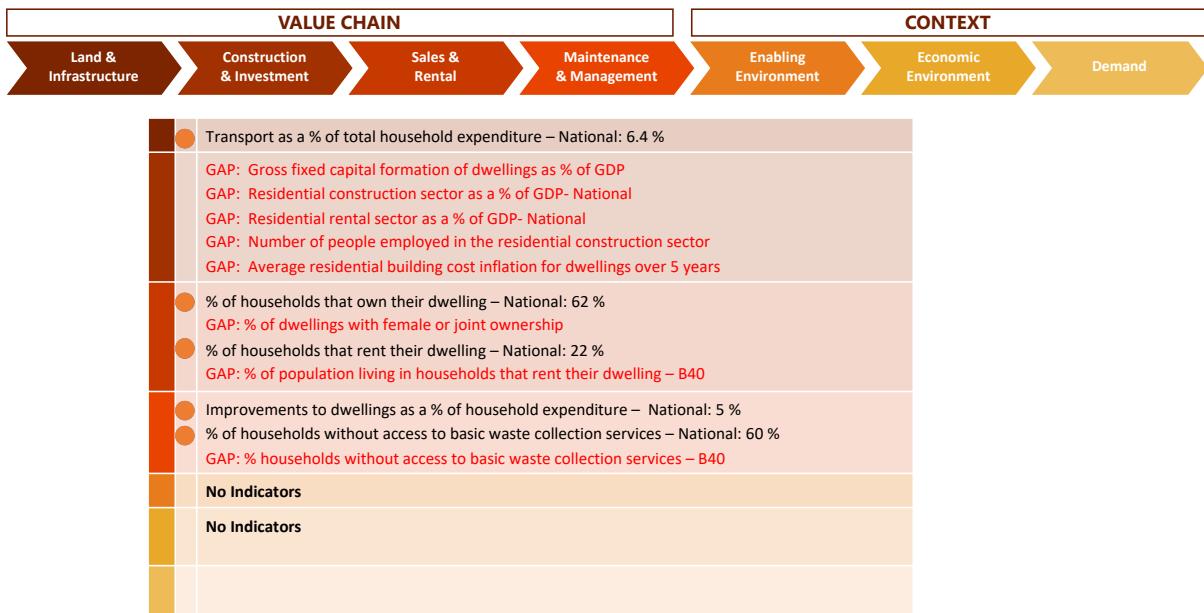
Although these reports are useful, many of them are outdated and are one-off publications, preventing the monitoring of progress over time.

4.1.4 Data sourced from NBS

Indicators sourced in part or in full from the NBS are highlighted in **Figure 13** below. Each indicator is associated with the team's assessment of data quality discussed above.

²⁸ The next round is scheduled for 2023

Figure 13: Indicators populated with data from the NBS



The NBS provides data for indicators across four of the five components of the value chain. The dominant sources of NBS data for the indicators in **Figure 13** are national accounts and the GHS-Panel. In most cases, this data is of good quality and closely matches the indicator definitions. The instance where the data is of lower quality relates to potential inaccuracies due to data on household expenditure being too aggregated to focus on home improvements specifically (i.e. the CPI weight relates to furnishings, household equipment and routine household maintenance).

4.2 Central Bank of Nigeria

Central banks are as important to a country's housing data landscape as the statistics bureau. These entities collect data from various financial institutions (e.g. commercial banks, developmental financial institutions, community banks, microfinance banks, etc.) by means of statutory returns that must be completed by regulated entities on a regular basis (typically monthly). While there are some differences across countries, most central banks will collect data on credit extension, book value and performance of debt broken down by credit product and market (household vs corporate vs government). In some cases, the central bank may collect data on rates charged for loan products, although this may not cover mortgages.

The [Central Bank of Nigeria \(CBN\)](#) was established as Nigeria's monetary authority by the Central Bank Act of 1958 (as amended) and the Banking Decree of 1969 (as amended). The current legal framework within which the CBN operates is the [Central Bank of Nigeria Act](#) of 2007 which repeals the Central Bank of Nigeria Act of 1991 and its amendments, which was released alongside the BOFIA 1991. The [Banks and Other Financial Institutions Act](#) (BOFIA) was promulgated in 1991, and was amended in 1997, 1998, 1999 and 2002. The original BOFIA 1991 focused on the interworking between the Central Bank of Nigeria and other financial businesses.

The objectives of the CBN are primarily to promote monetary stability and a stable financial environment and to act as an economic and financial advisor to the government. In addition, the CBN hosts comprehensive real estate sector, government finance, financial and external sector time series data in its statistics database alongside publications and reports. National Accounts data is sourced from the NBS.

4.2.1 Macroeconomic data

The CBN hosts a wide range of macroeconomic data, much of which is accessible through the NBS. The CBN's macroeconomic data covers:

- GDP, CPI, and other real sector statistics
- Government finances including federally collected revenue distributions, outstanding domestic and external debt, and state government expenditure

- Balance of payments, international investment and reserves, external trade, foreign exchange, and other external sector statistics

Data can be downloaded from the CBN [database](#) in excel format for a selected frequency (i.e. annually, quarterly, monthly) and time period. Most of this data is recent and is also accessible through the CBN in publication format, with [annual reports](#) available up to 2018 and [half-year, quarterly](#), and [monthly](#) economic reports available up to 2019. This data is aggregated to the same extent as the NBS data. For example, the GDP breakdown is not disaggregated further to distinguish between commercial and residential real estate, presenting a limitation in the analysis of governmental investment in residential housing.

4.2.2 Financial sector data

The main sources of financial data published by the CBN come from its [Banking Supervision Report](#), although this is significantly outdated (2014). The [Financial Stability Report](#) and its [Annual Report](#) are more recent (2018) and are frequently released. In addition, the monetary survey consolidates analytical accounts and balance sheets of the Deposit Money Banks (DMBs).

Financial data available for download in excel format from the CBN database include:

- Banks' balance sheets (asset and liability statements)
- Credit analyses
- Deposit Money Banks and interest rates
- Discount houses, payment system, capital market statistics

These statistics are released on a monthly basis. In addition to statistics made publicly available through the CBN database, the CBN website hosts other important financial data in different formats. This includes [five-year financial summaries](#) (up to 2012), [updated lists](#) of financial institutions operating in Nigeria such as deposit money banks, financial holding companies, commercial banks, micro-finance banks, and primary mortgage institutions, as well as CBN guidelines on Mortgage Banks.

In compliance with the BOFIA, Mortgage Banks are required to submit annual audited financial statements to the CBD, as well as monthly returns containing schedules of loans and receivables. Information submitted as part of these returns require a per customer view, including customer name and account number, amount granted, date granted, purpose of loan, collateral value, interest rate, amount outstanding, and classification of customer (watch list, sub-standard, etc.). Other information requested as part of these returns includes, amongst others, an analysis of credit by sector and loan type. While these monthly returns are very detailed and would provide valuable information to generate statistics, compliance might be low given the level of detail required.

A particularly useful publication hosted by the CBN is the [Financial Stability Report](#), released on an annual basis. The report reviews global and domestic developments and covers regulatory and supervisory activities in the financial system. The report also describes important developments in the mortgage sector and mortgage refinancing programmes, providing an indication of the government's commitment to the provision of housing in Nigeria. Examples of this include

- Establishment of the Mortgage Interest Drawback Fund (MIDF) to deepen the mortgage and housing finance market, offering interest rate rebates/refunds to mortgagors on conforming mortgages and interest rate rebates/refunds to developers of residential estates, subject to compliance with PMB guidelines
- Establishment of the Family Homes Funds (FHFL) to address the housing gap and employment challenges
- Establishment of the Mortgage Warehouse Funding Limited (MWFL) to provide additional access to funding for mortgage lenders

4.2.3 Other publications

The CBN website hosts various other regular and one-off publications and reports, including [Economic and Financial Reviews](#) (released quarterly), [Financial Markets Activity Reports](#) (released half-yearly) and a [Flow of Funds Statistics Report](#) (one-off publication from 2017). A [Financial Inclusion Newsletter](#) is also published on a quarterly basis, covering objectives such as increasing access to finance for women.

4.2.4 Data sourced from CBN

Indicators sourced in part or in full from the CBN are highlighted in **Figure 14** below.

Figure 14: Indicators populated with data from the CBN



The CBN's contribution to the headline indicators includes financial sector data on number of financial institutions, number and value of mortgages, and mortgage terms and interest rates. In most cases the available data is of good quality with two instances where the quality of the sourced data could be improved through the provision of more regular publications (*Number of mortgages outstanding* and *Value of residential mortgages outstanding in local currency*).

Other quality concerns relate to mortgage data collected by CAHF consultants. Although the data elements were sourced from the CBN to populate the indicators *Ratio of mortgages to GDP* and *Ratio of non-performing mortgages to total outstanding mortgages*, there is no documentation on the methodology used to obtain it, and it is unclear whether the data is accurate.

With regard to the *Prevailing mortgage rate*, the lower and upper bounds on mortgage interest rates used to calculate the required indicator were sourced from the Federal Mortgage Bank of Nigeria and various commercial banks. Although these are reliable sources, there is no detailed information the data collection methodology used by the CAHF consultants. In addition, the data was collected from a selected sample and therefore might not be nationally representative.

4.3 Government ministries key to the housing data landscape

Nigeria's housing data landscape is shaped by three key government ministries – the Federal Ministry of Finance, Budget and National Planning, the Federal Ministry of Lands, Housing and Urban Development, and the Federal Ministry of Works and Housing. We discuss the data curated by these three ministries as well as any relevant legislation and make recommendations for CAHF's engagement strategy below.

4.3.1 Federal Ministry of Finance, Budget and National Planning

The [Federal Ministry of Finance, Budget and National Planning](#) (FMFBNP) is responsible for the management of Nigeria's government finances which includes the management, control and monitoring of federal revenue and expenditure. The website, however, is not stable, presenting difficulties in browsing and accessing data.²⁹

4.3.2 Federal Ministry of Lands, Housing and Urban Development

The Vision Statement of the Federal Ministry of Lands, Housing and Urban Development (FMLHUD) is "To establish a sustainable housing delivery system that will ensure easy access to home ownership and rental schemes by the Nigerian populace in an environment where basic physical and social amenities are available." In addition, the Ministry's Mission

²⁹ The Ministry appears to be active on several social platforms, posting content regularly on their [Facebook](#) and [Twitter](#) pages

Statement is "To facilitate the provision of adequate and affordable housing for all Nigerians, in both the urban and rural areas, in secure, healthy and decent environment."³⁰

This Ministry does not currently have a website, presenting difficulties in understanding their data landscape and the key legislation they may oversee as part of their mandate.

4.3.3 Federal Ministry of Works and Housing

The Mandate of the [Federal Ministry of Works and Housing](#) (FMWH) is primarily to formulate and implement the policies, programmes and projects of the Federal Government of Nigeria (FGN) with respect to³¹

- Road transport, highways construction and rehabilitation; Highways planning and design; Monitoring and maintenance of federal roads and bridges nationwide; Provision of infrastructure, survey & mapping of the nation's internal and international boundaries (Works)
- Provision of Habitat and affordable housing for Nigerians (Housing)

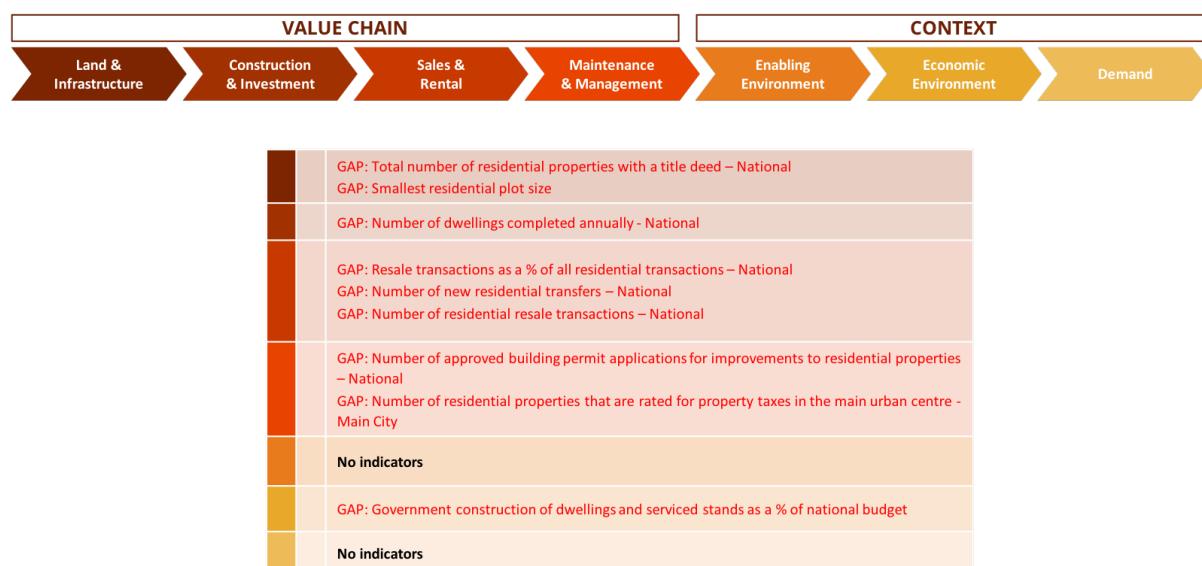
To assist with these tasks, the FMWH is made up of several different departments working together to fill the responsibilities of the Ministry.

The Ministry has an extensive list of downloadable resources available under the resource tab on their webpage. These resources, however, are mostly focused on policies, laws, forms, and speeches. Although this data might not be applicable for the purposes of this document, it can still be a useful asset when searching for any policy-related information. The Ministry's website is also not stable; at the time of writing this report the resource catalogue could not be accessed to gain an in-depth understanding of their housing data landscape.

4.3.4 Data sourced from FMFBNP, FMLHUD and FMWH

No indicators were sourced in part or in full from these ministries as highlighted in **Figure 15** below.

Figure 15: Indicators populated with data from the FMFBNP, FMLHUD and FMWH



4.4 Other important public sector entities

The sections below provide an overview of other public sector entities that participate in Nigeria's housing data landscape. No data was sourced from these entities, but recommendations are made where applicable in terms of potential engagement strategies for CAHF going forward.

³⁰ See: [https://issuu.com/fminigeria/docs/federal-ministry-of-lands-housing-anoooooooooooood-](https://issuu.com/fminigeria/docs/federal-ministry-of-lands-housing-anooooooooooooood-)

³¹ See: <https://www.devex.com/organizations/nigerian-federal-ministry-of-power-works-and-housing-fmopwh-122632>

4.4.1 State governments

Nigeria is divided into 36 states and a Federal Capital Territory (FCT). The states are further sub-divided into a total 774 Local Government Areas (LGAs). The FCT is the capital of Nigeria and located in the city of Abuja; the FCT is not a state but is administered by elected officials who are supervised by the Federal Government. The websites of the FCT (Abuja) and the most populous city (Lagos) were visited to gauge the type of data made available by state governments; however, given the large number of state and local governments, there may be disparities in the type of data made available by these governments.

While the website of the [Abuja Municipal Area Council](#) does not provide any useful data, the [Lagos State Government](#) website has some data that might be of use.

That website includes links to the [approved state budgets](#) for the period 2008 to 2020. These budgets include revenue and planned spending in various ministries and industries such as the Ministry of Finance, Ministry of Works and Infrastructure, Ministry of Housing, Ministry of Physical Planning and Urban Development, Lands Bureau, and the Lagos State Real Estate Transaction Department (LASRETRAD). The website also includes links to the [Citizens' Guide](#) to these budgets for the period 2010 to 2020. Other useful reports include the state government's financial statements, with the latest available document for [2019](#), and a list of other useful publications [here](#).

A report on retail prices for selected essential items in the Lagos metropolis is also available with the latest one being for [2018](#). That report includes retail prices of building materials in urban Lagos, such as blocks, cement, doors, roofing and ceiling sheets, tiles, and timber, amongst others.

The website also has a state-specific [poverty profile report for 2016](#) which publishes the results of a survey conducted by the Lagos Bureau of Statistics and the Ministry of Economic Planning and Budget. That survey comprises various poverty-related indicators such as housing, access to services, health and safety, amongst others.

The [Lagos State Real Estate Transaction Department](#) (LASRETRAD), mentioned above, is a Department under the Ministry of Housing established in 2012 as the main regulatory authority in Lagos State on real estate transactions. The website lays out the rules and regulatory [code of conduct](#) that guides and protects the practice of Registered Agents in Lagos state. The website also provides a [public register](#) of Real Estate Agents, Companies and Estate Brokers in Lagos State licenced by LASRETRAD. However, in a memo Ref. No: CIR/HOS/'20/Vol.1/027 dated the 7th of February 2020, the Governor of Lagos State approved the transition of LASRETRAD from a Department to a full Agency now known as the [Lagos State Real Estate Regulatory Authority](#) (LASRERA). The website was launched in June 2020 and provides an overview of the Agency's [vision and purpose](#), as well as a description of its portal for the registration of practitioners in the Property Market and Real Estate Business in Lagos State.³²

4.4.2 Federal Mortgage Bank of Nigeria

The [Federal Mortgage Bank of Nigeria](#) (FMBN) was established "to provide long-term credit facilities to mortgage institutions in Nigeria and encourage and promote the development of mortgage institutions at the rural, local, State and Federal levels." The FMBN was established through the [Federal Mortgage Bank of Nigeria Act of 1993](#).

The functions of the FMBN are to license and encourage the emergence and growth of the required number of viable secondary mortgage institutions to service the need of housing delivery in all parts of Nigeria. The Act enables the FMBN to collect, manage and administer the National Housing Fund in accordance with the provisions of the National Housing Fund Act. The FMBN has power to carry out research aimed at improving housing patterns and standards in both urban and rural areas of Nigeria. In addition, the FMBN has power to carry out research on mortgage finance activities and the building construction industry in Nigeria.

In line with the regulations that govern the establishment and operations of the FMBN, that institution is required to submit period reports "to the President through the Minister" as per Section 17 of the Act. There are no requirements for these documents to be made public, and no other information was found on their website.

³² See: <https://guardian.ng/news/lagos-to-capture-database-of-real-estate-practitioners/> and <https://hairametrics.com/2020/06/12/lagos-announces-mandatory-registration-for-real-estate-practitioners-introduces-rules-and-regulations/>

4.4.3 Nigerian Investment Promotion Commission

The [Nigerian Investment Promotion Commission](#) (NIPC) is an agency of the Federal Government, established to encourage, promote, and coordinate investment in Nigeria. The NIPC was established as a body corporate through the [Nigerian Investment Promotion Commission Act](#) of 1995.

The data ramifications of the NIPC Act are significant. The Act requires the NIPC to collect, collate, analyse, and disseminate information about investment opportunities and sources of investment capital, and to advise on request the availability, choice or suitability of partners in joint-venture projects. In addition, the NIPC is required to register and keep records of all enterprises to which the Act applies. The NIPC is also required to provide and disseminate up-to-date information on incentives available to investors. Sections 16 and 17 of the Act provide information on the annual reporting requirements of the Commission through the Minister to the President.

The NIPC publishes various [research and reports](#) on their website on investment opportunities and market analysis of various industries. Their [annual reports](#) are also available on their website, with the latest from 2018, providing a clear indication of the foreign direct investment into the different sectors in the country.

The NIPC also coordinates a [One-Stop Investment Centre](#) (OSIC) that brings together relevant government agencies to one location to provide fast-tracked services to investors. The OSIC does not have a standalone website but can be reached from the NIPC website. It offers all the information needed for an investor thinking about investing in the country. The OSIC provides the following services:

- Granting of business entry approvals, licenses and authorizations within the shortest possible time;
- Provision of general information on the Nigerian economy, investment climate, legal and regulatory framework, as well as sector and industry-specific information to aid existing and prospective investors in making informed business decisions; and
- Facilitation and follow-up services on behalf of investors in all government ministries, departments, and agencies.

4.4.4 Federal Housing Authority

The [Federal Housing Authority](#) (FHA) is an agency of the Federal Government, established through the [Federal Housing Authority Act](#). The FHA is supervised by the Federal Ministry of Works and Housing and is charged with:

- Preparation and submission to the Government, from time to time, proposals for National Housing Programmes
- Execution of such housing programmes as may be approved by the Government
- Making of recommendations to the Government on such aspects of urban and regional planning, transportation, communication, electric power, sewage, and water supply, as may be relevant to the successful execution of approved housing programmes
- Development and management of real estate on both commercial and profitable basis in all states of the country
- Provision of Site and Services Scheme for the benefit of all income groups

Section 9 of the Act specifies the submission of annual reports and financial activities to the President, however specific obligations around public data dissemination could not be found in the legislation, and no reports are available on the FHA's website.

4.5 Private sector and NGOs

The NBS, CBN, and other public entities constitute the bulk of the housing data landscape; however, these entities are often merely aggregators of housing data generated by the private sector. NGOs can also participate in the housing data landscape through commissioning research that serves their mandates. This section reviews the private sector entities and NGOs that play this role in Nigeria.

4.5.1 Banks and mortgage refiners

Although central banks oversee and regulate the financial sector, they do not always publish data that is sufficiently disaggregated. While it is time-consuming, it is possible to contact individual lenders or visit the websites of each financial service provider to get more information. Individual financial service providers may also publish periodic sectoral reports or provide useful information.

We visited the websites of the Federal Mortgage Bank of Nigeria, Nigeria Mortgage Refinance Company, three lenders (Abbey, FirstTrust, Platinum) and three lenders to get an idea of the publicly accessible information curated by these market players.

4.5.2 Nigeria Mortgage Refinance Company

The [Nigeria Mortgage Refinance Company](#) (NMRC) has the mandate of “promoting home ownership for Nigerians while deepening the primary and secondary mortgage markets.” Since 2015, the NMRC has developed interventions to promote the creation of a strong legal framework and standards to support the activities of key players in the mortgage market. This includes the development of uniform underwriting standards for both the formal and informal sectors of the economy. NMRC’s website hosts useful information on topics such as [mortgage and housing trends](#) in the country, and makes their [annual reports](#) and other financial summaries accessible.

NMRC’s Mortgage Market System (MMS) is a proprietary mortgage underwriting and mortgage transactions processing system that is currently integrated with the Nigeria Inter-Bank Settlement System (NIBSS) on Bank Verification Number. The NIBSS is a shared service infrastructure for facilitating inter-bank payments. In addition, MMS is integrated with the credit bureaus, namely, [CRC Credit Bureau Limited](#), [FirstCentral Credit Bureau Limited](#) and [CreditRegistry Nigeria](#).

The NMRC is driving the systematization of data as a basis for informed decision making in the Nigerian housing market through the Housing Market Information Portal (HMIP). The HMIP provides access to mortgage information and connects mortgage professional advisors with potential home buyers, as well as providing Nigeria housing statistics. More information about the housing statistics hosted on this portal is outlined in Section 4.5.2 below.

4.5.3 Abbey, FirstTrust, and Platinum Mortgage Banks

Three of the lenders’ websites contained some basic information on their product offerings (e.g. types of products, minimum income required). While [Abbey Mortgage Bank PLC](#) made their [annual reports](#) available on their website, [FirstTrust Mortgage Bank PLC](#) had a link to their financial statements [here](#) which was not accessible, and no annual reports or financial statements could be located on the website of [Platinum Mortgage Bank Ltd](#). Abbey and Platinum banks did have some useful information relating to mortgage education, guides, and glossaries [here](#), [here](#) and [here](#).

4.5.4 Private sector and Industry associations

Industry associations can be a useful source of data on the number of entities offering services in a particular market. Associations may publish contact details for members and might include useful contextual information on the sector in their annual reports. In countries where limited published data is available, industry associations sometimes assist with soliciting useful information from members.

The private sector associations explored in this study are the Mortgage Banking Association of Nigeria (MBAN), Nigerian Institution of Estate Surveyors and Valuers (NIESV), the Real Estate Developers’ Association of Nigeria (REDAN) and the Nigerian Institute of Town Planners (NITP).

4.5.4.1 National Real Estate Data Collation and Management Programme

The lack of viable data to support policy making prompted the Central Bank of Nigeria (CBN) and the Real Estate Developers Association of Nigeria (REDAN) to initiate the National Real Estate Data Collation and Management Programme (NRE-DCMP)³³. This programme has been designed to eliminate the silo approach to data collection, collation, and management in the housing sector.

The NRE-DCMP comprises the major market players from both public and private sectors that are producing data in Nigeria’s housing sector. This includes the Federal Ministry of Power, Works and Housing, National Bureau of Statistics (NBS), National Population Commission (NPC), Federal Mortgage Bank of Nigeria (FMBN), Mortgage Banking Association of Nigeria (MBAN), Nigeria Mortgage Refinance Company (NMRC), Building Materials Producers Association of Nigeria (BUMPAN), Value Chain Project Consultants, Pison Housing Company, Growth & Empowerment Project (GEM), GIZ and Family Homes Funds.

The data components and indicators are focused on four initiatives:

- Household Survey: The *National Housing Conditions Survey* will focus on the Nigerian household. It will provide information on the quantum and quality of housing stock and building materials, as well as household characteristics and living conditions in the selected areas. This is led by the FMBN and Family Homes Funds.

³³ This overview is largely drawn from the NRE-DCMP presentation available [here](#)

- Business Survey: The *National Real Estate Developers Survey* will capture activities of housing developers in Nigeria and will entail a full enumeration of developers in the country. The list is drawn from the NBS frame, FMPWH, REDAN and FMBN. Other players covered include builders, State secretariats of Real Estate Associations, amongst others. The survey will provide information on indicators such as number of developers per state, cost of operation, price of property, and average cost of building.
- Off-takers Survey: The aim of the *National Housing Off-takers Affordability Survey* is to close the gap across the housing delivery value chain with an integrated approach by matching housing supply to Off-takers' specific needs and affordability and customising housing and mortgage literacy campaigns.
- Administrative Data: While data on mortgage financing activities can be obtained from the CBN for commercial banks and primary mortgage banks, the data on administrative activities in the housing sector reside with state agencies. Land administration is a major challenge, and land and fiscal policy are independently determined by the Governors of Nigeria's 36 states. The *Administrative Survey* aims to collect information across the states that measures metrics affecting the issuance of title documents (including time of processing, number of applications and approvals, cost of issuances, amongst others).

The NMRC's [Housing Market Information Portal](#) (HMIP) is the repository for the data that is collected as part of the surveys mentioned above. In 2019, the NRE-DCMP disseminated data that has been collated on the portal.

4.5.4.1 *Mortgage Banking Association of Nigeria*

The [Mortgage Banking Association of Nigeria](#) (MBAN) is an umbrella body for all mortgage banks licensed by the CBN to engage in mortgage activities in Nigeria. MBAN was incorporated on the 6th of August 1992 under Part C of the [Companies and Allied Matters Act](#) (CAMA). The main focus of the organisation is to ensure access to mortgage finance for the provision of affordable housing through effective advocacy for improved legal, regulatory and operating environments for homeownership finance in Nigeria. The three broad categories of membership are mortgage banks, professional mortgage brokers, and individual employees in the sector.

MBAN's website provides a [membership directory](#) and hosts the [constitution](#) relevant to the organisation and its members. No annual reports or other useful documents are available on the website.

4.5.4.2 *Nigerian Institution of Estate Surveyors and Valuers*

The [Nigerian Institution of Estate Surveyors and Valuers](#) (NIESV) was founded in 1969 by a group of qualified Chartered (General Practice) Surveyors who were trained mainly in the United Kingdom. NIESV was established as a non-profit voluntary professional organisation to cater for the interest of the profession in Nigeria. The institution was granted government recognition by the promulgation of the [Estate Surveyors and Valuers \(Registration, etc.\) Act](#) in 1975. This legislation established the [Estate Surveyors and Valuers Registration Board of Nigeria](#) (ESVARBON) as the regulatory body for the profession.

NIESV is tasked with establishing a high and reputable standard of professional conduct and practice in the landed profession throughout Nigeria and is mandated to secure and improve the technical knowledge which constitutes land economy. In addition, objectives of the body are to promote the general interests of the profession and to maintain and extend its usefulness for the public good, and endeavour to acquaint the public with the role of the profession in the economic development of the country.

There is not much information available on NIESV's website that is of particular use for this study; however, the body does publish their own [journal](#) that contains interesting articles from time to time, and also makes accessible [presentations](#) from its annual conferences and other events.

4.5.4.3 *Real Estate Developers' Association of Nigeria*

The [Real Estate Developers' Association of Nigeria](#) (REDAN) is the principal agency and umbrella body of the organised private sector (public and private) responsible for housing development in Nigeria, having been conferred with official recognition by the Federal Government of Nigeria since November 2002.

Membership is open to corporate entities only and REDAN hosts a list of their latest [financial members](#) (as at May 2020) and a list of [real estate developers](#) (as at September 2019) on their website. Other useful information accessible on their website includes the organisation's constitution, presentations from their building conferences, and various other reports, presentations, and questionnaires on their [resources](#) page.

4.5.4.4 Nigerian Institute of Town Planners

The [Nigerian Institute of Town Planners](#) (NITP) was formed in 1966 and is Nigeria's leading urban and regional planning body. The objectives of the institution are the establishment and enforcement of a code of professional practice and conduct for town planning practitioners in Nigeria, as well as the protection of the practice and the welfare of those practicing it. In addition, the body seeks the advancement of public awareness of the importance of the living and working environments and the necessity for their protection, together with the advancement of town planning education, training, research, and practice.

The Federal Government of Nigeria formally recognises the profession of town and country planning in Nigeria through the Town Planners Decree No. 3 of 1988; namely the [Town Planners \(Registration, etc.\) Act](#) which establishes the [Town Planners Registration Council](#) (TOPREC) for the registration of town planners and to provide extensively for the regulation of the profession of town planning.

There is no information on NITP's website that is of particular use for this study, although they do make accessible a list of their latest [financial members](#) (date of update is unknown).

4.5.5 Housing developers

In some instances, contacting individual housing developers (or visiting their websites) may be the only way to get data on housing projects that are in the pipeline or have been completed. However, it can be very time-consuming to collect data from individual institutions. In addition, the data is likely to be for a subset of the total market and may not be representative of the entire industry. There is likely to be a bias towards larger, better known developers which may not be active in more affordable segments of the market.

For the purposes of this study, the websites of several developers in Nigeria were visited. Apart from some general information on projects currently underway, no material data was found. Given that most housing developers in Nigeria fall under REDAN, a lobbying plan for data collection/collation that targets housing developers would need to be targeted at that umbrella body.

4.5.6 Credit bureaus

Only three accredited credit reference bureaus could be found in Nigeria. These are the [CRC Credit Bureau Limited](#), [FirstCentral Credit Bureau Limited](#) and [CreditRegistry Nigeria](#). These entities do not host any useful publicly accessible data on their websites. It may be possible to encourage them to make available aggregated industry reports on mortgage loans and on the credit active population, with a particular focus on mortgage borrowers.

4.5.7 NGOs

[Enhancing Financial Innovation & Access](#) (EFInA) is a financial sector development organisation that promotes financial inclusion in Nigeria. EFInA was founded in 2007 and is funded by the UK Government's [Department for International Development](#) (DFID) and the [Bill & Melinda Gates Foundation](#). EFInA approach to expanding access to financial services is based on four pillars, namely research, innovation, advocacy, and capacity building.

Some of the key outputs from this organisation includes

- [2018 Access to Financial Services in Nigeria Survey](#) – a nationally representative survey conducted every two years since 2010 that provides an overview of the financial behaviour of Nigerian adults in terms of their usage of financial products across the formal and informal sectors, identifies their financial needs, and provides insights into regulatory and market obstacles to growth and innovation in the Nigerian financial sector
- [2019 Assessment of Women's Financial Inclusion in Nigeria](#) – a study to identify what causes the gender gap in financial inclusion in Nigeria and how it can be closed
- [2018 Microinsurance Assessment and Landscape Study in Nigeria: Supply-side Perspectives](#) – a survey to provide a status update on the progress of microinsurance in Nigeria and facilitate stakeholders around key financial inclusion programmes and regulations that will expand the market

The full list of EFInA publications can be accessed [here](#) while information on their other research projects is available [here](#).

4.5.8 Other sources

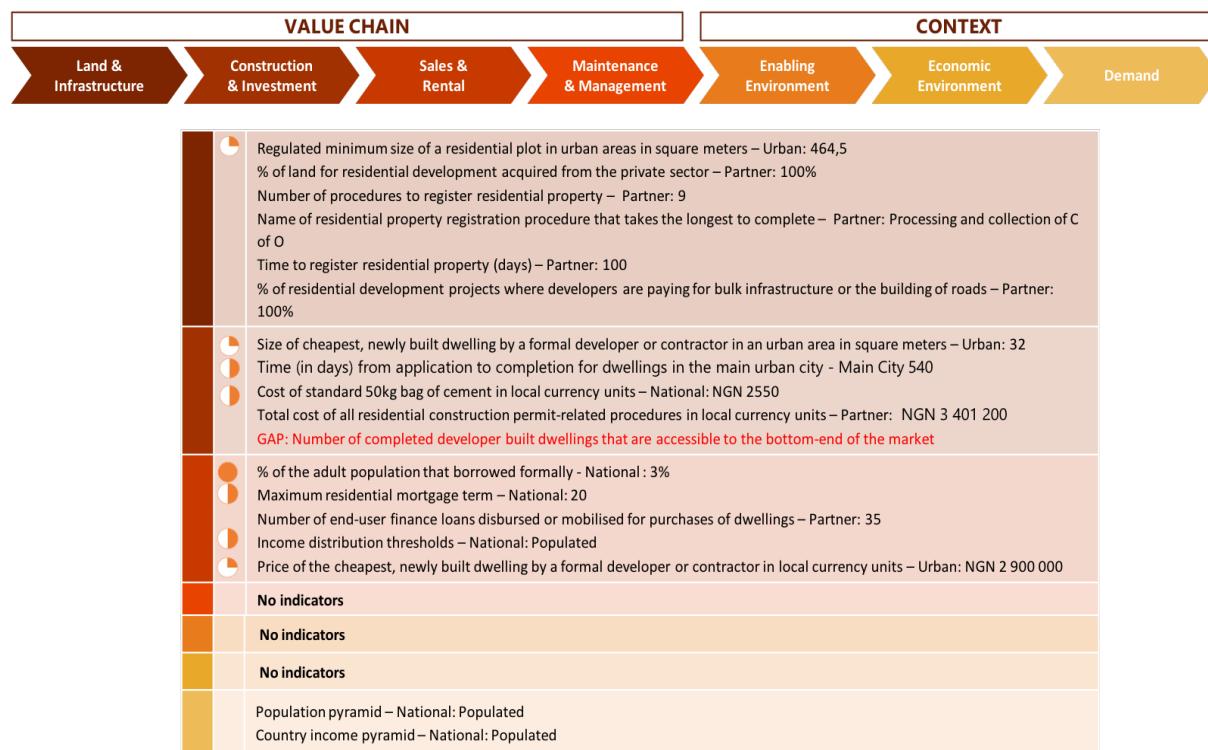
Academic journals, working papers, news articles, and websites also contribute to the housing data landscape, albeit in a more ad-hoc fashion. These sources are usually the last port-of-call to find data not already provided by other entities. Some of these additional sources are listed below.

- [Oxford Business Group](#)
 - Nigeria 2019 Report: Nigeria 2019
- [PopulationPyramid.net](#) and [World Population Review](#)
 - Source of population data that is updated frequently
 - Estimates are based on [UN World Population Prospects](#)
- [C-GIDD](#)
 - Subscription-based access income distribution data
 - Income distribution is derived using expenditure data
 - Socio-economic and demographic performance analysis – [Nigeria Country Deck](#)
- [BudgIT](#)
 - Civic organisation that seeks to simplify the budget and matters of public spending for citizens in Nigeria
 - Documents and infographics that are updated frequently

4.5.9 Data sourced from the private sector and NGOs

Indicators sourced in part or in full from the private sector and NGOs are highlighted in **Figure 16** below.

Figure 16: Indicators populated with data from the private sector and NGOs



The quality of data provided by the private sector is generally of a moderate or poor quality. The sources of this data include CAHF's [2019 Africa Housing Finance Yearbook](#), C-GIDD's income distribution database, as well as data sourced from developers, banks, various websites and interviews with representatives from several organisations.

Key factors driving the moderate and poor-quality assessments include

- The data is provided by a single entity and may not be representative of the market
- The entities from which the data was sourced are not the authority on the matter

- The provided data is not publicly available and cannot be verified or is costly to obtain
- The methodology used to generate the data is opaque and the data may be subject to measurement error

4.6 Multinational developmental finance institutions (DFIs)

The [World Bank](#) (WB), [International Monetary Fund](#) (IMF), [International Finance Corporation](#) (IFC), [Demographic and Health Surveys Program](#) (DHS), [International Labour Organisation](#) (ILO) and [African Development Bank](#) (AfDB) are good sources of data. In addition to publishing data across multiple countries, these institutions often commission specific studies and reports, and host conferences on housing, mortgages, or housing finance more broadly. This rich content is often disseminated on their websites.

4.6.1 Databases and portals

The [IMF](#) and [AfDB](#) host national data summary pages indicating what data are publicly disseminated in line with the IMF's Data Standards Initiatives.³⁴ These summary pages act as data portals through which users can access data, view metadata, or browse links to online datasets for all available categories for a country, even if these categories are compiled by multiple statistical agencies.

In addition to the data summary pages above, the AfDB's website provides access to country specific macro and socioeconomic data via [the African Information Highway](#) (AIH). The AIH is a mega network of live open data platforms disseminating data published by national statistics bureaus and central banks and sometimes includes data that is not accessible directly from the national entities themselves.

As with the AfDB, the WB, IMF, and ILO are also good sources of macro and socioeconomic data that is comparable across countries (see e.g. the WB's [World Development Indicators](#), the IMF's [data page](#), and the ILO's [ILOSTAT database](#)). Broadly speaking, the WB and ILO data maps more closely to data curated by a country's statistics bureau whilst the IMF data is closely related to that provided by the central bank.

Although universally accessible, reasonably up to date, and in a user-friendly format, the data provided through these portals is usually too aggregated to afford focusing on a specific sub-sector of the economy, such as housing.

Although highly accessible, reasonably up to date, and in a user-friendly format, the data provided through these portals is usually too aggregated to allow a focus on a specific sub-sector of the economy, such as housing. This is not the case with the [DHS data](#), where one can access micro data on nationally representative household surveys. Although mostly focused on health, these surveys also contain questions on housing and access to services that are critical to understanding the demand side of housing markets.

Another benefit of the DHS data is the inclusion of a pseudo wealth index³⁵ that enables focus on the poorest 40% of the population (the so-called Bottom 40). There is likely some measurement error because their index tries to measure wealth as opposed to income, but it is one of the few sources of data that affords this segmentation of the population.

A last database worth mentioning is that of the IFC's [investment services projects](#). This database provides easy access to all IFC projects and associated documents and information (e.g. project description, loans size, expected impact) that are in the public domain. In some cases, the disbursement of IFC loans requires beneficiaries to report on their performance, in which can assist in identifying additional producers of housing sector data.

4.6.2 Publications

Apart from hosting data, the institutions listed above also produce a host of publications. Useful periodic publications include

- WB's [Doing Business Reports](#) (published annually)
- AfDB's [Regional Economic Outlook](#) (published annually)
- AfDB's [African Statistical Yearbook](#) (published annually)
- IMF's [World Economic Outlook](#) (published bi-annually)

³⁴ See <https://dsbb.imf.org/>

³⁵ The wealth index is a composite measure of a household's cumulative living standard. The wealth index is calculated using easy-to-collect data on a household's ownership of selected assets, such as televisions and bicycles; materials used for housing construction; and types of water access and sanitation facilities. See <https://www.dhsprogram.com/topics/wealth-index/Wealth-Index-Construction.cfm> for details on how the wealth index is derived.

The above publications generally make use of the data accessible through each institution's data portal and suffer from the same aggregation shortcomings.

One-off publications by these institutions often address the aggregation shortcomings mentioned above. However, as their name suggests, the data contained within can quickly become outdated. An example of such a publication is the WB's [Stocktaking of the Housing Sector in Sub-Saharan Africa Challenges and Opportunities](#) (2015), an analysis that focuses specifically on the housing sector.

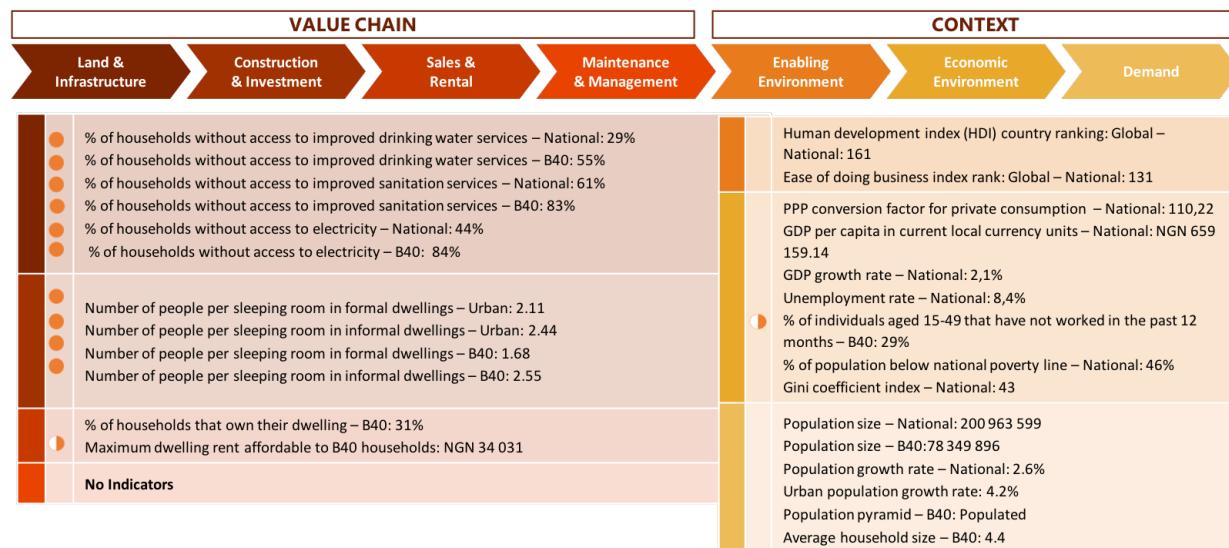
4.6.3 Data sourced from DFIs

Indicators sourced in part or in full from DFIs are highlighted in **Figure 17** below.

The DFI data used to populate the headline indicators are in general of good quality and there are only a few instances where less optimal data was used to populate indicators. These indicators are listed below together with a description of shortcomings in the data:

- Cost to register property, Number of procedures to register property, and Time to register property (days)
 - This data is sourced from the World Bank's Ease of Doing Business reports
 - There are many underlying assumptions in the Ease of Doing Business reports and these individual indicators may not reflect the situation on the ground. Notably, the indicators relate to commercial, not residential property, and the construction and registration of a 100m² warehouse, not a house.
- Proportion of the population living in households without access to basic health care services
 - This data is sourced from the DHS, published by USAID
 - It is based off a sample of females only
- Proportion of the population living in households without access to clean cooking, lighting, and heating fuels
 - This data is sourced from the DHS and includes clean cooking fuels only. It is therefore a lower bound estimate.

Figure 17: Indicators populated with data from DFIs



The DHS data shortcomings noted above can be addressed quite easily through engagement with the NBS (getting the right questions in survey questionnaires). Limitations associated with indicators derived from the World Bank's Ease of Doing Business are likely to remain, but with the benefit that the data is comparable across countries.

5 CONCLUSION

Figure 18 below summarises some of the key considerations that may frame next steps for data producers and custodians going forward, with high value interventions in red. Much of the data that can provide rich insights into Nigeria's housing market maybe stored in databases or reports not currently available in the public domain.

Figure 18: Key Considerations that frame next steps

	Nigeria National Bureau of Statistics	Central Bank of Nigeria	Federal Ministry of Works and Housing/Federal Mortgage Bank of Nigeria	State Governments/FHF	Private Sector	DFIs / NGOs
Unlock	NBS and NRE-DCMP can extract and analyse household data to close data gaps	Republish on NMRC's HMIP succinct housing and housing finance related statistics published by the CBN			Extract and analyse data collected by industry bodies (REDAN and NIESV) with emphasis on the affordable sector.	Analyse new DHS data when it becomes available
Disseminate	More frequent iterations of surveys (e.g Social Accounting Matrix) and sector summary reports (Real Estate and Construction Report)	Opportunity to disseminate data on residential lending activity and mortgage loan performance.	Publish indicators & reports on residential transfers (including raw land sales, registration and sale of new units and residential resale transactions).	Disseminate indicators and reports on turnaround times from application to decision for planning submissions, as well as cost of compliance related to applications and permitting	Dissemination of priority indicators on NMRC's Housing Market and Information Portal	
Disaggregate	Make raw data available for household level analysis of income, housing circumstances, etc.	Transactions data generated by lenders & credit bureaus could significantly improve public understanding of credit access and performance	Especially make available underlying transactions data so that third parties can augment and add value to the data	Make available detailed data on units completed to enable analysis of activity in the affordable segment of the market	Encourage donors to create more comprehensive and standardised data gathering protocols and templates for projects they fund	
Gather	Through the synergy created by the NRE-DCMP, there maybe opportunities for the NBS to gather and publish building and construction data.	There is an opportunity for to create more comprehensive and standardized data gathering protocols and templates for government funded housing initiatives			Where DFIs fund affordable housing developments, they should request that developers submit comprehensive and standardised data in line with clear protocols and templates (as with NGOs) – participation in the Open Access initiative	

It is hoped that with the synergy created through the NMRC's Housing Market Information Portal (HMIP), sector participants will continue to see the need to engage, share and disseminate data that will be relevant for the growth and development of the housing sector. A key priority area will be continued institutional engagement led by the NRE-DCMP to determine institutional capacity/ability (skills, systems, budget) to unlock, disseminate, disaggregate and / or gather additional data.

6 APPENDIX A: LEGISLATION

This appendix contains a short summary of key pieces of legislation and regulations that relate to participants in Nigeria's housing data landscape.³⁶ These laws and regulations were assessed from a data perspective, which aims to answer the following questions:

- What is the purpose of the legislation/regulation?
- What bodies (e.g. regulators or committees) are responsible for implementing the legislation/regulation?
- What are the data ramifications of the legislation/regulation?
- And what, if any, obligation is there to make this data publicly available?

The discussion matches legislation and regulations with the specific market players to which they apply, identifying 11 pieces of legislation and regulations that apply to four different market player groupings.³⁷ In addition, one act is identified that allows for freedom of information which falls outside of the market player groupings.

6.1 Government

There are four regulations that have been identified that are most relevant to governmental sector players.

6.1.1 Statistics Act of 2007

The [Statistics Act of 2007](#) replaces the Statistics Act of 1990 and establishes a National Statistical System (NSS) and the National Bureau of Statistics (NBS). It also repeals the Statistics Act of 1957 and dissolves the administrative body known as the Federal Office of Statistics.

Part I of the Act sets out the establishment, objectives, and functions of the National Statistical System (NSS). The four main elements of the NSS comprise the producers of statistics (including the NBS, Line Ministries, State Statistical Agencies, and Local Government Statistical Units), data users (including policy and decision makers), data suppliers (including establishments and households), and research and training institutions (including higher education institutions). The key objectives of the NSS are to raise public awareness about the importance and role of statistical information to society; to collect, process, analyse, and disseminate statistical data; and promote the use of best practice and international standards in the production, management, and dissemination of statistics.

Part II of the Act sets out the establishment and functions of the National Bureau of Statistics (NBS). The NBS is established as a body corporate and set out as an autonomous public authority responsible to the Presidency. The NBS is mandated to exercise professional independence in the way it collects, processes, analyses, reports, and disseminates statistical information. The NBS is established as the main national agency responsible for the development and management of official statistics, the authoritative source and custodian of official statistics in Nigeria, with the following key functions:

- Co-ordinate the NSS
- Advise Federal, State and Local Government on matters relating to statistical development
- Develop and promote the use of statistical standards and methodologies in the NSS
- Collect, compile, analyse, interpret, publish, and disseminate statistical information
- Develop and maintain a comprehensive national data bank by encouraging unit of line ministries and agencies to develop their sectorial data bank and forward it to the NBS

Part III of the Act provides for the establishment and composition of the Governing Board of the NBS. Key functions of the Board are to advise government on the national statistics policy, procedures, methods and regulations relating to the development of the statistics sector; formulate and monitor the implementation of policies for more effective coordination of the NSS; monitor the technical quality of official statistics and promote adherence to good practice and international recommendation and standards; and provide the President with a Quarterly Progress Report on activities of the NBS and the NSS. Part IV of the Act provides for the appointment of a Statistician-General by the President that is responsible for ensuring the NBS performs its functions as envisaged by the Act.

³⁶ Nigeria is divided into 36 states and a Federal Capital Territory (FCT). The states are further sub-divided into a total 774 Local Government Areas (LGAs). The FCT is the capital of Nigeria and located in the city of Abuja. The key pieces of legislation and regulations listed in this section are federal laws.

³⁷ Note that the list of legislation presented below may not exhaustively characterize the legislative and regulatory environment of Nigeria's housing sector. CAHF welcomes comments on any omissions.

The Act continues the existence of the NBS as the main co-ordinator of the NSS, and Part V provides for the establishment of a National Consultative Committee on Statistics by the President as one of the mechanisms for co-ordinating the NSS. The key functions of the Consultative Committee are to:

- Examine the statistical programmes of the various agencies annually in order to achieve greater co-ordination and avoid unnecessary duplication of efforts, and evolve a national statistical programme for the approval of the NBS
- Examine the Statistics Act and recommend to the Board any necessary changes
- Develop strategies to ensure uniform standards and methodologies between agencies.

Part VI Section 25 of the Act requires all private Nigerian and Foreign institutions wishing to conduct statistical surveys on a national scale to first obtain the approval of the NBS for the appropriateness and methodology of such surveys, and to provide the Statistician-General with the dataset and copies of the report on the collected data.

In terms of dissemination, Part VI Section 27 requires that data producers shall be required to process, disseminate, and make accessible to users as a 'public good', data collected or compiled using public funds. They are also required to, within confidentiality provisions, release micro level data sets for further analysis.

6.1.2 Land Use Act of 1978

The [Land Use Act](#) vests control of each State's urban land solely with the Governor of the State and control of non-urban land with local governments³⁸, describes the principles of land tenure, the rights of occupiers, and the powers of governors and local governments.

Section 2 of the Act establishes a Land Use and Allocation Committee for each State and a Land Allocation Advisory Committee for each local government. Land Use and Allocation Committees are responsible for advising their Governors on the management of land under their control, the resettlement of persons affected by the revocation of rights of occupancy as a result of the Act, and determining disputes as to the amount of compensation payable under the Act for improvements on land. The Land Allocation Advisory Committees serve a similar purpose, advising on matters related to the management of land vested with their respective local governments.

The Act's most relevant section from a data perspective relates to Section 46, the power to make regulations.³⁹ Among others, this section allows the National Council of States to make regulations around the granting of certificates of occupancy and temporary rights of occupancy. At a state-level, Section 46 empowers Governors to develop regulations around the method of application for any licence or permit and the terms and conditions under which licences may be granted as well as the forms that are to be used for any document or purpose.

Underpinning the enforcement of these regulations are compliance and monitoring processes that generate or are informed by data. In this way, the Land Use Act can develop data landscapes that is representative (national or state-wide regulation), continuously updated (each new permit or occupancy certificates), and accessible to the public (public reports on activities of regulators).

The Act does not vest any dissemination responsibilities on the National Council of States, Governors, or local governments regarding the data collected through regulatory compliance or other activities aimed at bringing the Act into effect.

6.1.3 Federal Lands Registry Act of 1992

The [Federal Lands Registry \(Miscellaneous Provisions\) Act](#) deals with the establishment of the Federal Lands Registry with the a key function being the registration of all titles to Federal Government lands and all interests created by subsequent transactions on lands vested in the Federal Government and its agencies.

Sections 1 of the Act deals with the establishment of the Federal Lands Registry, a division under the Urban and Regional Development Department of the Federal Ministry of Lands, Housing, and Urban Development. The Registry is

³⁸ The legislation "... vests all Land compromised in the territory of each State (except land vested in the Federal government or its agencies) solely in the Governor of the State, who would hold such Land in trust for the people and would henceforth be responsible for allocation of land in all urban areas to individuals resident in the State and to organisations for residential, agriculture, commercial and other purposes while similar powers with respect to non-urban areas are conferred on Local Governments."

³⁹ The Act empowers governors, local governments, and public officers in various manners; however not all are relevant to the data landscape – mostly they deal with the actual implementation of the Act. For example, Sections 5 and 6 of the Act provide powers to the governor and local government in relation to the granting of land occupancy rights and the imposition of land rents whilst Section 28 grants the governor the power to revoke rights of occupancy.

composed of cadastral, deeds, and administration and finance sections and is managed by the Registrar of Deeds as appointed by the President on recommendation by the Minister.

The functions of the Registry are provided in Section 2 of the Act and centre around the registration of land titles and all interests created by subsequent transactions on lands. These functions place the Registry at the epicentre of the formal property data landscape – from the curation and maintenance of documents and cadastral maps, to the production of property instruments such as deeds and plans. The Registry is also responsible for maintaining links between the different State Land Registries, ensuring that their data is accessible at a national level.

Section 10 of the Act carries additional data ramifications. This section allows the Minister to "... give to the Registry directives of a general character or relating generally to particular matters with regard to the Registry or its functions under this Act...". These wide-ranging powers bestow de facto data curation powers on the Minister and implies that the Minister can assist with providing access to Registry data.

Section 9 of the Act requires the Registry to submit an annual report on the activities of the Registry to the President by 30 June of each year. It is not clear what Registry activities consist of, nor is it clear whether the report can be made publicly available; however, Section 10 affords space for such a public dissemination request should the Minister deem it necessary.

6.1.4 Nigerian Urban and Regional Planning Act of 1992

The [Nigerian Urban and Regional Planning Act](#) provides for physical development planning in Nigeria and for the protection of the environment from certain development. The Act sets out the types and levels of physical development plans at the Federal, State and Local levels; these include the National Physical Development plan, as well as regional, sub-regional, local, urban, rural, and subject plans. The Act continues to establish the responsibilities of these three levels of government on several key points, including the formulation of policies for urban and regional planning; the preparation and implementation of planning standards for Nigeria; the promotion and fostering of the education and training of town planners and support staff; and the promotion, conduct, and dissemination of research in urban and regional planning.

For the purposes of the initiation, preparation, and implementation of the National Physical Development Plans, the Federal, State, and Local governments shall establish and maintain respectively a National Urban and Regional Planning Commission, a State Urban and Regional Planning Board in each of the 36 States and the FCT, and a Local Planning Authority in each of the local government areas and the area councils of the Federation.

The two authorities tasked with the implementation of the Act is the Development Control Department established in Part II of the Act, and the Urban and Regional Planning Tribunal established in Part VI of the Act. The Control Department's decision on an application for development permit shall be communicated to the applicant in writing. The Control Department shall publish in the Gazette a list of buildings of special architectural or historic interest within its jurisdiction.

The Act will lead to there being a more formal approach to urban planning for all levels of government. This will lead to a more homogenous data landscape with regards to land usage data. The most important data ramification, however, pertains to the Act forcing local governments to collect data with regards to land usage in their district. The types of data that will be collected can be found in Part I of the Act.

6.2 Banks, funders, and other lenders

We identified five pieces of legislation that form the institutional landscape within which banks, funders, and other lenders operate. The Banks and Other Financial Institutions Act and the Central Bank of Nigeria Act are interconnected and therefore outlined in one section below.

6.2.1 Banks and Other Financial Institutions Act of 1991 (As amended) & Central Bank of Nigeria Act of 2007

The [Banks and Other Financial Institutions Act](#) (BOFIA) was promulgated in 1991, and was amended in 1997, 1998, 1999 and 2002.⁴⁰ The original act focused on the interworking between the Central Bank of Nigeria and other financial businesses.

⁴⁰ A new bill, the Banks and Other Financial Institutions Act (BOFIA) (Repeal and Re-enactment) Bill 2020, had passed the Second Reading in the Senate in mid-May 2020. Amongst other updates/revisions, the introduction of the Bill seeks to clarify the regulatory

The [Central Bank of Nigeria Act](#) of 2007 repeals the Central Bank of Nigeria Act of 1991 which was released alongside the BOFIA 1991. The Central Bank of Nigeria (CBN) was established through the CBN Act of 2007, which charged the CBN with the overall control and administration of the monetary and financial sector policies of the Federal Government of Nigeria, as well as the responsibility of administering the BOFIA 1991 (As amended).

The BOFIA requires all financial institutions except insurance and stockbrokers in Nigeria to apply for a licence. This establishes a comprehensive list of all the financial businesses in Nigeria together with some basic information on the businesses. The information to be gathered is outlined in Part I (Section 3) and Part II (Section 59) of the Act.

The CBN will also serve as a repository where all the financial statements of all financial institutions in the country will be centralised.

As outlined in Part I (Section 25) of the BOFIA, every bank shall submit to the CBN not later than 28 days after the last day of each month or such other interval as the CBN may specify, a statement showing:

- a) the assets and liabilities of the bank; and
- b) an analysis of advances and other assets, at its head office and branches in and outside Nigeria in such form as the Bank may specify, from time to time.

In addition, every bank shall submit such other information, documents, statistics or returns as the CBN may deem necessary for the proper understanding of the statements supplied as specified above.

In terms of dissemination requirements, the CBN may prepare and publish consolidated statements aggregating the statements furnished for each category of banks. This and other dissemination requirements by the banks themselves are outlined in Part I (Sections 26 and 27) of the BOFIA.

6.2.2 Federal Mortgage Bank of Nigeria Act of 1993

The Federal Mortgage Bank of Nigeria (FMBN) is established by and operates under [Federal Mortgage Bank of Nigeria Act](#) of 1993. The Act establishes the "Federal Mortgage Bank of Nigeria to provide long-term credit facilities to mortgage institutions in Nigeria and encourage and promote the development of mortgage institutions at the rural, local, State and Federal levels."

The functions of the FMBN are to license and encourage the emergence and growth of the required number of viable secondary mortgage institutions to service the need of housing delivery in all parts of Nigeria. The Act enables the FMBN to collect, manage and administer the National Housing Fund in accordance with the provisions of the National Housing Fund Act. The FMBN has power to carry out research aimed at improving housing patterns and standards in both urban and rural areas of Nigeria. In addition, the FMBN has power to carry out research on mortgage finance activities and the building construction industry in Nigeria.

Section 17 of the Act obligates the FMBN to "prepare and submit to the President through the Minister, in such form as the Minister may direct and not later than 30 June in each year, a report on the activities of the Mortgage Bank during the immediately preceding year and shall include in the report a copy of the audited accounts of the Mortgage Bank for that year and the Auditor-General's report thereon."

6.2.3 Asset Management Corporation of Nigeria Act of 2010

The [Asset Management Corporation of Nigeria Act](#) establishes the Asset Management Corporation of Nigeria (AMCON) "for the purpose of efficiently resolving the non-performing loan assets of banks in Nigeria; and for related matters." The workings of AMCON will give insights into the non-performing loans across the Nigerian banking sector.

The AMCON established by the Act will be the authority that is tasked with the implementation of the provisions in the Act. The AMCON will be assisted in some respects by the CBN.

Sections 21, 22, and 23 of the Act specify certain requirements with respect to annual reports, audited accounts, and other information to be reported on. AMCON must by no later than 3 months after the end of each financial year submit its annual report to the Ministry of Finance and the CBN. The Ministry of Finance and the CBN also have the power to compel AMCON to report to them on any matter. AMCON is also expected to furnish the Houses of the National Assembly through their relevant standing committees with quarterly reports. Audited accounts must also be made

functions of the CBN and to provide for new areas such as micro finance banks and Financial Technology Companies (FINTECHs). See: <https://allafrica.com/stories/202005270123.html> (Accessed 30 June 2020)

available within six months after the end of the financial year to the wider public through a widely available media platform, as well as presented to the National Assembly, the Ministry of Finance, and the CBN.

6.2.4 Investments and Securities Act of 2007

The [Investments and Securities Act](#) establishes the Securities and Exchange Commission (SEC). The SEC is responsible for the regulation of the capital market to ensure protection of investors; maintain a fair, efficient, and transparent market; and reduce systemic risk.

All securities of a public company and all securities or investments of a collective investment scheme shall be registered with the SEC. A public company whose securities are required to be registered under this Act shall file with the SEC on a periodic or annual basis, its audited financial statements and such other returns as may be prescribed by the SEC from time to time.

Section 19 of the Act obligates the SEC to “not later than three months before the end of each year, submit to the Minister a report on the activities and the administration of the Commission during the immediately preceding year and shall include in such reports, audited accounts of the Commission and the auditor’s report on those accounts.”

Specific obligations around public data dissemination could not be found in the abovementioned legislation. This, however, does not mean that these bodies are not required by law to publish certain periodical reports.

6.3 Developers/ builders

The housing sector legislation most relevant to builders is the Builders (Registration, etc.) Act. This Act establishes a body to regulate those in the profession and provides for the development and maintenance of a database of those registered as builders.

6.3.1 Builders (Registration, etc.) Act of 1989

The [Builders \(Registration, etc.\) Act](#) was passed to formalise the registration of builders and to establish a body to regulate the conduct of builders and other related matters.

The Council of Registered Builders of Nigeria ('the Council') was established through this Act for the purposes of regulating the practice of building construction, maintenance, and management in the country, and for regulating the professional conduct and practice of builders in the country.

The Council of Registered Builders of Nigeria⁴¹ (CORBON) and the [Nigeria Institute of Builders](#) (NIOB) are established to be the authority tasked with implementing the Act. NIOB is a voluntary association for builders and has data on all their members.

All builders who wish to practise must be professionally registered with the Council by passing all required examinations and interviews and adhering to the Council's standard of professional conduct and practice. In addition, all professional builders must keep their data up to date in order to keep their registration.

The data ramifications of this Act relate to the establishment of a centralised list of registered builders that are operating in the country. The data elements to be captured for each builder are listed in Section 8 of the Act. The requirements for the publication of the register and lists of corrections to be “printed, published, and put on sale to members of the public” are outlined in Section 9 of the Act.

No regulatory obligation could be found with regards to the Council's publication of information with regards to the industry. However, part of NIOB's constitution states that it is required to make information available on matters affecting the Building Profession in Nigeria and abroad.⁴²

6.4 Estate agents' sector

The housing sector legislation most relevant to the estate agents' sector is the Estate Surveyors and Valuers (Registration, etc.) Act. This Act establishes a board to regulate those in the profession and provides for the development and maintenance of a database of those approved by the board.

⁴¹ At the time of writing, the Council's website was offline: <https://www.corbon.gov.ng/>

⁴² See: <http://niobnat.org.ng/Portal/FrontEnd/AboutUs.aspx>

6.4.1 Estate Surveyors and Valuers (Registration, etc.) Act of 1975

The [Nigerian Institution of Estate Surveyors and Valuers](#) (NIESV) was founded in 1969 by a group of qualified Chartered (General Practice) Surveyors who were trained mainly in the United Kingdom. NIESV was established as a non-profit voluntary professional organisation to cater for the interest of the profession in Nigeria. The institution was granted government recognition by the promulgation of the [Estate Surveyors and Valuers \(Registration, etc.\) Act](#) in 1975. This legislation established the [Estate Surveyors and Valuers Registration Board of Nigeria](#) (ESVARBON) as the regulatory body for the profession.

The Act legitimises NIESV as the governing body of the Estate Surveyors and Valuers of Nigeria and thus the implementing authority of the broader Act. All surveyors who wish to practise must be professionally registered at NIESV and adhere to the body's standard of professional conduct and practice. In addition, all professional surveyors must keep their data up to date in order to keep their registration.

The data ramifications of this Act relate to the establishment of a centralised list of registered estate surveyors and valuers that are operating in the country. The data elements to be captured for each builder are listed in Section 6 of the Act. The requirements for the publication of the register and lists of corrections to be "printed, published, and put on sale to members of the public" are outlined in Section 7 of the Act.

NIESV endeavours to acquaint the public with the role of Estate Surveyors and Valuers in the economic development of the country and is also mandated to secure and improve the technical knowledge which underpins the profession.

6.5 Additional legal requirements around public access to data and research

6.5.1 Freedom of Information Act of 2011

The [Freedom of Information Act](#) was promulgated in 2011 as "An Act to make public records and information more freely available, provide for public access to public records and information, protect public records and information to the extent consistent with the public interest and the protection of personal privacy, protect serving public officers from adverse consequences of disclosing certain kinds of official information without authorization and establish procedures for the achievement of those purposes and; for related matters."

The only information specifically relating to housing is contained in Section 19(1)(b) of the Act, namely "A public institution may deny an application for information that contains information pertaining to –architects' and engineers' plans for buildings not constructed in whole or in part with public funds and for buildings constructed with public funds, to the extent that disclosure would compromise security".

7 ADDITIONAL SOURCES

1.1 Websites

Central Bank of Nigeria <https://www.cbn.gov.ng/>

Demographic Health Survey Programme <https://dhsprogram.com/>

Family Homes Funds <https://fhfl.com.ng/>

Federal Mortgage Bank of Nigeria <https://www.fmbn.gov.ng/>

Haggai Mortgage Bank <https://haggaibank.com/>

Millard Fuller Foundation <https://fullercenter.org/nigeria/>

Mortgage Banking Association of Nigeria <http://mban.org.ng/>

National Bureau of Statistics <https://www.nigerianstat.gov.ng/>

National Population Commission <https://www.nationalpopulation.gov.ng/>

Nigeria Mortgage Refinance Company <https://nmrc.com.ng/>

Real Estate Developers Association of Nigeria <https://redanonline.org.ng/>

Reall in Nigeria Dashboard. <https://www.reall.net/data-dashboard/nigeria>

Transparency International <https://www.transparency.org/en/cpi/2020/index/nzl>

World Bank Ease of Doing Business <https://www.doingbusiness.org/en/rankings>