







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

15 July 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 processes of construction. govern the 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.







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, Mozambigue, 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 Mozambique, the partners worked with FSD Mozambique and Casa Real.









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

Management

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.

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 macroeconomic 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.

Land & Construction & Maintenance & Sales & Rental Infrastructure Investment

Enabling Environment







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 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.



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 and critical contextual areas 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: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index scor 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 • I and & 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 Infrastructure 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 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 Construction 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 / & Investment 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 **VALUE CHAIN** 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 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 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 Sales & 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 Rental 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

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

B40 households • Max. dwelling price affordable to typical households based on market mortgage finance terms • Max. dwelling rent affordable to the median household.

Enabling Environment

CONTEXT

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 nvironment

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

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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.







Land & Infrastructure VALUE CHAIN.

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

I AND 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.



-VALUE CHAIN-

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

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.





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

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.

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

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VALUE CHAIN.

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.

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CONTEXT

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.





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

CONTEXT

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 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.

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.

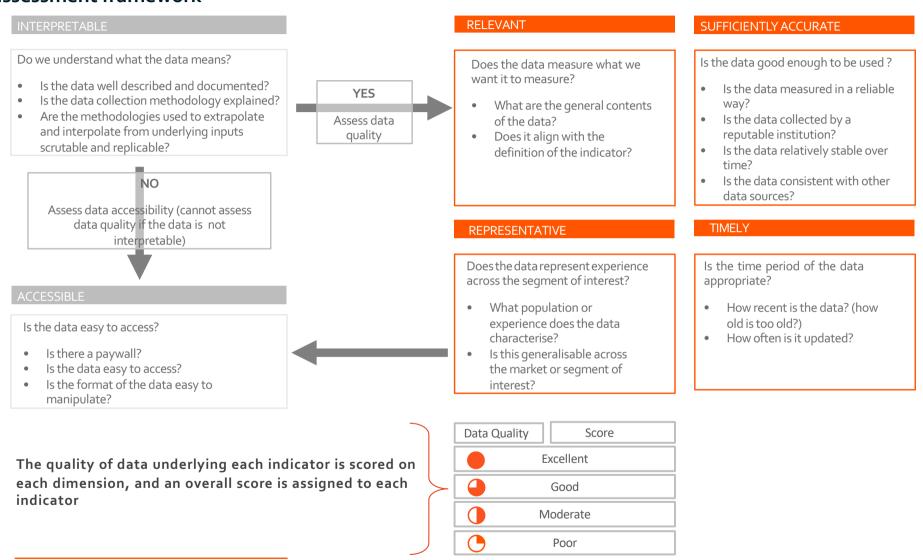








A Data Agenda for Housing in Africa: The quality of each indicator has been assessed using a data quality assessment framework



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

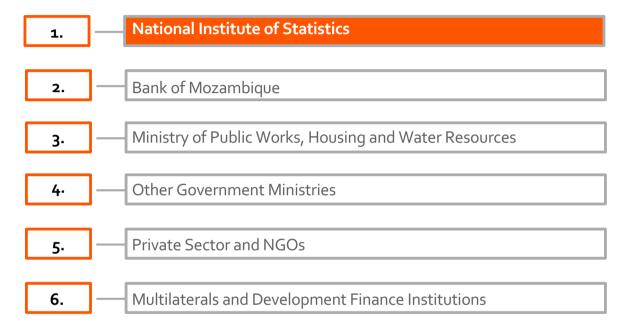






Mozambique's Data Landscape: All institutions in Mozambique's housing value chain generate data, whether for private or public use, or simply as a by-product of their business. We have reviewed the key institutions that generate and disseminate pertinent data

Key data producers and custodians in Mozambique





A General Overview of National Statistics Bureau

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

MOZAMBIQUE'S NATIONAL INSTITUTE OF STATISTICS

- The National Institute of Statistics (Instituto Nacional de Estatística) (INE) plays a critical role in providing and curating data in Mozambique
- The INE is responsible for collecting census data and conducting regular surveys
- As well as household surveys, the INE provides useful macroeconomic, social, and demographic data required to gauge housing demand and the impact of the sector on the larger economy. These are highlighted on the slides that follow

Regulation of Law No. 7/96, 5th July, Law of National Statistical System, 1998

Article 6 - Powers and duties

- 1. INE is responsible for the functions of notation, tabulation, coordination and dissemination of the country's official statistical information.
- 2. The INE has the following attributions:
- a) Notation, calculation, coordination and dissemination of the statistical data that may be mandated by the Government under its annual activity plan approved by the Minister of tutelage taking into account the general lines of national statistical activity and respective priorities defined by the CSE under the terms of paragraph a) of article 18 of Law no. 7/96, of 5 July, and the opinion of the CSE on that plan under the terms of paragraph b) of said article 18;
- b) Without prejudice to the performance of the duties referred to in the previous paragraph, proceed with statistical operations that make it possible to satisfy, in economically viable terms, the specific needs of statistical users, public and private, whose satisfaction whether requested by them and covered financially.
- 3. Under the terms of no. 4 of article 15 and article 21, both of Law no. 7/96, of 5 July, and no. 2 of article 4 of Presidential Decree no. 9/96, of 28 August, the structure executive of the Coordinating Council of the General Population Census will be guaranteed by INE.





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

National Institute of Statistics (INE)

Macroeconomic Data

NATIONAL ACCOUNTS OF MOZAMBIQUE

CPI REPORTS

SUMMARY OF ECONOMIC SITUATION

ECONOMIC ACTIVITY INDEX

- Latest version: February 2020
- Released quarterly
- Dataset contains:
 - GDP estimates and tables of the main macroeconomic aggregates of the Annual National Accounts 2011 to 2017 and 2018 (preliminary values) at current and constant prices
 - Quarterly GDP figures by industry including construction
- Reports for 2020 data and previous data are available for download on the INE website
- Raw data and metadata available for download

- Latest version: January 2021
- Released monthly
- Dataset contains:
 - Monthly inflation & cumulative inflation data
 - Contribution of housing, electricity, gas and water and furniture, home furnishings, household equipment and routine maintenance to inflation
- Reports for 2020 data and previous data are available for download on the INE website
- Raw data available for download

- Latest version: January 2021
- Released quarterly
- Dataset contains:
 - GDP data by industry including construction
 - Cement sales and import volume data
 - Inflation and interest rate data
- Reports for 2020 data and previous data are available for download on the INE website
- Raw data and metadata not available for download

- Latest version: September 2020
- Released monthly
- Dataset contains:
 - Indices including turnover, monthly changes in turnover, employment, variation in monthly employment, remuneration, monthly variation in remuneration for activities including commercial real estate, personal and household repair of aoods
- Reports for 2020 data and previous data are available for download on the INE website
- Raw data and metadata not available for download





Screenshots

CONTRIBUIÇÃO MENSAL EM DEZEMBRO DE 2020

Quadro 2. Contribuição por classes

Descrição	Contrib
Produtos alimentares e bebidas não alcoólicas	1.22
Bebidas alcoólicas e tabaco	0.00
Vestuário e calçado	0.01
Habitação, água, electricidade, gás e outros comb	0.00
Mobiliário, artigos de decoração, equipamento do	0.05
Saúde	0.00
Transportes	-0.02
Comunicações	0.00
Lazer, recreação e cultura	0.01
Educação	0.00
Restaurantes, hotéis, cafés e similares (inclui caté	0.23
Bens e serviços diversos	0.03
Total	1.52

Monthly Contribution to CPI CPI Report

Quadro 4a. PIB Trimestral por Ramos de Actividade: Valores constantes acumulados nos Últimos 4 Trimestres (106MT)

Ano	Trimetres	Agricultura	Pescas	Ind. Extraç. Mineira	Industria Transformadora	Electricidade Gaz e Água	Construção	Comércio e Serv. Reparação	Hoteis e Restaurantes	Transportes, Armazenagem e Informação e Comunicações	Serviços Financeiros	Alug. Imo. Serv. Prest. Emp.	Administração Publica	Educação	Saúde e Acção Social	Outros Serviços	Valor Acrescentado	Impostos sobre produtos	PIB a preços de mercado
2018	1	140,309	9,423	44,536	51,250	18,358	11,431	62,172	11,816	65,578	32,941	31,200	42,048	38,994	9,739	4,967	574,762	69,448	644,210
	2	142,146 142,695	9,482	45,585 46,749	51,449 51,653	18,079 17,921	11,423 11,302	62,311 62,533	11,664 11,922	66,030 66,875	34,154 34,199	31,515 31,874	43,729 43,132	39,076 39,169	9,766 9,780	5,004 5,043	581,413 584,330	70,361 71,231	651,775 655,561
	4	143,386	9,508	48,510	51,797	17,948	11,262	62,801	12,131	68,079	34,640	32,260	42,223	39,263	9,801	5,099	588,707	71,669	660,376
2019	1	144,333	9,580	48,711	52,207	17,624	11,288	63,247	12,165	68,623	34,903	32,657	42,382	39,283	9,880	5,149	592,032	72,383	664,415
	2	144,312	9,639	48,295	52,678	17,497	11,362	63,495	12,257	69,739	35,169	33,038	42,779	39,325	10,042	5,201	594,829	73,633	668,463
	3	144,660	9,586	47,808	52,790	17,669	11,437	63,430	12,334	70,726	35,487	33,372	42,992	39,419	10,127	5,249	597,086	74,568	671,654
	4	145,035	9,685	47,639	52,358	17,808	11,513	62,687	12,380	71,293	35,952	33,632	43,329	39,596	10,192	5,274	598,373	76,688	675,062

Quarterly GDP by Industry: Constant values accumulated in the last 4 quarters National Accounts of Mozambique





The INE releases a number of regular publications containing useful demographic data National Institute of Statistics (INE)

Key Survey Datasets

GENERAL POPULATION AND HOUSING CENSUS

- Latest version: 2017
- Not regularly released
- Dataset contains:
 - Population data by residence area, sex, age, nationality
 - Household size by province and residence area
 - Population by education level, school attendance, residence, sex, age
 - Households by type of housing, residence area, number of occupants
 - Households by durable aoods
 - Population by computer and internet use
- Reports for 2017 data and previous data are available for download on the INE website
- Raw data and metadata not available for download

FAMILY BUDGET SURVEY

- Latest version: 2014/15
- Not regularly released
- Dataset contains:
 - Household income, revenue and expenditure
 - Household durable goods, assets and materials
 - Household access to (and walking distance from) basic services (drinking water, sanitation, energy, health, school, transport, police station
 - Relationship between expenditure level and housing conditions
 - School enrolment rates. attendance and attainment levels
- Reports for 2014/15 data and previous data are available for download on the **INE** website
- Raw data and metadata not available for download

SOCIAL STATISTICS AND INDICATORS

- Latest version: 2014
- Not regularly released
- Dataset contains:
 - Population distributions
 - School and university enrolment rates by sex, student-to-teacher ratio, dropout rate
 - Health services and personnel
 - Social security beneficiaries and contributors by sex, target group
- Reports for 2020 data and previous data are available for download on the INE website
- Raw data and metadata not available for download





National Institute of Statistics (INE)

The screenshots below show the level of detail in the INE's demographic data. Generally, data in published reports disseminated by the INE is disaggregated by characteristics including residence area (urban/rural), age, sex and province

Screenshots

Population by age, residence, sex General Population & Housing Census

QUADRO 2. POPULAÇÃO POR ÁREA DE RESIDÊNCIA E SEXO, SEGUNDO IDADE. MOÇAMBIQUE, 2017 (Continuação)

	1	2	3	4		6					
30 - 34	1 528 432	716 287	812 145	607 117	299 767	307 350	921 315	416 520	504 795		
30	460 914	208 573	252 341	175 148	84 059	91089	285766	124514	161252		
31	243 100	117 455	125 645	98 695	49914	48 781	144 405	67541	76864		
32	358 568	171 536	187 032	141 830	71515	70315	216738	100 021	116717		
33	231 631	108 715	122 9 96	94 483	46 389	48 094	137 148	62326	74822		
34	234 219	110 008	124 211	96 961	47 890	49 071	137 258	62 118	75 140		
35 - 39	1 349 728	626 222	723 506	486 674	237 857	248 817	863 054	388 365	474 689		
35	340 588	165 902	174 686	123 048	62 309	60 739	217540	103 593	113947		
36	210 968	99 079	111 889	84 605	41308	43.297	126 363	57771	68 592		
37	283 613	131 049	152 564	99 056	48 393	50 663	184 557	82656	101901		
38	269 945	120 168	149 777	95 936	45 567	50 369	174 009	74601	99 408		
39	244 614	110 024	134 590	84 029	40 280	43 749	160 585	69744	90841		
40 - 44	1 065 955	509 208	556 747	363 149	177 694	185 455	702 806	331 514	371 292		
40	311 375	145 991	165 384	104 928	51004	53 924	206 447	94987	111460		
41	154 995	73.411	81 584	54 400	26790	27610	100 595	46 62 1	53.974		
42	281 166	139 017	142 149	95 736	48 080	47 656	185 430	90937	94493		
43	186 304	87 454	98 850	62 361	30 029	32 332	123 943	57 425	66518		
44	132 115	63 335	68 780	45 724	21791	23 933	86 391	41544	44847		

Distribution of households by type of housing, according to selected characteristics <u>Family Budget Survey</u>

QUADRO 6.2 DISTRIBUIÇÃO PERCENTUAL DOS AGREGADOS FAMILIARES POR NÚMERO DE PESSOAS EM CADA DIVISÃO PARA DORMIR. MOÇAMBIQUE, 2014/15

Características seleccionadas	Número de pessoas por divisão									
Características seleccionadas	1	2	3	4	5 e mais	Total				
Total	23,8	35,6	21,4	9,1	10,2	100,0				
Área de residência										
Urbano	32,5	39,3	18,4	5,6	4,2	100,0				
Rural	19,9	33,9	22,7	10,6	12,9	100,0				
Provincia										
Niassa	13,9	30,1	25,3	12,9	17,9	100,0				
Cabo Delgado	33,8	38,8	18,7	6,0	2,8	100,0				
Nampula	23,1	42,9	20,8	7,4	5,8	100,0				
Zambézia	20,6	37,2	23,1	9,5	9,5	100,0				
Tete	12,0	25,2	25,8	14,4	22,7	100,0				
Manica	20,5	41,5	23,7	8,2	6,0	100,0				
Sofala	18,3	29,5	21,0	10,9	20,3	100,0				
Inhambane	30,3	27,7	15,8	10,5	15,7	100,0				
Gaza	29,4	33,3	21,6	9,1	6,6	100,0				
Maputo Provincia	36,3	34,5	17,8	5,7	5,6	100,0				
Maputo Cidade	39,4	35,8	15,8	5,1	3,7	100,0				
Quintil de despesas										
Quintil 1	12,5	35,1	25,7	11,8	14,9	100,0				
Quintil 2	16,5	34,8	23,7	11,0	14,0	100,0				
Quintil 3	21,5	35,5	22,3	10,2	10,6	100,0				
Quintil 4	30,5	39,5	19,3	6,2	4,4	100,0				
Quintil 5	53,9	32,8	9,6	2,4	1,2	100,0				





Other Data

ANNUAL STATISTICS REPORT

SECTORAL REPORTS

PROGRESS TOWARD SUSTAINABLE **DEVELOPMENT GOALS REPORT**

COMPANIES IN MOZAMBIOUE: RESULTS OF THE SECOND NATIONAL CENSUS

- Latest version: 2019
- Released annually
- Dataset contains:
 - Population by sex and province
 - Primary and secondary schools by province, enrolment rates by education level, sex, area of studv
 - National health service resources and capacity
 - Interest rate, CPI data including housing water. electricity, gas and furnishing, household equipment and routine household maintenance
 - Bank credit by sector including construction
 - Private investment projects by sector including construction
- Reports for 2017 data and previous data are available for download on the INE website
- Raw data not available for download

- Latest version: 2019
- Released annually
- Construction and Assembly Report dataset contains:
 - Number of plots demarcated
 - Water source coverage rate, water systems built, house connections established
 - Septic tanks, latrines and drainage systems built
 - Investment in construction
- Reports for 2019 data and previous data are available for download on the INE website
- Raw data not available for download

- Latest version: June 2020
- One-off publication
- Dataset contains:
 - Percentage of population living below poverty line by residence, gender, age
 - Government expenditure on essential services
 - Rate of school admission. completion, gender parity index
 - Population with access to safe drinking water. sanitation services. electricity, internet
 - Unemployment rate and income by gender, age, disability
 - Foreign direct investment, remittances, public aid
- Reports for 2020 data are available for download on the INE website
- Metadata available for download

- Latest version: 2014/15
- One-off publication
- Dataset contains:
 - Companies and staff by province, district, sector, level of performance, activity, revenue
 - Includes real estate activities
- Reports for 2014/15 data are available for download on the INE website
- Metadata available for download





	Land & Infrastructure	Transport as a % of total household expenditure — National: 18%
HAIN-	Construction &	GAP: Number of people per sleeping room in formal dwellings GAP: Gross fixed capital formation of dwellings as % of GDP
VALUECHAIN	Sales & Rental	GAP: Average inflation for dwellings over 5 years GAP: % of households that rent their dwelling Number of formal estate agents — National: 283
	Maintenance & Management	GAP: Number of approved building permit applications for improvements to residential properties Improvements to dwellings as a % of household expenditure — National: 1% % of households without access to basic waste collection services: 23% GAP: % households without access to basic waste collection services — B40
EXT	Enabling Environment	No Indicators
CONTEXT	Economic Environment	No Indicators
	Demand	No Indicators



Generally, the quality of INE data is high as the data is well-defined, regularly updated and provided by a government authority. The main data shortcomings are associated with the outdatedness of the one-off Companies in Mozambique publication

National Institute of Statistics (INE)

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Transport as a % of household expenditure - National	Infrastructure	18%	2020	Data sourced from CPI tables for July 2020 - weight on transport	Data is documented and well-defined		Data collected by a government authority	Nationally representative, in line with definition	Published in 2020 – updated monthly	Data available for download – multiple formats, easy to access	Data is documented and well- defined, measurement in line with requirement
Number of formal estate agents - National	Transactions	283	2015	Data sourced from Companies in Mozambique: Results of the second national census (2014 - 2015)		Includes individuals employed in real estate activities	Data provided by government authority	Nationally representative, in line with definition	Published in 2015	Data available for download – multiple formats, easy to access	Data is outdated
Improvements to dwellings as a % of household expenditure - National	Home improvements	1%	2020	Data sourced from CPI tables for July 2020 - weight on housing maintenance and repair	Data is documented and well-defined	Measurement in line with requirement	Data collected by a reputable source	Nationally representative, in line with definition	Published in 2020 — updated monthly	Data available for download – multiple formats, easy to access	Data is documented and well- defined, measurement in line with requirement
% of households without access to basic waste collection services - National	Municipal management	23%	2017	Data sourced from Population and Housing Census 2017,	Data is documented and well-defined		Data collected by a government authority	Nationally representative, in line with definition	Published in 2017	Data available for download – multiple formats, easy to access	Data is documented and well- defined, measusement in line with requirement

Unlock

• It would be useful if data on formality and tenure and the bottom 40 population could be extracted from the Population and Housing Census

Disseminate

- Some data is collected and disseminated but not easy to find/access as it is only published in Portuguese (e.g. contribution of housing to CPI, contribution of construction sector to GDP). It is recommended that the INE publish reports in both English and Portuguese to improve data accessibility
- Some metadata is available for download (e.g. national accounts, price index, balance of payments) however, metadata and raw data for specific reports and surveys is not published. The INE should provide public access to raw data and metadata for key publications and surveys such as the Population and Housing Census and the Family Budget Survey and publish this together with relevant publication
- Some key reports are not released at regular intervals with no indication of when next report will be released. Key surveys such as the Population and Housing Census and the Family Budget Survey should be conducted and released at regular intervals
- The INE 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

Disaggregate

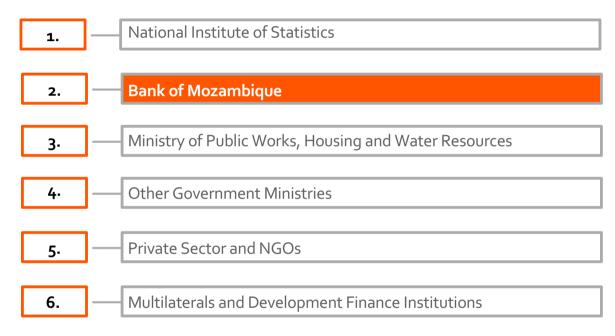
Gather

• Where there are opportunities to do so, CAHF should collaborate with the INE to refine household questionnaires in future so that data is gathered on key indicators



Mozambique's Data Landscape: All institutions in Mozambique'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 Mozambique







A General Overview of Central Banks

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

CENTRAL BANK OF MOZAMBIQUE

- The Central Bank of Mozambique (Banco de Moçambique) (BDM) is responsible for governing monetary policies in Mozambique
- It was established in 1975 under commitments made in the Lusaka Accords
- Its broader mission is to safeguard national currency and promote a safe and stable financial sector
- As a member of the Alliance for Financial Inclusion, the BDM is active in its development of a financial inclusion policy
- The BDM regulates and 22 commercial banks across the country as well as financial and insurance companies
- Its primary functions include advising government on financial matters, supervising financial institutions, advising and supervising monetary and exchange rate policies, administering the country's external assets and acting as an intermediary in international monetary relations

Law 1/92, Bank of Mozambique, 1992

"Defines the nature, objectives and functions of the Bank of Mozambique as the Central Bank of the Republic of Mozambique.'

ASSEMBLEIA DA REPÚBLICA Lei nº. 01/92 De 03 de Janeiro

A actual conjuntura política e económica do país impõe às instituições de crédito uma nova dinâmica na sua actuação como impulsionadoras do desenvolvimento económico.

A implementação do Programa de reabilitação económica e Social e o relacionamento cada vez mais alargado do Banco de Mocambique com instituições financeiras internacionais vieram a acelerar a necessidade de uma maior operacionalidade do Banco Central no seu papel de formulador e gestor da política monetária e de crédito e de supervisor do sistema financeiro nacional.

A materialização desses objectivos passa, necessariamente, pela separação institucional das funções de Banco Central das de Banco Comercial, por forma a permitir que o Banco de Mocambique assuma plenamente as suas funções de Banco Central e a conferir maior competitividade aos bancos comerciais.

Nestes termos, ao abrigo do disposto no nº.1 do artigo 135 da Constituição, a Assembleia da República determina:

"The country's current political and economic situation imposes a new dynamic on credit institutions in their role as drivers of economic development.

The implementation of the Economic and Social Rehabilitation Program and the increasingly extended relationship of the Bank of Mozambique with international financial institutions have accelerated the need for greater operationalism by the Central Bank in its role as formulator and manager of monetary and credit policy and supervisor of the national financial system.

The achievement of these objectives necessarily involves the institutional separation of the functions of the Central Bank from those of the Commercial Bank, in order to allow the Bank of Mozambique to fully assume its Central Bank functions and to make commercial banks more competitive."





Bank of Mozambique

The BDM hosts extensive financial data. Generally, the data is recent and frequently released, often on a monthly basis. The data can be downloaded in excel and pdf formats and some metadata is available on the INE website (see screenshot below)

Financial Data

Financial data hosted on the BDM website includes:

- Treasury bills
- Exchange rates
- **BDM Accounts**
- Issuance and currency circulation statistics
- Liquidity exchanges and provision
- Net international reserves
- Microfinance data (savings and loan organisations, microcredit operators and other information)
- Electronic banking and transfer data

Central Ban	k - Improvement Plan
Central Ban	k - Statistics Coverage, Dissemination Period and Frequency
Central Ban	k - Data Integrity and Public Access
External Se	ctor - Balance of Payments
External Se	ctor - Commodity Trading
External Se	ctor - Balance of Payments Aggregates
External se	ctor - External Debt and Debt Service
External Se	ctor - International Reserves
External Se	ctor - Exchange Rates
Financial se	ctor - Deposits Aggregates
Financial se	ctor - Central Bank Aggregates
Financial S	ector - Credit and Broad Money Aggregates
Financial se	ctor - Interest Rate





Financial Data

ANNUAL REPORT

FINANCIAL STABILITY REPORT

FINANCIAL INCLUSION REPORT

BALANCE OF PAYMENTS

- Latest version: 2018
- Released annually
- Dataset contains:
 - Financial statements; assets and liabilities
 - Credit quality of the Central Bank's financial assets
 - Other Central Bank financial assets including loans granted to financial institutions and repurchase agreements
 - Assets of pension fund
 - Financial inclusion indicators (ATM and POS distribution, transactions data, demographic access)
- Reports for 2018 data and previous data are available for download on the BDM website
- Raw data and metadata not available for download

- Latest version: June 2020
- Released annually
- Dataset contains:
 - NPL distribution by sector including construction and public infrastructure
 - Credit quality (NPL coverage ratio and NPLs to total gross loans)
 - Sources of banking secto financing
 - Real estate and financial stability; constraints to direct banking investment in housing sector
- Reports for 2020 data and previous data are available for download on the BDM website
- Raw data and metadata not available for download

- Latest version: 2019
- Released annually
- Dataset contains:
 - Total banking, microfinance and nonbanking institutions
 - Access points by province and district
 - Use of financial services
 - Credit and deposits as % of GDP
 - Electronic banking and digital finance services
 - Financial Inclusion Index
 - Legislation relevant to financial inclusion
- Reports for 2019 data and previous data are available for download on the BDM website
- Raw data and metadata not available for download

- Latest version: 2019
- Released annually
- Dataset contains:
 - Main investment partners by sector
 - Sectoral distribution of FDI including construction
 - Disbursement of external loans
- Reports for 2019 data and previous data are available for download on the BDM website
- Raw data and metadata not available for download





The BDM publishes useful data like FDI by activity (including construction) as well as credit quality data. However, further disaggregation is required to fill key data gaps for residential credit indicators specifically Screenshots

FDI in Mozambique by Activity Sectors Balance of Payments

Anexo 30. IDE em Moçambique por Sectores de Actividade (USD Milhões) Classificação da Actividade Económica 2015 2016 2017 2018 2019 Agricultura, Produção Animal, Caça e Silvicultura 519 68.1 81.8 69.1 53.1 -1.3 3.1 0.7 2.2 1.7 Indústrias Extractivas (carvão, petróleo, gás e minerais) 1748.5 1322.5 2091.1 1377.0 2012.8 Industrias transformadoras (alimentares, bebidas, tabaco, têxteis, outras) 132.4 83.2 195.0 108.5 Produção e Distribuição de Electricidade, Gás e Agua 0.4 117.9 94.8 8.3 -20.4 105.2 60.1 105.4 92.3 52.7 Comércio por Grosso e a Retalho e Reparações Diversas 151.1 -35.4 587 53.6 143.9 Aloiamento e Restauração (Hoteis e similares) 47.7 28.8 29.3 53.0 100.2 Transporte, Armazenagem e Comunicações 899.3 537.1 204.6 74.6 365.8 Servicos Ferro-Portuário 0.0 0.0 0.0 0.0 0.0 Actividades Financeiras 188.8 37.4 61.9 126.6 373.5 Actividades Imobiliárias, Alugueres e Serviços a Empresas 97.1 148.5 97.3 314 Administração Pública, Defesa e Segurança Social Educação 0.6 0.0 2.2 12.9 12.5 Saúde e Acção Social 3.0 0.5 7.4 0.5 0.9 Outros -23.2 17.5 5.7 4.4 13.8 17.5 5.5 4.4 Outras Actividades de Serviços Colectivos, Sociais e Pessoais -22.8 13.8 Famílias com Empregados Domésticos -0.4 0.0 0.0 Organismos Internacionais e Outras Instituições Extra-Territoriais 0.0 0.0 0.0 0.0 3093.4 2293.1 2703.0 2211.7 Dos Quais: Grandes Projectos 2,024.0

Compilação: BM

Financial Stability Report



Source: BM





The BDM hosts some macroeconomic data, most of which is already accessible through the INE. Some metadata is available on the INE website (see screenshot below)

Macroeconomic Data

The BDM's macroeconomic data includes:

- Exchange rates, average interest rates, CPI data
- Balance of Payments and International Investment position
- Monetary statistics
- Government and state budget statistics (income, expenses, deficit, net foreign loans)
- GDP data
- External debt statistics (external debt and accumulated monthly payments)
- Sectoral credit statistics

This data can be accessed in excel format. The metadata is also available for download.

letadata	
Central Bank - Improver	nent Plan
Central Bank - Statistics	Coverage, Dissemination Period and Frequency
Central Bank - Data Inte	grity and Public Access
External Sector - Balanc	e of Payments
External Sector - Comm	odity Trading
External Sector - Balanc	e of Payments Aggregates
External sector - Extern	al Debt and Debt Service
External Sector - Interna	ational Reserves
External Sector - Excha	nge Rates
Financial sector - Depos	sits Aggregates
Financial sector - Centra	al Bank Aggregates
Financial Sector - Credit	t and Broad Money Aggregates
Financial sector - Interes	st Rate





Macroeconomic Data

MONTHLY STATISTICAL **BULLETIN**

- Latest version: September 2020
- Released monthly
- Dataset contains:
 - Interest rates on new loans
 - Foreign Direct Investment by sector including construction, real estate, renting and business activities, household activities
 - GDP by sector including construction, activity property, rental and business services
- Reports for 2020 data and previous data are available for download on the BDM website
- Raw data and metadata not available for download

MONTHLY SUMMARY OF STATISTICAL INFORMATION

- Latest version: December 2020
- Released monthly
- Dataset contains:
 - Distribution of credit by sectors of activity including housing and construction
 - Distribution of credit by institutional sectors
 - Average interest rates on new loan operations including housing
- Reports for 2020 data and previous data are available for download on the BDM website
- Raw data and metadata not available for download

PRUDENTIAL, ECONOMIC AND FINANCIAL INDICATORS

- Latest version: October 2020
- Released quarterly
- Dataset contains:
 - Overdue credit ratio NPL and NPL coverage ratio for various commercial hanks
- Reports for 2020 data and previous data are available for download on the BDM website
- Raw data and metadata not available for download





The following table shows the level of aggregation provided for credit data, showing credit accounted for by construction and public works as well as housing

Screenshots

Distribution of Credit by Sector of Activity Monthly Summary of Statistical Information

Quadro 2 - Distribuição do crédito por sectores de actividade

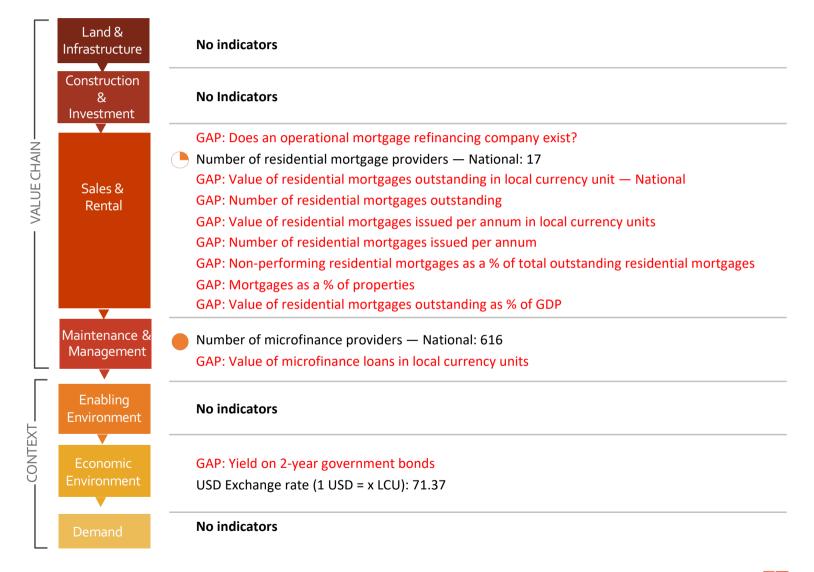
		D 40		11 00		1.100		0 00	0.4.00	
Sectores de Actividade	Nov-19	Dec-19	Jan-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
Agricultura	8,546.7	8,111.3	8,346.5	8,187.1	9,903.3	8,356.1	8,434.3	8,056.7	8,163.4	8,324.7
Indústria Extractiva	6,668.0	5,713.0	5,664.4	9,625.9	8,813.8	8,539.0	8,081.2	7,993.9	8,404.1	8,643.8
Constr. E Obras Púb.	23,009.0	20,045.0	19,280.0	19,502.5	17,138.6	17,963.6	19,209.5	19,369.1	19,283.4	20,233.3
Comércio	23,173.7	23,925.7	25,272.8	25,158.2	26,188.6	26,297.1	26,586.0	27,193.6	27,693.8	28,082.4
Transp. Comunicações	22,300.7	21,823.8	21,855.7	21,517.8	20,765.5	22,230.8	23,000.0	23,365.6	23,457.7	23,534.2
Turismo	3,348.4	3,315.0	3,363.2	3,522.0	4,031.9	3,695.0	3,527.2	3,509.3	3,907.1	3,741.6
Particulares	51.040.2	50.137.1	52,270.6	54.143.9	55.392.7	56,177.7	55,659.4	51.134.0	59.173.0	59.292.2
Habitação	6,533.9	6,466.8	7,074.9	6,751.5	6,847.9	6,659.4	6,343.7	13,706.3	7,267.2	7,338.4
Electricidade, gás e água	1,029.2	1,128.4	975.3	1,166.9	1,500.3	1,593.6	1,564.6	1,416.9	1,161.9	1,462.3
IFNM	2,448.2	1,760.4	1,810.7	1,867.5	2,362.5	1,867.5	1,859.0	1,495.2	1,415.4	1,412.0
Industria Transformadora	25,442.0	29,043.9	27,384.0	32,158.8	28,595.4	30,974.7	32,231.3	33,034.4	33,034.5	32,758.7
Outros	66,099	59,783	56,267	63,183	67,289	68,375.9	73,426.8	72,280.0	70,398.6	70,622.8
Total	239,639.1	231,253.8	229,564.6	246,785.4	248,829.8	252,730.4	259,923.1	262,555.0	263,360.1	265,446.4

Fonte:BM/DER





The following indicators were sourced from the BDM. Although sectoral loan data is disseminated, very little data on residential mortgages is disseminated. Whether this data is gathered at all remains unclear





Bank of Mozambique

Only two indicators were sourced from the BDM. Critically, one of these indicators was populated through a direct request by a CAHF consultant and is thus not accessible remotely. This affects our ability to verify the data, reducing the overall data quality score

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Number of residential mortgage providers - National	Finance	17	2018	Data collected through requested by CAHF consultant from Bank of Mozambique	Lacks information on data collection methodology by Bank of Mozambique		urement methodo	Data not accessible remotely	Data is not accessible remotely and cannot be verified		
Number of microfinance providers - National	Finance	616	2020	Data sourced from Bank of Mozambique Monthly Statistical Bulletin, April 2020	Data is documented and well-defined	Measurement in line with requirement	'	Nationally representative, in line with definition	Published in 2020	Data available for download – multiple formats, easy to access	Data is documented and well- defined, measurement in line with requirement



Unlock

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

Disseminate

- Although sectoral loan data is disseminated but very little data on residential mortgages is disseminated, including the number and value of residential mortgages outstanding/issued and non-performing residential mortgages outstanding. It is not clear whether this data is gathered
- Some reports are not published at interval stipulated in its name (e.g. most recent Annual Report is from 2018). Reports and raw data should be released at regular intervals (i.e. annually, quarterly, monthly)
- Public access to metadata for key publications like the Monthly Statistical Bulletin, the Annual Report and the Financial Stability Report should be provided and published together with relevant publication

Disaggregate

• Data on construction is disseminated (e.g. sectoral distribution of FDI in construction) however, data should be disaggregated further to provide access to data on the construction of housing specifically

Gather

• Systematically gather data on LTV, loan term, interest rates and fees, number of loans granted per annum



Mozambique's Data Landscape: All institutions in Mozambique'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 Mozambique





Overview of Ministry of Public Works, Housing and Water Resources

MINISTRY OF PUBLIC WORKS, HOUSING AND WATER RESOURCES

- The Ministry of Public Works, Housing and Water Resources (MOPHRH) is a government entity tasked with fulfilling Government duties in areas of public works, building materials, roads and bridges, urbanisation, housing, water resources, water supply, and sanitation.
- The Ministry hosts some documents including publications on construction input prices, legislation, studies and plans (e.g. water sector action plan, sustainable management of natural resources and environment) as well as press-related documents (project-specific announcements, interviews, speeches etc.).
- The MOPHRH website also has a resources tab. Here they upload:
- Annual performance assessment reports (Water Resources Management)
- Strategy and policy documents
- Legislations, regulations and amendments
- Additional documents on projects and hiring guidelines

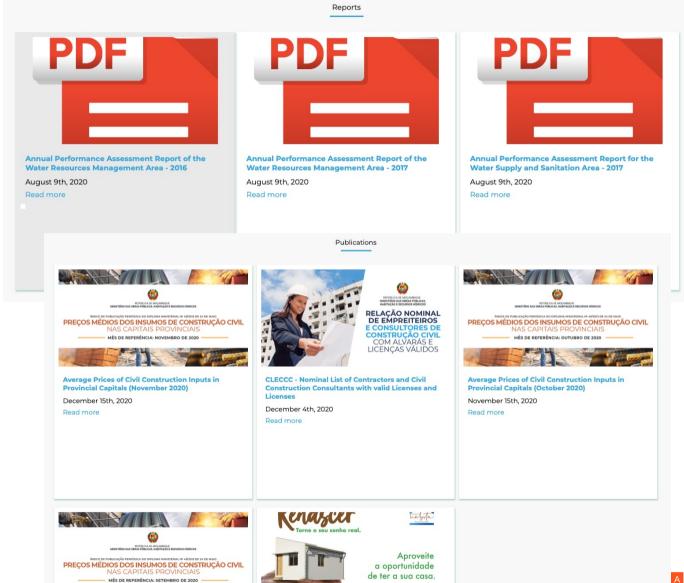
HOUSING PROMOTION FUND

- The Housing Promotion Fund is a government institution that promotes housing solutions for the low income segment within Mozambique. The website provides publications on housing policy as well as individual project information on the promotion of housing fund (vehicle technical specifications, architectural information etc.). The Housing Promotion Fund website publishes relevant legislation, housing studies and opinion articles. In addition, the website hosts information on a number of individual housing projects in Mozambique.
- The website publishes some data including the number of houses built with state resources, plots distributed and credits for home rehabilitation or expansions.





The MOPHRH primarily publishes information on infrastructure projects and physical plans





No indicators were populated by data sourced from the Ministry of Public Works, Housing and Water Resources





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Key data producers and custodians in Mozambique





Overview of Mozambique's Ministries

MINISTRY OF ECONOMY AND FINANCE

- The Ministry of Economics and Finance (Ministerio da Economica e Financias) (MEF) is a government ministry which aims to formulate and execute inclusive economic policies and promote the transparent and effective use of public resources.
- The MEF hosts comprehensive budget data including an annual state budget publication most data, including GDP projections and macroeconomic indicators, is sourced from the INE. The MEF also publishes quarterly lists of property titles intended for housing (see next slide). The budget is disaggregated by sector, accounting for Health, Education, Social Action and Labour, Infrastructure, including Water and Public Works, Roads and Energy, Justice, Agriculture, Transport and Communications. However, it is not allocated further, preventing critical analysis of the government's commitment to the housing sector. Figures on residential real estate, for example, are difficult to locate.
- Beyond this, the MEF website publishes newsletters, speeches, announcements, physical risk reports, action plans, planning meetings and studies on important policies.

MINISTRY OF LAND, ENVIRONMENT AND RURAL DEVELOPMENT

- The Ministry of Land, Environment and Rural Development (MITADER) was created to promote sustainable and fair development and reduce socioeconomic inequality through focus on rural development. Some past MITADER projects include environmental conservation projects, a peasant credit project, support and economic development for MSME's as well as a project aimed at ensuring full coverage of the country's banking network, particularly in rural areas. More information on these projects can be found on the MITADER website.
- All land in Mozambique is owned by the state although the Land Law recognises use-right to land known as a DUAT (direito de uso e aproveitamento dos terras). Responsibilities for land management and administration within MITADER fall under the National Directorate for Land (DINAT) and the National Directorate for Territorial Planning and Resettlement (DINOTER). These responsibilities include holding and organising national land cadastre records and processing land applications.





The following screenshot is a quarterly list of property titles intended for housing taken from the Ministry of Economy and Finance website

REPUBLIC OF MOZAMBIQUE MINISTRY OF ECONOMY AND FINANCE

NATIONAL DIRECTORATE OF STATE HERITAGE
STATE REGISTRY AND INVENTORY DEPARTMENT
PROPERTY MANAGEMENT BREAKDOWN

LIST OF ALIENATION PROPERTY TITLES FOR HOUSING, ISSUED IN THE FIRST QUARTER 2019 - (JANUARY 1 TO JUNE 31, 2019)

No. of Order	Province	Process number	Name
1	Map. City	01-1380 / 1998 Reis Moisés Nhacu	ımbe
two	Map. City	01-235 / 1993 Monteiro Valentim	Paulo da Costa
3		02-782 / 1993 Feliciano Massinga	ane Fulane
4	Sofala	05-138 / 1994 Tomás Uacitela Vil	lanculos
5		01-837 / 1994 António Massitele	
6	Map. City	01-942 / 1992 Eugénio de Azeveo	lo Lucas
7		01-89 / 2013 Jagmohan Phulcha	nd Rajpara
8	Sofala	05-296 / 2000 Francisco Armando	0
9	Tete	07-60 / 1997 Francisco Esteveno	Ntagaculima
10	Zambezia	08-37 / 1997 Rosa Isabel Uarela	i.
11	Niassa	11-2 / 2012 Hermínia Tomásia	Fernandes
12		01-1066 / 1995 Rosa Maria Aires S	Salvador do Nascimento
13		01-18 / 2001 João Victorino	
14	Map. City	01-211 / 1998 Crichula Elisa Don	ningos Tembe
15		01-2576 / 1996 Teresa Macamo	
16		01-2082 / 1996 Hortência Afonso I	Langa
17	Sofala	05-90 / 1994 José António Cuan	nba



No indicators were populated by data sourced from other government ministries. The following indicators could be populated by the Municipality or the Ministry of Land, Environment and Rural Development





Only one indicator was sourced from a government ministry, namely, the Presidency of Mozambique

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		477,786	2020	Data sourced from the Presidency: a speech by President Filipe Jacinto Nyusi, during the launch of the auscultation process of the revision of the National Land Policy, on June 16 2020".	Meaning of data is clear	Figure accounts for DUAT titles issued by Terra Segura program	Data collected by government authority	Nationally representative, in line with definition	Published in 2020	Downloadable - publication, easy to access	total DUAT



Recommendations for data provided by other government ministries

Unlock

Very little data is made available 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)

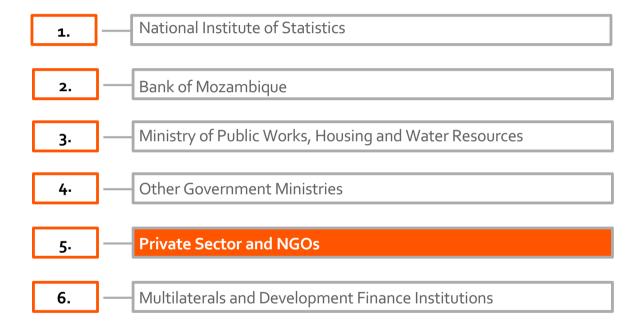
Disaggregate

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



Mozambique's Data Landscape: All institutions in Mozambique'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 Mozambique





Within the private sector, participants such as developers, real estate agents and finance providers will maintain data on their own activities. Some private sector associations may be reluctant to share data because of competitive concerns

THE MOZAMBICAN ASSOCIATION OF BANKS (AMB)

The Mozambican Association of Banks aims to promote and practice acts that contribute to the technical. economic and social progress of the banking activity of members

- The AMB hosts annual banking sector surveys from 2009-2012 and banking sector research from 2013-2020 on its website. The survey includes a macroeconomic and monetary analysis and an aggregate analysis of the banking sector
- Some useful data contained in these analyses includes total assets, balance sheets, deposits, credits, and loans. In addition, the document contains a list of commercial banks and micro finance institutions in Mozambique

THE CONFEDERATION OF ECONOMIC ASSOCIATIONS (CTA)

- The Confederation of Economic Associations aims to create a better business environment in Mozambique through economic and regulatory reform
- The website contains regulation documents on maritime labour, compulsory social security, tax, and hiring foreign nationals. It also hosts information on Mozambique's economic relations and the impact of COVID-19 on Mozambique
- Additional documents include surveys on the manufacturing industry, a report on natural resources and economic performance as well as doing business reports. The CTA also lists the construction sector as one of its areas of focus and this could be a potential source of construction related data and information

INTERNATIONAL FEDERATION **OF SURVEYORS**

- The International Federation of Surveyors is an organisation of national member associations. cadastral and mapping agencies, universities and corporates from various countries
- The website hosts a series of resources including publications on surveyor definitions, policies, recommended procedures, regulations and other statements and reports
- The website also contains World Bank and UN reports as well as peer-reviewed journals





Industry associations can be a useful source of data. 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

BANKS AND MORTGAGE FINANCERS

CREDIT BUREAUS

HOUSING DEVELOPERS

- 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

- One credit reference bureaus was explored, namely Compuscan Mozambique
- Although this credit bureau hosts some information on their website (credit services, decision analytics, marketing services etc.) the information is not useful for the purposes of analysis
- Most of the information available on the website concerns the company's product offering

- 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 timeconsuming 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



Industry associations can be a useful source of data. 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

FSD MOZAMBIOUE

- Financial Sector Deepening Mozambique (FSDMoc) is a not-for-profit organisation which aims to promote financial inclusion by improving access to financial services for low-income individuals in Mozambique
- FSDMoz is part of a network of nine FSD organisations working across Sub-Saharan Africa
- FSDMoz publishes a range of publications and blogs centred around financial inclusion and financial sector development including the FinScope Mozambique 2019 Report, in partnership with the FinMark Trust and the INE
- 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

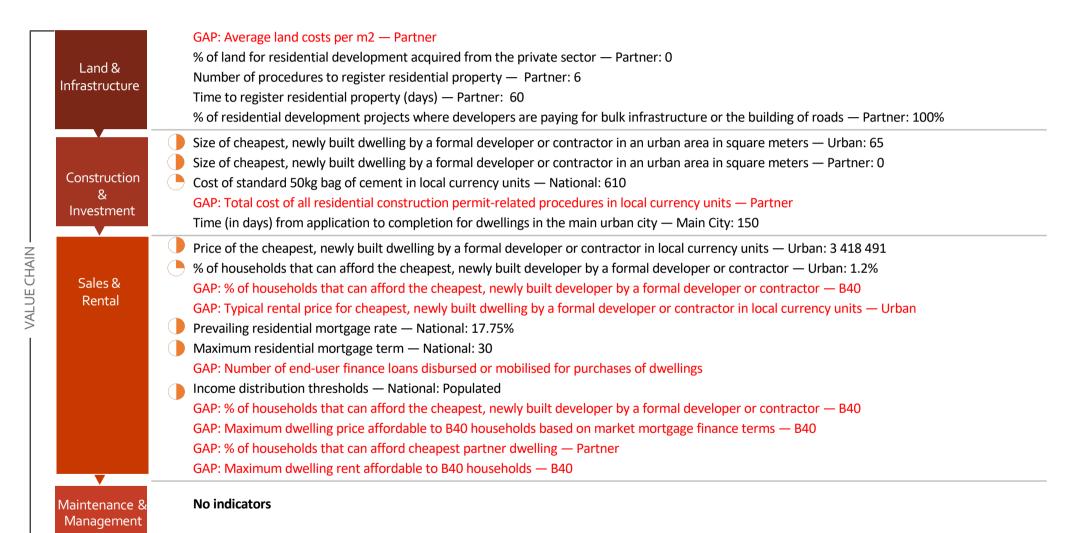
OTHER SOURCES

- Academic journals, working papers, news articles, and websites also contribute to the housing data landscape, albeit in a more adhoc 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
- <u>Transparency International</u> (Corruption Index)



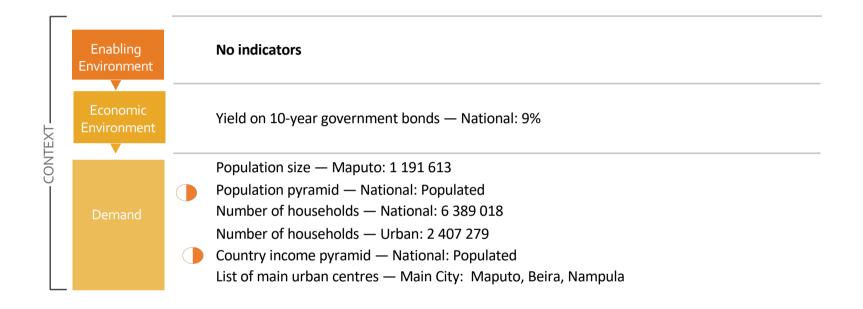


Some indicators were populated by data sourced from private sector participants because they are not published by regulatory authorities. The coverage and accuracy of the data may be compromised





Some indicators were populated by data sourced from private sector participants because they are not published by regulatory authorities. The coverage and accuracy of the data may be compromised





PRIVATE SECTOR & NGOs

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

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	65	2019	Data collected by CAHF consultant from Casa Minha website	Meaning of data is clear	Measurement in line with requirement	Data was triangulated by other sources	Data sourced from one developer's website – prone to sampling bias	Collected in 2019 — no indication of how frequently website is updated	Data can be accessed online	Data sourced from one developer website – may not be nationally representative
Cost of standard 50kg bag of cement in local currency units - National	Building materials	610	2018	Data sourced from Future Africa blog on cement prices in Mozambique	Meaning of data is clear	Measurement in line with requirement	Data could not be triangulated with reputable source		Published in 2018	Data can be accessed online	Data is not nationally representative
Time (in days) from application to completion for dwellings in the main urban city - Maputo	Process	150	2019	Data collected by CAHF consultant from interview with Stefanutti Stocks construction company	Lacks information on data collection methodology by construction company	Meas	surement methodo	blogy cannot be ve	rified	Data not accessible remotely	Data is not accessible remotely and cannot be verified



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PRIVATE SECTOR & NGOs

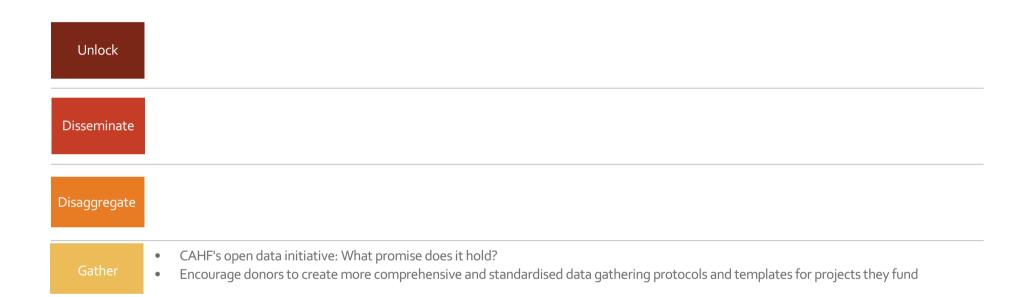
INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Price of the cheapest, newly built dwelling by a formal developer or contractor in local currency units - Urban	Ownership	3,418,491	2016	Data collected by CAHF consultant from Casa Minha website	Meaning of data is clear	Measurement in line with requirement	Data was triangulated by other sources	Data sourced from one developer's website – prone to sampling bias	Published in 2016	Data can be accessed online	Data sourced from one developer website – may not be nationally representative
% of households that can afford the cheapest, newly built developer by a formal developer or contractor - Urban	Ownership	1.2%	2019	Calculated using data from C-GIDD (income distribution) and CAHF consultants (mortgage terms, average down payment on a mortgage, price of cheapest house)	and acmica	Measurement error in underlying data	Unclear how cheapest house price is measured	Nationally representative of urban population, in line with definition	annually	Calculated by CAHF and published annually in country yearbook profile	Measurement error in underlying data
Prevailing residential mortgage rate - National	Finance	17.75%	2019	Data sourced by CAHF consultant from Mozambican Association of Banks and Absa Bank	Meaning of data is clear	Measurement in line with requirement		Nationally representative, in line with definition	Published in 2019	Data can be accessed online	Data comes from online notice – could not be verified
Maximum residential mortgage term - National	Finance	30	2019	Data soured websites of commercial banks including ABSA Bank, BancABC, FNB Moz, Standard Bank	Meaning of data is clear	Data is maximum mortage term, not average	Data triangulated with various commercial banks	Data sourced from vairous commercial banks - possibility of sampling bias	Published in 2020	Data can be accessed online	Data may not be nationally representative

PRIVATE SECTOR & NGOs

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

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Income distribution thresholds - National	Finance	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	- updated annually	Data available for download – multiple formats, protected by pay- wall	information on methodology and
Number of households - Urban	Demographics	2,407,279	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	- updated annually	Data available for download – multiple formats, protected by pay- wall	information on methodology and
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 available for download – multiple formats, protected by pay-wall	Lack of information on methodology and underlying data sources

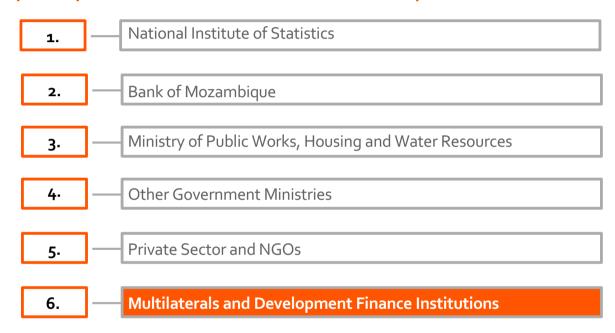






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Key data producers and custodians in Mozambique





An overview of Multilaterals & Development Finance Institutions

- The World Bank (WB), International Monetary Fund (IMF), International Finance Corporation (IFC), Demographic and Health Surveys Program (DHS), International Labour Organisation (ILO), the United Nations Development Programme (UNDP) and 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

Databases and portals

- The <u>IMF</u> and <u>AfDB</u> host national data summary pages indicating what data are publicly disseminated in line with the IMF's <u>Data Standards Initiatives</u>. 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 <u>African Information Highway</u> (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 <u>World Development Indicators</u>, the IMF's <u>data page</u>, and the ILO's <u>ILOSTAT database</u>). 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 <u>DHS data</u>, 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. The most recent household survey for Mozambique was conducted in 2018
- o 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 <u>investment services projects</u> 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 <u>Human Development Report</u> 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**

AfDB REGIONAL **ECONOMIC OUTLOOK**

AfDB AFRICAN STATISTICAL YEARBOOK

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

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

- 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 available for download on the AfDB website
- Raw data and metadata not available for download





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Key Publications

IMF WORLD ECONOMIC **OUTLOOK**

DEMOGRAPHIC & HEALTH SURVEY

IMF WORLD ECONOMIC OUTLOOK

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

- Latest version: 2011
- Next DHS report will be released in 2021
- Dataset contains:
 - Household characteristics including water, sanitation
 - Wealth guintiles which allow for Bottom 40 analysis
 - Family planning, child mortality and health, maternal health. nutrition, malaria, HIV/Aids
- Reports for 2011 data and previous data are available for download on the INE website
- Raw data and metadata are available for download from the DHS website

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





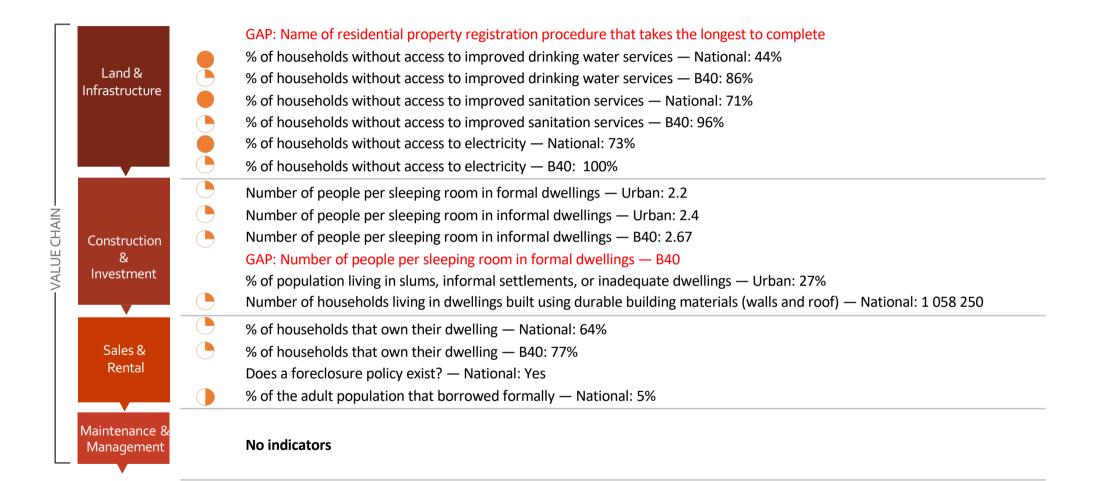
One-off publications by these institutions often address the aggregation shortcomings mentioned above. However, as their name suggests, the data contained within can quickly become outdated

Additional Publications

- One-off publications by these institutions often address the aggregation shortcomings mentioned above. However, as their name suggests, the data contained within can guickly become outdated
- An example of such a publication is the National Financial Inclusion Strategy which publishes key indicators including adults with access to financial services, adults with a loan or credit from a formal financial institution, adults with an account in electronic money transfer institution and credit to MSME's as a proportion to total bank credit to the economy
- The World Bank has a number of ongoing projects in Mozambique which primarily focus on public sector management, urban and rural development and environmental and natural resources management
- The World Bank website publishes additional indicators which include people provided with improved access to roads, coverage increase using improved municipal services, number of municipalities with 50% or more of all land files registered in a land management information system and the number of municipalities with 75% or more progress in the implementation of the Covid-19 Action Plans



Data for the following indicators was sourced from DFIs. Most of this data was provided by the DHS and the World Bank





Data for the following indicators was sourced from DFIs. Most of this data was provided by the DHS and the World Bank

Human development index (HDI) country ranking: Global — National: 180 Ease of doing business index rank: Global — National: 74 PPP conversion factor for private consumption — National: 20.62 GDP per capita in current local currency units — National: 30 772 GDP growth rate — National: 3.4% Unemployment rate — National: 25% % of individuals aged 15-49 that have not worked in the past 12 months — B40: 29.8% % of population below national poverty line — National: 46% Gini coefficient index — National: 0.457 Population size — National: 30 366 036 Population size — B40: 9 674 995 Population growth rate — National: 2.9% Population growth rate — Urban: 4.4% Population pyramid — B40: Populated Average household size — Urban: 4.6 Average household size — B40: 4.2



INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
% of households without access to improved drinking water services - National	Infrastructure	44%	2017	Data sourced from World Bank API	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in	,	Data available for download – microdata, easy to access	Data is documented and well-defined, measurement in line with requirement
% of households without access to improved drinking water services - B40	Infrastructure	86%	2011	Data provided DHS Standard Household Survey 2011 — DHS wealth quintiles used to identify bottom 40 households and access to services	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – multiple formats, easy to access	Data is outdated
% of households without access to improved sanitation services - National	Infrastructure	71%	2017	Data sourced from World Bank API	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – microdata, easy to access	Data is documented and well-defined, measurement in line with requirement
% of households without access to improved sanitation services - B40	Infrastructure	96%	2011	Data provided DHS Standard Household Survey 2011 – DHS wealth quintiles used to identify bottom 40 households and access to services	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – multiple formats, easy to access	Data is outdated

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
% of households without access to electricity - National	Infrastructure	73%	2017	Data sourced from World Bank API	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – microdata, easy to access	Data is documented and well-defined, measurement in line with requirement
% of households without access to electricity - B40	Infrastructure	100%	2011	Data provided DHS Standard Household Survey 2011 – DHS wealth quintiles used to identify bottom 40 households and access to services	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – multiple formats, easy to access	Data is outdated
Number of people per sleeping room in formal dwellings - Urban	Stock	2.2	2011	Data sourced from DHS Household Survey 2011 – formality based on floor, wall and roof material	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – multiple formats, easy to access	Data is outdated
Number of people per sleeping room in informal dwellings - Urban	Stock	2.4	2011	Data sourced from DHS Household Survey 2011 – formality based on floor, wall and roof material	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – multiple formats, easy to access	Data is outdated

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Number of people per sleeping room in informal dwellings - B40	Stock	2.67	2011	Data sourced from DHS Household Survey 2011 – formality based on floor, wall and roof material	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – multiple formats, easy to access	Data is outdated
Number of households living in dwellings built using durable building materials (walls and roof) - National	Stock	1,058,250	2011	Data sourced from DHS Household Survey 2011 – formality based on floor, wall and roof material	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – multiple formats, easy to access	Data is outdated
% of households that own their dwelling - National	Ownership	64%	2011	Data sourced from DHS General Household 2011 - "Own a house individually", "Own a house jointly"	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 2011	Downloadable – multiple formats, easy to access	Data is outdated
% of households that own their dwelling - B40	Ownership	77%	2011	Based on DHS Standard Household Survey 2011 — respondents asked whether they own a house jointly or alone	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in	Published in 2011	Downloadable – microdata, easy to access	Data is outdated

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIV E	TIMELY	ACCESSIBLE	FINAL SCORE
% of the adult population that borrowed formally - National	Finance	5%	2017	Based on 2017 Global Findex Survey – based on face-to-face interviews with 1000 respondents	Data is documented and well-defined		Data collected by reputable source in line with global standards	respondents	Published in 2017	Downloadable – publication, easy to access	Data based on survey with 1000 respondents - may not be nationally representative
% of individuals aged 15-49 that have not worked in the past 12 months - B40	Macroeconomic indicators	29.8%	2011	Data provided by DHS Household Survey – DHS wealth quintiles used to identify B40 households and unemployment; labour force data sourced from World Bank, only includes individuals aged	Data is documented and well-defined	Data does not match indicator definition exactly	Data collected by a reputable source in line with global standards	representative, in line with		Data available for download – multiple formats, easy to access	Data is outdated & data does not match indicator definition exactly
Population pyramid - B40	Demographics	Populated	2011	Data provided by World Bank and DHS household survey – DHS wealth quintiles used to identify B40 households and B40 population pyramid shares per gender-age group; World Bank data used to identify size of bottom 40 population	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in		Data available for download – microdata, easy to access	Data is outdated

INDICATOR	COMPONENT	VALUE	YEAR	DATA SOURCE OVERVIEW	INTERPRETABLE	RELEVANT	SUFFICIENTLY ACCURATE	REPRESENTATIVE	TIMELY	ACCESSIBLE	FINAL SCORE
Average household size - Urban	Demographics	4.6	2011	Data sourced from 2011 DHS Household Survey for Mozambique	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in line with	Published in 2011	Downloadable – microdata, easy to access	Data is outdated
Average household size - B40	Demographics	4.2	2011	Data provided DHS Standard Household Survey 2011 – DHS wealth quintiles used to identify bottom 40 households	Data is documented and well-defined	line with	Data collected by a reputable source in line with global standards	representative, in line with	Published in 2011	Data available for download – multiple formats, easy to access	



Recommendations for data provided by DFIs

Key Recommendations



CAHF should analyse new DHS data when it becomes available

Disseminate

Disaggregate

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



State of housing data in Mozambique

Information on housing finance can be sourced from several institutions such as FFH, the Central Bank, INE and commercial banks. However, these institutions do not have specific and detailed reports and data on housing finance. The Central Bank has financing information per banking institution for housing construction, market shares, interest rates, and more. and the information is available on the institution's website. Banks do not provide detailed information due to compliance and reputational risk. The INE provides detailed information through surveys and general population census. The FFH provides information of ongoing housing projects, house prices, payments, and more. Lastly, the DUAT and property registration information can be found on municipal councils and registry offices, however, the information is superficial and barely updated.

As suggested, macro level indicators for Mozambique are largely accessible from government entities and multinational institutions. However, despite existing legislation governing housing related data, there are critical gaps in housing sector data. There are key data concerns for housing construction related indicators – some data must be collected through direct correspondence and is not available on the respective websites of government entities. This increases reliance on private entities, who are not legally required to host data in the public domain. Some housing supply data also needs to be sourced directly from private

companies or developers, which only reflects a selected and not a nationally representative sample. The gaps in housing construction indicators impairs understanding of access to finance, housing adequacy and living conditions, the cost breakdown of the housing construction value chain and the contribution of housing to the economy. Significant data gaps relating to sales, transfer, and rental of residential properties, further limits understanding of access to finance, home ownership, mortgage credit, housing affordability and property transactions. There is also a lack of downloadable and regularly updated or released data hosted by private entities.

Supporting an agenda for data reporting and sharing in Mozambique's housing ecosystem, requires concerted coordination and collaboration between market players at the highest level. First, the Bank of Mozambique is well positioned to leverage its network of mortgage and other finance providers to publicly host data related to access to finance. Second, it would be useful for INE to disaggregate some of its real estate data to establish the contribution of residential property to Mozambique's economy. Third, the Ministry of Public Works, Housing and Water resources (MOPHRH) should be encouraged to centralise housing-related data collected from private housing and construction companies. Furthermore, the Land Registry could develop an electronic database which hosts publicly accessible property transaction data.





Legislation governing the data landscape for affordable housing in Mozambique

Different market players are regulated by legislations that govern the collection, production, and dissemination of housing related data in Mozambique.

Legislation most relevant to developers/ builders are the Private Works Licensing Decree (2004) and Procurement Regulation Decree of 2005. The latter creates a supervision unit responsible for creating and managing a centralised supplier registry database of public work contractors.

Four regulations govern the activities of banks and other lenders. The Bank of Mozambique Act (1992) establishes the Bank of Mozambique, and is responsible for providing monetary, financial, and foreign exchange statistics. In supervising the activities of credit and financial companies, the Bank of Mozambique, through the Credit Institutions and Financial Companies Act (1999) requires the centralisation and submission of all elements of information concerning degree of liquidity, credit risk and compliance with legal and regulatory rules. The Agency for Promotion of Investment and Exports (Apiex) is the implementing authority of the Regulation of Investment Act (2009) and disseminates information on investment opportunities and sources of major investments in Mozambique. The Securities

Market Code Act (2009) supervises the securities market. The stock exchange is required to disclose sufficient and timely information on transactions, the admission, suspension, and exclusion of securities, annual reports, and annual accounts to the Bank of Mozambique.

In the public sector, the National Statistical System Act (1996) establishes the National Institute of Statistics (INE) as the authority responsible for the overall coordination, collection, and dissemination of official statistical information through surveys (household budget and expenditure surveys), censuses (population and housing census), and elaboration of national accounts, economic, social and demographics data. The Land Act (1996) and Land Law Regulation Decree (1998) require various entities to submit data to the National Land Cadastre relating to land tenure and title. The Territorial Planning Act (2017) makes for the provision of data relating to rural and urban spatial plans and land use, special zoning, characteristics of infrastructure networks and services, and population densities, while the demarcation of land parcel documents and topographic surveys are supervised by the National Directorate of Geography and Cadastre, through the Regulation of Activities of Sworn Surveyors Decree 15 (1993).



Housing finance-specific data is difficult to access in Mozambique and no institution has identified this as a priority. That said, the Bank of Mozambique holds data that could offer valuable insights on the state of the housing market. Key next steps are summarised below with high value interventions highlighted in red

	National Institute of Statistics (INE)	Bank of Mozambique	Ministry of Public Works, Housing and Water Resources	Other Government Ministries	Private Sector and NGOs N	Multilaterals and DFIs
Unlock	Extract and analyse data on formality, tenure and the Bottom 40, from the Population and Housing Census	Transactions data generated by lenders and credit bureaus could significantly improve public understanding of credit access & performance				Analyse new DHS data nen it becomes available
Disseminate	Improve data dissemination in Portuguese and English.	Ensure timely publishing of raw data & reports. Extract and publish residential mortgage data . Public access to metadata for key publications i.e. Monthly Statistical bulletin, Annual Report, Financial Stability Report		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)		
Disaggregate	Provide public access to raw data and metadata for key publications and surveys i.e. Population and Housing Census, Family Budget Survey	Disaggregate construction data to explicitly highlight residential		The Ministry of Lands should make available underlying transactions data so that third parties can augment and add value to the data	Encourage donors to create mor standardised data gathering proto projects they f	ocols and templates for
Gather	Refine household survey questionnaires to respond to housing-investment relevant information needs	Centralise housing-related data collected from private housing and construction companies. Systematically gather data on LTV, loan term, interest rates and fees, number of loans granted per annum.	Create a central database for collecting the number of dwellings completed annually.		Where DFIs fund affordable housi should request that developers s and standardised data in line wi templates (as with NGOs) – part Access initiati	submit comprehensive ith clear protocols and ticipation in the Open



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





