Centre for Affordable Housing Finance in Africa

71point4 NUMBERS TO LIFE

Reall A HOME FOR HUMAN POTENTIAL

A REVIEW OF THE DATA LANDSCAPE IN AFRICAN HOUSING ECOSYSTEMS: KENYA

1 June 2021

A Data Agenda for Housing in Africa

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, the Data Agenda is core to the missions of CAHF, Reall and 71point4, which all look towards working housing finance markets in Africa. 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.

Industry-wide data sharing initiatives can sometimes succeed, but there is a 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.

At the same time, the housing sector and its participants generate data just by existing. Much of this is collected by regulators who govern the processes of construction, investment, urban development, and participation in property markets. This data, important in the regulatory process, could also be usefully considered as part of the housing data landscape. **The Data Agenda for Housing in Africa seeks to curate and collate existing data, whether collected by the private, public or NGO sectors, in the normal course of business, or explicitly for unique purposes, and share this into the public domain in support of overall market development.**

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

A Data Agenda for Housing in Africa: a Review of the Data Landscapes in African Housing Ecosystems

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 Kenya, the partners worked with FSD Kenya and with NACHU.

A Data Agenda for Housing in Africa: working with state institutions, regulators and administrators to make the data that they collect publicly available

Data collected along the housing value chain

The entities that authorise activity and regulate participants across the formal housing and housing finance value chains naturally generate vast amounts of data. Legislation that empowers the state and regulators to collect data can drive efficiencies and generate more complete data. The data they collect represents all formal market activity, and is collected in explicit, common formats. A consistent requirement, the regular submission of data creates a track record ripe for analysis.

Data collected by public entities and regulators includes:

- Administrative data, which may include data collected by planning authorities, in response to statutory building controls, can be very useful in characterising formal housing supply.
- Indicators relating to lending activity and loan performance are collected by central banks using compliance returns submitted by regulated financial services providers. This data can be useful in characterising formal access to and use of finance, and how the finance sector intersects with the housing sectors.

Regulators 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 the Data Agenda for Housing in Africa is to highlight this potential value to data curators, and encourage them to gather and disseminate more data, more often.

Land & Infrastructure → Construction & Investment → Sales & Rental → Maintenance & Management

Data that frames the context

Contextual data provides information on the enabling environment, the economic environment and demand-side demographics.

Data relating to the enabling environment is largely drawn from international sources – the UNDP, the World Bank and specifically, its Ease of Doing Business Indicators Programme, and Transparency International. Of course, these offer high level, globally standardized insights into the business operating environment as it impacts on housing. More locally-specific data might be drawn from the experiences of developers themselves, on a case-by-case basis.

Data relating to the economic environment includes macro-economic and labour force indicators, which are largely drawn from national statistics bureaus and the Finance Ministry or Central Bank. The World Bank also provides high level, globally standardized data.

At the national level, demand side data is primarily available from national statistics bureaus, although there are some international survey data sources as well, including the World Bank and the Demographic and Health Surveys dataset of USAID.

Enabling Environment → Economic Environment → Demand

A Data Agenda for Housing in Africa: national statistical agencies can bridge the data gap with existing household surveys, as well as with different methodologies that confront the reality of informality and its role in the housing sector.

Household Surveys

- Typically, household surveys are the primary data source used to quantify and characterise informal housing activity
- Household surveys typically include questions on dwelling characteristics, access to services and tenure. They also include detailed data on household members and can include questions on sources of income and income levels
- However, surveys are prone to error, including misreporting by respondents, a common limitation of income data collected by surveys. They are also expensive to conduct

New Technologies and Data

- New technologies to generate and process alternative forms of data can provide more accurate and detailed characterisations of informal housing activity while reducing the costs of collecting data and improving the accuracy of data collection processes. New technologies also enable new forms of data to be collected at scale, and processed and analysed at lower cost and in close to real time, creating new possibilities for the way regulators and authorities monitor the activity of participants in the value chain
- In addition, distributed ledger technologies, including blockchain based land registries can enable that data to be maintained over time. Data creates administrative visibility and provides a basis for formalisation, notwithstanding the lack of regulatory compliance
- 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

The challenge of informality

Administrative data collected by the state only sees formal housing activity.

In most African countries, many 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 these dwellings may be characterised as slums, the households who have built them have clearly invested in them, often incrementally over extended periods of time.

Where data is not available or is 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.

A Data Agenda for Housing in Africa: CAHF, Reall and 71point4 started with a review of what data is available, and building the agenda from there

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.

B40

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.

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.

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". Gathering data on incomes of poorer households is particularly challenging. Household units are unlikely to be stable in the face of changing economic circumstances. In addition, income itself can vary significantly over time. Survey respondents may also incorrectly report income. Increasingly, survey collection of income data relies on daily diary studies which track income and expenditure. 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, more stable and is thought to have a fairly direct relationship to income or expenditure. 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, this data is not available in many cases. Where it is available, survey instruments may not explore data points required to generate specific indicators. Some flexibility with regard to the determination of the Bottom 40 as well as the measurement of indicators is therefore required.

Identified gaps create an agenda for better collection and analysis, highlighting which state institutions are best placed to participate.

This is our **Data Agenda for Housing in Africa**

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

VALUE CHAIN

Land & Infrastructure

LAND ASSEMBLY • Regulated minimum size of a residential plot in urban areas in square meters • Smallest residential plot size • Typical land costs per m2 in urban areas • Size of publicly/government owned land released for residential developments • World Bank DBI Geographic coverage index score ranking: Africa •World Bank DBI Geographic coverage index score ranking: Global • World Bank DBI Quality of land administration index ranking: Africa • World Bank DBI Quality of land administration index ranking: Global • **LAND TITLE** • Total number of residential properties with a title deed • Number of procedures to register residential property • Name of residential property registration procedure that takes the longest to complete • Time to register residential property (days) • Cost to register residential property • World Bank DBI Transparency of information index ranking: Africa • World Bank DBI Transparency of information index ranking: Global • **INFRASTRUCTURE** • % of residential development projects where developers are paying for bulk infrastructure or the building of roads • % of households without access to improved drinking water services • % of households without access to improved sanitation services• % of households without access to electricity • % of households living in dwellings built using durable building materials (walls and roof) with inadequate services • Transport as a % of household expenditure • World Bank DBI Reliability of infrastructure index ranking: Africa • World Bank DBI Reliability of infrastructure index ranking: Global

Construction & Investment

STOCK • Size of cheapest, newly built dwelling by a formal developer or contractor in an urban area in square meters • Number of people per sleeping room in formal dwellings • Number of people per sleeping room in informal dwellings • Number of households living in dwellings built using durable building materials (walls and roof) • % of households living in dwellings built using durable building materials (walls and roof) that are overcrowded • % of population living in slums, informal settlements, or inadequate dwellings • **FLOW** • Number of dwellings completed annually • Gross fixed capital formation of dwellings as % of GDP • Real estate activities as a % of GDP • **INDUSTRY** • Is there a body or association that organises developers / contractors? • Number of formal private developers / contractors serving the median household • Number of people employed in the construction sector • Number of people employed in real estate activities • Number of completed developer built dwellings that are affordable to the median household • **BUILDING MATERIALS** • Cost of standard 50kg bag of cement in local currency units • Residential building cost inflation for dwellings over the previous calendar year • **PROCESS** • Time (in days) from application to completion for dwellings in the main urban center • Total cost of all residential construction permit-related procedures in local currency units

Sales & Rental

OWNERSHIP • 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 • World Bank DBI Equal access to property rights index ranking: Global • **RENTAL** • 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** • 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 • World Bank DBI Land dispute resolution index ranking: Global • **FINANCE** • 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 • Value of residential mortgages outstanding as % of GDP • Residential mortgages as a % of residential properties with a title deed • Prevailing residential mortgage rate • Max. residential mortgage term • Max. LTV on a residential mortgage • Is there a regulatory cap on residential mortgage interest rates? • % of the adult population that borrowed formally • Annual household income distribution thresholds • Does a foreclosure policy exist? • Maximum instalment to income ratio • Number of residential mortgage providers • Number of residential mortgage providers that serve the typical household • Number of residential mortgages issued per annum • Number of residential mortgages and formal loans issued to median or poorer households in the previous calendar year • Number of residential mortgages outstanding • Number of end-user finance loans disbursed or mobilised for purchases of dwellings in the previous calendar year • Number of non-performing residential mortgages as a % of total outstanding residential mortgages • **AFFORDABILITY** • % of households that can afford the cheapest, newly built developer by a formal developer or contractor • Max. dwelling price affordable to B40 households based on market mortgage finance terms • Max. dwelling rent affordable to B40 households • Max. dwelling price affordable to typical households based on market mortgage finance terms • Max. dwelling rent affordable to the median household.

Maintenance & Management

HOME IMPROVEMENTS • Number of approved building permit applications for improvements to residential properties • Improvements to dwellings as a % of household expenditure • **MUNICIPAL MANAGEMENT** • Number of residential properties that are rated for property taxes in the main urban centre • % of households without access to basic waste collection services • **FINANCE** • Number of microfinance providers • Value of microfinance loans in local currency units

CONTEXT

Enabling Environment

OPERATING ENVIRONMENT • Human development index (HDI) country ranking: Africa • Human development index (HDI) country ranking: Global • Ease of doing business index rank: Africa • Ease of doing business index rank: Global • Corruption perceptions index rank: Africa • Corruption perceptions index rank: Global

Economic Environment

MACROECONOMIC INDICATORS • Real GDP growth rate • Unemployment rate • % of individuals aged 15- 49 that have not worked in the past 12 months • % of females aged 15-49 that have not worked in the past 12 months • % of population below national poverty line • Government construction of dwellings and serviced stands as a % of national budget • GDP per capita in current local currency units • GDP per capita growth rate • Gini coefficient index • Inflation rate (CPI) • Yield on 10-year government bonds • USD Exchange rate (1 USD = x LCU) • PPP conversion factor for private consumption

Demand

DEMOGRAPHICS • Number of households • Average household size • Population size • Population growth rate • Population pyramid • Country income pyramid • List of main urban centres

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.

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

VALUE CHAIN

Land & Infrastructure

LAND ASSEMBLY

- Regulated minimum size of a residential plot in urban areas in square meters
- Smallest residential plot size
- Typical land costs per m2 in urban areas
- Size of publicly/government owned land released for residential developments
- World Bank DBI Geographic coverage index score ranking: Africa / Global
- World Bank DBI Quality of land administration index ranking: Africa / Global

LAND TITLE

- Total number of residential properties with a title deed
- Number of procedures to register residential property
- Name of residential property registration procedure that takes the longest to complete
- Time to register residential property (days)
- Cost to register residential property
- World Bank DBI Transparency of information index ranking: Africa / Global

INFRASTRUCTURE

- % of residential development projects where developers are paying for bulk infrastructure or the building of roads
- % of households without access to improved drinking water services
- % of households without access to improved sanitation services
- % of households without access to electricity
- % of households living in dwellings built using durable building materials (walls and roof) with inadequate services
- Transport as a % of household expenditure
- World Bank DBI Reliability of infrastructure index ranking: Africa / Global

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.

As the first link in the housing delivery and management value chain, **land & infrastructure** is about the ability to initiate a development. Aside from the risks associated with the physical property on which the development will take place, the indicators in this link relate primarily to government capacity to deliver on their statutory compliance responsibilities. Poor scores in each of these indicators can be one of the reasons for higher housing delivery costs, and lower values.

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.

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

VALUE CHAIN

Construction & Investment

STOCK

- Size of cheapest, newly built dwelling by a formal developer or contractor in an urban area in square meters
- Number of people per sleeping room in formal dwellings
- Number of people per sleeping room in informal dwellings
- Number of households living in dwellings built using durable building materials (walls and roof)
- % of households living in dwellings built using durable building materials (walls and roof) that are overcrowded
- % of population living in slums, informal settlements, or inadequate dwellings

FLOW

- Number of dwellings completed annually
- Gross fixed capital formation of dwellings as % of GDP
- Real estate activities as a % of GDP

INDUSTRY

- Is there a body or association that organises developers / contractors?
- Number of formal private developers / contractors serving the median household
- Number of people employed in the construction sector
- Number of people employed in real estate activities
- Number of completed developer built dwellings that are affordable to the median household

BUILDING MATERIALS

- Cost of standard 50kg bag of cement in local currency units
- Residential building cost inflation for dwellings over the previous calendar year

PROCESS

- Time (in days) from application to completion for dwellings in the main urban centre
- Total cost of all residential construction permit-related procedures in local currency units

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.

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.

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

VALUE CHAIN

Sales & Rental

OWNERSHIP

- 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

- 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

- 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

- 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
- Value of residential mortgages outstanding as % of GDP
- Residential mortgages as a % of residential properties with a title deed
- Prevailing residential mortgage rate
- Max. residential mortgage term
- Max. LTV on a residential mortgage
- Is there a regulatory cap on residential mortgage interest rates?
- % of the adult population that borrowed formally
- Annual household income distribution thresholds
- Does a foreclosure policy exist?
- Maximum instalment to income ratio
- Number of residential mortgage providers
- Number of residential mortgage providers that serve the typical household
- Number of residential mortgages issued per annum
- Number of residential mortgages and formal loans issued to median or poorer households in the previous calendar year
- Number of residential mortgages outstanding
- Number of end-user finance loans disbursed or mobilised for purchases of dwellings in the previous calendar year
- Number of non-performing residential mortgages as a % of total outstanding residential mortgages

AFFORDABILITY

- % of households that can afford the cheapest, newly built developer by a formal developer or contractor
- Max. dwelling price affordable to B40 households based on market mortgage finance terms
- Max. dwelling rent affordable to B40 households
- Max. dwelling price affordable to typical households based on market mortgage finance terms
- Max. dwelling rent affordable to the median household.

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 **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.

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.

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

VALUE CHAIN

Maintenance & Management

HOME IMPROVEMENTS
Number of approved building permit applications for improvements to residential properties
Improvements to dwellings as a % of household expenditure

MUNICIPAL MANAGEMENT
Number of residential properties that are rated for property taxes in the main urban centre
% of households without access to basic waste collection services

FINANCE
Number of microfinance providers
Value of microfinance loans in local currency units

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.

A key gap in our assessment of affordable housing markets has been around issues of long term **maintenance and management**. This link is about home improvements, the place of the house within a city's infrastructure, and the finance available to support investment in the sustainability of affordable housing.

Clearly, there are many more issues that are worth considering in terms of long term sustainability and affordability – over time, as the data landscape improves, we will build on this section.

CONTEXT

Enabling Environment

OPERATING ENVIRONMENT
Human development index (HDI) country ranking: Africa
Human development index (HDI) country ranking: Global
Ease of doing business index rank: Africa
Ease of doing business index rank: Global
Corruption perceptions index rank: Africa
Corruption perceptions index rank: Global

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.

Enabling environment indicators speak to the operating environment for businesses, and draw on established indicators, easily accessible but unfortunately not particular to affordable housing. Considering these scores in light of affordable housing requires a level of translation – the national operating environment may be differently expressed at the local level where the housing delivery and management process depends so significantly on the local authority.

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.

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

CONTEXT

Economic Environment

MACRO-ECONOMIC INDICATORS

- Yield on 2-year government bonds
- Yield on 10-year government bonds
- USD Exchange rate (1 USD = x LCU)
- PPP conversion factor for private consumption
- GDP per capita in current local currency units
- GDP per capita in current local currency units growth rate
- GDP growth rate
- Government construction of dwellings and serviced stands as a % of national budget
- Unemployment rate
- % of individuals aged 15-49 that have not worked in the past 12 months
- % of females aged 15-49 that have not worked in the past 12 months
- % of population below national poverty line
- Gini coefficient index
- Inflation rate (CPI)

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.

Macro-economic indicators are critical in determining not only the opportunity and scope for investment but also potential pressures on affordability.

Demand

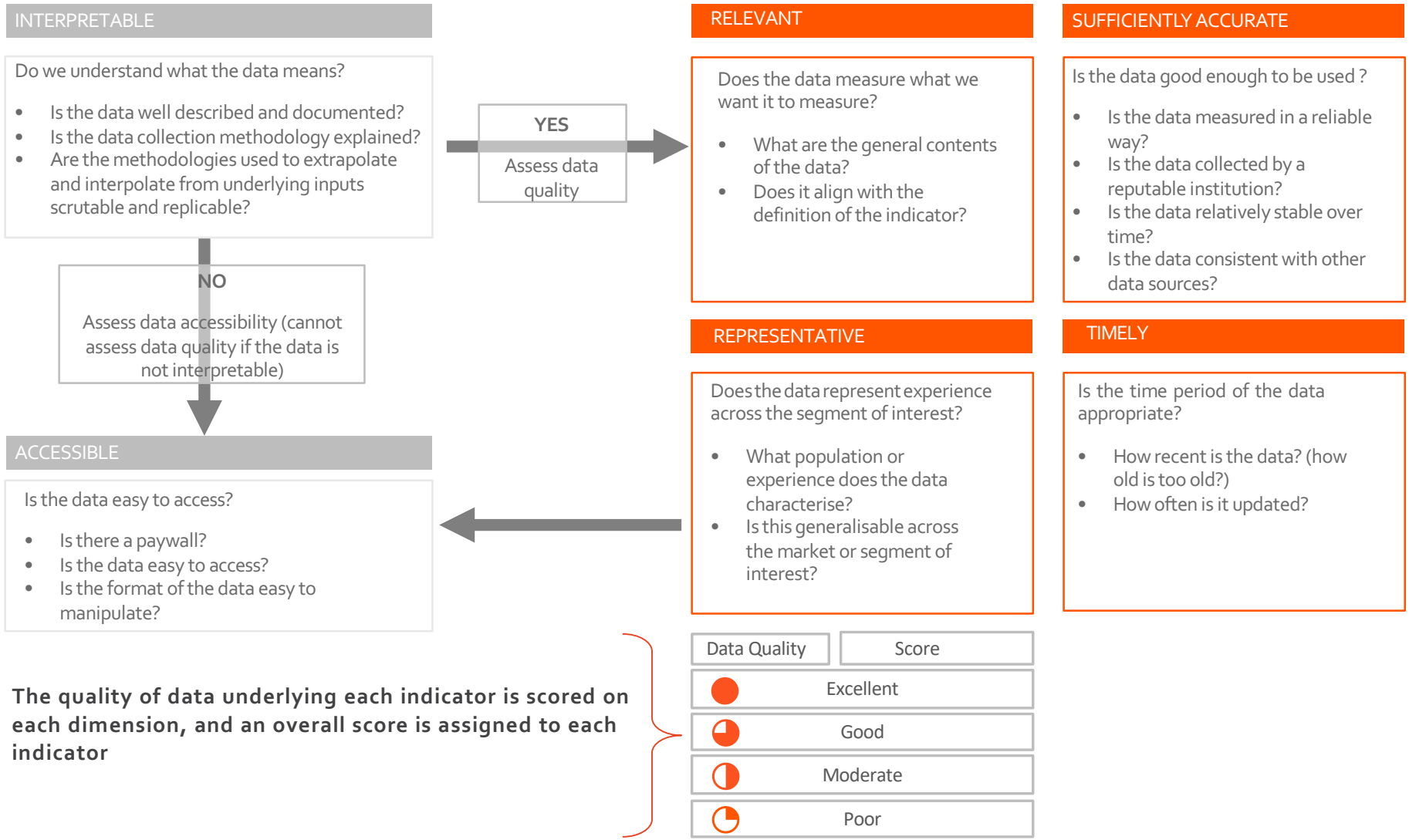
DEMOGRAPHICS

- Population growth rate
- Population pyramid
- Number of households
- Average household size
- Country income pyramid
- List of main urban centres

Demand side indicators characterise the nature and size of the target market. A key but particularly difficult indicator in this regard is the population pyramid.

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.

A Data Agenda for Housing in Africa: The quality of each indicator has been assessed using a data quality assessment framework



The quality of data underlying each indicator is scored on each dimension, and an overall score is assigned to each indicator

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.

Overall conclusion: Many indicators cannot be filled from existing, publicly available data in Kenya. Key opportunities may exist with data from public sector regulators and the KNBS.

VALUE CHAIN

Land & Infrastructure

LAND ASSEMBLY • 9 indicators: **no data for 2**. Available data from international sources not rated. Local data outdated or not nationally representative

LAND TITLE • 9 indicators: **no data for 3**. Available data largely from the Doing Business Indicators, therefore not rated.

INFRASTRUCTURE • 11 indicators: no data for 1. Available data from international sources not rated. Data that is locally sourced is well document and well-defined, measurement in line with requirement. DHS Survey data is outdated.

Construction & Investment

STOCK • 9 indicators: **no data for 3**. Available data primarily from outdated DHS Survey. National survey data is robus.

FLOW • 4 indicators: **no data for 3**. Available data only accounts for Nairobi.

INDUSTRY • 5 indicators: **no data for 4**. Only indicator for which there is data relates to the Kenya Property Developers Association.

BUILDING MATERIALS • 2 indicators: **no data for 1.** Available data based on information from four manufacturers – may not be nationally representative.

PROCESS • 3 indicators: **no data for 2**. Available data directly from Reall partner. No national data.

Sales & Rental

OWNERSHIP • 7 indicators: **no data for 4**. Nairobi data is well-documented and defined in line with requirement. DHS Survey data is outdated.

RENTAL • 3 indicators: **no data for 1.** Nairobi data is well-documented and defined in line with requirement. Poor rental data, no B40 focus.

TRANSACTIONS • 8 indicators: **no data for 5**. Available data is good: provided by a regulatory authority and international bodies.

FINANCE • 19 indicators: **no data for 5**. Available data varies in quality: some provided by a regulatory authority; some from individual lenders may not be representative.

AFFORDABILITY • 6 indicators: **no data for 1**. Available data compiled with proxies and estimates; lack of information on methodology or underlying data sources.

CONTEXT

Maintenance & Management

HOME IMPROVEMENTS • 2 indicators, **both fulfilled**. Data accounts for Nairobi applications only and is not nationally representative.

MUNICIPAL MANAGEMENT • 3 indicators: **no data for 1**. Available data lacks detailed source description and collection methodology; not clear when data will be updated

FINANCE • 2 indicators, **both fulfilled**. Available data is good: provided by a regulatory authority.

Enabling Environment

OPERATING ENVIRONMENT • 6 indicators, **all fulfilled.** Data is provided by international bodies.

Economic Environment

MACROECONOMIC INDICATORS • 14 indicators, **all fulfilled.** Data is provided by international bodies.

Demand

DEMOGRAPHICS • 13 indicators, **all fulfilled.** Data is provided by international bodies and KNBS. Income- related data, however, is from a private source with a proprietary methodology which lacks a detailed description.

The Data Audit and Quality Assessment exercise explored these 135 indicators.

Kenya's Data Landscape: All institutions in Kenya's housing value chain generate data, whether for private or public use, or simply as a by-product of their business. We have reviewed the key institutions that generate and disseminate pertinent data

Key data producers and custodians in Kenya

Regulator / Government Department

- Central Bank of Kenya
- Kenya National Bureau of Statistics
- Ministry of Lands & Physical Planning
- National Land Commission
- National Treasury
- Nairobi City County

Private Institution / Industry Body

- Kenya Bankers Association and other lenders
- Kenya Property Developers Association and other developers
- Association of Microfinance Institutions of Kenya
- National Cooperative Housing Union
- TransUnion, Creditinfo, Metropol
- Haas Consult
- Kenya Mortgage Refinance Company
- Institute of Quantity Surveyors

NGO

- Reall
- FSD Kenya
- CAHF

DFI

- World Bank / IFC
- AfDB
- DHS Program

A General Overview of National Statistics Bureaus

National Bureaus of Statistics

Together with central banks, statistics bureaus form the core of a country's data landscape, collecting and publishing a wide 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

These data are often summarised in a statistical abstract that is available for download from the statistical bureau's website

Statistics bureaus also collect demographic data generated by nationally representative household or business surveys

While summary reports of this data are published. In some cases, raw data is made available

Relevant Legal Acts

Statistics Act No. 4 of 2006

"An Act of Parliament to provide for the establishment of the Kenya National Bureau of Statistics for the collection, compilation, analysis, publication and dissemination of statistical information, and the co-ordination of the national statistical system, and for connected purposes"

Objectives and Functions of the Bureau

(a) planning, authorising, co-ordinating and supervising all official statistical programmes undertaken within the national statistical system;

(b) establishing standards and ensuring the use of best practices and methods in the production and dissemination of statistical information across the national statistical system;

(c) collecting, compiling, analyzing, abstracting and disseminating statistical information on the matters specified in the First Schedule;

(d) conducting the Population and Housing Census every ten years, and such other censuses and surveys as the Board may determine;

(e) maintaining a comprehensive and reliable national socio-economic database.

(f) developing and maintaining sampling frames of the Bureau;

(g) collaborating with and assisting the county governments or any other institutions in the production of official statistics;

(h) providing technical advice on statistics to other state entities;

(i) promoting co-ordination among producers, users and suppliers of official statistics by forming appropriate sector committees; and

(j) designating statistics produced by national statistical system as official statistics on being satisfied that the necessary criteria have been followed.

[Act No. 16 of 2019, s. 4.]

An Overview of the Kenya National Bureau of Statistics

Kenya National Bureau of Statistics

The Kenya National Bureau of Statistics (KNBS) plays an important data provision and curation role in Kenya

The KNBS hosts valuable macroeconomic, social, and demographic data required to gauge housing demand and the impact of the sector on the broader economy. These are highlighted on the slides that follow

More recently, the KNBS has developed several data sharing platforms, where survey datasets can be accessed in digital and disaggregated format. Examples include the Integrated Multi-sectoral Information System (IMIS) which enables access to key datasets through a set of tables and crosstabs. However, during the preparation of this report, all links to data on the IMIS were not functioning. In addition available data sets are out of date

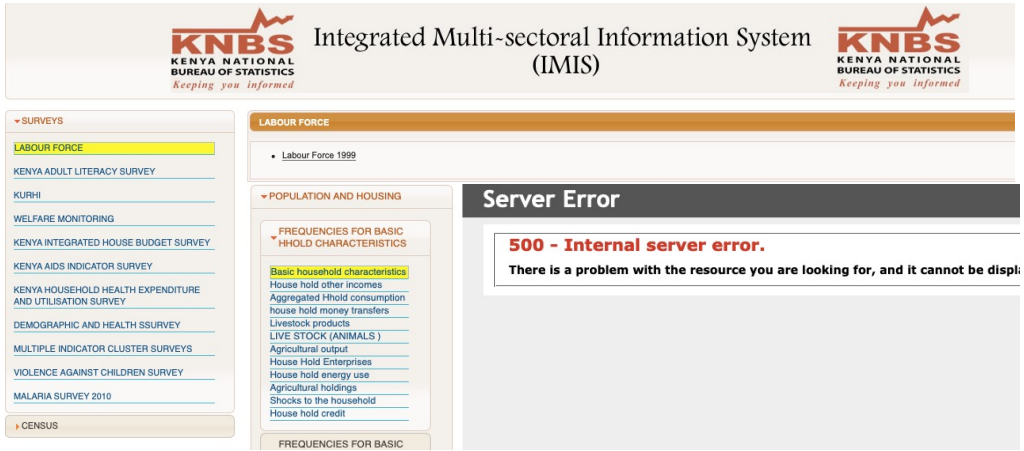
Other useful resources include, the Kenya National Data Archive (KENADA) which contains raw data and metadata for a number of surveys, and the Kenya Open Data Portal

This is a positive development towards the democratisation of the country's social and economic data

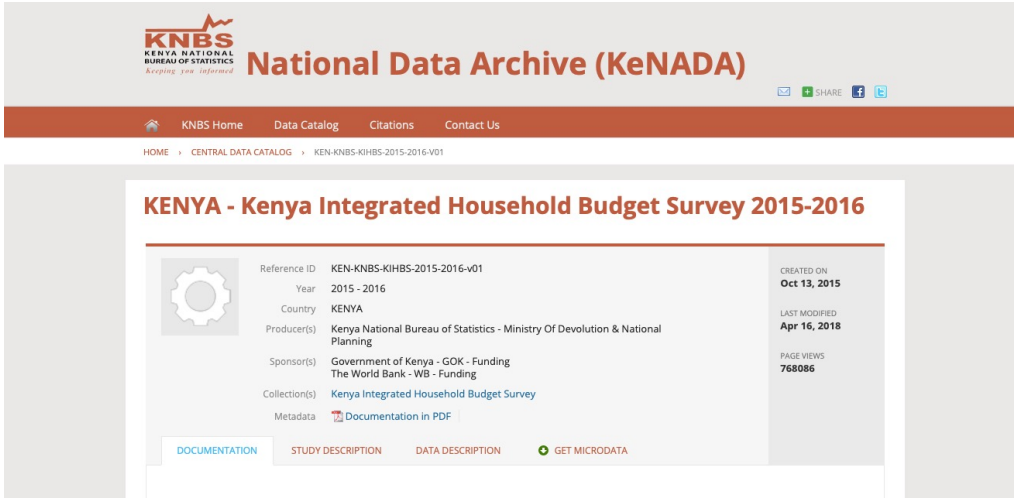
KNBS data is not easily accessed from the various portals.

Kenya National Bureau of Statistics

The Integrated Multi-sectoral Information System (IMIS) was designed to enable access to key datasets through a set of tables and crosstabs. However, most data is outdated and cannot be accessed easily (note: internal server error)



The Kenya National Data Archive provides access to raw data and metadata for some key surveys. However, it is difficult to access this archive directly from the KNBS website



The KNBS releases a number of regular publications containing useful macroeconomic data

Kenya National Bureau of Statistics

Macroeconomic Data

Leading Economic Indicators Report

- Latest version: September 2020
- Released monthly
- Dataset contains:
  - CPI & inflation rates by income group based on household expenditure
  - Exchange rate, interest rate changes
  - Changes in indicators of international trade, agriculture, energy, manufacturing, building and construction, tourism and transport
- Reports for 2020 data and previous data are available for download on the KNBS website
- Raw data & metadata not
- available available for download

Economic Survey

- Latest version: 2020
- Released annually
- Dataset contains:
  - Useful data on employment byindustry and sector, average wages and gazetted minimum wages
  - Credit to public and private sector including real estate and loans byNHC
  - Assets of pension funds including
  - immovable property and REITs
  - Government budget data on housing and amenities and county government expenditureon housing
  - Residential buildings completedby private & public sector
- Reports for 2020 data and previous data are available for download on the KNBS website
- Raw data and metadata not available for download

CPI & Inflation Rate Reports

- Latest version: October 2020
- Released monthly
- Dataset contains:
  - Changes in price indices based on a survey of retailprices that target a basketof household goods and services
  - Includes housing, water, electricity, gas other fuels and furnishings, household equipment and routine household maintenance
- Reports for 2020 data and previous data are available for download on the KNBS website
- Raw data and metadata not are available for download

GDP Reports

- Latest version: 2nd Quarter, 2020
- Released quarterly
- Dataset contains:
  - GDP by sector
  - Includes construction &real estate GDP
- Reports for 2020 data and previous data are available for download on the KNBS website
- Raw data and metadata not available for download

The KNBS releases a number of regular publications containing useful macroeconomic data

Kenya National Bureau of Statistics

Statistical releases and publications are published on the KNBS website in .pdf format only

Publications published by the KNBS are not listed in any specified order which can make it difficult to locate key publications like the Economic Survey

Leading Economic Indicators 2020

Title	Categories	Create Date	Download
Leading Economic Indicators – October 2020 (1 files, 975 downloads)	Leading Economic Indicators 2020	December 22, 2020	Download
Leading Economic Indicators – September 2020 (1 files, 877 downloads)	Leading Economic Indicators 2020	November 18, 2020	Download
Leading Economic Indicators – August 2020 (1 files, 1386 downloads)	Leading Economic Indicators 2020	October 2, 2020	Download
Leading Economic Indicators July 2020 (1 files, 1125 downloads)	Leading Economic Indicators 2020	August 31, 2020	Download
Leading Economic Indicators June 2020 (1 files, 1034 downloads)	Leading Economic Indicators 2020	July 31, 2020	Download
Leading Economic Indicators – May 2020 (1 files, 1061 downloads)	Leading Economic Indicators 2020	June 29, 2020	Download
Leading Economic Indicators April 2020 (1 files, 924 downloads)	Leading Economic Indicators 2020	June 2, 2020	Download
Leading Economic Indicators March 2020 (1 files, 295 downloads)	Leading Economic Indicators 2020	May 26, 2020	Download
Leading Economic Indicator February 2020 (1 files, 564 downloads)	Leading Economic Indicators 2020	May 11, 2020	Download
Leading Economic Indicator January 2020 (1 files, 1582 downloads)	Leading Economic Indicators 2020	March 12, 2020	Download

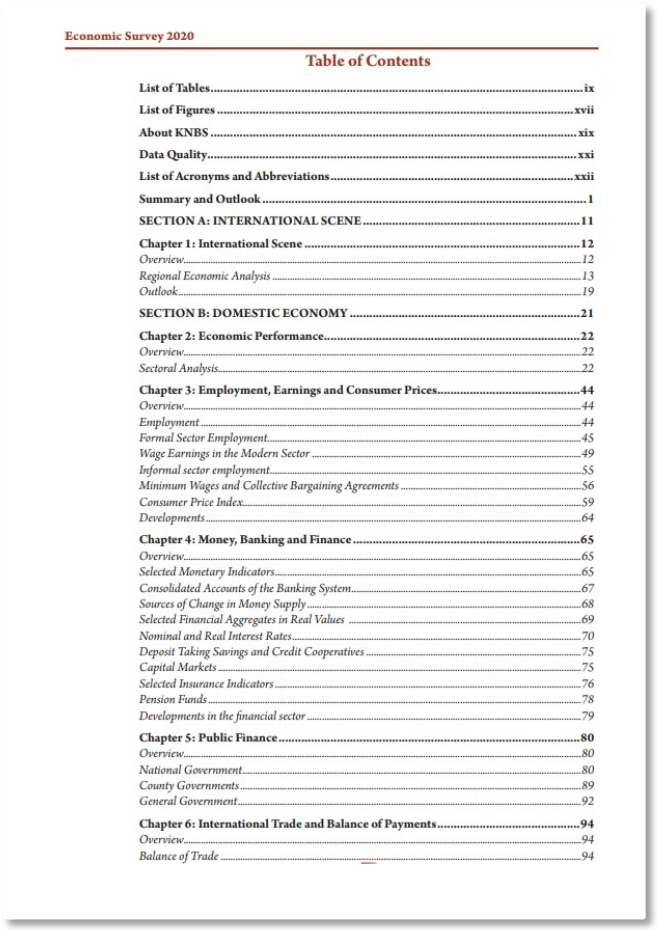
Publications

- 2019 Population and Housing Census
- Quarterly Labour Force Reports
- Enhanced Food Balance Sheets for Kenya
- FinAccess
- The 2015/16 Kenya Integrated Household Budget Survey Basic Reports
- 2009 Population and Housing Census
- Women and Men in Kenya, Fact and Figures
- Census of Establishment
- 2015 STEP Survey
- Census of Industrial Production (CIP)
- County Statistical Abstracts
- Exploring Kenya Inequality
- **Economic Survey**
- Foreign Investment Survey
- Global Adult Tobacco Survey
- ICT Survey

The Economic Survey publication contains useful data, but it can be easily overlooked as it requires one to scroll through the table of contents pages (which are not linked to the relevant pages) to find data. The screenshots below show a few Table of Contents pages

Kenya National Bureau of Statistics

Screenshots : Economic Survey



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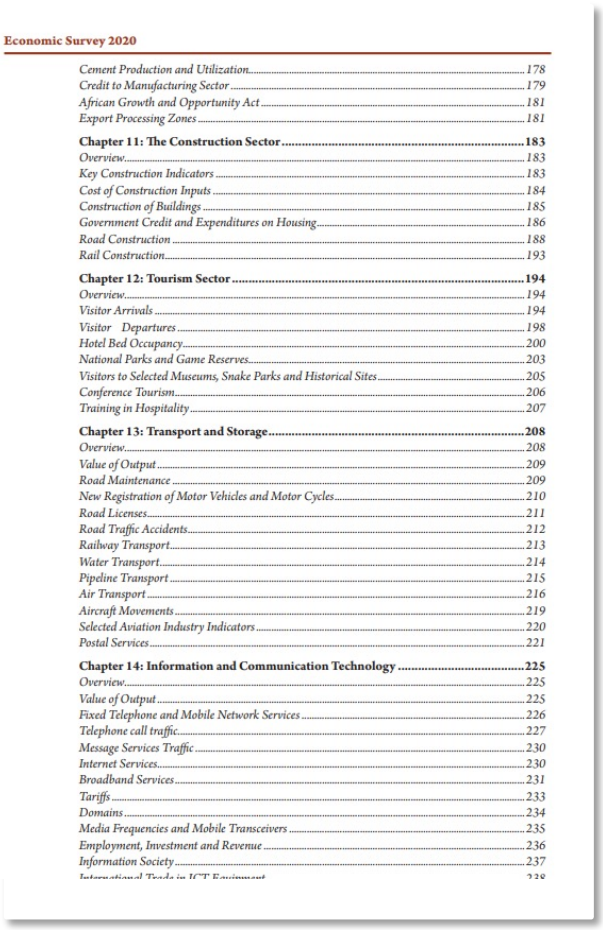

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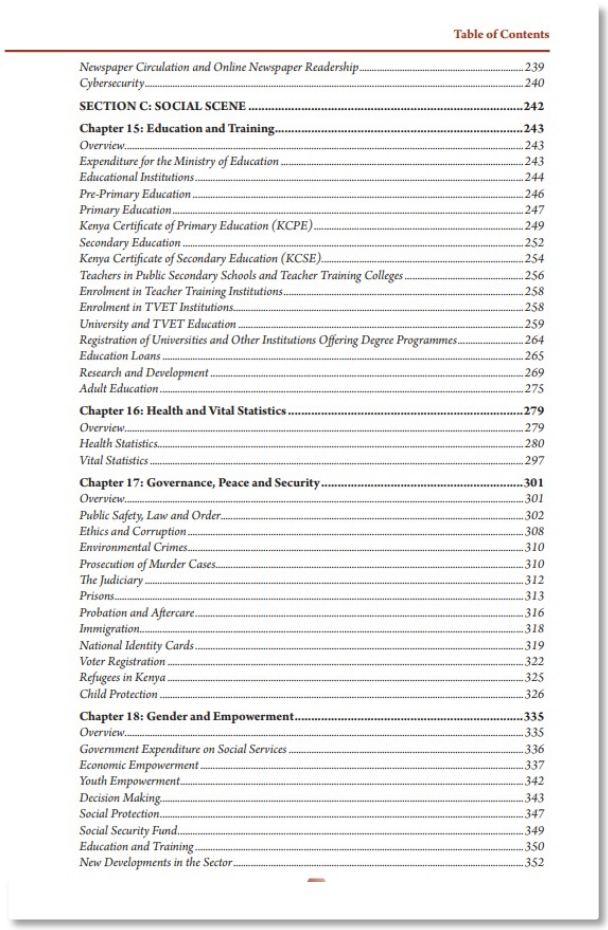

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Some useful indicators (e.g. Value of Private Building Plans Approved) account for Nairobi only and are thus not nationally representative

Kenya National Bureau of Statistics

Screenshots : Economic Survey

Table 11.4: Reported Number of Private and Public Buildings Completed, 2015 – 2019

Number

Year	Private (Nairobi City County)			Public Residential		
	Residential	Non-Residential	Total	National Housing Corporation	State Department for Housing	Total
2015	7,834	1,220	**9,054**	45	0	**45**
2016	8,806	1,462	**10,268**	240	822	**1,062**
2017	9,864	2,038	**11,902**	0	1,164	**1,164**
2018	10,785	1,940	**12,725**	180	250	**430**
2019*	11,802	2,174	**13,976**	100	430	**530**

Source: Nairobi City County, National Housing Corporation & The State Department for Housing

* Provisional

Table 11.5: Reported Value of Private and Public Buildings Completed, 2015 – 2019

KSh Million

Year	Private (Nairobi City County)			Public Residential		
	Residential	Non-Residential	Total	National Housing	State Department for Housing	Total
2015	61,556.4	9,311.0	**70,867.4**	61.5	0.0	**61.5**
2016	67,624.9	10,124.8	**77,749.7**	879.0	2,907.4	**3,786.4**
2017	74,347.1	11,781.3	**86,128.4**	0.0	2,347.0	**2,347.0**
2018	77,722.2	12,405.2	**90,127.4**	816.0	730.3	**1,546.3**
2019*	80,346.5	13,635.8	**93,982.3**	370.2	1,138.8	**1,509.1**

Source: Nairobi City County, National Housing Corporation & the State Department for Housing

Table 11.6: Value of Private Building Plans Approved and Reported Building Works Completed in Nairobi City County, 2015 – 2019

KSh Million

Year	Building Plans Approved	Building Works Completed[1]
2015	215,211.0	70,867.4
2016	308,361.4	77,749.7
2017	240,752.0	86,128.4
2018	210,296.7	90,127.4
2019*	207,624.9	93,982.3

Source: Nairobi City County

*Provisional

Table 11.8: Government Expenditure on Housing, 2015/16 – 2019/20

Year	Expenditure in KSh Million		Actual Expenditure as a Percentage of Approved Expenditure
	Approved	Actual	
2015/16	7,342.7	6,034.5	82.2
2016/17	17,497.7	15,242.7	87.1
2017/18	18,409.9	16,130.0	87.6
2018/19*	26,810.0	24,793.0	92.5
2019/20**	27,553.0	-	

Source: State Department for Housing

* Provisional

Despite these shortcomings, the data contained in the Economic Survey is useful

Kenya National Bureau of Statistics

Screenshots : Economic Survey

Chapter 11: The Construction Sector

Table 11.7: Housing Loans Advanced by National Housing Corporation by County, 2017/18-2018/19

County	2017/18		2018/19	
	Number of Loans	KSh '000'	Number of Loans	KSh '000'
Bungoma	1	1,500.0	1	525.0
Embu	1	1,800.0	1	2,500.0
Kajiado	4	10,050.0	5	6,287.5
Kakamega	-	-	5	10,650.0
Kiambu	5	18,650.0	5	12,300.0
Kirinyaga	2	4,600.0	-	-
Kisii	-	-	3	7,400.0
Kisumu	2	3,850.0	5	8,560.0
Kitui	2	3,400.0	-	-
Machakos	8	16,880.0	1	7,200.0
Makueni	1	2,300.0	-	-
Marsabit	1	3,000.0	-	-
Meru	3	5,100.0	-	-
Migori	-	-	1	3,000.0
Mombasa	1	3,000.0	-	-
Murang'a	-	-	3	7,000.0
Nairobi City	8	17,540.0	8	18,350.0
Nakuru	4	9,300.0	6	11,400.0
Nyandarua	-	-	1	3,000.0
Vihiga	-	-	2	5,000.0
Taita Taveta	2	3,150.0	1	1,750.0
Trans Nzoia	-	-	1	1,100.0
Uasin Gishu	1	1,050.0	-	-
Total	**46**	**105,170.0**	**49.0**	**106,022.5**

Source: National Housing Corporation

Chapter 4: Money, Banking and Finance

Table 4.9a: Commercial Banks' Bills, Loans and Advances[1], 2015-2019

KSh million

	2015 Dec	2016 Dec	2017 Dec	2018 Dec	2019* Dec
PUBLIC SECTOR:					
National Government (net)[2]	583,727	709,866	817,775	956,267	1,084,808
County Government (net)	1,149	3,807	3,975	4,342	4,299
Enterprises, Parastatal bodies and other Public entiti	45,173	100,912	108,424	96,608	87,985
TOTAL PUBLIC SECTOR	**630,049**	**814,585**	**930,174**	**1,057,217**	**1,177,091**
PRIVATE ENTERPRISES:					
Agriculture	85,925	90,081	84,697	83,005	80,990
Mining and Quarrying	20,776	16,802	16,470	14,700	13,852
Manufacturing	290,069	275,018	314,176	334,618	365,351
Building and Construction	106,307	104,826	111,985	114,015	115,800
Transport, Storage and Communication	171,643	201,270	190,531	172,695	186,665
Wholesale and retail trade, hotels and restaurants	378,043	380,683	417,376	429,314	467,420
Real Estate	282,586	337,352	370,732	368,710	374,089
Financial Institutions	61,042	85,212	82,082	96,482	96,877
Other Business	402,179	356,304	315,720	346,249	400,709
TOTAL PRIVATE ENTERPRISES	**1,798,569**	**1,847,548**	**1,903,769**	**1,959,787**	**2,101,754**
Community and Personal Services (including Non-Profit Making Institutions)	360,292	389,591	385,078	411,738	434,761
Other Activities (nec)	84,890	79,886	127,076	115,190	127,867
TOTAL BILLS, LOANS AND ADVANCES	**2,873,800**	**3,127,888**	**3,318,907**	**3,543,932**	**3,838,797**

Source: Central Bank of Kenya

*Provisional

[1] Commercial Banks' bills,loans and advances excludes portfolio investment by private enterprises and bank deposits placed with non-bank financial institutions.

With regard to employment data, the Economic Survey is more detailed than the Labour Force Survey

Kenya National Bureau of Statistics

Screenshots : Employment data in the Economic Survey

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Table 3.4: Wage Employment by Industry and Sex, 2018 and 2019

'000

INDUSTRY	Male		Female		Total	
	2018	2019*	2018	2019*	2018	2019*
Agriculture, forestry and fishing	225.5	215.0	111.2	123.6	336.6	338.6
Mining and quarrying	13.6	13.3	1.7	2.6	15.2	15.9
Manufacturing	259.1	292.2	88.7	61.1	347.9	353.3
Electricity, gas, steam and air conditioning supply	14.7	19.6	8.5	4.2	23.2	23.8
Water supply; sewerage, waste management and remediation activities	12.0	13.4	3.0	2.0	15.0	15.4
Construction	124.9	184.3	93.5	37.2	218.4	221.5
Wholesale and retail trade; repair of motor vehicles and motorcycles	201.2	190.0	59.2	79.2	260.4	269.2
Transportation and storage	71.4	80.7	19.3	11.8	90.7	92.5
Accommodation and food service activities	59.7	52.1	21.8	30.8	81.5	82.9
Information and communication	89.5	83.9	41.7	48.4	131.2	132.3
Financial and insurance activities	49.2	40.9	26.4	36.7	75.6	77.6
Real estate activities	3.5	2.2	0.8	2.2	4.3	4.4
Professional, scientific and technical activities	51.7	53.5	17.1	17.3	68.8	70.8
Administrative and support service activities	5.8	4.8	0.3	1.6	6.1	6.4
Public administration and defence; compulsory social security	199.7	163.6	96.8	141.0	296.5	304.6
Education	318.0	317.0	261.1	281.1	579.1	598.1
Human health and social work activities	66.0	71.4	82.8	86.6	148.7	158.0
Arts, entertainment and recreation	5.3	4.6	1.9	2.8	7.2	7.4
Other service activities	25.1	23.0	11.2	15.0	36.3	38.0
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	48.3	62.0	67.5	54.4	115.8	116.4
Activities of extraterritorial organizations and bodies	1.0	0.6	0.3	0.7	1.3	1.3
TOTAL	1,845.2	1,888.1	1,014.8	1,040.2	2,859.9	2,928.3
Of which: Regular	1,408.4	1,410.4	804.2	831.5	2,212.5	2,241.9
Casual	436.8	477.7	210.6	208.7	647.4	686.4

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Table 2: Labour Participation Rates by Age Cohorts

Age	Quarter 3, 2019			Quarter 2, 2020			Quarter 3, 2020			Change	
	Labour Force	Total Population	Rate	Labour Force	Total Population	Rate	Labour Force	Total Population	Rate	Qrt3, 2020/ Qrt2, 2020	Qrt3, 2020/ Qrt3, 2019
15-19	1,483,474	5,246,942	28.3	1,350,244	5,351,277	25.2	1,575,871	5,386,056	29.3	4.1	1.0
20-24	2,511,219	4,414,851	56.9	2,385,142	4,502,641	53.0	2,517,389	4,531,904	55.5	2.5	(1.4)
25-29	3,073,406	3,826,135	80.3	2,824,302	3,902,217	72.4	2,985,707	3,927,578	76.0	3.6	(4.3)
30-34	2,956,090	3,544,379	83.4	2,863,645	3,614,860	79.2	3,106,515	3,638,354	85.4	6.2	2.0
35-39	2,328,840	2,630,588	88.5	2,153,021	2,682,898	80.2	2,368,934	2,700,335	87.7	7.5	(0.8)
40-44	2,007,274	2,242,600	89.5	1,908,018	2,287,194	83.4	2,056,509	2,302,059	89.3	5.9	(0.2)
45-49	1,615,522	1,773,105	91.1	1,483,210	1,808,364	82.0	1,648,530	1,820,117	90.6	8.6	(0.5)
50-54	1,163,705	1,298,969	89.6	1,096,210	1,324,800	82.7	1,136,119	1,333,410	85.2	2.5	(4.4)
55-59	994,370	1,109,868	89.6	949,705	1,131,938	83.9	948,391	1,139,295	83.2	(0.7)	(6.4)
60-64	677,123	863,614	78.4	698,778	880,786	79.3	699,211	886,511	78.9	(0.4)	0.5
Total	**18,811,023**	**26,951,051**	**69.8**	**17,712,275**	**27,486,975**	**64.4**	**19,043,176**	**27,665,619**	**68.8**	**4.4**	**(1.0)**

The KNBS releases a number of regular publications containing useful demographic data

Kenya National Bureau of Statistics

Key Survey Datasets

The population and housing census

- Latest version: 2019
- Released every 10 years
- Dataset contains:
  - ø Residence type and housing
  - ø ownership
  - ø Education and basic service access
- Reports for 2019 data and previous data are available for download on the KNBS website
- Raw data and metadata are not
- available for download

Integrated household budget survey

- Latest version: 2015/16
- No indication of next release
- Dataset contains:
  - ø Poverty, inequality and labour force indicators
  - ø Household size, composition, conditions, access to services including waste collection
  - ø Household income by type, residence,
  - ø headship
  - ø Detailed data on expenditure including rent, maintenance and repairs and utilities
- Reports for 2015/16 data and previous data are available for download on the KNBS website
- Raw data and metadata are available for download

Quarterly labour force survey

- Latest version: 2nd Quarter 2020
- Released quarterly
- Dataset contains:
  - ø Employment to population ratio
  - ø Short-term and long-term
  - ø unemployment rates by age group
- Reports for 2020 data and previous data are available for download on the KNBS website
- Raw data and metadata are not available for download

The KNBS releases a number of regular publications containing useful demographic data

Kenya National Bureau of Statistics

Key Survey Datasets

Demographic and health survey

- Latest version: 2014
- Next version will be released in 2021
- Dataset contains:
  - Household characteristics
  - including water, sanitation
  - Wealth quintiles which allow for Bottom 40 analysis
  - Family planning, child mortality and health, maternal health, nutrition, malaria, HIV/Aids
- Reports for 2014 data and previous data are available for download on the KNBS website
- Raw data and metadata are available for download

Finaccess household survey

- Latest version: 2019
- Released every 3 years
- Dataset contains:
  - Access to and usage of financial products
  - Financial health and literacy
  - Dwelling tenure and type, how property was acquired, dwelling adequacy
  - Housing-related goals & device used to meet goal
- Reports for 2019 data and previous data are available for download on the KNBS website
- Raw data and metadata are available for download

Micro ,small and medium enterprises survey

- Latest version: 2016
- No indication of next release
- Dataset contains:
  - MSMEs by economic activity, county, structure
  - Employment characteristics in MSMEs, MSME contribution to GDP
  - Constraints and access to amenities and support services
  - Note: 160 construction MSMEs included in sample
- Reports for 2016 data and previous data are available for download on the KNBS website
- Raw data and metadata are available for download

In addition, the KNBS publishes a variety of one-off publications

Other Data

Gender Statistics Assessment

- Latest version: 2017
- No indication of next release
- Report contains:
  - Detailed review of genderstatistics in NSS
  - Identification of gender data gaps to monitor gender-relatedSDG's
  - Analysis of availability of data and how it informs policies
- Reports for 2017 data are availablefor download on the UN website
- Raw data and metadata are not available for download

Foreign Investment Survey

- Latest version: 2018
- Next version released in 2020
- Dataset contains:
  - Construction and real estatedata
  - Stocks and flows of DFI liabilities, international trade ingoods, services expenditure
  - Employee compensation
- Reports for 2018 data and previousdata are available for download on the KNBS website
- Raw data and metadata are notavailable for download

County Statistical Abstracts

- Latest version: 2015
- No indication of next release
- Dataset contains:
  - Population statistics (sex,household, density)
  - Wage employment
  - Education statistics
  - Public expenditure and revenue
  - Governance
- Reports for 2015 data and previousdata are available for download on the KNBS website
- Raw data and metadata are not available for download

The screenshot below is an excerpt from the Foreign Investment Survey. It is not clear how detailed the corresponding raw data is

Kenya National Bureau of Statistics

Screenshots : Foreign Investment Survey

Table 2.7: Stock of FDI liabilities by Economic Activity, 2016-2017

Sector		2016		2017	
		KSh Million	% Share	KSh Million	% Share
A.	Agriculture, Forestry & Fishing	26,462.75	4.2	10,885.85	1.6
B.	Mining & Quarrying	25,989.52	4.1	29,900.31	4.4
C.	Manufacturing	123,270.72	19.6	130,194.34	19.0
D.	Electricity, Gas, Steam & Air Conditioning Supply	33,368.97	5.3	36,308.69	5.3
E.	Water supply; sewerage, waste management and remediation activities	0.00	0.0	0.00	0.0
F.	Construction	10,582.90	1.7	11,546.03	1.7
G.	Wholesale & Retail Trade	111,331.32	17.7	106,166.20	15.5
H.	Transportation & Storage	-1,525.43	-0.2	-974.28	-0.1
I.	Accommodation & Food Service Activities	15,137.77	2.4	14,925.23	2.2
J.	Information & Communication	53,733.69	8.5	50,766.54	7.4
K.	Financial & Insurance Activities	213,711.28	33.9	273,832.96	40.0
L.	Real estate activities	200.59	0.0	321.65	0.0
M.	Professional, Scientific & Technical Activities	9,014.06	1.4	9,706.87	1.4
N.	Administrative & Support Service Activities	1,022.70	0.2	1,201.92	0.2
P.	Education	6,852.35	1.1	7,911.06	1.2
Q.	Human Health & Social Work Activities	638.49	0.1	615.12	0.1
R.	Arts, entertainment and recreation	0.00	0.0	0.00	0.0
S.	Other Service Activities	664.02	0.1	530.33	0.1
Grand Total		**630,455.69**	**100.0**	**683,838.81**	**100.0**

The following indicators were sourced from the KNBS

Kenya National Bureau of Statistics

VALUE CHAIN

Land & Infrastructure

- Transport as a % of total household expenditure – National: 9.7%

Construction & Investment

- GAP: Gross fixed capital formation of dwellings as % of GDP
- Number of dwellings completed annually – National: 12 332
- Number of households living in dwellings built using durable building materials (walls and roof) – National: 2 466 384

Sales & Rental

- GAP: Average inflation for dwellings over 5 years – National
- % of households that own their dwelling – National: 61%
- GAP: % of dwellings with female or joint ownership
- % of households that rent their dwelling – Urban: 35%
- GAP: % of population living in households that rent their dwelling – B40
- % of adult population that borrowed formally – National: 19%
- % of households that can afford the cheapest, newly built developer by a formal developer or contractor – Urban: 14.2%

CONTEXT

Maintenance & Management

- Improvements to dwellings as a % of household expenditure – National: 3.7%
- % of households without access to basic waste collection services – National: 83%
- GAP: % households without access to basic waste collection services – B40

Enabling Environment

- No Indicators

Economic Environment

- % of population below national poverty line – National: 34%

Demand

- Population size – Nairobi: 4 697 274 Average household size – National: 3.30

Generally, the quality of data sourced from the KNBS is good. The main shortcomings are as a result of data that is not nationally representative or doesn't quite match the stipulated indicator definition

Kenya National Bureau of Statistics

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Transport as a % of household expenditure – National	Infrastructure	9.7%	2020	Data collected from Consumer Price Indices and Inflation Rates for July 2020	Data is documented and well- defined	Measurement in line with requirement	Data provided by government authority	Nationally representative , in line with definition	Published in 2020, released monthly	Downloadable – multiple formats, easy to access	Data is documented and well- defined, measurement in line with requirement
Number of dwellings completed annually - National	Flow	12,332	2019	Data sourced from 2020 Economic Survey	Data is documented and well defined	Measurement in line with requirement	Data provided by government authority	Data only accounts for Nairobi	Published in 2020	Downloadable – publication, easy to access	Data only accounts for Nairobi - not nationally representative
Number of households living in dwellings built using durable building materials (walls and roof) - National	Stock	2,466,384	2019	Data sourced from Kenya FinAccess 2019 survey: Y4 – "Permanent building"	Data is documented and well defined but subject to respondents' perceptions	Measurement is based on households living in permanent buildings	Data provided by reputable source in line with global standards	Nationally representative , in line with definition	Published in 2019, released every few years	Downloadable – publication, easy to access	Survey data provided by regulatory authority

Generally, the quality of data sourced from the KNBS is good. The main shortcomings are as a result of data that is not nationally representative or doesn't quite match the stipulated indicator definition

Kenya National Bureau of Statistics

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
% of households that own their dwelling - National	Ownership	61%	2019	Data sourced from Kenya FinAccess 2019 survey: "owner occupied", "occupied nomads"	Data is documented and well defined	Measurement in line with requirement	Data collected by reputable source in line with global standards	Nationally representative , in line with definition	Published in 2019, updated every few years	Downloadable – multiple formats, easy to access	Data is documented and well- defined, measurement in line with requirement
% of households that rent their dwelling - National	Rental	35%	2019	Data sourced from Kenya FinAccess 2019 survey: "rented"	Data is documented and well defined	Measurement in line with requirement	Data collected by reputable source in line with global standards	Nationally representative , in line with definition	Published in 2019, updated every few years	Downloadable – multiple formats, easy to access	Data is documented and well- defined, measurement in line with requirement
% of the adult population that borrowed formally - National	Finance	19%	2019	Data sourced from Kenya FinAccess 2019 survey - current credit usage "formal"	Data is documented and well defined	Data based on current credit usage instead of last 12 months	Data collected by reputable sources in line with global standards	Nationally representative , in line with definition	Published in 2019	Downloadable – multiple formats, easy to access	Data based on current credit usage; does not match definition

Generally, the quality of data sourced from the KNBS is good. The main shortcomings are as a result of data that is not nationally representative or doesn't quite match the stipulated indicator definition

Kenya National Bureau of Statistics

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
% of households that can afford the cheapest, newly built developer by a formal developer or contractor - Urban	Affordability	14.2%	2019	Calculated using data from FinAccess Survey, C- GIDD CBK, CAHF consultants	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	Published in 2019, updated annually	Calculated by CAHF and published annually in country yearbook profile	Measurement error in underlying data

COMPONENTS OF THE AFFORDABILITY CALCULATION	*Kenya*	Source	Assessment
1 What does the house cost?	**KSh 4 000 000**	*Tsavo Real Estate*	
2 How is the purchase financed?	**Mortgage** Max term: **25 years** Min deposit: **20%** Interest rate: **11.3%**	*Commercial banks* *Commercial banks* *CBK*	
3 What is the monthly instalment?	**KSh 32 060.07**	*Calculation*	
4 What percentage of income is allocated to repayments?	**30%**	*Assumption*	
5 What is the minimum income that makes this instalment affordable?	**KSh 106 862.20**	*Calculation*	
6 What percentage of households earn at least this income?	**14.2%**	*CGIDD*	

Generally, the quality of data sourced from the KNBS is good. The main shortcomings are as a result of data that is not nationally representative or doesn't quite match the stipulated indicator definition

Kenya National Bureau of Statistics

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Improvements to dwellings as a % of household expenditure – National	Home improvements	3.7%	2020	Data collected from Consumer Price Indices and Inflation Rates for July 2020	Data is documented and well defined	Data includes furnishings, household equipment and routine household maintenance	Data provided by government authority	Nationally representative , in line with definition	Published in 2020, released monthly	Downloadable – multiple formats, easy to access	Data does not match definition
% of households without access to basic waste collection services – National	Municipal management	83%	2016	Data sourced from KNBS Integrated Household Budget Survey 2015/16	Data is documented and well defined	Measurement in line with requirement	Data provided by government authority	Nationally representative, in line with definition	Published in 2016, released every few years	Downloadable – multiple formats, easy to access	No indication of when data will be updated
Average household size -National	Demographics	3.3	2016	Data sourced from KNBS Integrated Household Budget Survey 2015/16	Data is documented and well defined	Measurement in line with requirement	Data provided by government authority	Nationally representative, in line with definition	Published in 2016, released every few years	Downloadable – multiple formats, easy to access	No indication of when data will be updated

Supporting the Data Agenda: The KNBS data repository is rich and substantial. A key opportunity exists in curating data with an explicit housing lens.

Kenya National Bureau of Statistics

Key Recommendations

Unlock	• CAHF, FSDKenya and others could extract and analyse household data to close data gaps • Integrated Household Budget Survey: Bottom 40 data (including access to services like waste collection and rental data) and data on home improvements exists but is in raw format
Disseminate	• Economic Survey: Some data is collected and disseminated but not easy to find/access (e.g. data in construction chapter on housing loans and residential building construction). The KNBS could publish separate chapters and disseminate construction data to improve accessibility
Disaggregate	• Population and Housing Census: Bottom 40 data may exist but raw data is not disseminated (consider a 10% sample) • The KNBS is well-positioned to make raw data available to enable analysis of household data. This will allow for useful household-level analysis based on formality and type of residence (urban/rural). This could also facilitate standardised cross-country comparisons. This data could also be triangulated against C-GIDD income data
Gather	• Economic Survey: Much of the published data (including the number of houses completed and employment data) is for Nairobi only which does not allow for a nationally representative analysis. There may be opportunities for the KNBS to gather and publish data from other municipalities • Integrated Household Budget Survey: Survey is outdated with no indication of when new budget survey will be conducted. It is not clear what additional household surveys will be conducted in Kenya in light of post-COVID austerity measures. CAHF and FSDK should clarify this • Real Estate Survey: This survey has not yet been published but offers an important opportunity for KNBS to track Kenya's Affordable Housing Programme • Where there are opportunities to do so, CAHF and FSDKenya should collaborate with the KNBS to refine household questionnaires in future so that data is generated on key indicators

Supporting the Data Agenda: The KNBS data repository is rich and substantial. A key opportunity exists in curating data with an explicit housing lens.

Kenya National Bureau of Statistics

Key Recommendations

Proposed way forward?

KNBS, CAHF, FSDKenya, and Reall form a working group to support better reporting on Kenya's Affordable Housing Programme within the overall residential property sector, and to explore:

- Real Estate Survey and Kenya's house price index
- Value chain data attention
- Macro-economic & demand side data
- Articulating the B40 and how to grapple with informality
- KNBS as the repository for value-chain data from counties / other government agencies, with standardised frameworks

CAHF and FSDKenya to produce a digital dashboard for inclusion on the KNBS website, drawing in data from across KNBS surveys, explicitly speaking to the Affordable Housing Programme

Kenya's Data Landscape: All institutions in Kenya's housing value chain generate data, whether for private or public use, or simply as a by-product of their business. We have reviewed the key institutions that generate and disseminate pertinent data

Key data producers and custodians in Kenya

Regulator / Government Department		Private Institution / Industry Body		NGO	DFI
Central Bank of Kenya	Kenya National Bureau of Statistics	Kenya Bankers Association and other lenders	Kenya Property Developers Association and other developers	Reall	World Bank / IFC
Ministry of Lands & Physical Planning	National Land Commission	Association of Microfinance Institutions of Kenya	National Cooperative Housing Union	FSD Kenya	AfDB
National Treasury	Nairobi City County	TransUnion, Creditinfo, Metropol	Haas Consult	CAHF	DHS Program
		Kenya Mortgage Refinance Company	Institute of Quantity Surveyors		

Central Banks

Central banks are as important to a country's data ecosystem as Statistic Bureaus, collecting data on many financial institutions that operate within their borders

This data is typically collected from different financial institutions (e.g. commercial banks, developmental financial institutions, community banks, microfinance banks, etc.) by means of a statutory return that must be completed on a regular basis (typically monthly)

While there are some differences across countries, most central banks will collect data on credit extension and the 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

Banks And Mortgage Financers

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

From the Central Bank of Kenya Act, Chapter 491

(1) The principal object of the Bank shall be to formulate and implement monetary policy directed to achieving and maintaining stability in the general level of prices.

(2) The Bank shall foster the liquidity, solvency and proper functioning of a stable market-based financial system.

(3) Subject to subsections (1) and (2), the Bank shall support the economic policy of the Government, including its objectives for growth and employment.

(4) The Minister may by notice in writing to the Bank, specify for purposes of this sections –

(a) the price stability targets of the government, and

(b) the economic policy to be taken by the Government

(5) The Minister shall specify at least in every period of 12 months, the price stability target in consultation with the Bank and economic policies to be taken by the Government; provided that the first such specification shall be made at the beginning of the financial year next following the commencement of this section.

(6) Where the Minister gives notice under this section, the Minister shall:

(a) publish the notice in such a manner as the Minister considers fit; and

(b) lay a copy of the notice before the appropriate committee of the National Assembly.

From the CBK website:

Mandate and Objectives

The mandate and objects of the Central Bank of Kenya are provided for under Sections 4 and 4A of the Central Bank of Kenya (CBK) Act, which set out the Bank's objects as follows:

i. To formulate and implement Monetary Policy directed to achieving and maintaining stability in the general level of prices.
ii. To foster the liquidity, solvency and proper functioning of a stable market-based financial system.
iii. To support the economic policy of the Government including its objectives for growth and employment.

Without prejudice to the generality of the above, other objects of the Bank are:

i. To formulate and implement foreign exchange policy.
ii. To hold and manage foreign exchange reserves.
iii. To license and supervise authorized dealers.
iv. To formulate and implement such policies as best promote the establishment, regulation and supervision of efficient and effective payment, clearing and settlement systems.
v. To act as banker and adviser to, and as fiscal agent of the Government.
vi. To issue currency notes and coins.

Overview of the Central Bank of Kenya

The Central Bank Of Kenya

The Central Bank of Kenya (CBK) is responsible for formulating monetary policy to achieve and maintain price and financial stability

The CBK is a useful source of data, hosting extensive macroeconomic and financial data as well as additional publications in the form of reports, releases and journals

As at December 31 2018, the CBK regulated 43 banking institutions (42 commercial banks & 1 mortgage finance company), 9 representative offices of foreign banks, 13 Microfinance Banks (MFBs), 3 Credit Reference Bureaus (CRBs), 19 Money Remittance Providers (MRPs), 8 non-operating bank holding companies and 70 foreign exchange (forex) bureaus.

The CBK releases a number of regular publications containing useful financial data

Central Bank of Kenya

Financial Data

Monetary Policy Report

- Latest version: April 2018
- Released bi-annually
- Dataset contains:
  - ǿ Exchange rates,remittance and performance oftreasury bills
  - ǿ Key weeklymarket indicators
  - ǿ Government domestic debt by instrument and instrument and holder
- Reports for 2018 data and previous data are available for download on the CBK website
- Raw data and metadata not available for download

Bank Supervision & Banking Sector Reports

- Latest version: 2019
- Released Annually
- Dataset contains:
  - ǿ Residential mortgage data and mortgage loan characteristics (size, interestrate etc…)
  - ǿ Residential mortgage data for individual commercial banks
  - ǿ NPLs by sector includingbuilding/ construction
  - ǿ Sectoral distribution of loansacross banking sector including real estate and household loans but not residential mortgages
  - ǿ Commercial bank lendingrates
- Reports for 2019 data and previous data are available fordownload on the CBK website
- Raw data and metadata not available for download

CBK Report

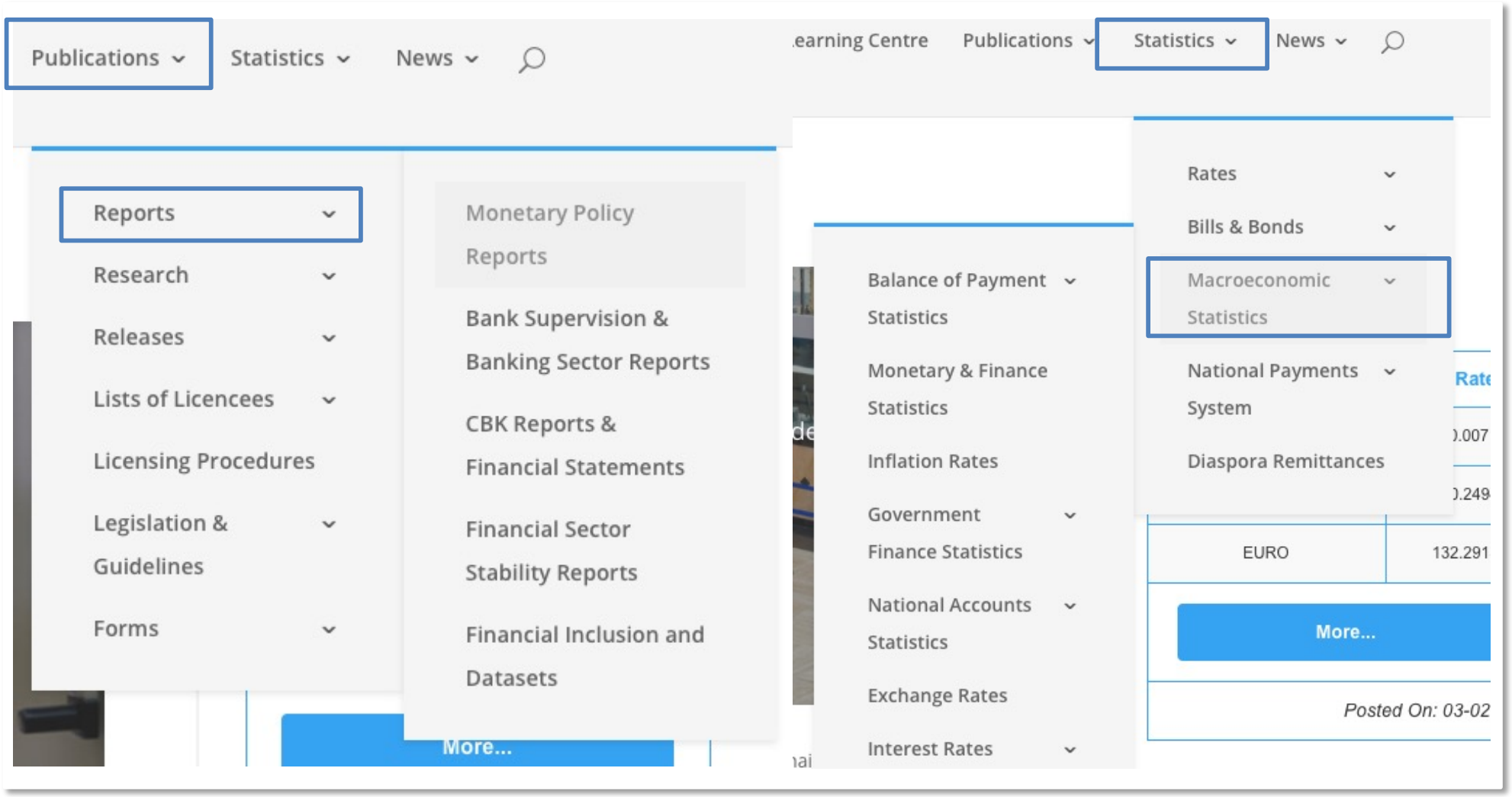
- Latest version: 2020
- Released Annually
- Dataset contains:
  - ǿ Government budget and credit to government, public and private sector
  - ǿ Interest and exchange rates
  - ǿ NPLs by sector
  - ǿ Financial statements
- Reports for 2020 data and previous data are available for download on the CBK website
- Raw data and metadata not available for download

Financial Stability Report

- Latest version: 2018
- Released Annually
- Dataset contains:
  - ǿ Private sector credit
  - ǿ Selling price and rental priceindices (sourced from Hass Consult)
  - ǿ Value of building plans approved
  - ǿ sourced from the NBS
  - ǿ Share of financial sector assets to GDP (including pensions, SACCOs)
  - ǿ Sectoral distribution of loans including building/construction & real estate
  - ǿ Analysis of pensions industryassets including immovable property and government securities
- Reports for 2018 data and previousdata are available for download on the CBK website
- Raw data and metadata not available for download

The screenshots below demonstrate how the CBK website categorises data and where the relevant data can be accessed

Central Bank of Kenya



The screenshots below were taken from the Banking Supervision Report. Here, it would be useful for the CBK to provide additional information on what is encapsulated in data labelled 'real estate'

Central Bank of Kenya

Screenshots: Banking Supervision Report

Table 18: Sectoral Distribution of Loan Accounts, Gross Loans and NPLs-December 2019

	No of Loan A/Cs	% of Total	Gross Loans Ksh. M	% of Total	Gross NPLs Ksh. M	% of Total
Personal and Household	7,861,097	93.81	745,047.97	27.69	56,953.91	16.95
Trade	276,206	3.30	512,314.00	19.04	88,453.23	26.33
Real Estate	28,055	0.33	396,349.63	14.73	48,065.11	14.31
Manufacturing	19,764	0.24	352,189.88	13.09	53,893.69	16.04
Transport and Communication	38,415	0.46	186,390.34	6.93	19,233.62	5.73
Building and construction	12,293	0.15	108,973.10	4.05	24,386.30	7.26
Financial Services	17,698	0.21	102,381.27	3.80	6,819.33	2.03
Energy and water	2,910	0.03	100,532.78	3.74	11,013.39	3.28
Agriculture	115,511	1.38	89,579.05	3.33	16,841.32	5.01
Tourism, Restaurant and Hotels	6,764	0.08	77,695.78	2.89	8,281.55	2.47
Mining and Quarrying	1,131	0.01	19,455.74	0.72	1,987.76	0.59
Total	**8,379,844**	**100.00**	**2,690,910**	**100.00**	**335,929**	**100.00**

Source: Central Bank of Kenya

Are these mortgages?

i) The value of mortgage loan assets outstanding increased from Ksh.224.9 billion in December 2018 to Ksh.237.7 billion in December 2019, representing a growth of Ksh.12.8 billion or 5.71 percent due to increased appetite for home ownership.

iv) There were 27,993 mortgage loans in the market in December 2019 up from 26,504 in December 2018 an increase of 1,806 loan accounts or 6.90 percent.

The table below was taken from the Banking Supervision Report. This table shows an error under Ecobank Kenya Ltd where the number of mortgage accounts and the number of mortgage NPLs accounts appear to be reversed

Central Bank of Kenya

Screenshots:

Banking Supervision Report

APPENDIX XIII : RESIDENTIAL MORTGAGES MARKET DEVELOPMENT SURVEY DECEMBER 2019

		Dec-18					Dec-19				
	Institution	Mortgage Outstanding (Ksh. M)	% of the Mortgage Market	No. of Mortgage Accounts	Value of NPLs. Mortgage (Ksh. M)	No. of Mortgage NPLs.Accounts	Mortgage Outstanding (Ksh. M)	% of the Mortgage Market	No. of Mortgage Accounts	Value of NPLs. Mortgage (Ksh. M)	No. of Mortgage NPLs. Accounts
1	KCB Bank Kenya Ltd	64,303.00	27.05	7,602	4,979.00	534	66,134.00	27.82	8,404	5,143.00	559
2	HFC Ltd	33,706.00	14.18	5,073	5,110.00	518	40,066.00	16.85	4,717	11,652.00	533
3	Stanbic Bank Kenya Limited	25,645.00	10.79	2,084	1,222.00	162	28,380.00	11.94	2,224	1,830.00	201
4	Standard Chartered Bank Kenya Limited	25,912.33	10.90	2,038	454.94	63	21,983.00	9.25	2,042	669.00	97
5	Absa Bank Kenya Plc	9,692.00	4.08	1,079	269.00	33	12,594.00	5.30	1,242	423.00	49
6	The Co-operative Bank of Kenya Limited	11,725.00	4.93	1,192	1,211.00	72	11,646.00	4.90	1,274	1,656.00	94
7	Equity Bank Ltd	9,740.00	4.10	1,891	997.00	169	10,872.00	4.57	1,955	1,052.00	198
8	NCBA Bank Plc	7,342.00	3.09	1,348	194.00	24	10,133.00	4.26	1,283	789.00	87
9	Family Bank Ltd	5,450.86	2.29	759	875.85	152	7,161.80	3.01	863	834.50	81
10	SBM Bank Kenya Limited	2,836.79	1.19	154	2,175.26	81	3,239.56	1.36	199	2,276.78	98
11	Bank of Africa Ltd	3,615.91	1.52	384	218.71	63	2,996.00	1.26	374	52.00	6
12	Development Bank of Kenya Limited	3,350.00	1.41	527	96.00	91	2,950.00	1.24	617	875	90
13	I&M Bank Ltd	3,936.00	1.66	468	338.00	31	2,546.00	1.07	314	387.00	37
14	Consolidated Bank of Kenya Limited	665.32	0.28	123	161.00	31	2,272.31	0.96	293	621.75	48
15	DIB Bank Kenya Ltd	722.24	0.30	45	7.75	1	2,163.93	0.91	70	55.30	3
16	First Community Bank Ltd	1,936.00	0.81	158	644.00	41	2,108.00	0.89	218	727.00	40
17	National Bank of Kenya Ltd	1,979.00	0.83	309	119	20	1,953.00	0.82	324	142.00	21
18	Bank of Baroda Ltd	1,212.50	0.51	127.00	103.41	10	1,268.79	0.53	128	35.91	2
19	Diamond Trust Bank of Kenya Ltd	842.00	0.35	78	52.00	6	980.00	0.41	90	52.00	6
20	Guardian Bank Ltd	982.40	0.41	42	210.01	4	880.00	0.37	32	259.00	150
21	Gulf African Bank Ltd	604.52	0.25	81	8.06	3	751.00	0.32	154	-	-
22	African Banking Corporation Ltd	547.95	0.23	62	86.77	9	707.44	0.30	658	75.77	6
23	Sidian Bank Ltd	1,010.00	0.42	176	186.00	44	621.00	0.26	109	211.00	47
24	Ecobank Kenya Ltd	594.18	0.25	104	60.90	18	550.60	0.23	84	52.00	645
25	Victoria Commercial Bank Ltd	75.00	0.03	6	-	-	328.00	0.14	14	17.00	1.
26	Paramount Bank Ltd	278.59	0.12	20	15,660.00	3	254.00	0.11	19	18.00	3
27	Bank of India	289.80	0.12	21.00	-	-	252.70	0.11	22	-	-
28	Prime Bank Ltd	187.00	0.08	23	31.00	1	195.00	0.08	21	10.00	1
29	Middle East Bank Kenya Limited	41.00	0.02	5	13.00	1	42.00	0.02	5	34.00	3
30	Jamii Bora Bank Ltd	2,734.00	1.15	249	1,827.00	101	1,294.60	0.54	223	840.16	82
31	Spire Bank Ltd	414.00	0.17	22	144.00	1	390.80	0.16	21.	183.40	5.
32	UBA Kenya Bank Ltd	3.88	0.00	1	-	-	-		-	-	-
33	NIC Bank PLC***	2,506.50	1.05	253	611.56	37					
34	Chase Bank (K) Ltd**	-		-							

If Saccos provide mortgages, who reports on their activity?

Screenshots: Financial Stability Report

Table 4: Value of Building Plans Approved (KSh Millions)

Month	Actual Value of Buildings			Real Actual Value of Buildings			
	Residential	Non-Residential	TOTAL	Residential	Non-residential	2018 Total	2017 Total
Jan	13,122.47	6,824.92	19,947.39	154.20	78.25	232.45	236.83
Feb	10,917.29	9,822.84	20,740.13	128.29	112.62	240.91	230.14
Mar	12,810.54	6,607.25	19,417.78	150.53	75.75	226.28	252.06
April	-	-	-	-	-	-	254.48
May	12,917.29	7,122.58	20,039.87	151.79	81.66	233.45	257.99
June	13,409.58	7,207.25	20,616.83	157.57	82.63	240.20	267.76
July	10,624.92	7,201.69	17,826.61	124.85	82.57	207.42	242.8
Aug	10,735.63	4,880.78	15,616.41	126.15	55.96	182.11	-
Sept	11,132.49	6,147.54	17,280.03	130.82	70.48	201.30	279.94
Oct	9,696.37	8,082.13	17,778.50	113.94	92.66	206.60	372.92
Nov	15,319.80	9,354.40	2,4674.20	180.02	107.25	287.27	191.13
Dec	11,152.41	5,206.55	16,358.96	131.05	59.69	190.74	219.16
Total	**31,838.80**	**78,457.93**	**21,0296.70**	**1,549.21**	**899.52**	**2,448.73**	**2,805.21**

Source: KNBS actuals deflated by recent construction cost indices (Dec 1972 = 100), - No Building plans approved

The CBK hosts a wide range of macroeconomic data, much of which is accessible through the KNBS. However, the CBK's data is categorised, significantly improving data accessibility

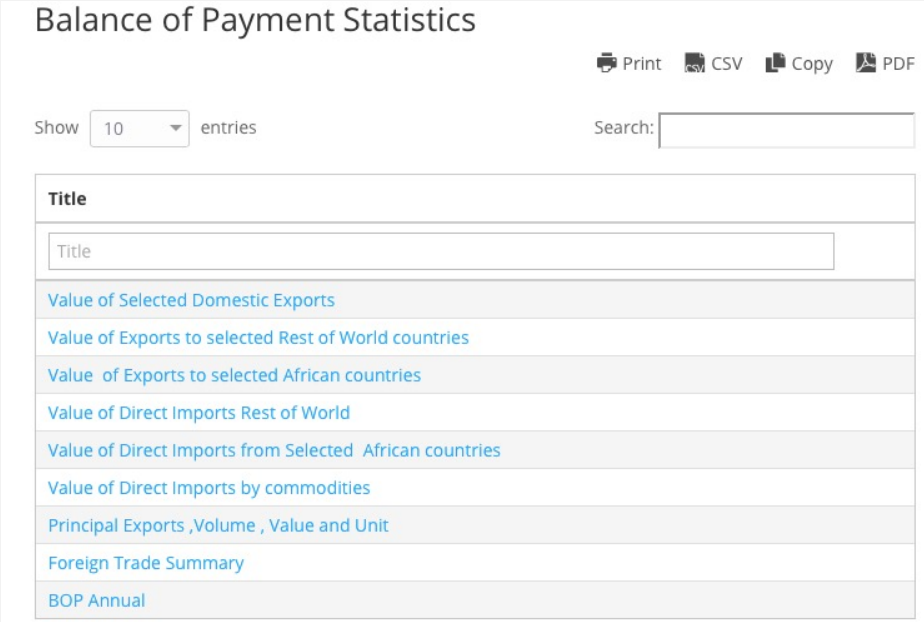
Central Bank of Kenya

Macroeconomic Data CBK

The CBK's macroeconomic data includes:

- Balance of Payment statistics
- Monetary and Finance statistics
- Inflation rates, exchange rates and interest rates
- Weighted average lending rates for commercial banks
- Government Finance Statistics
- National Account Statistics

This data can be accessed in table format from the website. It can also be downloaded in .csv and .pdf formats. The data is released on a monthly basis and is recent (i.e. as at November 2020, most data was last updated in February 2020).



The CBK releases a number of regular publications containing useful macroeconomic data

Central Bank of Kenya

Key Publications

Weekly Bulletin

- Latest version: Nov 2020
- Released weekly
- Dataset contains:
  - Exchange rates,remittance and performance oftreasury bills
  - Key weekly marketindicators
  - Government domesticdebt by instrument and holder
- Reports for 2020 data and previous data are available for downloadon the CBK website
- Metadata available fordownload

Monthly Economic Indicators Report

- Latest version: June 2020
- Released monthly
- Dataset contains:
  - CPI and inflation rate data by income group
  - Credit and interest
  - rates
  - Real sector indicators including construction
- Reports for 2020 data andprevious data are available for download on the CBK website
- Metadata available fordownload

Quarterly Economic Review

- Latest version: 2019
- Released quarterly
- Dataset contains:
  - CPI and inflation rate data
  - Credit and interest rates
  - GDP by sector including construction and real estate
  - Exchange rates
  - Banking sector loans and NPLs as reported in the Banking Supervision Report
- Reports for 2019 data and previous data are available fordownload on the CBK website
- Metadata available for download

Statistical Bulletin

- Latest version: 2019
- Released Bi-annually
- Dataset contains:
  - Summarised and detailed accounts of banking system
  - Government finance data
  - Sectoral credit data including
  - building & construction
  - GDP by activity including construction and real estate, CPI data and selected economic indicators
- Reports for 2019 data and previous data are available fordownload on the CBK website
- Metadata available fordownload

The CBK also disseminates extensive financial data. Generally, the data is recent (updated in 2020 as at November 2020), easy to access and frequently released. This data can be accessed in table format from the website. It can also be downloaded in .csv and .pdf formats

Financial Data CBK

- Treasury bonds and Treasury bills (91, 192 and 364 day)
- Exchange rates, interbank rates, repo rates, central bank rates
- National payments system data, including ATM and transaction data, cheque and EFT data
- Remittance data
- A directory of licensed commercial banks, mortgage finance institutions and authorised non-operating holding companies

The CBK website hosts various other regular and one-off publications and reports, licensing procedures, legislation and guidelines and forms

Other Data CBK

Importantly, the CBK publishes extensive metadata outlining the analytical frameworks and sources of data as well as guideline notes for the compilation of banking statistics. This includes lists of commercial banks, mortgage finance companies, central government bodies, local government bodies and non-financial public enterprises.

Additionally, the CBK website publishes research conducted by CBK researchers (books, journals, working papers and discussion papers) on financial integration, economic growth and other important topics.

Accessing metadata on the CBK website is significantly easier than on the KNBS website, where it is difficult to locate raw or metadata for key publications

Central Bank of Kenya

The following indicators were sourced from the CBK

Central Bank of Kenya

VALUE CHAIN

Land & Infrastructure

- No indicators

Construction & Investment

- No Indicators

Sales & Rental

- Number of residential mortgage providers National: 31
- Prevailing residential mortgage rate – National: 11.3%
- Value of residential mortgages outstanding in local currency unit – National: KES 237.7 Bn
- Number of residential mortgages outstanding – National: 27 993
- GAP: Value of residential mortgages issued per annum in local currency units
- GAP: Number of residential mortgages issued per annum
- Non-performing residential mortgages as a % of total outstanding residential mortgages – National: 11.4%
- Mortgages as a % of properties – National: 0.7%
- Value of residential mortgages outstanding as % of GDP – National: 2.7%
- % of the adult population that borrowed formally – National: 19%
- % of urban households that can afford the cheapest, newly built house by a formal developer or contractor in an urban area – Urban: 6.1%

CONTEXT

Maintenance & Management

- Number of microfinance providers – National: 14
- Value of microfinance loans in local currency units – National: KES 46.7 Bn

Enabling Environment

- No Indicators

Economic Environment

- Yield on 2-year government bonds – National: 10.3%
- Yield on 10-year government bonds – National: 11.5%
- USD Exchange rate (1 USD = x LCU): 108.004

Demand

- No indicators

As shown in the assessment below, the data sourced from the CBK is generally recent, documented and well-defined

Central Bank of Kenya

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Number of residential mortgage providers - National	Finance	31	2019	Data sourced from Bank Supervision Annual Report 2019	Data is documented and well defined	Measurement in line with requirement	Data provided by government authority	Nationally representative , in line with definition	Published in 2019; released annually	Downloadable – publication, easy to access	Data provided by a regulatory authority
Value of residential mortgages outstanding in local currency units - National	Finance	KES 237.7 Bn	2019	Data sourced from Bank Supervision Annual Report 2019	Data is documented and well defined	Measurement in line with requirement	Data provided by government authority	Nationally representative , in line with definition	Published in 2019; released annually	Downloadable – publication, easy to access	Data provided by a regulatory authority
Number of residential mortgages outstanding - National	Finance	27,993	2019	Data sourced from Bank Supervision Annual Report 2019	Data is documented and well defined	Measurement in line with requirement	Data provided by government authority	Nationally representative , in line with definition	Published in 2019; released annually	Downloadable – publication, easy to access	Data provided by a regulatory authority
Non-performing residential mortgages as a % of total outstanding residential mortgages – National	Finance	11.4%	2019	Data sourced from Bank Supervision Annual Report 2019	Data is documented and well defined	Measurement in line with requirement	Data provided by government authority	Nationally representative , in line with definition	Published in 2019; released annually	Downloadable – publication, easy to access	Data provided by a regulatory authority

As shown in the assessment below, the data sourced from the CBK is generally recent, documented and well-defined

Central Bank of Kenya

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Mortgages as a % of properties - National	Finance	0.7%	2019	Data sourced from Bank Supervision Annual Report 2019 and Registration of Title in Land Draft Report published by the National Land Commission	Data is documented and well defined	Properties figure based on number of titles registered in Kenya	Data provided by government authorities	Nationally representative , in line with definition	Published in 2019; released annually	Downloadable – publication, easy to access	No indication of when National Land Commission publication will be updated
Value of residential mortgages outstanding as % of GDP - National	Finance	2.7%	2019	Data sourced from Bank Supervision Annual Report 2019	Data is documented and well defined	Measurement in line with requirement	Data provided by government authority	Nationally representative , in line with definition	Published in 2019; released annually	Downloadable – publication, easy to access	Data provided by a regulatory authority
Number of microfinance providers - National	Finance	14	2019	Data sourced from Bank Supervision Annual Report 2019	Data is documentedand well defined	Measurement in line with requirement	Data provided by government authority	Nationally representative , in line with definition	Published in 2019; released annually	Downloadable – publication, easy to access	Data provided by a regulatory authority
Value of microfinance loans in local currency units - National	Finance	KES 46.7 Bn	2019	Data sourced from Bank Supervision Annual Report 2019	Data is documentedand well defined	Measurement in line with requirement	Data provided by government authority	Nationally representative , in line with definition	Published in 2019; released annually	Downloadable – publication, easy to access	Data provided by regulatory authority

Recommendations for Financial Data provided by the CBK

Central Bank of Kenya

Key Recommendations

Unlock

- CAHF or FSDK could regularly collate and republish succinct housing and housing finance related statistics published by the CBK

Disseminate

- Some key reports were last released in 2018. Ensure that reports are released as required (i.e. annually, quarterly, monthly)
- Critical data on mortgages is disseminated, but in an appendix to another document. It is easy to miss

Disaggregate

- Transactions data generated by lenders and credit bureaus could significantly improve public understanding of credit access and performance in Kenya

Gather

- Systematically gather data on LTV, loan term, interest rates and fees, number of loans granted per annum
- Who will be gathering and reporting data on mortgages granted by Saccos? In what publication?

Kenya's Data Landscape: All institutions in Kenya's housing value chain generate data, whether for private or public use, or simply as a by-product of their business. We have reviewed the key institutions that generate and disseminate pertinent data

Key data producers and custodians in Kenya

Regulator / Government Department		Private Institution / Industry Body		NGO	DFI
Central Bank of Kenya	Kenya National Bureau of Statistics	Kenya Bankers Association and other lenders	Kenya Property Developers Association and other developers	Reall	World Bank / IFC
Ministry of Lands & Physical Planning	National Land Commission	Association of Microfinance Institutions of Kenya	National Cooperative Housing Union	FSD Kenya	AfDB
National Treasury	Nairobi City County	TransUnion, Creditinfo, Metropol	Haas Consult	CAHF	DHS Program
		Kenya Mortgage Refinance Company	Institute of Quantity Surveyors		

Overview of Ministry of Lands and Physical Planning

Relevant Legal Acts

Ministry of Lands and Physical Planning

- The Ministry of Lands and Physical Planning (MLAPP) aims to facilitate improvement of Kenyans' livelihood through efficient administration, equitable access, secure tenure and sustainable management of Land resources throughout the country
- The Ministry has digitised over three million land records and also maintains a library of the filed paper records for reference. They have records dating back to 1900 which are securely stored in both digital and paper format. A report on this is available on the Ministry website. They provide an online portal for landowners and buyers to carry out transactions such as search, transfer of ownership etc. The steps to do a search using the portal are set out at https://fanaka.co.ke/how-to-perform-an-online-land-search-in-kenya/. A land search shows the full name of the owner, the approximate size of the land, and whether there is any claim on the land. A land search costs Ksh 500

The MLAPP website also has a resources tab which includes:

- Media resources
- Forms regarding the Land Registration Act and Community Land Act
- Guidelines and Standards which include the National Spatial Plan and land registration regulations
- There are also pdf maps available for the country for 1924 and present day

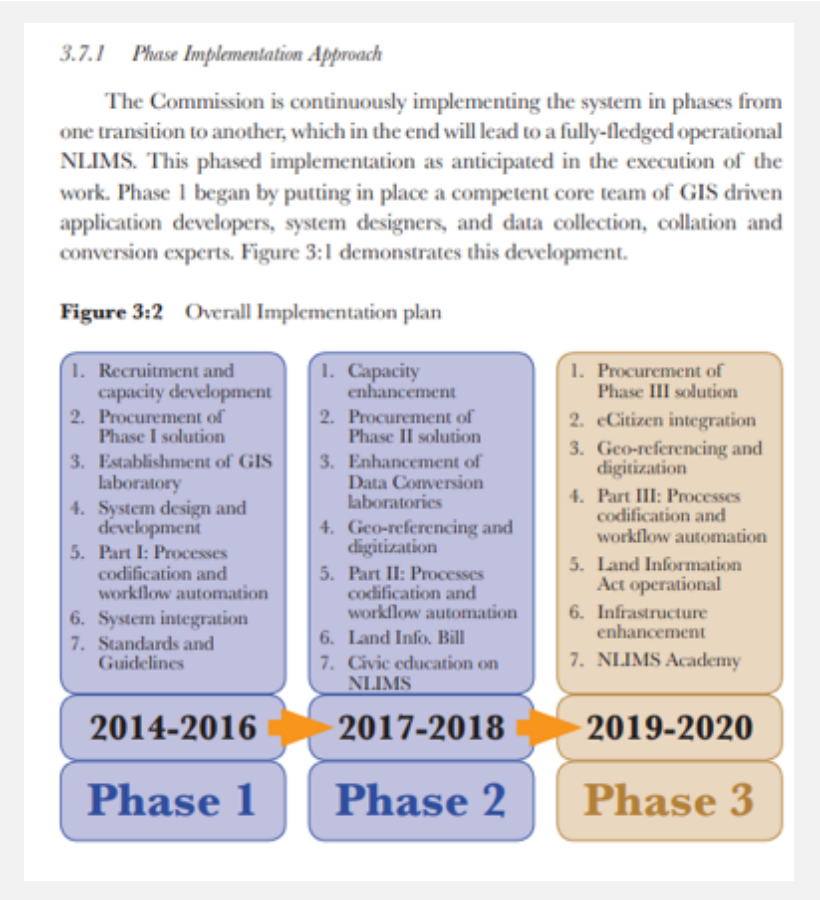
The website also has tabs dedicated to listing all the tenders of the ministry the programs and project that are currently running and the services that they provide.

National Land Commission Act 2012

- An Act which makes additional provisions regarding the functions and powers of the National Land Commission, in accordance with Article 60 of the Constitution and the National Land Policy. The Act provides for the responsibilities and other functions of the Commission in accordance with Article 67(3) of the Constitution. Furthermore, the Act provides for the identification of a chairperson, eight members and secretary of the Commission and it outlines how the Commission will cooperate with county governments and other relevant institutions
- Under this Act, the Commission must keep record of all income, expenditure, assets and liabilities. The accounts should be submitted to the Auditor-General at the end of every financial year. Before each financial year, the Commission should provide estimates of revenue and expenditure for that year. These estimates should be approved by the National Assembly
- The Act also requires that the Commission shall produce an annual report under Article 254 of the Constitution which consists of financial statements, activity descriptions, information on registration of title and land, recommendations to government and relevant entities, Commission impediments and any other information deemed important by the Commission. In addition, the Commission may develop a land information system to manage public land efficiently and transparently

National Land Commission

- The mission of the National Land Commission (NLC) is "To facilitate sustainable land use in Kenya through a holistic land policy, efficient land management practices, equitable access to land, comprehensive land registration and applying appropriate land dispute handling mechanisms."
- The NLC derives its mandate from the Constitution of Kenya 2010, the National Land Policy of 2009 and acts of Parliament, namely the National Land Commission (NLC) Act, the Land Act and the Land Registration Act, all of 2012
- Its mandate includes, amongst others, to:
- Manage Public land on behalf of the national and county governments
- Recommend a National Land Policy to the national government
- Advise the national government on a comprehensive program for the registration of title in land throughout Kenya
- Conduct research related to land and the use of natural resources, and make recommendations to appropriate authorities
- Notable resources on their website includes Country Spatial Planning Toolkits and their 2015/16 Annual Report. No more recent updates on the annual report are available despite the requirement that the commission publish a report each year
- No data is published on the number of titled residential properties, sales etc



3.7.1 Phase Implementation Approach

The Commission is continuously implementing the system in phases from one transition to another, which in the end will lead to a fully-fledged operational NLIMS. This phased implementation as anticipated in the execution of the work. Phase 1 began by putting in place a competent core team of GIS driven application developers, system designers, and data collection, collation and conversion experts. Figure 3:1 demonstrates this development.

Figure 3:2 Overall Implementation plan

The following indicators were sourced from the Ministry of Lands & National Land Commission

Ministry of Lands & Physical Planning
National Land Commission

VALUE CHAIN

Land & Infrastructure

- Average land costs per m2 – Partner: 1 291.62
- Total number of residential properties with a title deed – National: 4 060 000

Construction & Investment

- GAP: Time (in days) from application to completion for dwellings in the main urban city – Nairobi

Sales & Rental

- GAP: Resale transactions as a % of all residential transactions – National
- GAP: Number of new residential transfers – National
- GAP: Number of residential resale transactions – National
- GAP: Number of residential transfers financed with a mortgage – National
- Mortgages as a % of properties – National: 1%

CONTEXT

Maintenance & Management

- No indicators

Enabling Environment

- No indicators

Economic Environment

- No indicators

Demand

- No indicators

The data sourced from the National Land Commission did not match the stipulated indicator definitions

Ministry of Lands & Physical Planning
National Land Commission

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Total number of residential properties with a title deed - National	Land title	4,060,000	2018	Data collected from Registration of Title in Land Draft Report published by the National Land Commission	Data is documented and well defined	Figure based on number of titles registered in Kenya not the number of residential titles	Data provided by government authority	Nationally representative , in line with definition	Published in 2018. No indication of when publication will be updated	Downloadable – publication, easy to access	Data not aligned with definition. No indication of when publication will be updated
Mortgages as a % of properties - National	Finance	0.7%	2019	Data sourced from Bank Supervision Annual Report 2019 and Registration of Title in Land Draft Report published by the National Land Commission	Data is documented and well defined	Properties figure based on number of titles registered in Kenya	Data provided by government authorities	Nationally representative , in line with definition	Published in 2019; released annually	Downloadable – publication, easy to access	No indication of when National Land Commission publication will be updated

Very little data is published from the Ministry of Lands and Physical Planning and the National Land Commission. There is an opportunity for the Ministry to publish the data it does collect however, to support a better understanding of Kenyan residential property markets.

Ministry of Lands & Physical Planning
National Land Commission

Key Recommendations

Unlock

- Very little data is published so there is very little to unlock

Disseminate

- The Ministry of Lands should publish indicators and reports on residential transfers (including raw land sales, registration and sale of new units and residential resale transactions). The Ministry of Lands and Physical Planning is well-positioned to do this as it already has the data
- The Ministry is currently developing and implementing a National Land Management System to ensure access to land data as well as a credible land valuation database. Key indicators can be generated off this data and should be published by the Ministry of Lands / National Land Commission

Disaggregate

- The Ministry of Lands should make available underlying transactions data so that third parties can augment and add value to the data

Gather

Kenya's Data Landscape: All institutions in Kenya's housing value chain generate data, whether for private or public use, or simply as a by-product of their business. We have reviewed the key institutions that generate and disseminate pertinent data

Key data producers and custodians in Kenya

Regulator / Government Department

- Central Bank of Kenya
- Kenya National Bureau of Statistics
- Ministry of Lands & Physical Planning
- National Land Commission
- National Treasury
- Nairobi City County

Private Institution / Industry Body

- Kenya Bankers Association and other lenders
- Kenya Property Developers Association and other developers
- Association of Microfinance Institutions of Kenya
- National Cooperative Housing Union
- TransUnion, Creditinfo, Metropol
- Haas Consult
- Kenya Mortgage Refinance Company
- Institute of Quantity Surveyors

NGO

- Reall
- FSD Kenya
- CAHF

DFI

- World Bank / IFC
- AfDB
- DHS Program

Overview of the National Treasury

National Treasury

- The National Treasury is a government ministry tasked with formulating financial and economic policies and managing the Kenyan Government's finances at a national and county level. The Treasury listed the provision of affordable and decent housing for all Kenyans as part of its "Big Four Agenda"
- The National Treasury has published comprehensive budget data including annual budget policy statements and quarterly economic and budgetary reviews from 2007-2020/21 in publication format. This report presents data on recent economic and fiscal developments (including government revenue and expenditure) and public debt. The Budget review includes revenue figures for construction, real estate and other infrastructure
- In addition, annual sector reports on health, education, education, environment, social protection, energy, infrastructure, and ICT are published. The report on Energy, Infrastructure and ICT publishes key performance indicator expenditure and budget data on housing and urban development and government housing delivery
- In addition to budget data, the National Treasury hosts various other publications in the form of reports, circulars, bills and acts, regulations, public debt management, agreements, and guidelines. Other information is contained in speeches, news releases and general press releases

Overview of the Nairobi City County

Nairobi City County

- The Nairobi City County website has a vast amount of information available with regards to the local government
- Some of the most important services are provided to residents through its online platform. You can pay some bills through the ePayments Portal and apply for development permits through the eDevelopment Permit System
- The website also has a resources tab under which noteworthy news, tenders and notices are published. In addition, the downloads library contains several development plans, laws and legislations and annual reports
- The most informative downloads for the purposes of this document are their Annual Development Plan (2019/2020) and Draft Annual Development Plan (2020/2021)

Indicators sourced from other government ministries, in this case, the Nairobi City County

National Treasury
Nairobi City County

VALUE CHAIN

Land & Infrastructure

- Regulated minimum size of a residential plot in urban areas in square meters – Urban: 500

Construction & Investment

- No indicators

Sales & Rental

- Does an operational mortgage refinancing company exist? – National: Yes

CONTEXT

Maintenance & Management

- Number of residential properties that are rated for property taxes in the main urban centre – Nairobi: 165 000

Enabling Environment

- No indicators

Economic Environment

- No indicators

Demand

- No indicators

As detailed below, data sourced from other government ministries is not nationally representative and is not sufficiently documented nor well-defined

National Treasury
Nairobi City County

INDICATOR	COMPONENT	VALUE	YEAR	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	Land Assembly	500	2004	Data collected from Guide of Nairobi City Development Ordinances and Zones published by City Council of Nairobi	Meaning of data is clear	Measurement in line with definition	Data was triangulated with other sources	Data sourced from City Council of Nairobi – may not be nationally representative	Published in 2004	Downloadable – publication, easy to access	Data is outdated and may not be nationally representative
Number of residential properties that are rated for property taxes in the main urban centre – Nairobi	Municipal management	165,000	2017	Data collected from thesis on Assessment of Equity in Property Taxation in Niarobi City, University of Nairobi	Lacks detailed source description and collection methodology	Measurement in line with requirement	Data originally sourced from Nairobi City County	Representative of main urban city, in line with requirement	Published in 2017	Downloadable – publication, easy to access	Lacks detailed source description and collection methodology

Recommendations for data provided by other government ministries

National Treasury
Nairobi City County

Key Recommendations

Unlock

Disseminate

- The Nairobi City County should 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
- Other larger counties should likewise publish indicators on plans submitted, approved, units completed, turnaround times and costs

Disaggregate

- The Nairobi City County (and other counties) should make available detailed data on units completed to enable analysis of activity in the affordable segment of the market

Gather

Kenya's Data Landscape: All institutions in Kenya's housing value chain generate data, whether for private or public use, or simply as a by-product of their business. We have reviewed the key institutions that generate and disseminate pertinent data

Key data producers and custodians in Kenya

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Ministry of Lands & Physical Planning	National Land Commission	Association of Microfinance Institutions of Kenya	National Cooperative Housing Union	FSD Kenya	AfDB
National Treasury	Nairobi City County	TransUnion, Creditinfo, Metropol	Haas Consult	CAHF	DHS Program
		Kenya Mortgage Refinance Company	Institute of Quantity Surveyors		

Overview of Kenya's Private Sector Institutions

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 Kenya Bankers Association (KBA), Kenya Property Developers Association (KPDA), Association of Microfinance Institutions of Kenya (AMFI), the Kenya Mortgage Refinance Company (KMRC), Hass Consult and the National Cooperative Housing Union (NACHU)

The AMFI and NACHU websites do not provide any useful information for the purposes of this study. The most useful websites are those of the KBA and KPDA

Kenya Bankers Association and other lenders	Kenya Property Developers Association and other developers	Reall
Association of Microfinance Institutions of Kenya	National Cooperative Housing Union	FSD Kenya
TransUnion, Creditinfo, Metropol	Haas Consult	CAHF
Kenya Mortgage Refinance Company	Institute of Quantity Surveyors	

Kenya Property Developers Association (KPDA)

The KPDA was established in Nairobi in 2006 as the representative body of the residential, commercial, and industrial property development sector in Kenya

Their mission is to promote the involvement of the private sector in development through advocacy, education, research and ethical standards

The KPDA has an affordable housing taskforce

It publishes a monthly report on permitting activity based on statistics from the Nairobi City County Government

Some of the most useful information on the website can be found in the Industry Reports section which serves as a repository for all property-related reports

The website also has a membership directory and a resource centre tab that includes the association's monthly notes as well as several pieces of legislation that impacts their members

Housing Developers

In some instances, contacting individual housing developers (or visiting their websites) may be the only way to access 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

Kenya Bankers Association (KBA)

The KBA is the financial sector's leading advocacy group and the umbrella body of the institutions licenced and regulated by the Central Bank of Kenya (CBK) with a current membership of 47 financial institutions

The KBA aims to reinforce a reputable and professional banking sector to support Kenyans, who entrust their ambitions and hard-earned resources with its member banks. The KBA was registered as an Industry Association on 16th July 1962 by the Registrar of Trade Unions

The KBA website includes links to the KBA house price index publication. The index is based off a hedonic model using "a sample, not the population. Data representing over 80 percent of the mortgage portfolio of banks, data from the National Housing Corporation is utilised". KBA member data derived from mortgage lending activity. It is not clear whether underlying data includes all mortgage applications / loans granted across all KBA members. Publications include data on the number of observations that underpin the index which may be a useful proxy for the number of mortgages granted. By way of example, in Q3 2020 there were 57 observations, 90 in Q2 and 147 in Q1

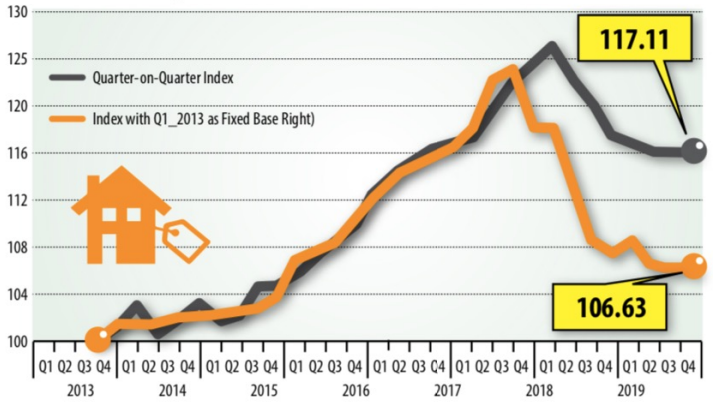
A state of the banking industry report from June 2019 is also available although the report does not reference mortgage or real estate lending activity. The website also has a tab dedicated to consumer information which includes a mortgage calculator to help consumers assess the Total Cost of Credit

The KBA House Price Index was designed to track house prices in Kenya. The dataset is based on a sample, not the population. It uses data from the National Housing Corporation which represents over 80% of the mortgage portfolio of banks

Kenya Property Developers Association & other developers

KBA House Price Index

Figure 2: KBA – House Price Index Evolution



Overview of Kenya's Private Sector Institutions

Haas Consult

HASS Consult

- Hass Consult is a real estate company which offers investment-grade developments in Nairobi
- It publishes the Hass Index, Kenya's first property index
- The index is published quarterly and measures the mix adjusted average house price for middle and upper sections of the market for detached homes, semi-detached houses and apartments.
- The index is published for significant number of towns and suburbs in Nairobi.
- The reports can be accessed on the Hass Consult website

The Hass Property Index is a quarterly figure that measures the mix adjusted average house price for middle and upper sections of the market for detached homes, semi-detached houses and apartments

HAAS Property Index

The Hass Composite Sale Index	Quarter % Change	Annual % Change	Change From 2007
All Properties	-1.2 %	-0.2 %	1.48 Fold
Segment with Highest Quarterly Increase in Sale Price	Apartments in Langata (+2.3 % over last quarter)		
Segment with Lowest Quarterly Increase in Sale Price	Apartments in Kilimani (-2.8 % over last quarter)		
Segment with Highest Annual Increase in Sale Price	Houses in Loresho (+6.7 % over last year)		
Segment with Lowest Annual Increase in Sale Price	Apartments in Kileleshwa (-9.9% over last year)		

Source

The majority of house price information is derived from sources in the public domain, and drawn from Hass own data, more than 30 other estate agencies in Nairobi, several online property portals, social media, newspapers and magazines. Many different data sources have allowed the development of the Composite Price series which is the Average Offer Price of all properties listed of the relevant property type in the 3 months prior to the end of the relevant quarter.

Kenya Mortgage Refinance Company

- The KMRC was established as part of the Government's Big 4 agenda
- It aims to support affordable housing in Kenya
- It is a non-deposit taking financial institution supervised by the CBK and primarily provides long-term funds to primary mortgage lenders including Banks, Microfinance Banks and SACCOs
- The KMRC's products include affordable housing and market housing loans
- The KMRC website publishes an Annual Report which includes detailed financial statements. Beyond this, there is no useful data hosted on the website

The screenshots below provide an overview of the KMRC website and the data it provides. The KMRC primarily publishes data on its financial position which is contained in its annual report

Kenya Mortgage Refinance Company

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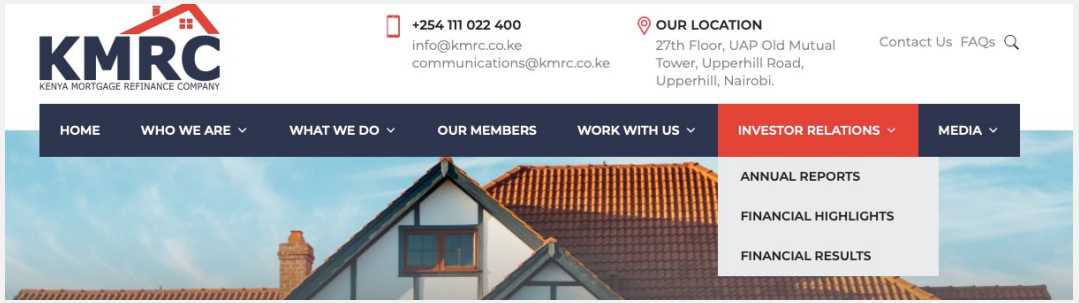

Statement of Financial Position

	Note	2019 Kshs
Assets		
Cash and Bank	9	2,269,227,540
Other Receivables	10	497,926
Property and Equipment	12	5,129,843
Total Assets		2,274,855,309
Liabilities And Equity		
Liabilities		
Trade and Other Payables	13	25,444,686
Tax Payable	8	8,982,681
Deferred Tax Liability	11	956,758
		35,384,125
Equity		
Share Capital	14	1,291,000,100
Contribution Pending Allotment	15	683,999,900
Revenue Reserves		264,471,184
		2,239,471,184
Total Liabilities And Equity		2,274,855,309

The screenshots below highlight important information contained in the KMRC's Annual Report on its lending operations as well as an online post on a Sh.2.75 billion loan disbursed to primary mortgage lenders

Its important to note that 80% of World Bank credit line is earmarked for affordable housing which is a loan of up to KES. 4million in Nairobi metropolitan area (Nairobi, Kiambu, Machakos & Kajiado) and up to KES. 3 million elsewhere. The difference, 20% will be available for upper middle income housing. On the other hand, 40% of AfDB funds will be used to refinance mortgages of up to KES. 5million and 60% will go into refinancing mortgages of up to 8million. For purposes of affordable housing, the borrower's income threshold is KES. 150,000 per month.

Commencement of Lending Operations

In preparation for commencement of lending operations, management has been putting in place the necessary structures to ensure KMRC is ready to start its core business. The Company's policies and internal control structures were developed and are already in use. Additionally, key staff have been onboarded and are currently going through fit & proper assessment by the CBK. Further, the following other critical milestones have been achieved:

Portfolio review

In October 2019, KMRC conducted a portfolio review of its 20 participating financial institutions to determine existence of portfolio that meets KMRC eligibility criteria. The review identified a potential aggregate housing loan portfolio of KES 50.3 billion that could be potentially refinanced by KMRC. However, in view of the effect of Covid-19 pandemic in the financial markets, KMRC will review the portfolio afresh in order to ascertain actual portfolio that could be refinanced once a license is granted.

Further, KMRC with the support of the World Bank commissioned a consultant to review participating institutions' mortgage underwriting processes and

This will enable the financial institutions that are not currently offering mortgages to develop a roadmap for building mortgage loan portfolios that meet KMRC's threshold. Capacity building support was also provided to the Sacco Societies Regulatory Authority (SASRA) in order to ensure the regulators mortgage lending guideline and approvals are aligned with KMRC requirements.

License from CBK

KMRC applied for a license from the CBK in September 2019. The Company met the substantial licensing requirements and the CBK granted an approval in principle in March 2020. However, the Regulator imposed additional requirements that the Company is required to fulfil before grant of full license. This included finalization of fit & proper assessment for all Directors and key staff, deployment of an ICT system and risk management framework and availability of KMRC's own office premises for inspection by the Regulator. The Company has submitted all fit & proper requirements for the Directors and key staff to the Regulator and has moved into its own office premises. At the same time, deployment of an ICT system is ongoing, thus all the additional requirements have been met save for the ongoing implementation of the ICT system. It is important to note that grant of an operational license by the CBK is a condition precedent for disbursement of funds by World Bank, AfDB and IFC.

Looking forward

KMRC is starting operations during unprecedented times.

Kenya, like other countries globally is expected to have

HOME | WHO WE ARE | WHAT WE DO | OUR MEMBERS | WORK WITH US

AFFORDABLE HOUSING

KMRC LENDS OUT SH.2.75B FOR AFFORDABLE HOUSING

Nairobi: Thursday, December 17, 2020: The Kenya Mortgage Refinancing Company (KMRC) has today disbursed Sh.2.75 billion to participating primary mortgage lenders (PMLs)

KCB Bank, HF Bank, Stima Sacco and Tower Sacco have each received Sh.2.13 billion, Sh.514million, Sh.69 million and Sh.29 million respectively, marking KMRC's debut lending since its start. This first disbursement is drawn from the World Bank line of credit.

This initial lending, provided at a fixed rate of 5% per annum, will help mortgage lenders create new mortgages in the market on long term-tenor within single digits rates.

The 4 institutions made successful applications and demonstrated a refinanceable mortgage portfolio of 1400 mortgages, which acts as the collateral for the funding.

According to KMRC's Chief Executive Officer Johnstone Oltetia, the Sh. 2.75 billion is part of a Sh.4.5 billion mortgage loan portfolios available for immediate refinancing to participating financial institutions. KMRC is drawing down funds from both the World Bank and African development Bank lines of credit thus participating financial institutions are encouraged to submit applications for refinancing.

"Today's disbursement of funds marks a historic new dawn in affordable housing finance in Kenya. It illustrates the legal, structural and strategic foundations that we have been putting in place since inception for a fit for-purpose mortgage refinance company," said Mr. Oltetia.

There are more participating institutions who are at an advanced stage of accessing funding from KMRC. They are presently preparing their mortgage portfolio based on KMRC's eligibility criteria, and once submitted KMRC will review and release more funding in due course" said Mr. Oltetia.

Overview of Kenya's Private Sector Institutions

Institute of Quantity Surveyors
•TransUnion, Creditinfo, Metropol

The Institute Of Quantity Surveyors (IQSK)

- The IQSK was established in 1994 as an institute to bring together and advance quantity surveyors in Kenya. Their mission is to promote excellent service delivery, regulate and enforce quantity surveying practices and promote collaboration with professional organisations that represent quantity surveyors regionally
- The most useful information on the IQSK website is provided in the Quantity Surveyor Journal and the Building and Construction Costs Handbook
- These publications provide construction costs for Nairobi, the Coastal area and the Western area. (e.g. concrete, walling, roof coverings etc...). The Quantity Surveyor publication publishes construction costs for different kinds of residential buildings and includes a list of paid IQSK members

Credit Bureaus

- Three credit reference bureaus were explored, namely TransUnion, Creditinfo and Metropol
- Information on bureaus' websites focuses on product offering
- 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

Overview of Kenya's Private Sector Institutions

FSD Kenya

- Financial Sector Deepening Kenya (FSK) is a not-for-profit organisation which aims to promote financial inclusion by improving access to financial services for low- income individuals in Mozambique
- FSDK is part of a network of nine FSD organisations working across Sub-Saharan Africa
- FSDK publishes a range of publications and blogs centred around financial inclusion and financial sector development including the FinAccess Household Survey Report, in partnership with the CBK and the KNBS
- The report is focused on financial inclusion trends (benchmarked with countries in the region) and financial service needs. The report contains useful data on digital connectivity, credit needs and accessibility, financial services and service providers including SACCOs and mobile money operators

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
- C-GIDD provides access to income distribution data derived using expenditure data, however, it is protected by a paywall
- PopulationPyramid.net
- Transparency International (Corruption Index)

Private Sector Indicators: Some indicators are collected from private sector participants because they are not published by regulatory authorities. The coverage and accuracy of the data is compromised

Private Sector and NGOs

VALUE CHAIN

Land & Infrastructure

- % of land for residential development acquired from the private sector – Partner: 100%
- Number of procedures to register residential property – Partner: 9
- Name of residential property registration procedure that takes the longest to complete – Partner: Preparation of the sub-titles
- Time to register residential property (days) – Partner: 100
- % of residential development projects where developers are paying for bulk infrastructure or the building of roads – Partner: 100%

Construction & Investment

- Size of cheapest, newly built dwelling by a formal developer or contractor in an urban area in square meters – Urban: 47
- GAP: Size of cheapest, newly built dwelling by a formal developer or contractor in an urban area in square meters – Partner
- Cost of standard 50kg bag of cement in local currency units – National: KES 650
- Total cost of all residential construction permit-related procedures in local currency units – Partner: KES 35 000

Sales & Rental

- % of dwellings with female or joint ownership of a dwelling – Partner: 53%
- Typical rental price for cheapest, newly built dwelling by a formal developer or contractor in local currency units – Urban: KES 23 000
- Number of formal estate agents – National: 421
- Maximum residential mortgage term – National: 25
- Number of end-user finance loans disbursed or mobilised for purchases of dwellings – Partner: 19
- Income distribution thresholds – National: Populated
- Price of the cheapest, newly built dwelling by a formal developer or contractor in local currency units – Urban: KES 4 000 000
- Maximum dwelling price affordable to B40 households based on market mortgage finance terms – B40: KES 1 142 991
- Maximum dwelling rent affordable to B40 households – B40: KES 14 933

CONTEXT

Maintenance & Management

- Number of approved building permit applications for improvements to residential properties – National: 957

Enabling Environment

- No indicators

Economic Environment

- No indicators

Demand

- Population pyramid – National: Populated
- Number of households – National: 13 926 946
- Number of households – Urban: 5 659 046
- Country income pyramid – National: Populated
- List of main urban centres – National: Nairobi, Mombasa

Where data is made publicly available by private sector institutions, it may be provided sporadically and partially, and often with the objective of building reputational capital in higher income segments of the market. The non-uniformity of data coupled with unsynchronised releases constraints one's ability to take sector/nationally representative views

Private Sector and NGOs

INDICATOR	COMPONENT	VALUE	YEAR	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	Stock	47	2019	Data sourced from Tsavo Real Estate website	Lacks information on data collection methodology	Measurement in line with requirement	Data triangulatedwith sales agent	Data sourced from one real estate company – may not be nationally representative	Published in 2019	Data can be accessedonline	Data is based on one real estate company website – may not be nationally representative
Cost of standard 50kg bag of cement in local currency units – National	Building materials	KES 650	2020	Data is an average of cement prices provided by four main cement manufacturers	Meaning ofdata is clear	Measurement in line with requirement	Triangulated with other online sources	Average of four main cement manufacturers - possibility of sampling bias	Collected in2020	Data can be accessed online	Based on data from four manufacturers - may not be nationally representative
Typical rental price for cheapest, newly built dwelling by a formal developer or contractor in local currency units - Urban	Rental	KES 23,000	2019	Data sourced by CAHF consultant through phone call with Property24 sales agent	Lacks information on data collection methodology	Measurement in line with requirement	Data could not be triangulated with other sources	Figures are variable – may not be nationally representative	Collected in2019	Data not accessible remotely	Rent prices for advertised housing units vary significantly based on agent/property manager

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Private Sector and NGOs

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIV E	TIMELY	ACCESSIBLE	FINAL SCORE
Number of formal estate agents - National	Transactions	421	2020	Data sourced from Real Agents Registration Board in Kenya Gazette, April 2020	Meaning ofdata is clear	Measurement in line with requirement	Data provided by government authority	Nationally representative , in line with definition	Published in 2020, updated regularly	Downloadable – publication, easy to access	Data provided by a regulatory authority
Maximum residential mortgage term - National	Finance	25	2020	Data sourced from various commercial banks in Kenya	Meaning of data is clear	Data is the maximum mortgage term offered by commercial banks	Data provided by Kenyan commercial banks	Data based on various commercial banks = possibility of sampling bias	Published in 2020	Data can be accessedonline	Data based on various commercial banks = possibility of sampling bias
Price of the cheapest, newly built dwelling by a formal developer or contractor in local currency units - Urban	Affordability	KES 4,000,000	2019	Data collected by CAHF consultant from Tsavo Real Estate website	Lacks information on data collection methodology	Measurement in line with requirement	Data triangulatedwith sales agent	Data sourced from one developer's website – may not be nationally representative	Published in2019	Data can be accessed online	Lacks information on data collection methodology. Data is based on one real estate company website – may not be nationally representative

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Maximum residential mortgage term - National	Finance	25	2020	Data sourced from various commercial banks in Kenya	Meaning of data is clear	Data is the maximum mortgage term offered by commercial banks	Data provided by Kenyan commercial banks	Data based on various commercial banks = possibility of sampling bias	Published in 2020	Data can be accessedonline	Data based on various commercial banks = possibility of sampling bias
Price of the cheapest, newly built dwelling by a formal developer or contractor in local currency units - Urban	Affordability	KES 4,000,000	2019	Data collected by CAHF consultant from Tsavo Real Estate website	Lacks information on data collection methodology	Measurement in line with requirement	Data triangulatedwith sales agent	Data sourced from one developer's website – may not be nationally representative	Published in2019	Data can be accessed online	Lacks information on data collection methodology. Data is based on one real estate company website – may not be nationally representative

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Maximum residential mortgage term -National	Finance	25	2020	Data sourced from various commercial banks in Kenya	Meaning of data is clear	Data is the maximum mortgage term offered by commercial banks	Data provided by Kenyan commercial banks	Data based on various commercial banks = possibility of sampling bias	Published in 2020	Data can be accessedonline	Data based on various commercial banks = possibility of sampling bias
Price of the cheapest, newly built dwelling by a formal developer orcontractor in local currency units - Urban	Affordability	KES 4,000,000	2019	Data collectedby CAHF consultant from Tsavo Real Estate website	Lacks information on data collection methodology	Measurement in line with requirement	Data triangulatedwith sales agent	Data sourced from one developer's website – may not be nationally representative	Published in2019	Data can be accessed online	Lacks information on data collection methodology. Data is based on one real estate company website – may not be nationally representative

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Private Sector and NGOs

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Maximum dwelling price affordable to B40 households based on market mortgage finance terms - B40	Affordability	KES 1,142,991	2019	Data sourced from Central Bank of Kenya, C-GIDD and the DHS	Proprietary methodology, lacks detailed description	Measurement in line with requirement	Data collected by a reputable source	Nationally representative , in line with definition	DHS data published in2015	Data available for download – multiple formats, protected by pay-wall	Lack of information on methodology and underlying data sources
Maximum dwelling rent affordable to B40 households – B40	Affordability	KES 14,933	2019	Calculated based on C-GIDD income distribution database and rental prices	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 availablefor download – multiple formats, protected by pay-wall	Lack of information on methodology and underlying data sources
Number of approved building permit applicationsfor improvements to residential properties – National	Home improvements	957	2019	Data collected from KPDA Nairobi City County Government Building Permit Applications Report For January - June 2019	Meaning ofdata is clear	Data includes approved applications between January and June 2019	Data providedto KPDA by Nairobi City County	Data only accounts forNairobi	Published in2019	Downloadable – publication, easy to access	Data accounts for Nairobi applications only - not nationally representative ; Data is for a 6 month period only

Where data is made publicly available by private sector institutions, it may be provided sporadically and partially, and often with the objective of building reputational capital in higher income segments of the market. The non-uniformity of data coupled with unsynchronised releases constraints one's ability to take sector/ nationally representative views

Private Sector and NGOs

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Number of households – Urban	Demographics	5,659,046	2019	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
Country income pyramid – National	Demographics	Populated	2019	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 availablefor download – multiple formats, protected by pay-wall	Lack of information on methodology and underlying data sources

Recommendations for data provided by the Private Sector and NGOs

Key Recommendations: Private Sector and NGOS

Unlock	
Disseminate	• The KMRC has undertaken extensive analysis on mortgage lending. This analysis (aggregated for the sector as a whole) should be shared more widely
Disaggregate	• CAHF's open data initiative: What promise does it hold? • Encourage donors to create more comprehensive and standardised data gathering protocols and templates for projects they fund
Gather	

Kenya's Data Landscape: All institutions in Kenya's housing value chain generate data, whether for private or public use, or simply as a by-product of their business. We have reviewed the key institutions that generate and disseminate pertinent data

Key data producers and custodians in Kenya

Regulator / Government Department		Private Institution / Industry Body		NGO	DFI
Central Bank of Kenya	Kenya National Bureau of Statistics	Kenya Bankers Association and other lenders	Kenya Property Developers Association and other developers	Reall	World Bank / IFC
Ministry of Lands & Physical Planning	National Land Commission	Association of Microfinance Institutions of Kenya	National Cooperative Housing Union	FSD Kenya	AfDB
National Treasury	Nairobi City County	TransUnion, Creditinfo, Metropol	Haas Consult	CAHF	DHS Program
		Kenya Mortgage Refinance Company	Institute of Quantity Surveyors		

Data available from Multilaterals & Development Finance Institutions

The World Bank (WB), International Monetary Fund (IMF), International Finance Corporation (IFC), Demographic and Health Surveys Program of USAID (DHS), International Labour Organisation (ILO), the United Nations Development Programme (UNDP) and the African Development Bank (AfDB) are useful 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.

- The IMF and AFDB host national data summary pages indicating what data are publicly disseminated in line with the IMF's Data Standards Initiatives. 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
- 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.
- 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 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. Unfortunately, the most recent household survey for Kenya was conducted in 2014. However, the next survey will be released in 2021
- Another benefit of the DHS data is the inclusion of a wealth index that enables focus on the poorest 40% of the population (i.e. the Bottom 40)
- The IFC's investment services projects 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
- The UN's Human Development Report database presents Human Development Index (HDI) values and ranks for over 150 countries. The HDI is a summary measure comprised of three indices or dimensions, namely, life expectancy, education and GNI

DFIs publish a number of key publications which facilitate cross-country analysis

Key Publications

World Bank Doing Business Report

- Latest version: 2020
- Released annually
- Dataset contains:
  - Scores/rankings on dealing with construction permits, registering property, getting credit
  - Standardised to allowcross-country comparisons
- Reports for 2020 data and previous data are available for download on the DoingBusiness website
- Raw data and metadata available for download

AFDB Regional Economic Outlook

- Latest version: 2020
- Released annually
- Dataset contains:
  - Macroeconomic performance andprospects
  - Policy implications
  - Jobs, growth and firm dynamism
  - African integrationand economic prosperity
- Reports for 2020 data and previous data are availablefor download on the AfDB website
- Raw data and metadata not available for download

AFDF African Statistical Yearbook

- Latest version: 2019
- Released annually
- Dataset contains:
  - Social and demographic indicators
  - GDP statistics
  - Government finances
  - Economic infrastructure
  - SDG's
- Reports for 2019 data and previous data are availablefor download on the AfDB website
- Raw data and metadata notavailable for download

IMF World Economic Outlook

- Latest version: 2020
- Released bi-annually
- Dataset contains:
  - Real GDP, consumer
  - prices, inflation rates
  - Earnings, productivity,labour costs
  - Labour mobility andfactor allocation
  - Economic activity and
  - welfare
  - Structural reform andpolicies
- Reports for 2020 data and previous data are available fordownload on the IMF website
- Raw data and metadata available for download

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

Additional Publications

MULTILATERALS & DFI's

- 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
- FSD Kenya publishes a range of publications and blogs centred around financial inclusion and financial sector development including the FinAccess Household Survey (in partnership with the NBS, outlined above)
- The World Bank has a number of ongoing projects in Kenya including the Affordable Housing Finance Project which supports the Kenya Mortgage Refinance Company (KMRC). The KMRC will primarily serve SACCOs, microfinance banks and commercial banks
- The World Bank website publishes useful project indicators which include bonds issued and affordable mortgages refinanced and average maturity of mortgages refinanced by KMRC as well as volume of mortgage lending and the percentage of non-performing loans in the residential mortgage sector

The following indicators were sourced from DFIs. Most DFI-sourced data was provided by the DHS

Multilateral and DFIs

VALUE CHAIN

Land & Infrastructure

- GAP: Name of residential property registration procedure that takes the longest to complete - National
- % of households without access to improved drinking water services – National: 41%
- % of households without access to improved drinking water services – B40: 65%
- % of households without access to improved sanitation services – National: 70%
- % of households without access to improved sanitation services – B40: 88%
- % of households without access to electricity – National: 25%
- % of households without access to electricity – B40: 99%

Construction & Investment

- Number of people per sleeping room in formal dwellings – Urban: 2.35
- Number of people per sleeping room in informal dwellings – Urban: 2.45
- Number of people per sleeping room in formal dwellings – B40: 2.41
- Number of people per sleeping room in informal dwellings – B40: 2.93
- GAP: Total cost of all residential construction permit-related procedures in local currency units – National

Sales & Rental

- % of households that own their dwelling – B40: 59%
- Does a foreclosure policy exist? – National: Yes
- % of households that can afford the cheapest, newly built developer by a formal developer or contractor – B40: 0%

CONTEXT

Maintenance & Management

- No Indicators

Enabling Environment

- Human development index (HDI) country ranking: Global – National: 142
- Ease of doing business index rank: Global – National: 61

Economic Environment

- PPP conversion factor for private consumption – National: 50.058
- GDP per capita in current local currency units – National: KES 173 272.3
- GDP growth rate – National: 6.32%
- Unemployment rate – National: 9.3%
- % of individuals aged 15-49 that have not worked in the past 12 months – B40: 30%
- % of population below national poverty line – National: 34%
- Gini coefficient index – National: 0.41

Demand

- Population size – National: 50 221 473
- Population size – B40: 18 679 992
- Population growth rate – National: 2.3%
- Urban population growth rate: 4%
- Population pyramid – B40: Populated
- Average household size – B40: 4.07

Generally, DFI data is well-defined, accessible and available in multiple formats. The major shortcomings associated with DFI data are outdatedness and the irregularity of releases

Multilateral and DFIs

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIV E	TIMELY	ACCESSIBLE	FINAL SCORE
% of households without access to improved drinking water services - National	Infrastructure	41%	2017	Data sourced from World Bank API	Data is documentedand 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 2017, updated every few years	Downloadable – multiple formats, easyto access	Data is documented and well- defined, measurementin line with requirement
% of households without access to improved drinking water services - B40	Infrastructure	65%	2014	Data from DHS Standard Household Survey 2014 – DHS wealth quintiles used to identify B40 households and access to services	Data is documentedand 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 in2014	Data available for download –multiple formats, easy to access	DHS survey data is outdated; no indication of when it will be updated
% of households without access to improved sanitation services - National	Infrastructure	70%	2017	Data sourced from World Bank API	Data is documentedand 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 2017, updated every few years	Downloadable – multiple formats, easyto access	Data is documented and well- defined, measurementin line with requirement
% of households without access to improved sanitation services - B40	Infrastructure	88%	2014	Data from DHS Standard Household Survey 2014 – DHS wealth quintiles used to identify B40 households and access to services	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 2014	Data available for download – multiple formats, easy to access	DHS survey data is outdated; no indication of when it will be updated

Generally, DFI data is well-defined, accessible and available in multiple formats. The major shortcomings associated with DFI data are outdatedness and the irregularity of releases

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
% of households without access to electricity - National	Infrastructure	25%	2018	Data sourced from World Bank API	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 – multiple formats, easy to access	Data is documented and well- defined, measurement in line with requirement
% of households without access to electricity - B40	Infrastructure	99%	2014	Data provided DHS Standard Household Survey 2014 – DHS wealth quintiles used to identify bottom 40 households and access to services	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 2014	Data available for download – multiple formats, easy to access	DHS survey data is outdated; no indication of when it will be updated
Number of people per sleeping room in formal dwellings - Urban	Stock	2.35	2014	Data sourced from DHS Standard Household Survey 2014 - formality based on floor, wall and roof material	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 2014	Downloadable – microdata, easy to access	DHS Survey data is outdated; no indication of when it will be updated
Number of people per sleeping room in informal dwellings - Urban	Stock	2.45	2014	Data sourced from DHS Standard Household Survey 2014 - formality based on floor, wall and roof material	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 2014	Downloadable – microdata, easy to access	DHS Survey data is outdated; no indication of when it will be updated

Generally, DFI data is well-defined, accessible and available in multiple formats. The major shortcomings associated with DFI data are outdatedness and the irregularity of releases

Multilateral and DFIs

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Number of people per sleeping room in formal dwellings -B40	Stock	2.41	2014	Based on DHS Standard Household Survey 2014 – DHS wealth quintiles usedto identify bottom 40 households, formality based on floor, wall androof material	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 2014	Downloadable – microdata, easy to access	DHS Survey data is outdated; no indication of when it will be updated
Number of people per sleeping room in informal dwellings -B40	Stock	2.93	2014	Based on DHS Standard Household Survey 2014 – DHS wealth quintiles usedto identify bottom 40 households, formality based on floor, wall androof material	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 2014	Downloadable – microdata, easy to access	DHS Survey data is outdated; no indication of when it will be updated

Generally, DFI data is well-defined, accessible and available in multiple formats. The major shortcomings associated with DFI data are outdatedness and the irregularity of releases

Multilateral and DFIs

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
% of households that can afford the cheapest, newly built developer by a formal developer or contractor - B40	Affordability	0%	2015	Data sourced from Central Bank of Kenya, C-GIDD and the DHS	Proprietary methodology, lacks detailed description	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	DHS data published in 2015	Calculated by CAHF and published in country yearbook profile	B40 cannot afford cheapest house, regardless of measurement error in underlying data
% of individuals aged 15-49 that have not worked in the past 12 months - B40	Macroeconomi c indicators	30%	2014	Data provided by DHS Standard Household Surveys 2014 – DHS wealth quintiles used to identify bottom 40 households and unemploymen t; labour force data sourced from World Bank, only includes individuals aged 15-49	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 2014	Data available for download – multiple formats, easy to access	DHS survey data is outdated; no indication of when it will be updated

Generally, DFI data is well-defined, accessible and available in multiple formats. The major shortcomings associated with DFI data are outdatedness and the irregularity of releases

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Population pyramid - B40	Demographics	Populated	2014	Data provided by World Bank and DHS 2014 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 2014	Data available for download – microdata, easy to access	DHS survey data is outdated; no indication of when it will be updated
Average household size - B40-	Demographic s	4.07	2014	Data provided by DHS Standard Household Survey 2014 – 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 2014	Data available for download – multiple formats, easy to access	DHS survey data is outdated; no indication of when it will be updated

Recommendations for data provided by DFIs

Key Recommendations : Multilaterals & DFI's

Unlock

- CAHF or FSDK should analyse new DHS data when it becomes available

Disseminate

Disaggregate

Gather

- 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 Source initiative
- There may be an opportunity to engage with the DHS to enrich housing / services related questions in that survey

State of housing data in Kenya

The assessment of data availability and data quality in Kenya's housing sector has highlighted a number of data gaps and limitations regarding available data. Data gaps along various components of the housing value chain affect the ability to accurately measure investment in Kenya's housing sector, measure the contribution of housing to Kenya's economy and measure access to finance and affordability. Majority of the macroeconomic (inflation, GDP and interest rates) and financial data gaps can be closed through the disaggregation of existing data to allow for the analysis of the housing sector.

Private and public sector market players need to be leveraged to access and centralize data that would help improve segmenting the demand side and tracking housing supply. An important step is to develop an institutional data engagement approach to lobby and engage key market players on their important roles in collectively improving Kenya's housing data landscape.

Kenya's Central Bank is attentive to the need to collect and share housing finance data. A review of data gaps found that the provision of disaggregated budget, government expenditure and high-level mortgage data would address the main data gaps. For example, by disaggregating GDP data to provide figures for residential real estate and residential real estate construction, it would allow for high-level analysis of housing sector investment and its economic impact. Another important data gap is the value of development finance institution funding invested in residential real estate in local currency units which hinders tracking of investment in Kenya's housing sector.

Legislation governing the data landscape for affordable housing in Kenya

The review of Kenya's housing data landscape matched legislation and regulations with the specific market players to which they apply, identifying 22 pieces of legislation and regulations that apply to developers/ builders, banks, funders and other lenders, the estate agency sector and government.

- There are eleven pieces of legislation that are most relevant to government sector players. These include the Land Registration and Regulation Act of 2012, Sectional Properties Act of 1987, Land Control Act of 2012, Land Act of 2012, National Land Commission Act of 2012, Physical and Land Use Planning Act of 2019, Housing Act of 1953, National Housing Policy of 2016, Public Finance Management Act of 2012, Urban Areas and Cities Act of 2011, and the Retirement Benefits Act of 1997. While some laws have no significant data dissemination requirements, laws such as the National Housing Policy (2016) encourage the collection and public dissemination of housing-related data.
- There are 8 pieces of legislation that are most relevant to banks, funders and other lenders. These include the Banking Act of 2015, Capital Markets Act of 2012, Civil Servants (Housing Scheme Fund) Regulations of 2004, Capital Markets Acts, The Central Bank of Kenya Act of 2014, Investment Promotion Act of 2004, Microfinance Act of 2006 and the Sacco Societies Act of 2008. The Banking Act of 2015 and Microfinance Act of 2006 provide the Central Bank with regulatory authority to manage the banking and microfinance sectors and to collect relevant financial sector data.
- There are two pieces of legislation that are relevant to developers/ builders. These include National Construction Authority Act of 2011 and Architects and Quantity Surveyors Act. There are no significant data dissemination requirements for the regulation and registration of contractors, architects and quantity surveyors.
- The Rent Restriction Act of 1959 is relevant for the estate agency sector. The Act makes mandatory the keeping of rent books by landlords. This is a significant step towards being able to effectively track and monitor Kenya's rental market.

Kenya has a rich administrative data landscape that can offer valuable insights on the state of the housing market. Much of this is locked in other databases or reports and would be usefully shared with a housing-specific purpose. Key next steps are summarised below with high value interventions highlighted in red

	Kenya National Bureau of Statistics	Central Bank of Kenya	Kenya Ministry of Land & Physical Planning / National Land Commission	County governments (including Nairobi)	Private Sector	DFIs / NGOs
Unlock	Extract and analyse household data to close data gaps, esp. Integrated Household Budget Survey	Regularly collate and republish succinct housing and housing finance related statistics published by the CBK			Extract and analyse data collected by industry bodies with emphasis on the affordable sector.	Analyse new DHS data when it becomes available
Disseminate	Produce a digital dashboard for inclusion on the KNBS website, drawing in data from across KNBS surveys, explicitly speaking to the Affordable Housing Programme	Ensure timely publishing of data. Extract mortgage data in a separate publication so it is easier to access.	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	The KMRC has undertaken extensive analysis on mortgage lending. This analysis (aggregated for the sector as a whole) should be shared more widely	
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	Generate and publish key indicators off the pending National Land Management System. 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	Gather and publish data from municipalities other than Nairobi. Refine household survey questionnaires to respond to housing-investment relevant information needs	Systematically gather data on LTV, loan term, interest rates and fees, number of loans granted per annum. Gather and publish data on mortgages disseminated by SACCOs			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	

A Data Agenda for Housing in Africa: a joint initiative of CAHF, 71point4 and Reall with support from AfD, FSD Africa, the Swedish International Development Agency and the UK's Foreign, Commonwealth and Development Office.

The Centre for Affordable Housing Finance in Africa has been operating as an independent think tank in South Africa since May 2014, pursuing its mission of making Africa's housing finance markets work. Supported by the French and UK governments, as well as other funders and partners, CAHF's work extends across the continent. CAHF brings information to the market place to enable stakeholders in the public and private sector to make policy and investment decisions in favour of improved access to affordable housing. Our emphasis is on the role that finance plays in realising this, and we champion market intelligence—data, market analytics and research—to stimulate investor interest and to support better policy. See www.housingfinanceafrica.org . In driving the Data Agenda for Housing in Africa, CAHF is supported by

71point4 strives to drive change in transformational sectors and, in doing so, contribute to economic development and the well being of consumers. Specialising in data-driven analysis, 71point4 works with a wide array of data types and sources, from 'big data' including administrative and transaction data sets to small, thick data from in-depth interviews and focus groups. Using a combination of research techniques and data analysis tools, 71point4 brings all the findings together to answer key questions and deliver useful insights that set an agenda for action, future data gathering and monitoring of interventions. See www.71point4.com

Reall is a market innovator and impact investor in affordable housing for the bottom 40 percent of the income pyramid in Africa and Asia. Headquartered in the UK and possessing over 30 years' experience in the sector, Reall's priority focus is in Kenya, Nigeria, Uganda, India and Pakistan, with a wider footprint that includes Ghana, Mozambique, the Philippines, and Zimbabwe. Reall and its network of in-country partners specialize in affordable housing and end-user financing solutions, while also tackling systemic political, regulatory, and financial barriers through strategic brokering interventions. By evidencing the cross-cutting developmental impact of housing (contributing to 16 of 17 SDGs) and demonstrating the commercially viable investable opportunity, Reall leverages private sector actors and resources to transform markets and accelerate delivery at scale. See https://www.reall.net/ Reall is funded by