

# A Review of the Data Landscape in African Housing Ecosystems: Morocco

#### **Main Findings and Recommendations**

Data is crucial 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 invaluable data 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 forprofit entities at no cost, it may be provided sporadically and partially, and often with the objective of building reputational capital in higher income segments of the market. Non-uniformity of data provided by various companies and unsynchronised releases reduces the usability and value of this data.

Industry-wide data sharing initiatives can sometimes succeed, but there is a risk of free-riding, with some participants failing to submit data while making use of data provided by others. Often, participants in data sharing

initiatives fatigue, as more pressing business concerns are prioritised.

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

The Data Landscape Review is a program that CAHF, Reall (who are a member of the AUHF) and 71point4 have undertaken to examine the housing data available in a country, its quality, the gaps and to identify who the main producers of data are. The program's aim is to improve data availability and access so as to stimulate the housing and finance markets. This document is targeted at key data producers and custodians and provides a summary of the Data Landscape Review's main findings and recommendations.

Reall has developed a dashboard from which the data for Morocco can be accessed: https://reall.net/msi/morocco/

The African Union for Housing Finance (AUHF) was established as a member-based body of housing lenders in 1984. Today, the AUHF comprises of 55 members from 23 countries across the continent and the globe. Members include commercial and mortgage banks, building societies, microfinance banks/institutions, housing development corporations, and other institutions involved in the mobilization of funds for shelter and housing. As an industry body, the AUHF promotes the development of effective housing finance markets, and delivery of affordable housing across Africa. <a href="http://www.auhf.co.za/">http://www.auhf.co.za/</a>



#### A Data Agenda for Housing in Africa

A set of 116 Headline Market Shaping Indicators that provide information on the state and functioning of the housing sector, were developed by CAHF, 71point4 and Reall. These indicators were organised in two categories—Value chain and Context. The Value chain category consists of four sub-categories (land and infrastructure; construction and investment; sales and rental; and maintenance and management) while the Context category has three sub-categories (enabling environment, economic environment and demand):

#### Data collected along the housing value chain

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.

The formal housing and housing finance value chains are tracked by public entities and regulators. This process naturally generates 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.

For example, administrative data includes data collected by planning authorities, in response to statutory building controls, and can be very useful in characterising formal housing supply.

Lending activity and loan performance data is 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 and may be unaware of the potential value to market participants of the data they have. An important objective of the Data Agenda 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

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.

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. 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.



Enabling Economic Demand Environment

# The challenge of informality

Often, where data is not available or severely limited, underlying administrative or regulatory processes are inefficient or poorly aligned with the needs of the market. This **poor alignment is often the underlying cause of informality**. In light of this, the 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.

A data agenda for Housing in Africa: 116 Headline Market Shaping Indicators have been identified across the value chain and critical contextual areas



LAND ASSEMBLY • Smallest residential plot size • Regulated minimum size of a residential plot in urban areas in square meters • Average land costs per m² • % of land for residential development acquired from the private sector • World Bank DBI Geographic coverage index score ranking: Africa • World Bank DBI Geographic coverage index score ranking: Global • World Bank DBI Quality of land administration index ranking: Africa • World Bank DBI Quality of land administration index ranking: Africa • World Bank DBI Quality of land administration index ranking: Global • LAND TITLE • Total number of residential properties with a title deed • Cost to register residential property • Number of procedures to register residential property • Time to register residential property (days) • Name of residential property registration procedure that takes the longest to complete • 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 • Transport as a % of household expenditure • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of infrastructure index ranking: Global • World Bank DBI Reliability of inf



STOCK • Size of cheapest, newly built dwelling by a formal developer of contractor in an urban area in square meters • Number of people per sleeping room in formal dwellings • % of population living in slums, informal settlements, or inadequate 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 • FLOW • Residential construction sector as a % of GDP • Gross fixed capital formation of dwellings as % of GDP • Number of dwellings completed annually • Residential rental sector as a % of GDP • INDUSTRY • Number of formal private developers / contractors serving the bottom-end of the market • Number of completed developer built dwellings that are accessible to the bottom-end of the market • Is there a body that organizes developers / contractors? • Number of people employed in the residential construction sector • Number of people employed in residential rental sector • BUILDING MATERIALS • Cost of standard 50kg bag of cement in local currency units • Average residential building cost inflation for dwellings over 5 years • PROCESS • Total cost of all residential construction permit-related procedures in local currency units • Time (in days) from application to completion for dwellings in the main urban city



OWNERSHIP • Average inflation for dwellings over 5 years • World Bank DBI Equal access to property rights index ranking: Africa • World Bank DBI Equal access to property rights index ranking: Global • % of households that own their dwelling • % of dwellings with female or joint ownership of a dwelling • Price of the cheapest, newly built dwelling by a formal developer or contractor in local currency units • % of dwellings with female ownership of a dwelling • 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 city? • Number of formal estate agents • Resale transactions as a % of all residential transactions • Number of new residential transfers • Number of residential t

FINANCE • Number of residential mortgage providers that serve the bottom-end market • Number of residential mortgages or formal loans provided to the bottom-end market • Does an operational mortgage refinancing company exist? • Does a foreclosure policy exist? • Number of residential mortgage providers • Value of residential mortgages outstanding in local currency units • Number of residential mortgages outstanding • Value of residential mortgages issued per anum in local currency units • Number of residential mortgages issued per anum • Non-performing residential mortgages as a % of total outstanding residential mortgages • Mortgages as a % of properties • Value of residential mortgages outstanding as % of GDP • Is there a regulatory cap on residential mortgage interest rates? • Prevailing residential mortgage rate • Maximum residential mortgage term • Highest LTV on a residential mortgage • Number of end-user finance loans disbursed or mobilised for purchases of dwellings • % of the adult population that borrowed formally • Income distribution thresholds

AFFORDABILITY • Maximum dwelling price affordable to B40 households based on market mortgage finance terms • % of households that can afford cheapest partner dwelling • % of households that can afford the cheapest, newly built dwellings by a formal developer or contractor • Maximum dwelling rent affordable to B40 households



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



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



MACROECONOMIC INDICATORS ● Yield on 2-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 ● 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)



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

#### About the data landscape review process

- 1. The data landscape review began with a review of what data is available, and building the agenda from there.
- 2. The process involved **reviewing legislation** associated with the housing delivery process, and considering what regulatory data requirements might produce useful administrative data.
- 3. In line with Reall's mandate and a general objective of the work to look at the affordable end of the market serving lower income households in the first four income or wealth deciles (the **Bottom 40** of the market), a number of indicators relating specifically to this segment were included.
- 4. In cases where indicators were difficult to populate using publicly available data, the process relied on proxies.
- Reall's housing development partners provided access to various datapoints captured from their construction projects, providing valuable benchmarks for the wider market.
- 6. The quality of each indicator was assessed using a **data quality assessment framework** which considers the interpretability, relevance, accuracy, timeliness, accessibility and representativeness of the data.
- 7. Identified gaps create an agenda for better collection and analysis. This is our Data Agenda for Housing in Africa



# Quick data landscape facts

https://reall.net/msi/morocco/

#### **Economic Environment**

123 / 191

**Human Development** Index ranking

Source : World Bank (2021)

DH 34,334 (equivalent to US\$3,442)

GDP per capita

Source : World Bank (2022)



Source: World Bank (2022)



2.6 %

of the adult population borrowed formally (not only for housing)

Source : World Bank (2017)



50.53 %

of households that can afford the cheapest, newly built dwelling by a formal developer or contractor

Source: CAHF; C-GIDD (2019)



#### DH 30 BILLION

(equivalent to US\$2,843,243,243)

of formal housing finance is outstanding

Source: Central Bank of Morocco (Bank Al-Maghrib) (2017)



2.32 %

yield on 10-year government bonds

Source: World Government Bonds (2021)

# **Population statistics**



43.7 %

of the population live below the national poverty line

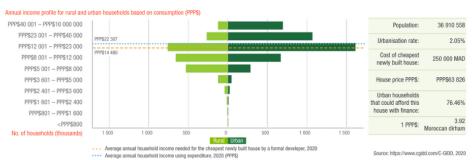
Source: World Bank (2017)



11.5 % **Unemployment rate** 

Source: World Bank (2021)

# **Population Pyramid**



Source : C-GIDD (2020)

8.4 Million households in total Source: High Commissariat of Planning (2021)



4.6 people

per household on average

Source: High Commissariat of Planning (2014)



1.2 %

national population growth rate

Source: World Bank (2021)

# Housing environment



#### of all households rent their own dwelling



## of all households own their own dwelling

Source: High Commission of Planning (2017)

Source: High Commission of Planning (2017)

Average number of people per sleeping room...

Source: High Commission of Planning (2014)

in urbain formal dwellings: 4,2 people

Number of formal estate agents: 500 agents

Source: Internet Websites, Reall.net (2017)



130,035

Total number of residential properties with a title deed

Source: Haut-Commissariat au Plan (2018)

#### Access to services

# Household expenditure



of the urban population live in slums, informal settlements of inadequate dwellings

Source: World Bank (2018)



DH 84.70

(equivalent to US\$8)

cost of standard bag of 50kg of cement

Source : Medias 24 (2018)



of all households do not have access to improved drinking water services

Source : World Bank (2017)



14.89 %

of all household expenditure goes towards transport

Source: CEIC (2018)



of all households do not have access to improved sanitation services

Cheapest newly built house by a formal developer in an urban area...

Source: World Bank (2017)

Price to buy:

DH 286,173



(equivalent to US\$27,027)

Source: Various Real Estate Websites (2019)

Size:



45 sq

Source: Chaabi lil iksane (2019)

Price to rent (urban):

DH 6,296

(equivalent to US\$594.59)

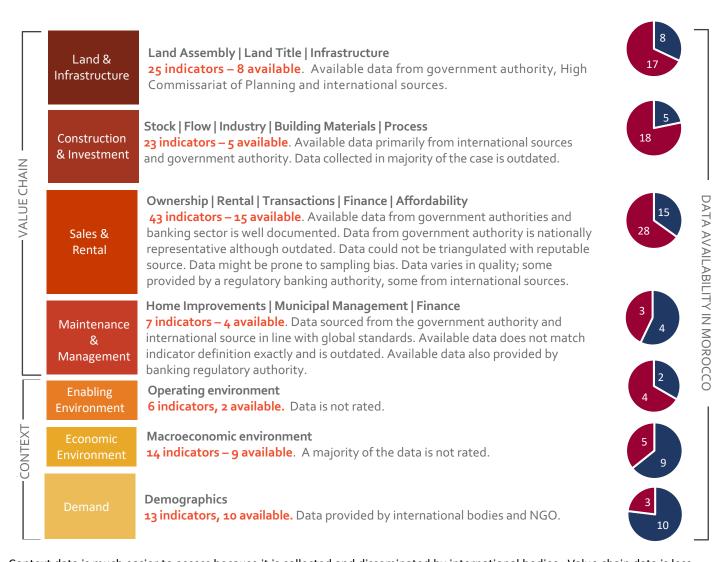
Source: Various Real Estate Websites (2019)

## A review of the data landscape

A review of data published by international and local institutions has allowed CAHF, Reall and 71Point4 to populate available data according to the Headline Indicator Market Shaping Framework. The figure below illustrates this data collection activity per component by including a high-level characterisation of data quality for indicators that were populated.

This landscape shows how data gaps along the value chain affect the ability to accurately measure investment in the country's housing sector, the contribution of this latter in the national economy and access to finance and affordability. Another important gap is the value of development finance institution funding invested in residential real estate in local currency units which hinders tracking of investment in Morocco's housing sector.

However, macroeconomic data and financial data are quite well collected and disseminated through reports and surveys published by main public or state organisations. Housing finance data provide relevant information although mainly focused on end-users finance and not providing enough data on private developer finance.



Context data is much easier to access because it is collected and disseminated by international bodies. Value chain data is less available – but is particularly important because this is where the nuance of Morocco's affordable housing sector can be seen and understood. There is an important opportunity for regulators – public sector regulators and the office of the High Commissariat of Planning – to unlock, disaggregate, disseminate and further gather critical data to support housing investment in Morocco.

All of the data collected is available on Reall's website: <a href="https://reall.net/msi/morocco/">https://reall.net/msi/morocco/</a>. An overview document providing definitions of the metadata is available on CAHF's website: <a href="https://housingfinanceafrica.org/documents/market-shaping-indicators-for-housing-metadata-document/">https://housingfinanceafrica.org/documents/market-shaping-indicators-for-housing-metadata-document/</a> The full Morocco Data Landscape Report will be soon available on CAHF's website.

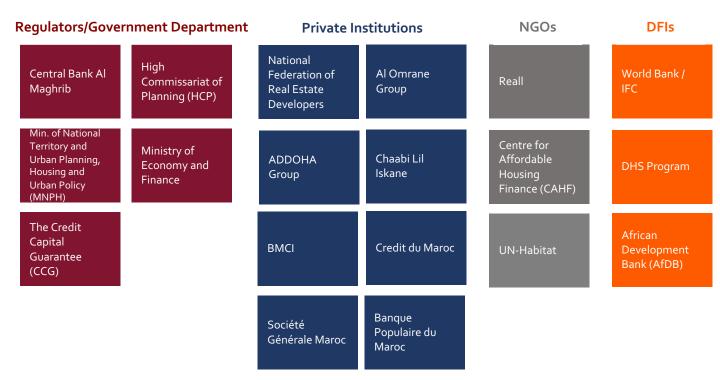






#### **Key Data Producers and Custodians in Morocco**

All institutions in Morocco's housing value chain generate data, whether for private or public use, or simply as a by-product of their business. The figure below show the key institutions that generate and disseminate pertinent data in Morocco:



# The High Commissariat of Planning (HCP), public sector regulators and the private sector have a critical role to play in Morocco's data landscape.

The <u>High Commissariat of Planning (HCP)</u> – Together with central banks, statistics bureaus form the core of a country's data landscape, collecting and publishing a range of data in various ways, and HCP plays this important data provision and curation role in Morocco. The HCP is the agency responsible for producing, analysing and publishing official statistics in Morocco. It develops studies in the fields of economic conditions, macroeconomic framing and forecasting, and has an observatory of household living conditions and a centre for demographic studies and research. The HCP conforms its statistics and studies to international standards and has been admitted since 2005 to the IMF's Special Data Dissemination Standard.

Established as Morocco's monetary authority, <u>The Central Bank Al Maghrib</u> (BAM)'s current legal framework within which it operates is the Bill 40-17 by the Council of Government of July 2019. The objectives of the BAM are to formulate monetary policy to achieve and maintain price and financial stability. It is a useful source of data, hosting extensive macroeconomic and financial data as well as additional publications in the form of reports, releases and journals. The <u>Ministry of National Territory Planning</u>, <u>Urban Planning</u>, <u>Housing and Town Policy</u> (MNPH) is responsible for implementing and monitoring the government housing, social housing policy and town planning policy. It is a major player in capturing all information at macro level, but offers also housing indicators that provide data on the number of construction sites, number of social housing projects including unit price, consumption of cement etc.

The <u>Credit Capital Guarantee (CCG)</u> is a public financial institution assimilated to a credit institution by the banking Act, providing detailed information on the FOGARIM (the irregular and modest income guarantee fund created by the government) and the FOGALOGE (which has the same objective as the FOGARIM but operates only for Moroccan living abroad). <u>Al Omrane</u> is a public enterprise created by the State to implement the national housing policy and national urban development policy. The National Federation of Real Estate Developers gathers actors of the private sector and publishes monthly the "Real Estate in Numbers" (REN), that offers general and specific information on the Moroccan real estate sector. Other key players from the private sector include private developers and commercial banks like ADDOHA (first Moroccan real estate group); Chaab Lil Iskane (a major actor in the real estate sector since 1948 in Morocco, Africa, and middle-east); BMCI; Crédit du Maroc; Société Générale Maroc Banque Populaire du Maroc and Bank of Africa (a key player in the housing finance sector in Morocco).

#### A call to action

Morocco has a rich administrative data landscape that can offer valuable insights on the state of the housing market. The HCP offers a variety of data and information, but a key opportunity exists in curation data with an explicit housing lens. The data generated by BAM is generally recent, documented and well-defined. However, high-level mortgage data would address the main data gaps. The private sector market players need to be leveraged to access and centralize data that would help improve segmenting the demand side and tracking housing supply, and property market evolution.

The main challenges observed are around publication language of some key reports (only available in Arabic) and disaggregated data of private developer finance and construction finance, along with land sales.

We call on all sector players in Morocco, the continent and beyond to actively participate in the generation and dissemination of housing and housing finance data to improve Morocco's housing market. The identified data gaps offer an opportunity to drive the Data Agenda and improve Morocco's data landscape for affordable housing.

#### Key next steps

Morocco has a rich administrative data landscape that can offer valuable insights on the state of the housing market. Much of this needs to be made accessible and would be usefully shared with a housing-specific purpose. Key next steps are summarised below with particularly **high value interventions highlighted in burgundy** (although all together are important).

	High Commissariat of Planning (HCP)	Central Bank Al Maghrib (BAM)	Ministry of National Territory Planning, Urban Planning, Housing and Urban Policy (MNPH)	The Credit Capital Guarantee (CCG)	Private Sector	DFIs / NGOs
Unlock	CAHF and other housing and housing finance organisations could extract and analyse household data to close data gaps.	CAHF could collate and republish succinct housing and housing finance related statistics published by the BAM.	Very little data and statistics on housing finance sectors is published, so there is little to unlock.		ADDOHA Group website should offer translation (French/English) easily available to access their information	Analyse new DHS data when it becomes available.
Disseminate	The HCP could publish an up- to-date survey to improve the national data landscape, and update all its existing publications.	Could add a specific housing finance tab pooling all financial publication from formal financial institution and MFIs offering house finance products.	Housing dedicated directions of MNPH should release quantitative data on land sales, land and property registration and sale of new units & residential resale transactions.	Provide more up to date publication. Key figures report presenting the main development of financial trends observed in housing finance each year.	Opportunity to compile all data on mo\srtgages/housing loans and/or housing products through a general data portal to improve data access and availability.	CAHF could re-publish its most relevant research on DFIs websites.
Disaggregate	Well-positioned to make raw data available and enable analysis of household data (population & housing, consumption & expenditure etc.) to facilitate standardised cross-country comparisons.	Transactions data generated by lenders & credit bureaus could significantly improve public understanding of credit access and performance.	Make available underlying transactions data so that third parties can augment and add value to the data.	Provide disaggregated data on FOGARIM and FOGALOGE applicants financial profiles, especially during COVID-19. Should disaggregate its financial data per gender, contribution to GDP, housing program category financed	Donors should create more comprehensive and standardised data gathering protocols and templates for projects they fund. Commercial banking to collect more detailed data on gender, categories of real estate asset, type of housing program etc.	DHS to create a specific data set covering housing and housing finance survey without coupling it with its health survey
Gather	Opportunities for the HCP to publish recent survey on the housing sector and its contribution to the economy & to track Morocco's Affordable Housing Programme.	Systematically gather data on LTV, loan term, interest rates and fees, number of loans granted per annum.				

#### About the research

This document summarises the facts, findings and recommendations contained within the full report, "A Review of the Data Landscape in African Housing Ecosystems: Morocco" — a joint initiative of the Centre for Affordable Housing Finance in Africa, 71point4 and Reall (Reall is also a member of the AUHF), produced in July 2021. The report interrogated the availability and quality of housing-relevant data required to populate a set of priority indicators that characterise activity along Morocco's Housing Value Chain.

The Data Agenda for Housing in Africa identified gaps Morocco's housing data and the analysis was also applied in Kenya, Mozambique, Tanzania, Uganda, Côte d'Ivoire, Rwanda, Pakistan, India and Nigeria. The findings support the need for further in-country engagements to create an agenda for better collection and analysis. The complete Data Landscape report and all the recommendations will soon be available on CAHF's website.







