

MINISTRY OF TRANSPORT,
INFRASTRUCTURE, HOUSING AND
URBAN DEVELOPMENT (STATE
DEPARTMENT OF HOUSING AND URBAN
DEVELOPMENT)

**CONSULTANCY SERVICES FOR PREPARATION
OF THE PROGRAMME MASTER PLAN OF THE
AFFORDABLE HOUSING AGENDA UNDER THE
BIG FOUR**

Benchmarking study report

17 December 2018

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17 December 2018

Dear Charles

Re: Consultancy Services for Preparation of programme master plan of the affordable housing agenda under the big four – benchmarking report

In accordance with Contact Agreement MTIHAD/HUD/HD/35/2017-18 between KPMG Advisory Services Limited (“KPMG”) and Ministry of Transport, Infrastructure, Housing and Urban Development’s State Department of Housing and Urban Development, (“SDHUD”) dated 12th June 2018 for provision of consultancy services for preparation of programme master plan for delivery of one (1) million housing units (the “Contract”), and the Inception Report dated 29th June 2018, please find enclosed the benchmarking report dated 17 December 2018.

Our report is for the benefit and information only of those Parties who have accepted the terms and conditions of the Contract and should not be copied, referred to or disclosed, in whole or in part, without our prior written consent, except as specifically permitted in the Contract. To the fullest extent permitted by law, we will not accept responsibility or liability to any other party (including those Parties’ legal and other professional advisers) in respect of our work or the report.

We draw your attention to the important notice included on the next page.

Yours sincerely,

Sheel Gill
Director
KPMG Advisory Services Limited

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Important notice

This draft benchmarking report is prepared by KPMG Advisory Services Limited (“KPMG”), a limited liability company established under Kenyan law and a member firm of the KPMG network of independent firms affiliated with KPMG International Cooperative (“KPMG International”), a Swiss entity. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm vis-à-vis third parties, nor does KPMG International have any such authority to obligate or bind any member firm.

Our work commenced on 12th June 2018 and the fieldwork related to this draft benchmarking report began in the week commencing 2nd July 2018 and was completed the week commencing 1st October 2018. The final benchmarking analysis will be incorporated into the final report deliverable.

In preparing our draft report, our primary sources of information were limited to desktop research, review of available secondary data, contacting relevant KPMG representatives in local member firms within the benchmarked countries, conducting meetings and interviews with relevant local government institutions and organisations in benchmark countries. Our secondary sources of information included externally available market information including market reports, other published material and press comments. Details of our principal information sources are set out throughout this report. We have satisfied ourselves, as far as possible, that the information presented in our report is consistent with other information which was made available to us in the course of our work in accordance with the terms of our Engagement Letter. We have not, however, sought to establish the reliability of the sources by reference to other evidence and do not accept responsibility for such information.

Our report makes reference to ‘KPMG analysis’ or ‘KPMG interviews’. These references are used when KPMG has compiled or undertaken certain analytical activities on market information and interview feedback in order to arrive at future scenarios or current market characteristics. These compilations, assessments and future assessments should be considered as indicative. It is particularly important to note that, due to a limited sample size, the benchmarking findings cannot be said to be representative of the population in the relevant countries and should be considered as soundings from the market. We do not accept responsibility for this information.

A report of this kind is dependent on the completeness, accuracy and reliability of data received from a variety of sources. KPMG makes no warranty or claim as to the accuracy of the information on which this report is based and cannot be held responsible for any inaccuracies so arising. Where possible, KPMG has taken steps to ensure that the use of information is consistent and complete within the terms of the Engagement Letter.

This engagement is not an assurance engagement conducted in accordance with any generally accepted assurance standards and consequently no assurance opinion is expressed. Our scope of work and procedures are not designed to detect material misstatements in the financial statements or accounting records resulting from irregularities, therefore our outputs and reports should not be relied upon to disclose irregularities that may exist at any companies named in this report.

Unless otherwise specifically stated in the Contract, any advice or opinion (deliverable) relating to the provision of this Service is provided solely for the use of SDHUD. Should you wish to disclose or refer to such deliverable in any way, including but not limited to any publication on any electronic media, to any third party, you are required to notify such third party of the fact that the said deliverable has been provided to you for your sole use and benefit and is based on specific facts and circumstances provided by you and pursuant to the Contract entered into between KPMG and SDHUD on 12th June 2018. Such third party may not rely on such deliverable and KPMG to the fullest extent possible, shall accept no responsibility or liability to that third party in connection with our Services. Attention is drawn to paragraph 3.7 of the general conditions of contract regarding prior approval of the other Party.

During the supply of our services, we may supply oral, draft or interim advice, reports or presentations but in such circumstances our written advice or final written report shall take precedence. No reliance should be placed by you on any oral, draft or interim advice, reports or presentations. Where you wish to rely on oral advice or an oral presentation, you shall inform us and we will provide documentary confirmation of the advice. KPMG shall not be under any obligation in any circumstance to update any advice or report, oral or written, for events occurring after the advice or report has been issued in final form.

Glossary

AACA	Addis Ababa City Administration
AdCSI	Addis Credit Savings Institution
AFD	Agence Française de Développement (French Development Agency)
BEE	Bureau of Energy Efficiency
BCA	Building and Construction Authority, Singapore
BMTPC	Building Management and Technology Promotion Council, India
BNDES	Social Development Bank, Brazil
BPL	Below Poverty Line
BRI	Building Research Institute, Singapore
BTO	Build-to-Order
CAHF	Centre for Affordable Housing Finance
CAIXA	Caixa Econômica Federal, Brazil
CAPEX	Capital Expenditure
CAMCCUL	Cameroon Cooperative Credit Union League
CARPA	CARPA - Support Council for the implementation of partnership contracts, Cameroon
CBE	Commercial Bank of Ethiopia
CBN	Central Bank of Nigeria
CEO	Chief Executive Officer
CEMAC	Economic and Monetary Community of Central Africa
CFA	West African CFA franc
CFC	Cameroon Housing Loan Fund
CLSS	Credit Linked Subsidy Scheme
CPF	Central Provident Fund
CS	Cabinet Secretary
CSMC	Central Sanctioning and Monitoring Committees
CVUC	Association of Municipalities, Cameroon
Contract/ Consultancy	Contact Agreement MTIHAD/HUD/HD/35/2017-18 between KPMG Advisory Services Limited and Ministry of Transport, Infrastructure, Housing and Urban Development dated 12 th June 2018 for provision of consultancy services for preparation of the programme master plan for delivery of one (1) million housing units
DBFOT	Design, Build, Finance, Operate and Transfer
DBSS	Design-Build-Sell-Scheme
DBT	Direct Benefit Transfer
DPRs	Detailed Project Reports
EC	Executive Condominium
ECBs	External Commercial Borrowings
EDL	Estate Development Loan
EGP	Egyptian Pound
EPF	Employee Provident Fund
EPFO	Employees Provident Fund Organisation, India
ETB	Ethiopian Birr
EWS	Economically Weaker Sections

FAR	Residential Leasing Fund
FDI	Foreign Direct Investment
FEICOM	Special Fund for Equipment and Inter-Municipal Intervention
FGTS	Workers Severance Fund
FHA	Federal Housing Authority
FMBN	Federal Mortgage Bank of Nigeria
FMOF	Federal Ministry of Finance
FMPWH	Federal Ministry of Power, Works and Housing
GBP	Pound Sterling
GESP	Growth and Employment Strategy Paper
GIBB	GIBB Africa Limited
GoB	Government of Brazil
GoC	Government of Cameroon
GoE	Government of Ethiopia
GoI	Government of India
GoK/Government	Government of Kenya
GoM	Government of Mexico
GoN	Government of Nigeria
GoS	Government of Singapore
GST	Goods and Services Tax
GoT	Government of Tanzania
GVA	Gross Value Added
HDB	Housing and Development Board
HDFC	Housing Development Finance Corporation, India
HDPO	Housing Development Project Office
HIG	Higher-Income Group
HMIG	Higher-Middle-Income Group
HUDCO	Housing and Urban Development Corporation
IAY	Indira Awas Yojana
IHDP	Integrated Housing Development Program
IIT	Indian Institute of Technology
INSA	Information Network Security Agency
Inception Report	Inception Report dated 29 June 2018 for the Services
JnNURM	Jawaharlal Nehru National Urban Renewal Mission
JV	Joint Venture
K	Thousand ('000)
KMRC	Kenya Mortgage Refinance Company
KPMG	KPMG Advisory Services Limited
KPMG Team/Consultant	KPMG delivery team for the Project in consortium with sub-consultants MMC and Gibb
LAPO	Lift Above Poverty Organization
LASRRA	Lagos State Residents Registration Card
LIGs	Low Income Groups
MAETUR	Urban and Rural Land Development and Servicing Mission
MBAN	Mortgage Banking Association of Nigeria
MCMV	My House My Life
MENA	Middle East and North Africa

MFIs	Micro-Finance Institutions
MHUPA	Ministry of Housing and Urban Poverty Alleviation
MIGs	Middle Income Groups
MND	Ministry of National Development
MINDCAF	The Ministry of State Property, Surveys, and Land Tenure
MINDHU	Ministry of Urban Development and Housing
MINEPAT	Ministry of Economy, Planning and Regional Development
MINFI	Ministry of Finance
MIPROMALO	The Mission for the Promotion of Local Materials
MoCB	Ministry of Cities of Brazil
MMC	Muriu, Mungai & Company Advocates trading as MMC Africa Law
MoTIHUD	Ministry of Transport, Infrastructure, Housing and Urban Development
MoU	Memorandum of Understanding
MUDHC	Ministry of Urban Development, Housing and Construction
MWUD	Ministry of Works and Urban Development
N	Nigerian Naira
NHB	National Housing Bank
NHC	National Housing Corporation
NHDF	National Housing Development Fund
NHP	National Housing Programme
NMRC	Nigerian Mortgage Refinance Company
NSHF	National Social Housing Fund
NSSF	National Social Security Fund
NT	National Treasury
NYS	National Youth Service
OA	Ordinary Account
ORAAMP	Organisation for the Review of Addis Ababa Master Plan
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PASGR	Partnership for African Social & Governance Research
PMB	Primary Mortgage Banks
PMCMV	Programa Minha Casa Minha Vida
PMCMV-Entities-FDS	Social Development Fund
PLANUT	Triennial Emergency Development Plan
PMCMV-FAR	Residential Leasing Fund
PPDA	Public Procurement and Disposal of Assets Act
Project/Services	Provision of consultancy services for preparation of the programme master plan for delivery of one (1) million housing units
PS	Principal Secretary, SDHUD
REDAN	Real Estate Development Association of Nigeria
R\$	Brazilian Real
Rs	Indian Rupee
SACCOs	Savings and Credit Cooperative Organisations
SDG	Singapore Dollar
SDHUD/Client	State Department of Housing and Urban Development
SDHUD Secretariat	Core team allocated by PS to liaise with the KPMG Team
SIC	Cameroon Real Estate Corporation (SIC is the French Abbreviation)

SME	Small and Medium Sized Enterprises
SR	Smart Regulation
TBA	Tanzania Building Agency
THB	Tanzania Housing Board
TMRC	Tanzania Mortgage Refinance Corporation
ToRs	Terms of Reference
TPS	Tenant Purchase Scheme
TVET	Technical and Vocational Education and Training
TZS	Tanzania Shillings
UNCTAD	United Nations Conference on Trade and Development
URA	Urban Redevelopment Authority
US\$	United States dollar
WB	World Bank
WHC	Watumishi Housing Corporation
WSF	Workers Severance Fund

1 Executive summary

1.1 Background and approach

SDHUD is aiming to improve its knowledge and awareness of best practice approaches that can influence the effective delivery of one (1) million affordable housing units in Kenya by 2022. This benchmarking exercise is aimed at sharing case studies of best practice for affordable/social housing programmes covering the following elements: overview of the country; funding strategies for both supply and demand; implementation approach including delivery timelines; success rate in each country; risks faced; mitigation measures and key lessons; project management approaches used by each country; and impact of project in each country.

KPMG benchmarked the Kenyan affordable housing sector against international best practices in the following countries that were agreed upon in the Inception Report. These include Singapore, Egypt, Tanzania, Cameroon, India, Nigeria, Mexico, Brazil and Ethiopia. In conducting the study the following approach and methodology was utilised:

- Conducted desktop research, reviewed available secondary data related to items in the scope areas for each of the countries. All sources are quoted in the footnotes.
- Contacted relevant KPMG representatives in local member firms across the benchmarked countries to validate findings from the desktop research.
- Conducted selected primary data collection i.e. organised face to face meetings and interviews with relevant local government institutions and relevant organisations in selected countries to collect data to validate our findings.

1.2 An overview of benchmarking study findings

Based on our benchmarking of Kenya against the nine countries on specific parameters, we have highlighted in the table below Kenya's relative standing based on data availability per country.

Table 1: Country metrics

	Kenya*	Singapore**	Egypt	Tanzania	Cameroon	India	Nigeria	Mexico	Brazil	Ethiopia
Population (millions)	46.6	5.6	95.2	56.9	24.1	1,200.2	191.8	129.2	207.7	104.9
Area (Million Km ²)	0.6	0.01	1.0	1.0	0.5	3.4	0.9	1.9	8.5	1.1
GDP (US\$ bn)	75	324	236	49	35	2,597	376	1,151	2,050	81
Per capita income (US\$)	1,507	52,600	2,475	672	1,504	1,820	2,080	9,946	9,821	740
Ease of doing business	80	2	128	137	163	100	145	49	125	161
Compulsory contribution (employee/employer %) for affordable or social housing	2.5%/2.5%	17%/20%	x	x	1%/1.5%	x	2.5%/-	-/5%	-/8%	x
Annual contribution to the fund (US\$ million)	x	27, 888	N/A	N/A	58	N/A	N/A	N/A	268	N/A
Mortgage refinance company	✓	x	x	✓	x	✓	✓	x	x	x
National housing fund	✓	✓	x	✓	✓	x	✓	x	x	✓
Subsidised interest rates for borrowing	NA	3%	5-11%	16%	4-6%	2-5%	6%	4-9%	5-7%	7%
Borrowing rate in local currency	14%	5%	7-10.5%	22%	13%	8-9%	17%	11-15%	7%	14%
Annual demand (units)	250k	12-14k	600k	200k	100k	3,750k	1,000k	900k	NA	N/A
Annual target (units)	200k	21k	200k	N/A	N/A	5,100k	200k	N/A	1,000k	N/A
Annual achieved (units)	50k	20k	90k	10k	N/A	4,800k	100k	N/A	406k	N/A
Annual deficit (units)	150k	974	110k	NA	100k	300k	100k	800k	594k	NA
Deficit to target	75%	5%	55%	NA	N/A	6%	50%	N/A	59%	N/A
Annual housing units target per million people	4,292	3,682	2,101	26	N/A	4,250	1,047	NA	4,831	N/A
3 bedder price (US\$)	30k	145k	N/A	27k	17-22k	N/A	100k	28-49k	34k	18k
3 bedder price to per capita income multiple	20	3	N/A	40	11-14	N/A	48	3-5	4	25

The sources to this table are in the detailed country reports from page 36 to page 138 of this report

Key

The country metrics above are as at 2017.

Kenya* - the figures used for Kenya are based on the current forecast aimed at achieving one (1) million affordable houses by 2022 which continues to be validated through the Consultancy.

Singapore** - In Singapore, the indicated compulsory contribution from employee and employer is an average. Compulsory contribution in Singapore is based on salary scales of employees. The details are included in the detailed Singapore country report.

N/A – Data not available

1.2.1 Common constraints

The following key issues are common constraints restricting the attainment of annual targets:

- 1. Lower income bands programme implementation** – lack of strict enforcement of the programmes, corruption, consistency in the allocation of completed housing units, political interference, lack of adequate monitoring and evaluation of the programmes and poor coordination between the respective government agencies and private sector players. Each of these can be mitigated by strong and independent programme management.
- 2. Insufficient project funding and financing** – Such projects are extremely capital intensive. In most cases, governments struggled to allocate enough budget from the exchequer or through compulsory contributions to ensure successful implementation of the projects.
- 3. High mortgage interest rates** – Tanzania, Ethiopia, Nigeria, Cameroon and India had mortgage lending rates over 8% from commercial banks, which could not be afforded by a majority of the population especially low income earners. There is need for government to play a facilitative role and provide necessary incentives to financial institutions to help lower the mortgage interest rates.

4. **Lack of regulatory framework** – Tanzania, Ethiopia, Nigeria, and Cameroon do not have formal land and housing regulatory framework in place. This has resulted in land speculation and a number of court cases that delayed implementation of the programmes.
5. **Public agitation against resettlement** – in Singapore and Cameroon there were litigation cases mostly related to land ownership and resettlement that contributed to the delay of projects due to long court battles. These were majorly caused by lack of a formal land and housing policy in place thus agitating the public against resettlement.
6. **Overly ambitious targets** – Most governments were overly ambitious with the planning and preparation for construction of social houses. For most countries this was caused as a result of setting targets beyond the capability of both government and private sector players.

1.2.2 Summary of key takeaways for each benchmarked country

01	Singapore	<ul style="list-style-type: none"> – A unique housing system, with three-quarters of its housing stock built by GoS' Housing Development Board (HDB) – Provision of subsidised houses to lower income households – GoS owns land and provides it to HDB for construction of housing units – The country's homeownership rate of 90% is one of the highest in the world – Compulsory contribution by both the employer and employees towards the housing fund – Merit Star and Core Contractor schemes for the benefit of the contractors, provides them with minimum offtake guarantee and helped in maintaining their performance
02	Egypt	<ul style="list-style-type: none"> – Availability of strong state controlled lending programs – The social housing project forecasted to build 200,000 new homes each year – Formation of non-bank Mortgage Finance Companies (MFCs) with greater interest in serving lower income households – Establishment of Egyptian Mortgage Refinance Company (EMRC) to provide long term funding for primary mortgage institutions – GoE's decreed increase of residential housing units, coupled with new investment laws, land reforms, availability of adequate financing, and strong sector performance has led to a positive investor appetite
03	Tanzania	<ul style="list-style-type: none"> – Introduction of Tanzania Mortgage Refinance Company (TMRC) led to the increase of mortgage lenders from 3 to over 30 – Introduction of a policy that extended the mortgage tenor from 7 to 20 years – A private bond to be issued in 2018 through Bank of Tanzania to support mortgage financing
04	Cameroon	<ul style="list-style-type: none"> – Cameroon Housing Loan Fund (CFC) is financed through an indirect tax levied on employees and employers, collected by the tax authorities and transferred to CFC – CFC has instituted a line of credit dedicated towards financing house construction – Housing policy focusing both on construction of social infrastructural amenities and provision or upgrading of basic services in informal settlements – GoC provides sovereign guarantees to private developers – Individuals in the formal and informal sectors can provide 20% of the investment as their equity investment upfront and take a loan for the remaining 80%, which is guaranteed by GoC – Despite GoC introducing a number of schemes and incentives to lower cost of materials, labour and improving the registry process, house prices are unaffordable for 80% of the population, mainly low and middle income earners – GoC has encouraged the use of local materials and reduced the price of land inputs such as cement and sand – Private sector investors have set up factories to manufacture and distribute building materials, which will potentially reduce input costs. These materials are exported to all other Central African Economic and Monetary Community countries

05 India

- Allows withdrawal of up to 90% of Employee Provident Fund (EPF) contributions to build affordable housing for the working class
- Strong offtake mechanisms for encouraging participation of private developer
- GoI has been following a devolved approach, providing flexibility to state governments to choose the option which can best meet the demand of housing in their states/cities and also empowers them to formulate and approve projects for faster implementation
- The National Housing Bank (NHB), a central nodal agency has taken up many initiatives to bridge the financing gap that previously led to the failure of several schemes
- Provision of a Single Window Clearance to private players involved in project implementation for Economically Weaker Sections (EWC) of society
- Developers of affordable houses have been allowed to raise funds through External Commercial Borrowings (ECBs)
- The income of affordable housing developers is exempt from tax by the GoI under Income Tax Act

06 Nigeria

- Established Nigeria Mortgage Refinance Company (NMRC) to bridge funding cost of residential mortgages and promote availability and affordability
- NMRC securitises long-term loans from Primary Mortgage Banks (PMBs) and issues bonds thereby establishing a route to the capital markets for mortgages, improving liquidity in the mortgage market
- Compulsory contributions from employees and employers towards the National Housing Fund
- It is mandatory for insurance companies to invest 20% of non-life and 40% of life funds in the housing sector
- Federal Mortgage Bank of Nigeria (FMBN) extends Estate Development Loans (EDL) to private developers and state housing corporations at a rate of 10% for a maximum tenor of 24 months with revision clauses for proposed projects where the housing apartment's target prices are not more than US\$13,815 (N 5 million)

07 Mexico

- A housing policy that includes generating optimal credit and subsidy schemes, increasing subsidies and strengthening inter-institutional coordination
- The housing policy seeks to promote construction of new houses in urban locations and providing environmental-conscious and socially sustainable housing by according higher subsidies for such developments
- Presence of a government bank aimed at promoting the development mortgage loans market
- The development bank, SHF supplies funding and guarantees which support mortgage lending through commercial banks and housing construction
- Lower interest mortgages that require a minimum of eco-technologies in social housing in order to save electricity, gas and water
- CONAVI, the implementing agency, provides training, conducts R&D establishes standard for the construction sector
- It also certifies developers according to the nature of development (integrated facilities, urban infrastructure, public spaces, etc.)
- Certified developers are selected for GoM financing, providing land and equipment, as well as technical assistance

08

Brazil

- Implemented one of the largest housing programmes for low and middle income families
- Mandatory contribution from employees of 8% of salary used to provide long term housing finance loans to beneficiaries
- Existence of non-refundable grants from the government utilised for private sector housing provision (residential leasing fund) and the social development fund
- Bulk of the construction under the housing programme undertaken by private developers that apply for funding from the residential leasing fund
- A social development fund through which the government channels subsidies for generation of cooperative housing in the country
- Programme implementation is the responsibility of the Ministry of Cities, through the National Housing Secretariat.
- Guarantor social housing fund that assures loan repayment to lenders in case of a default

09

Ethiopia

- Commercial Bank of Ethiopia (CBE), a government bank, provides mortgage loans at lower than market rates to low income households
- The Addis Ababa City Administration (AACAA) provides subsidies by providing urban land for social housing projects, provides infrastructure and tax benefits
- Providing employment opportunities to the unemployed at the construction sites in tandem to the employee saving half of their earnings towards down payment of the completed units
- Lottery system is not considered effective for the lower income bands. Buyers who can afford down payment of 40% head to the front of the queue
- GoE reserves a land bank for investors/developers making land available to investors in real estate



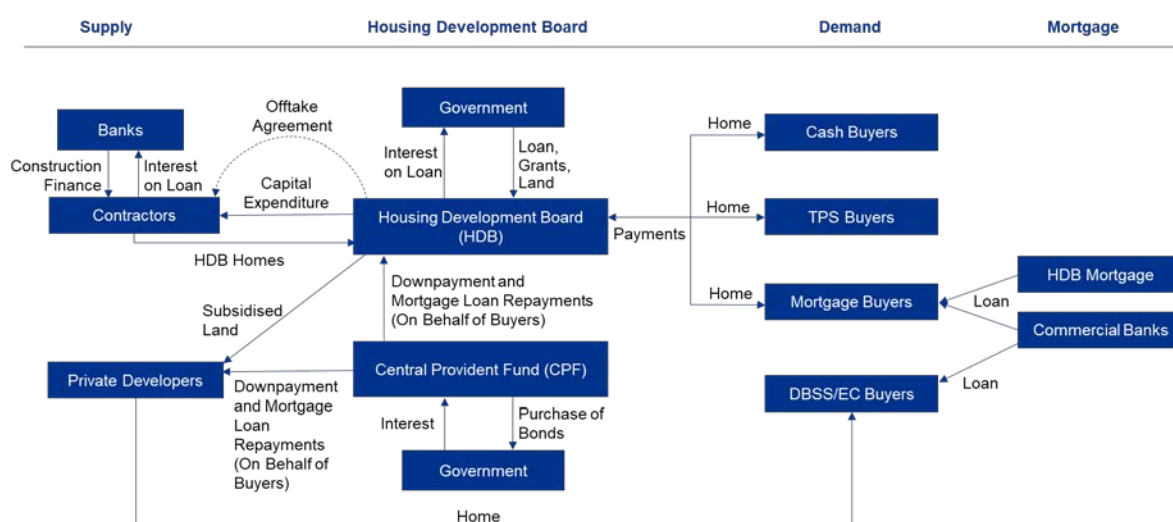
1.3 Singapore – specific country findings

1.3.1 Introduction to housing programme and key highlights

Public housing in Singapore is managed by the Housing and Development Board (HDB) under temporary leaseholds for 99 years. HDB is Singapore's public housing authority and a statutory board under the Ministry of National Development formed to develop public housing in towns.

- Singapore has developed a unique housing system, with three-quarters of its housing stock built by HDB and homeownership financed through Central Provident Fund (CPF) savings.
- CPF is a compulsory comprehensive savings plan for working Singaporeans and permanent residents primarily to fund their retirement, healthcare and housing needs.
- As part of CPF, employers and employees contribute 17% and 20%, respectively, of the individual employee's monthly salary (up to a monthly salary ceiling of US\$ 4,425 (SGD 6,000) toward the employee's account in the fund.
- The Government of Singapore (GoS) owns around 90% of the land and provides it to HDB and applicants apply directly to HDB.
- CPF furnishes payments to HDB on behalf of buyers for down payment or mortgage payments for the finished apartments.

Figure 1 Singapore housing programme framework



Source: KPMG Analysis

1.3.2 Funding strategies for both supply and demand

The GoS provides annual budgetary allocation to HDB to cover its deficits (the difference in revenue generated from sale of HDB apartments and total development costs) incurred for development, maintenance and upgrading as part of the programme and CPF housing grants for eligible home buyers.

- HDB provides loans to buyers at concessionary interest rates at 0.10% above the prevailing CPF Ordinary Account (OA) interest rate, currently at 2.60% per annum.
- The public housing programme enables CPF members to use their CPF OA savings to buy new or resale HDB apartments.
- Home Protection Scheme (HPS) ensures that dependents of apartment owners do not lose their homes, when they are unable to finance their loan in the event of death/permanent incapacity of the sole breadwinner.

- Merit Star Scheme was awarded to contractors who performed consistently well. For every merit star earned, the contractor would enjoy a 0.5% bidding preference when tenders were evaluated.
- HDB introduced interest free financing scheme which enabled contractors to receive pre-financing loans from HDB to run their projects.
- Contractors with a minimum paid-up capital of US\$ 500,000 and a minimum of five stars attained from the Merit Star Scheme were offered a guaranteed annual workload of 1,000 apartments per year for a period of three years.

1.3.3 Implementation approach and timelines

Overall implementation across key delivery timelines have been very efficient. HDB processes loan requests within 14 days and CPF applications for repayments of HDB loans are processed within 5 days. Successful applicants for Built-to-Order (BTO) apartments generally wait three or four years for their blocks to be complete.

1.3.4 Ownership criteria

- The HDB housing programme categorised the overall houses (apartments) under three categories i.e. Built-to-Order (BTO), Design-Build-Sell-Scheme (DBSS) and Executive Condominium (EC). The household income forms the eligibility criteria for applying for these houses.

1.3.5 Success rate

- House income ceilings per month are as follows: BTO (US\$ 4,425 for individual, US\$ 8,850 for families and US\$ 13,275 for extended families); DBSS (US\$ 8,850 for individual or families and US\$ 13,275 for extended families) and EC (US\$ 10,325 for individual or families).
- Home ownership rate has increased from 29% in 1970 to over 91% of the total population in 2017.
- Contribution of HDB houses has increased from 39% in 1970 to over 82% of the total houses in 2017.
- Number of people per housing unit have declined by 65% between 1970 and 2017 i.e. from 6.8 in 1970 to 4.1 to 2017.
- The ratio of housing mortgage loans to GDP has increased from 4% in 1970 to 55.5% in 2014.

1.3.6 Key risks faced

- Large scale agitation from the public against resettlement to new dwellings.
- Property price capping - HDB started facing financial challenges, as it had no other sources of revenue.
- Construction industry of Singapore lacked skilled labour that could implement programme of this magnitude.
- Singaporeans could demand very high compensation based on future land use.

1.3.7 Key takeaway

- A unique housing system, with three-quarters of its housing stock built by GoS' Housing Development Board (HDB)
- GoS owns land and provides it to HDB for construction of housing units
- Provision of subsidised houses to lower income households
- The country's homeownership rate of 90% is one of the highest in the world
- Compulsory contribution by both the employer and employees towards the housing fund
- Merit Star and Core Contractor Schemes for the benefit of the contractors, provide them with minimum offtake guarantee and helped in maintaining their performance.

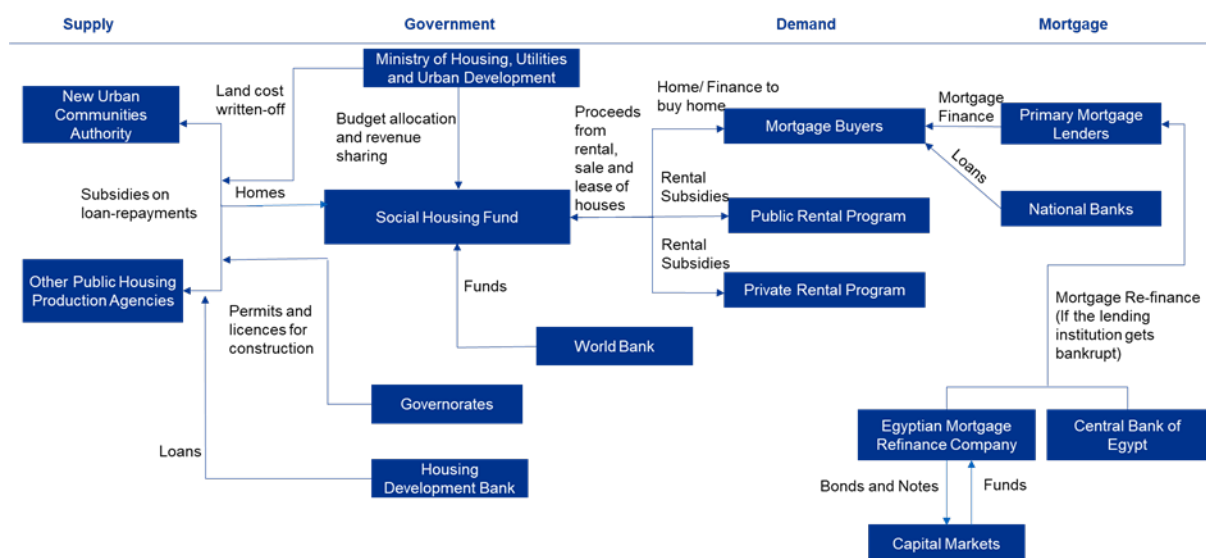


1.4 Egypt – specific country findings

1.4.1 Introduction to housing programme and key highlights

- Egypt has the largest housing deficit of the MENA region with a requirement for 3.5 million new units.
- It has implemented a number of affordable housing programs: 237,000 housing units in the New Urban Communities Authority (NUCA) program between 1982 and 2005; 68,400 housing units in Mubarak Youth Housing Program (MYHP) between 1996 and 2005 and the National Housing Project (NHP) program targeting 500,000 units from 2005 to 2011.
- These programs have been criticised as being insignificant to support Egypt’s growing population. Egypt needs to build 500,000 - 600,000 new homes a year to keep up with demand, 70% of which should aim at the lower income bands.
- The social housing project forecasted to build 200,000 new homes each year, meeting over half the annual demand for affordable housing.

Figure 2 Housing programme framework in Egypt



Source: KPMG analysis

1.4.2 Affordability

With real estate prices rising significantly, by at least 50% per square metre during the period from 2011 to 2014, and an average of 30-35% per year in 2016, house prices in Egypt relative to income are more expensive than in Western Europe, double most Gulf countries and four times more expensive than the USA.

1.4.3 Funding strategies for both supply and demand

- Real Estate Finance Law passed in 2001, establishing the legal and regulatory framework, allowing the formation of non-bank Mortgage Finance Companies (MFCs) that would have a greater interest in serving lower income households.
- A stimulus for the housing sector of a total of EGP 20 billion (US\$ 1.1 billion), into the mortgage sector was injected to stimulate the financing of houses for low and middle-income groups by the Central Bank of Egypt in 2014.
- 13 mortgage companies operate in the Egyptian market in addition to 12 banks out of 39 that offer mortgage loans, and 197 real estate appraisers. Banks offer housing loan amount starting from EGP 120,000 (US\$ 6.7k) up to EGP 5,000,000 (US\$ 279k) with differential interest rates ranging between 7% and 10.5%.

- Egypt finances its social housing scheme through land sales to developers who are building higher-end homes.
- Egypt had planned to build 1 million homes for middle-income Egyptians by 2020 in a US\$ 35 billion joint venture with Dubai-based Arabtec on the land provided by the Egyptian armed forces.

1.4.4 Implementation approach and timelines

- State land is offered to private developers on a revenue sharing basis, allowing the government to generate revenue from public land in a transparent manner while easing the difficulties of land acquisition for these developers.
- Housing and Building Research Centre (HBRC) provides trainings to skill-up labourers, performs studies and conducts research for building material and construction technologies.
- New cities are being built in the deserts in collaboration with Chinese construction firms.
- Research on green building, passive solar heating and water conservation technologies is underway to make the housing project environment friendly.

1.4.5 Ownership criteria

The programme has defined the eligibility for purchase of houses based on income levels. A capped unit price for purchase of homes and mortgage loan interest rates and term for the same has also been defined for these categories of income groups.

1.4.6 Success rate

- Egypt has gone through various social housing programmes since 1982. Some of these projects marked milestones in the history of social housing namely, Mubarak Youth Housing Programme-1996 and National Housing Programme-2005 which have successfully achieved the construction of their targeted units i.e. 70,000 and 500,000 units respectively. As of 2016, 180,000 housing units of the 1 million affordable housing units planned till 2019, have been built under the ongoing Social Housing Programme-2015.
- To provide affordable public housing, prices of the homes built rose beyond the reach of the lower income bands, a problem in the entire Egyptian housing market where deregulated housing prices have far outstripped incomes.
- Further, the bureaucratic requirements of some of the schemes, such as proving income statements, have made the housing more available to the middle class than the lower income bands, the latter often operate in the informal economy.

1.4.7 Key takeaway

- Availability of strong state controlled lending programs
- The social housing project forecasted to build 200,000 new homes each year
- Formation of non-bank Mortgage Finance Companies (MFCs) with greater interest in serving lower income households
- Establishment of Egyptian Mortgage Refinance Company (EMRC) to provide long term funding for primary mortgage institutions
- GoE's decreed increase of residential housing units, coupled with new investment laws, land reforms, availability of adequate financing, and strong sector performance has led to a positive investor appetite

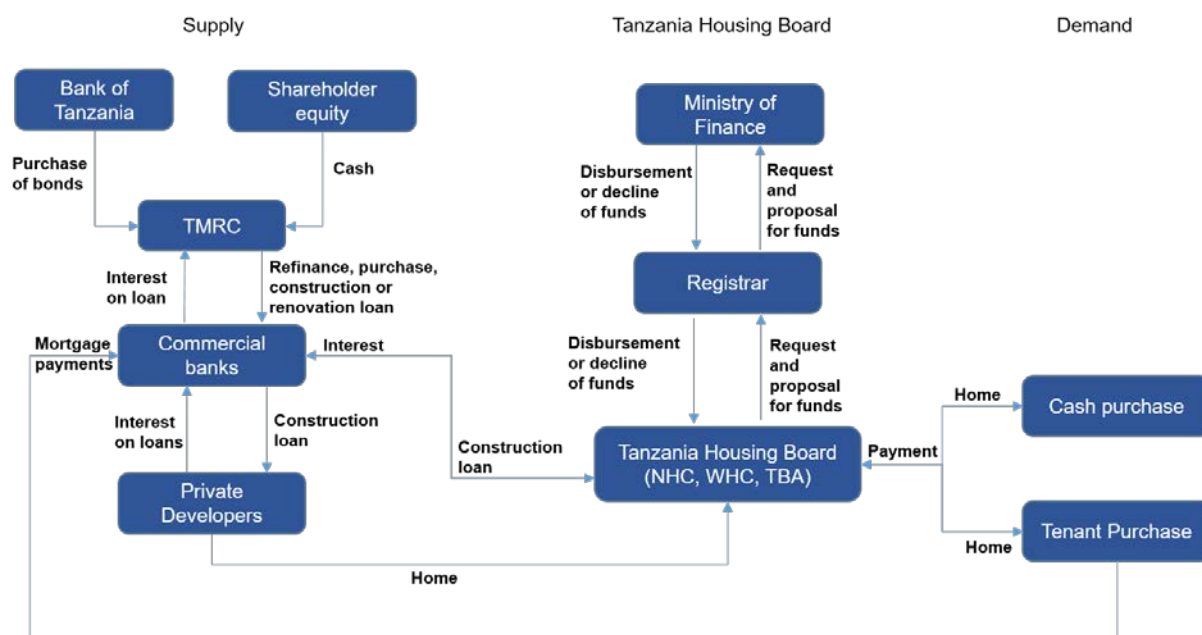


1.5 Tanzania – specific country findings

1.5.1 Introduction to housing programme and key highlights

- Housing demand in Tanzania has been boosted by access to mortgages, with the number of mortgage lenders increasing from 3 in 2010 to over 30 as at 2017.
- Current housing deficit in Tanzania is estimated to be 3 million units and is increasing at a rate of 200,000 units per year.
- Four major players dominate Tanzania's housing sector: National Housing Corporation (NHC), Watumishi Housing Corporation (WHC), Tanzania Building Agency (TBA) and National Social Security Fund (NSSF).

Figure 3 Tanzania housing programme framework



Source: KPMG Analysis

The above chart shows working of the Tanzania Housing Board (THB) and other stakeholders, including role of financial institutions in the housing sector. Tanzania Housing Board (THB) is made of three government institutions namely: NHC, WHC and TBA.

1.5.2 Affordability in Tanzania

- NHC has categorised its housing units into three broad classes: affordable (US\$ 15,000 – 124,500); mid-range (US\$ 125,000 – 249,500) and high-end (US\$ 250,000).
- The prices quoted for two bedroom (56m²) and three bedroom (70m² and 85m²) in various regions of the country ranged between TZS 44.7 million (US\$ 20,175) to TZS 128 million (US\$ 57,773) VAT inclusive.

1.5.3 Funding strategies for both supply and demand

The GoT primarily funds NHC as follows:

- Pre-finance, estimated to contribute about 20% of total funds.
- Loans from banks. Recently, the GoT has introduced a policy that requires NHC to get approval from the Ministry of finance and debt committee. According NHC, this has become a bureaucratic process and is delaying the progress of the housing projects.
- NHC equity finance, which forms a minor part of its total funds.

1.5.3.1 Demand side schemes

- In 2013, NHC initiated countrywide affordable housing project called 'My Home My Life' with an aim of developing 5,000 housing units. The prices quoted for two bedroom (56m²) and three bedroom (70m² and 85m²) in various regions of the country ranged between TZS 44.7 million (US\$ 20,175) to TZS 128 million (US\$ 57,773) VAT inclusive.
- In December 2015, NHC announced its commitment to delivering not less than 1,500 units each year for the coming 10 years in an attempt to address acute shortage of housing in the country.
- WHC is the main implementer of Tanzania Public Servant Housing Scheme tasked to build 50,000 housing units since 2014/15 financial year. WHC offers both commercial and residential property management services as well as consultancy services.
- WHC launched a project in August 2017 to deliver 500 house units in Njedengwe, Dodoma. The price range for WHC houses ranges from TZS 27 million to TZS 85 million (US\$ 12,186 to US\$ 38,364).
- TMRC is a private sector financial institution owned by member banks with a sole purpose of supporting banks to do mortgage lending by refinancing banks' mortgage portfolios.

1.5.3.2 Supply side schemes

- TMRC gets loans from the GoT at 7.5% per annum and lends to member banks at 9% and non-member banks at 10% per annum.

1.5.4 Implementation approach and timelines

- NHC undertakes a number of projects as a master developer in the newly acquired land as part of its land bank.
- TMRC is focusing on conducting research and development aimed at improving building technologies and lowering the cost of construction.

1.5.5 Ownership criteria

There is no eligibility criterion for the housing units. Once construction is completed, NHC advertises the units. Eligible applicants can pay either in cash or through mortgage. Mortgage applicants are required to pay a down payment of 10% of the price and the rest as a mortgage up to a maximum period of 20 years. The houses are awarded on a first come, first serve basis.

1.5.6 Success rate

- According to Bank of Tanzania, the mortgage market recorded an annual growth rate in mortgage loan balances of 11% in June 2017. A key element in the growth of the mortgage market has been the provision of long term funding by TMRC.
- NHC has involved 16 banks in mortgage lending to customers. However, NHC faces challenges in the implementation of programmes due to lack of funds and lower income bands project management.
- The mortgage debt through TMRC has increased from TZS 1 billion (US\$ 500,000) in 2010 to TZS 340 billion (US\$ 170 million) in 2017.

1.5.7 Key risks faced

- Nascent mortgage system (tough lending conditions) and lack of targeted monetary policy.
- Inadequate budgetary support to NHC from the GoT hence NHC has not been able to adequately meet its housing unit targets.
- Lack of a comprehensive housing policy.
- Delayed government approval on loans – NHC has to seek approval from the Ministry to be able to borrow loans from banks and this takes long.
- Affordability – The mortgage interest rates charged by the banks are relatively high and the majority of citizens are not able to afford them.

1.5.8 Key takeaway/conclusion

- Introduction of Tanzania Mortgage Refinance Company (TMRC) led to the increase of mortgage lenders from 3 to over 30
- Introduction of a policy that extended the mortgage tenor from 7 to 20 years
- A private bond to be issued by 2018 through Bank of Tanzania to support mortgage financing.



1.6 Cameroon – specific country findings

1.6.1 Introduction to housing programme and key highlights

- Cameroon is facing a challenge in providing housing for its population evidenced by the fact that 50% of 24.1 million Cameroonians live in informal dwellings and settlement.
- Cameroon had a housing deficit of over 1.2 million units as at 2015, which is further compounded by an annual additional housing shortage of 100,000 units.
- Access to housing has become increasingly costly, witnessing a price increase of almost 10% year-on-year.
- Contribution to the Cameroon Housing Loan Fund (CFC) comes from an indirect tax levied on employees and employers of private and public sectors which is collected by the tax authorities and transferred to the Fund (currently about FCFA 32 billion per year (US\$ 57.6 million).
- The tax is calculated by the employer by applying a rate of 1% for employees on the gross wage and 1.5% for employers on the remunerations paid, including benefits in cash and kind. It also collects and receives savings deposits from natural or legal persons.

1.6.2 Affordability in Cameroon

- The average monthly income per household is US\$ 386 in the formal public sector and US\$ 472 in the private sector.
- It costs up to US\$ 17,885 to build a standard three-bedroom house (averaging 300m² in size) excluding the cost of land in Douala and Yaounde. This cost is about the same and can even be more expensive in the smaller cities due to higher input costs. The cost of standard inputs increases outside main cities as the cost of transport increases. Most raw materials are either manufactured in the country or imported.
- The cost of a serviced 500 square metres piece of land is US\$ 8,943 in urban areas and US\$ 7,154 in the smaller cities.
- As per CAHF (Centre for Affordable Housing Finance), typical mortgage lending in Cameroon involves a term of 15 years and a down payment of 20%.
- The interest rate is about 12.5%. Only about 11% of the population can afford the cheapest newly built house by a private developer (US\$ 18,500) given current mortgage financing arrangements.

1.6.3 Funding strategies for both supply and demand

The Government of Cameroon (GoC) has introduced various schemes to address issues like building materials, labour, registry, etc. in the housing sector. However, lack of strong fundamentals like management of public funds and stable incomes have posed serious challenges to bringing large-scale transformation.

FCFA 387.9 billion (US\$ 672 million) has been allocated towards the major projects under the 2009 Growth and Employment Strategy Paper (GESP) and PLANUT to prioritise large public infrastructure projects that will promote private investment and growth.

1.6.3.1 Demand side schemes

- GoC has instituted reforms like providing financial guarantees and broadening the category of assets that can be used as collateral to make it easier to access housing finance.
- Real estate companies are collaborating with local commercial banks to extend end-user financing opportunities to the growing middle class.
- An English company NMS Infrastructure in partnership with some Cameroon banks has entered into a contract for constructing up to 10,000 social housing units over a six-year period in 2015. The project is valued at GBP 208 million (US\$ 273 million) and will be financed by British Government and GoC governmental and financial institutions.

1.6.3.2 Supply side schemes

- GoC provides sovereign guarantees to private developers. To increase construction of affordable housing across the country, individuals can provide 20% of the investment as their equity investment upfront and take a loan for the remaining 80%, which is guaranteed by GoC. Beneficiaries include individuals in the private and informal sectors as well.
- GoC has also helped to reduce housing production costs to enable the development of more housing units by encouraging the use of local materials and to reduce the price of land and inputs such as cement and sand. It has stepped up funding to government agencies in this sector.

1.6.4 Implementation approach and timelines

As land has become very scarce in the urban centers of Yaounde and Douala, Cameroon Real Estate Corporation (abbreviated to 'SIC' in French) has oriented its activity towards the production of housing and transacting its valuable property assets. It is opting to optimise its land by redevelopment of spaces and vertical densification of housing.

1.6.5 Success rate

- CFC's financing activities have increased over the past few decades. Between 1990 and 2011, CFC provided FCFA 198.07 billion (US\$ 344 million) in loans to individuals, government and private developers. This included FCFA 161.51 billion (US\$ 280 million) for 35,184 individual projects and FCFA 36.56 billion (US\$ 62 million) for 2,533 housing units and 2,390 plots in the grouped sector.
- The success rate of the programme has been low with 80% of Cameroon's population unable to afford these social housing units. The Stocktaking of the Housing sector in Sub-Saharan Africa study by World Bank describes that in conventional affordability terms, these units are far outside the typical price-to-income range of between 3:1 and 5:1, with prices 44-51 times the typical income levels. This is even applicable to public employees who earn higher income on average in Cameroon, price-to-income ratios range between 10.5-13.5 mean incomes, or two to three times affordability thresholds.

1.6.6 Key risks faced

- Information on the number of land titles and other forms of registered land rights is difficult to gather and often inconsistent. Only a small percentage of plots are registered and titled.
- In the two decades of economic recession, housing deficit has worsened due to population growth and rural exodus, coupled with the degradation of the existing housing stock.

1.6.7 Key takeaway/conclusion

- Cameroon Housing Loan Fund (CFC) is financed through an indirect tax levied on employees and employers, collected by the tax authorities and transferred to CFC
- CFC has instituted a line of credit dedicated towards financing construction of houses
- Housing policy focusing both on construction of social infrastructural amenities and provision or upgrading of basic services in informal settlements
- GoC provides sovereign guarantees to private developers
- Individuals in the formal and informal sectors can provide 20% of the investment as their equity investment upfront and take a loan for the remaining 80%, which is guaranteed by GoC
- Despite GoC introducing a number of schemes and incentives to lower cost of materials, labour and improving the registry process, the house prices are still high and cannot be afforded by 80% of the population, mainly low and middle income earners
- GoC has encouraged the use of local materials and reduced the price of land inputs such as cement and sand
- Private sector investors have set up factories to manufacture and distribute building materials, which will potentially reduce input costs. These materials are exported to all other Central African Economic and Monetary Community countries.

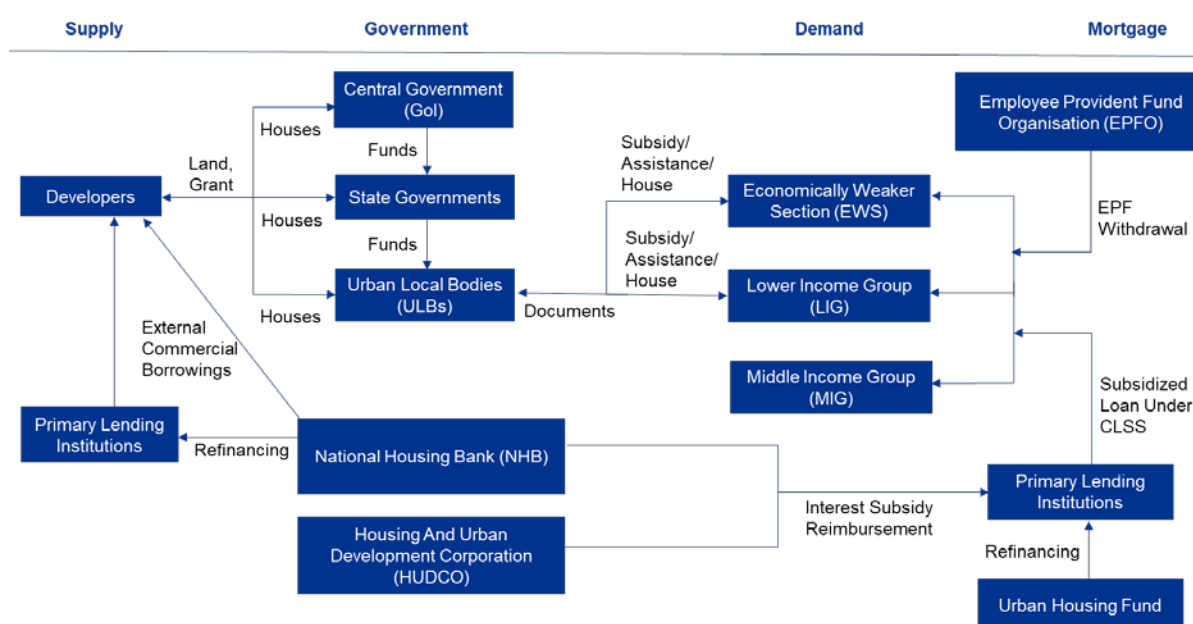


1.7 India – specific country findings

1.7.1 Introduction to housing programme and key highlights

- The Government of India (GoI) has implemented several affordable housing programs.
- On average, India’s housing requirement is increasing at a rate of 2.5-3 million homes per annum.
- To cater to the housing needs and a growing urban population, GoI in 2015 launched the Pradhan Mantri Awas Yojana – Urban (PMAY-U) with the aim of addressing the shortage of over 20 million houses in urban India by 2022.
- In 2016, GoI expanded the scheme to include rural areas with the launch of Pradhan Mantri Awas Yojana – Gramin/Rural (PMAY-G) aimed to develop about 30 million houses in rural India by 2022.
- Due to failure to achieve targets from previous schemes under PMAY, GoI has taken up the role of a facilitator, ensuring decentralised operations and have made several funding mechanisms available.

Figure 4 India housing programme framework



Source: KPMG Analysis

1.7.2 Affordability in India

- The Ministry of Housing and Urban Poverty Alleviation (MHUPA) provides guidelines on the affordability and construction of such housing according to income groups.
- The definition of affordable housing in India is materially different to other countries in that the Indian definition refers to any housing that meets some form of affordable criterion, the prime ones being (i) income level, (ii) size of the dwelling unit and (iii) proportion of expenditure required for the housing.

1.7.3 Funding strategies for both supply and demand

- GoI has been following the decentralisation approach, providing flexibility to state governments to choose the option which can best meet the demand of housing in their states/cities and also empowers them to formulate and approve projects for faster implementation of projects.
- GoI had given approval for creation of National Urban Housing Fund (NUHF) for US\$ 8.78 billion (Rs. 600 billion). The creation of NUHF is a proposal by the GoI but it is yet to be actualised. We are unable to determine the exact stage of NUHF, their role is at the initial planning stage.

1.7.3.1 Demand side schemes

- Under PMAY-U, an interest subsidy of 6.5% is available for EWS and LIG, 4% for MIG and 3% for HMIG.
- The loan tenure under CLSS (being one of the four verticals under PMAY-U) has been extended from 15 to 20 years from 2017.
- To bring more people under the affordable housing scheme, GoI has altered the criteria for the maximum size of a dwelling leading to an increase in the reach of the programme.
- The employer and employee both contribute a compulsory 12% each towards the retirement benefit scheme generating an interest of 8% - 12% per annum.

1.7.3.2 Supply side schemes

- The developers of affordable houses have been allowed to raise funds through external commercial borrowings (ECBs). These are considered attractive since cost of raising an ECB loan is lower than from domestic borrowings. The specific terms are not in the public domain.
- GoI incentivised builders to take up affordable housing projects, allowing profits from these as a full deduction from their total income under section 80IBA of the Income Tax Act.
- GoI increased budgetary allocation of both demand and supply subsidies under the programme based on the marginal utility of housing for each category.
- Increased budgetary allocation for housing subsidies to US\$ 146.31 million (Rs.10 billion) for LIG and EWS category and US\$ 131.68 million (Rs.9 billion) for MIG category.

1.7.4 Implementation approach and timelines

- GoI's PMAY programme has resulted in a slight change to the Land Acquisition Act 2013. Based on the amendment in 2015, the consent of the land owner is no longer required for the construction of affordable houses. Use of green and energy efficient technologies and raw materials and upgrading labour skills is another important aspect emphasised by GoI.

1.7.5 Eligibility criteria

The PMAY programme covers housing for both rural and urban areas. In the urban areas, people are classified on the basis of their income levels into three categories, which are: Economically Weaker Section (EWS), Lower Income Group (LIG) and Middle Income Group (MIG). In the rural areas people below poverty line and those living in dilapidated houses are eligible for the scheme.

1.7.6 Success rate

- Between 1947 and 2014, more than 8.75 million affordable houses were built under various schemes for both rural and urban areas.
- Since 2015, about 0.6 million houses have been built and another 1.65 million are under development.
- Since 2016, about 6.6 million houses have been built under PMAY-G. 1.

1.7.7 Key risks faced

- Insufficient funding for the scheme from GoI to the state government agencies.
- The location of affordable housing, where land was available at lower cost which precluded most city locations, made them unattractive to LIGs.
- Previous schemes remained ineffective because programs were fragmented, overlapping in their objectives and often administered by different ministries or government departments that did not collaborate.

1.7.8 Key takeaway/conclusion

- Allows withdrawal of up to 90% of Employee Provident Fund (EPF) contributions to build affordable housing for the working class
- Strong offtake mechanisms for encouraging participation of private developer
- GoI has been following a devolved approach, providing flexibility to state governments to choose the option which can best meet the demand of housing in their states/cities and also empowers them to formulate and approve projects for faster implementation
- The National Housing Bank (NHB), a central nodal agency has taken up many initiatives to bridge the financing gap that previously led to the failure of several schemes
- Provision of a Single Window Clearance to private players involved in project implementation for Economically Weaker Sections (EWC) of society
- Developers of affordable houses have been allowed to raise funds through External Commercial Borrowings (ECBs)
- The income of affordable housing developers is exempt from tax by the GoI under Income Tax Act

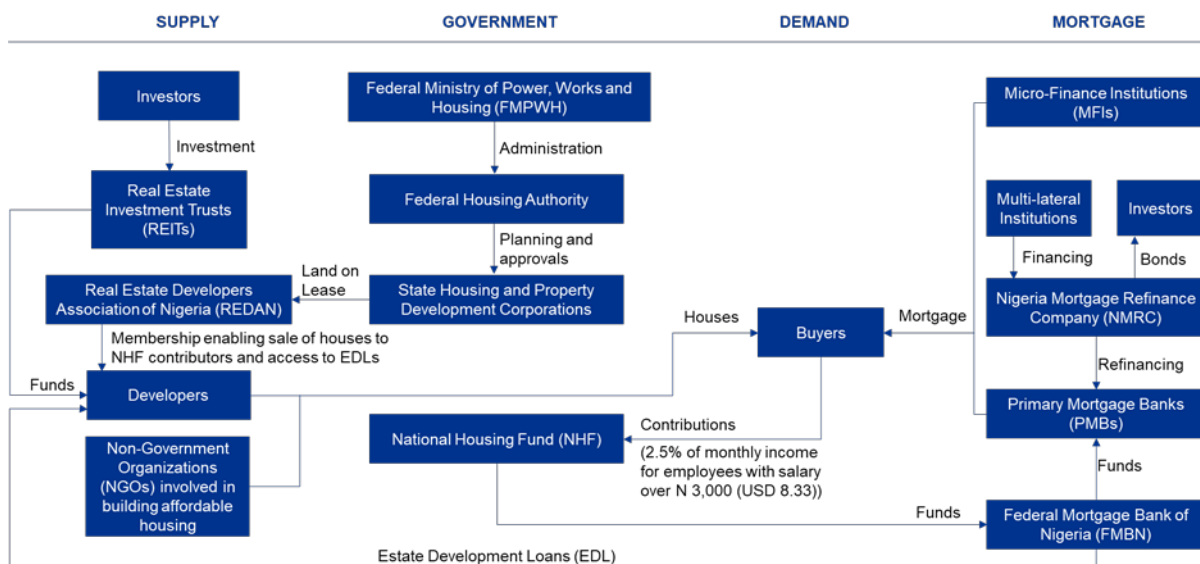


1.8 Nigeria – specific country findings

1.8.1 Introduction to housing programme and key highlights

- Almost half of Nigeria's population live in urban areas with urbanisation rate of 4.2% (estimated between 2015 and 2020) and population growth of 2.6% between 2016 and 2017).
- Major issues affecting housing in Nigeria include inadequate access to finance, slow administrative procedures and the high cost of land registration.
- The country's housing deficit is estimated to be in the range of 17 to 20 million houses and at least 1 million houses are needed annually to bridge the deficit by 2033.
- The Government of Nigeria (GoN) is currently only able to develop 100,000 houses per year, leaving an annual deficit of 900,000 houses.
- In 2015, President Muhammad Buhari stated that GoN would provide five million new middle-class homes between 2015 and 2019.

Figure 5: Nigeria housing programme framework



Source: KPMG analysis

The above diagram shows the working of National Housing Programme (NHP) and other stakeholders, including the role of financial institutions under the Nigeria Housing Finance Programme (NHFP).

- FMBN raises capital through the National Housing Finance (NHF), which obtains funding mostly from contributions of salaried employees earning monthly US\$ 8.33 (N 3,000) and above. These individuals are mandated to contribute 2.5% of their salary to the NHF.
- The Federal Ministry of Power, Works and Housing (FMPWH) is responsible for formulating and implementing GoN's policies with respect to provision of habitat and affordable housing.
- Nigeria Mortgage Refinance Company (NMRC) is a Public Private Partnership (PPP) arrangement between the GoN and the private sector and forms a key component of the NHFP.
- NMRC accesses capital market by issuing long-term bonds to investors. The proceeds of the bonds issued are utilised to provide liquidity to PMBs using refinancing facilities. As at the end of 2016, NMRC had refinanced mortgages amounting to US\$ 22 million (N 8 billion) – the amount of its inaugural bond issue in 2015.

1.8.2 Affordability in Nigeria

- More than half of Nigeria's population lives on less than US\$ 1 per day. A standard three bedroom middle income apartment currently commands a rent of US\$ 5,000 per annum and purchase price of US\$ 100,000.
- Because of the high cost of housing in Nigeria, 51% of Nigerians live in rented accommodation. Of these, 40% are paying rent of between US\$ 55.6 (N 20,000) and US\$ 222 (N 100,000) annually. This suggests that the housing programme provided by the GoN is not affordable.

1.8.3 Funding strategies for both supply and demand

1.8.3.1 Demand side schemes

- NMRC securitises long-term loans from Primary Mortgage Banks (PMBs) and issues bonds. This establishes a route to the capital markets for mortgages, improving liquidity in the mortgage market.
- Home owners who cannot pay initial down payment can also access mortgage through a third-party guarantee.
- Low income earners can access microcredit for incremental construction and housing improvement under this scheme.

1.8.3.2 Supply side schemes

- FMBN lends to PMBs at a concessionary rate of 4%. The banks on-lend NHF loans to homeowners at 6%, compared to non-NHF mortgage from banks which range from 16 to 32%.
- An amount of up to US\$ 41,667 (N 15 million) can be borrowed, where the borrower must make a deposit of between 10 to 30% with a maximum tenure of 30 years. The information for either middle or low income earners is not readily available.

1.8.4 Implementation approach and timelines

- GoN does not own the land but is the statutory occupant and the sole trustee of the land in Nigeria and hence the land restructuring and use falls under its jurisdiction.
- The Nigerian Building and Road Research Institute (NBRRI) is a GoN institute responsible for research and development building materials for the Nigerian building industry.
- Construction materials are procured from private suppliers working with the microfinance institutions.

1.8.5 Success rate

Nigeria still has a huge deficit that needs to be met by 2033. Since 2015, the government has been majorly laying the foundation as well as fixing housing sector issues e.g. formulating policies that will ensure the huge housing deficit is met.

1.8.6 Key risks faced

- Nigeria did not have a housing policy until 1991 and all housing projects were part of the National Development Plans
- Absence of strict enforcement, corruption, lack of adequate funding, inconsistency in the allocation of complete housing units, political interference and lack of adequate monitoring and evaluation of the programmes have been the reasons for inadequate implementation of the housing programme.
- The NHP does not have clearly defined parameters (eligibility criteria) for participation into housing program.

1.8.7 Key takeaway/conclusion

- Established Nigeria Mortgage Refinance Company (NMRC) to bridge funding cost of residential mortgages and promote availability and affordability
- NMRC securitises long-term loans from Primary Mortgage Banks (PMBs) and issues bonds thereby establishing a route to the capital markets for mortgages, improving liquidity in the mortgage market
- Compulsory contributions from employees and employers towards the National Housing Fund
- It is mandatory for insurance companies to invest 20% of non-life and 40% of life funds in the housing sector
- Federal Mortgage Bank of Nigeria (FMBN) extends Estate Development Loans (EDL) to private developers and state housing corporations at a rate of 10% for a maximum tenor of 24 months with revision clauses for proposed projects where the housing apartment's target prices are not more than US\$13,815 (N 5 million).

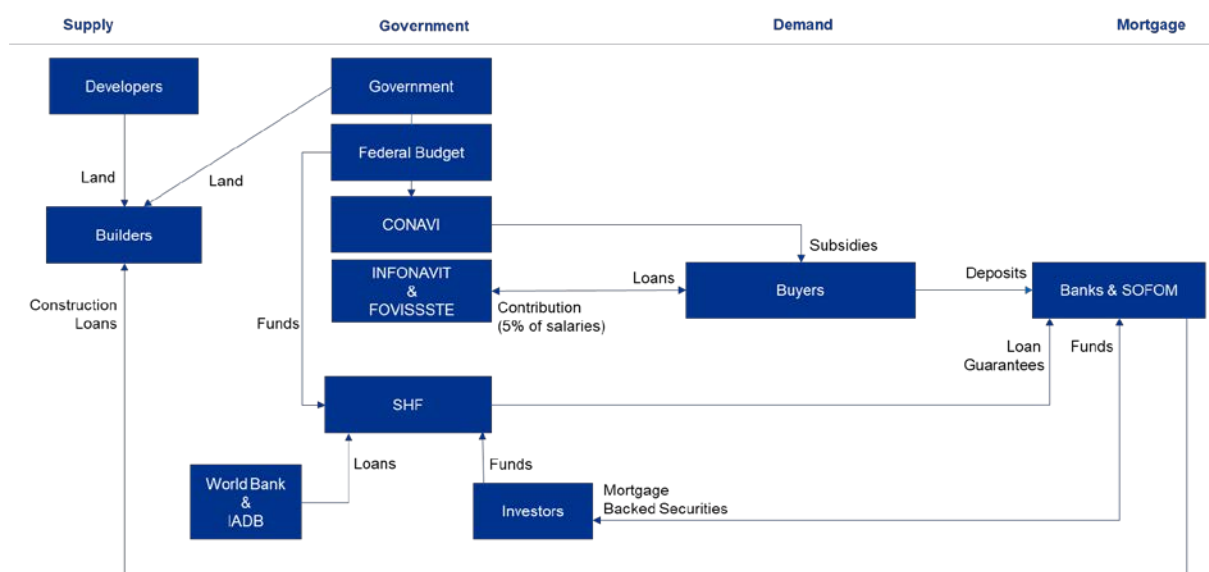


1.9 Mexico – specific country findings

1.9.1 Introduction to housing programme and key highlights

- Mexico has a housing deficit of 9.2 million units as of 2016.
- To meet this demand, the Government of Mexico (GoM) has focused its efforts on providing a range of financial schemes and subsidies to assist citizens in acquiring, building and expanding homes.
- The residential construction sector contributes 5.7% of GDP and witnessed an annual growth of 3.2% in 2016.
- Mexico’s latest National Housing Policy, Programa Nacional de Vivienda 2014-2018 (PNV) was introduced in 2013 to address the prevailing housing deficit in the country by way of increasing subsidies.

Figure 6 Mexican housing Market Structure



Source: An economic approach to Mexico’s Housing Market

1.9.2 Funding strategies for both supply and demand

There are three main ways to access financial support for housing in Mexico:

- Financing and co-financing of loans, mainly through the operation of the housing sub-accounts managed by the National Housing Agencies (ONAVIS), as well as through direct operation of federal and state resources from the National Fund for Popular Housing Trust (FONHAPO) and the State Housing Organisations (OREVIS).
- By accessing direct support from SHF or through bridge loans from financial intermediaries for real estate developers.
- Availing subsidies through the programs implemented by CONAVI and FONHAPO. Subsidies form only a small portion of the overall housing finance, around 2% while the total financing in Mexico stood at US\$ 133.8 billion as of May 2018.

1.9.2.1 Demand side schemes

- INFONAVIT is the largest financier of formally built housing units in Mexico providing loans to homeowners.
- The second largest lender by loan volume is SHF, and it provides mortgage insurances and guarantees to banks, which are then able to provide loans to consumers.

- FOVISSSTE provides loans by lottery to eligible workers and is the second-largest public capital source after SHF.

1.9.2.2 Supply side schemes

- SHF supplies funding and guarantees to support mortgage lending as well as indirect partial guarantees to support housing construction.
- It channels funds through Mexican commercial banks and Sociedades Financieras de Objeto Limitado (SOFOLLES).
- It also provides loans to financial intermediaries and guarantees to banks, both of which then provide loans to developers.

1.9.3 Implementation approach and timelines

- The land use design and building code is decided at a local level in Mexico.
- Executors of housing projects have implemented actions to give certainty to property such as signing of agreements through public notaries and channelling subsidies for regularisation of property.
- Certified developers are selected for government financing, infrastructure and housing construction, equipment and land acquisition, bond structuring, promotion of private investment, as well as technical assistance.

1.9.4 Success rate

- Besides meeting its targets, the housing policy has been able to decrease self-production of housing since its introduction in 2014.
- Self-constructed homes in Mexico are mostly make-shift arrangements made from lower income bands quality materials. They also lack access to adequate infrastructure and urban services.

1.9.5 Key risks faced

- Despite the policy push towards urbanisation, Mexico has until very recently lacked a clear urban development policy.
- Previously, homebuilders focused large amounts of capital in acquiring land and constructing homes on the outskirts of cities, which put the burden of commuting on homeowners. This led to many homes being abandoned or remaining unsold, as owners chose to remain closer to the centre.
- Large scale developers started shying away from building social housing once caps were laid down on new developments to eradicate concentration of social housing.

1.9.6 Key takeaway/conclusion

- A housing policy that includes generating optimal credit and subsidy schemes, increasing subsidies and strengthening inter-institutional coordination
- The housing policy seeks to promote construction of new houses in urban locations and providing environmental-conscious and socially sustainable housing by according higher subsidies for such developments
- Presence of a government bank aimed at promoting the development mortgage loans market
- The development bank, SHF supplies funding and guarantees which support mortgage lending through commercial banks and housing construction
- Lower interest mortgages that require a minimum of eco-technologies in social housing in order to save electricity, gas and water
- CONAVI, the implementing agency, provides training, conducts R&D establishes standard for the construction sector
- It also certifies developers according to the nature of development (integrated facilities, urban infrastructure, public spaces, etc.)
- Certified developers are selected for GoM financing, providing land and equipment, as well as technical assistance.

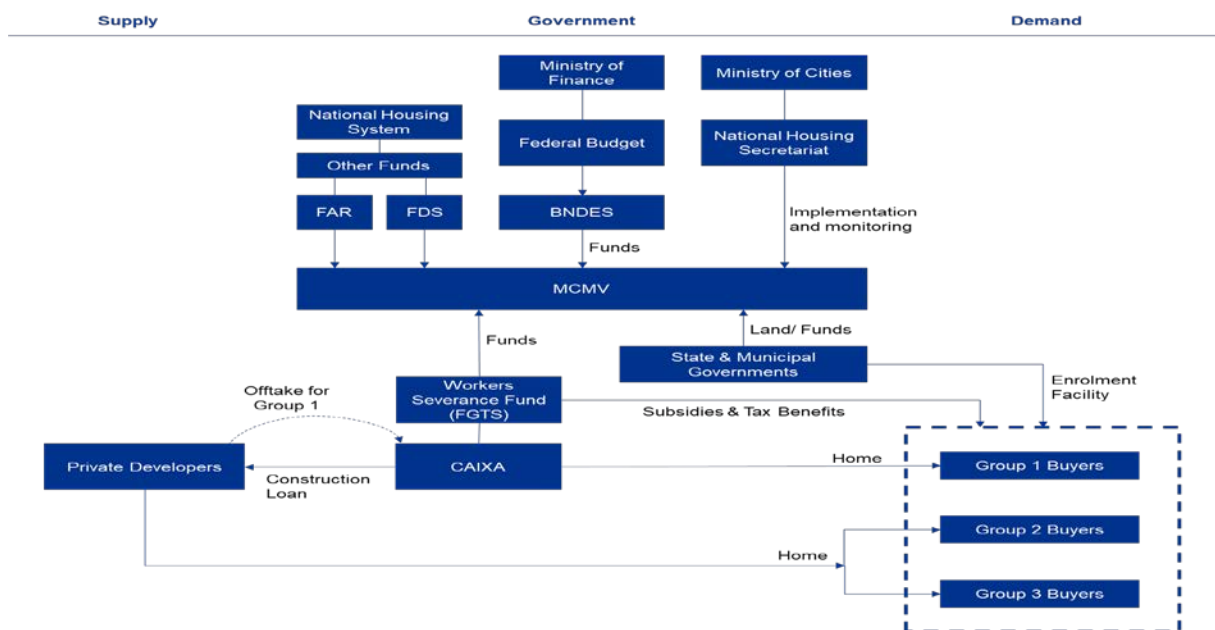


1.10 Brazil – specific country findings

1.10.1 Introduction to housing programme and key highlights

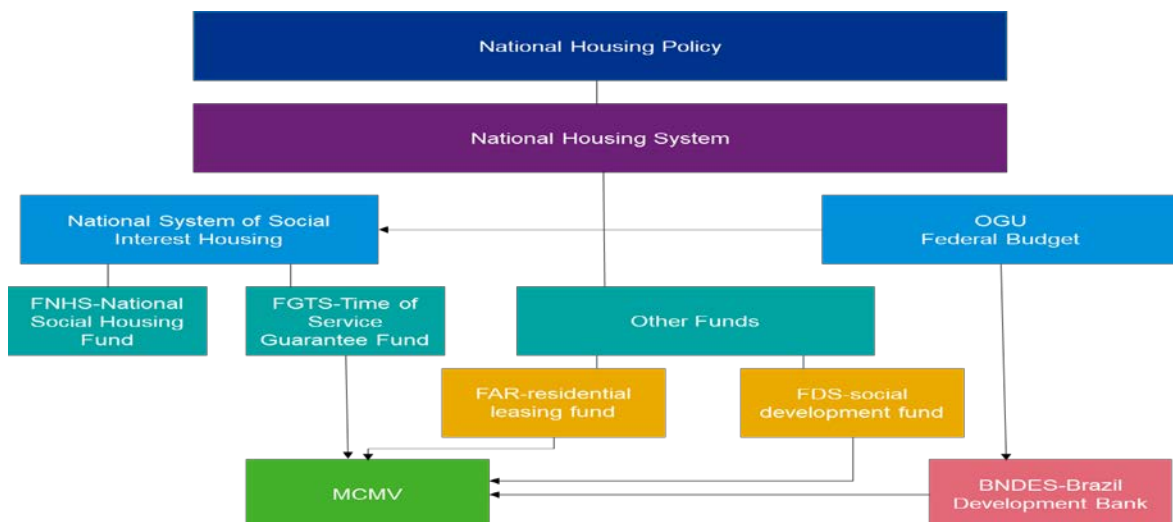
- Programa Minha Casa Minha Vida”- PMCMV (My House My Life) or MCMV, was launched by the federal government in partnership with states, municipalities and not for profit entities to provide housing to the low and middle income families (gross monthly income of US\$ 1,680).
- The plan was launched in 2009 with an initial target of building 1 million affordable homes for the low income earners at a budget of US\$ 8.8 billion. By 2012, 800,000 affordable homes had been built under the programme (an average of 266,000 units per year).
- The program has been implemented by splitting its potential beneficiaries into four groups divided by their monthly income. This division also dictates the amount of subsidies and grants allowed for each group.

Figure 7: Brazil housing programme framework



Source: KPMG analysis

Figure 8 Flows of financial resources to PMCMVF



Source: KPMG analysis

1.10.2 Funding strategies for both supply and demand

- The PMCMV Programme derives most of its funding from the federal budget surplus and the Workers Severance Fund (WSF). While federal contribution is a non-refundable subsidy that is not required to be paid back, contributions from the WSF requires repayment. The Social Development Bank (BNDES) has also allocated funds for infrastructure financing.
- In the first phase of the PMCMV programme, which was launched in 2009, 75% of total budget came from non-refundable sources, refundable sources accounted for 25%.

1.10.2.1 Demand side schemes

- The government provides varying levels of direct subsidies, insurance exemption or reduction, tax reduction for housing developments and exemption or reduction of property registration costs to different income groups.
- Workers Severance Fund (FGTS): A mandatory contribution created in 1969, FGTS was fund was formed through deposits from the employer equalling 8% of the employee's salary into a current account in the CAIXA linked with the employment contract.
- It provides long-term housing finance loans for beneficiaries of various groups of the PMCMV program.

1.10.2.2 Supply side schemes

- Government channels significant resources to the private-oriented housing provision fund. The design of the Leasing Fund allows for a more flexible transfer of federal resources and procurement processes for housing production, especially when the private sector is the executor.
- Until September 2017, the cumulative amount of US\$ 15.53 billion had been allocated by GoB to FAR.
- The government channels subsidies into this fund and is exclusively aimed at the production of cooperative housing. Cooperative housing programmes are resident led housing societies, in which the families themselves hire the contractors and architects to get their houses built.
- It assures loan repayment to the lenders in case of default from a PMCMV beneficiary.

1.10.3 Implementation approach and timelines

- Programme implementation is the responsibility of the Ministry of Cities, through the National Housing Secretariat. The Secretariat draws up specific norms and conditions and then provides detailed instructions on the implementation of the Programme modalities for local administrations and private developers.
- FGTS funds the PMCMV in two ways: Through the granting of housing finance and with the concession of discounts linked to these loans (in the amount of the instalments or in the settlement of part of the value of the financed property).

1.10.4 Success rate

- While PMCMV has effectively been able to deliver 3.2 million affordable housing units, but it has also faced increased criticism for the planning, design and quality of its end products.
- The programme also contributed to the Brazilian housing deficit reducing from 6.9 million homes in 2009 to 5.4 million homes in 2012.

1.10.5 Key risks faced

- Phase 1 of the PMCMV was criticised for the lower income bands quality of its projects and their social-spatial consequences.
- Although the plan addressed issues regarding project implementation, it devoted little attention to urban insertion and transit oriented urban design.

1.10.6 Key takeaway/conclusion

- Implemented one of the largest housing programmes for the low and middle income families
- Mandatory contribution from employees of 8% of salary used to provide long term housing finance loans to beneficiaries
- Existence of non-refundable grants from the government utilised for private sector housing provision (residential leasing fund) and the social development fund
- Bulk of the construction under the housing programme undertaken by private developers that apply for funding from the residential leasing fund
- A social development fund through which the government channels subsidies for generation of cooperative housing in the country
- Programme implementation is the responsibility of the Ministry of Cities, through the National Housing Secretariat.
- Guarantor social housing fund that assures loan repayment to lenders in case of a default.

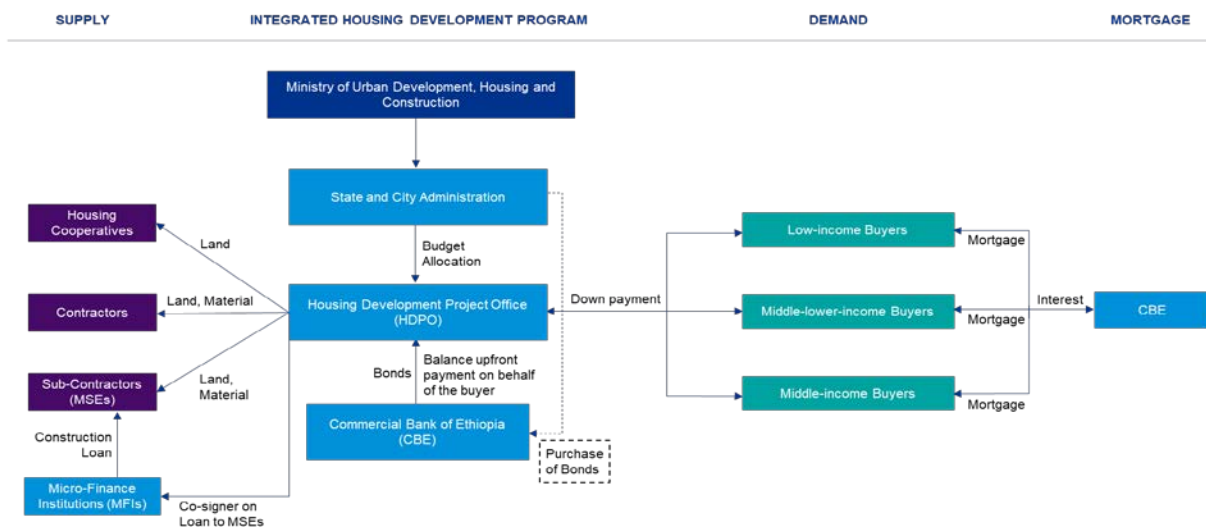


1.11 Ethiopia – specific country findings

1.11.1 Introduction to housing programme and key highlights

- Ethiopia's economic growth is accompanied by rapid rate of urbanisation of approximately 5.3%. Due to the rapid population growth and urbanisation, housing shortages and overcrowding are the primary issues faced by the country currently.
- For the urban cities like Addis Ababa (one of the most populous city) homelessness and slum dwelling are also becoming an emerging problem.
- It is estimated that about 80% of the inhabitants in Addis Ababa are homeless or live in low-grade dwellings.

Figure 9 Ethiopian housing programme framework



Source: KPMG analysis

1.11.2 Affordability in Ethiopia

- Affordability is one of the primary challenges of the housing sector in Ethiopia. In theory, the IHDP scheme is expected to pay for itself, as all land in the country is state-owned which reduces the upfront costs.
- It has been witnessed that the prices charged by the government were significantly low to sustain the IHDP programme, hence over the years the government has hiked the prices, making the segment less affordable for the citizens.
- Once allotted, the house owners often struggle to pay their mortgages and a numbers of owners opt to rent out the flats and move elsewhere.

1.11.3 Funding strategies for both supply and demand

- Since the launch of the program in 2005, the Housing Development Program Office (HDPO) established an agreement with the Commercial Bank of Ethiopia (CBE) to provide low interest mortgage loans to program beneficiaries.
- While every condominium-housing owner is expected to make a down payment of 10%, 20% or 40% of the total housing cost prior to property transfer, CBE provides the mortgage loans to individuals upon unit transfer at 7%, which is 50% lower than the market rate of 14%.

1.11.3.1 Demand side schemes

- A scheme to cross-subsidise studio and one-bedroom units as a pricing strategy to increase affordability for low-income households. Studio and 1-bed units are sold lower than their individual construction costs, whereas, 2- and 3-bedroom units are sold at a higher cost.
- The subsidy percentages are: studio - 30%, 1-bed -10%, 2-bed +5%, and 3-bed +10% of unit construction cost.
- In order to ensure financial sustainability of the program, GoE introduced a separate scheme in 2013 aimed at the middle-income buyers. The buyers who could afford down payment of 40% and had saved the whole price of the property would skip the lottery and head to the front of the queue.

1.11.3.2 Supply side schemes

- In the city suburbs, the GoE reserves a land bank for investors/developers, which makes available land to investors engaging in real estate development.
- Inputs on Credit: The IHDP provides re-bars, iron and cement (when not available in the market) on credit. The costs of inputs are deducted from future payments for the outputs.

1.11.4 Eligibility criteria

- Homes under IHDP are divided into four different groups based on payment modalities; 10/90, 20/80, 40/60 and housing association.
- The payment modality for the last one requires a 100% upfront settlements, while the others incorporate 10, 20 and 40% down payment mixed with a long-term mortgage plan.

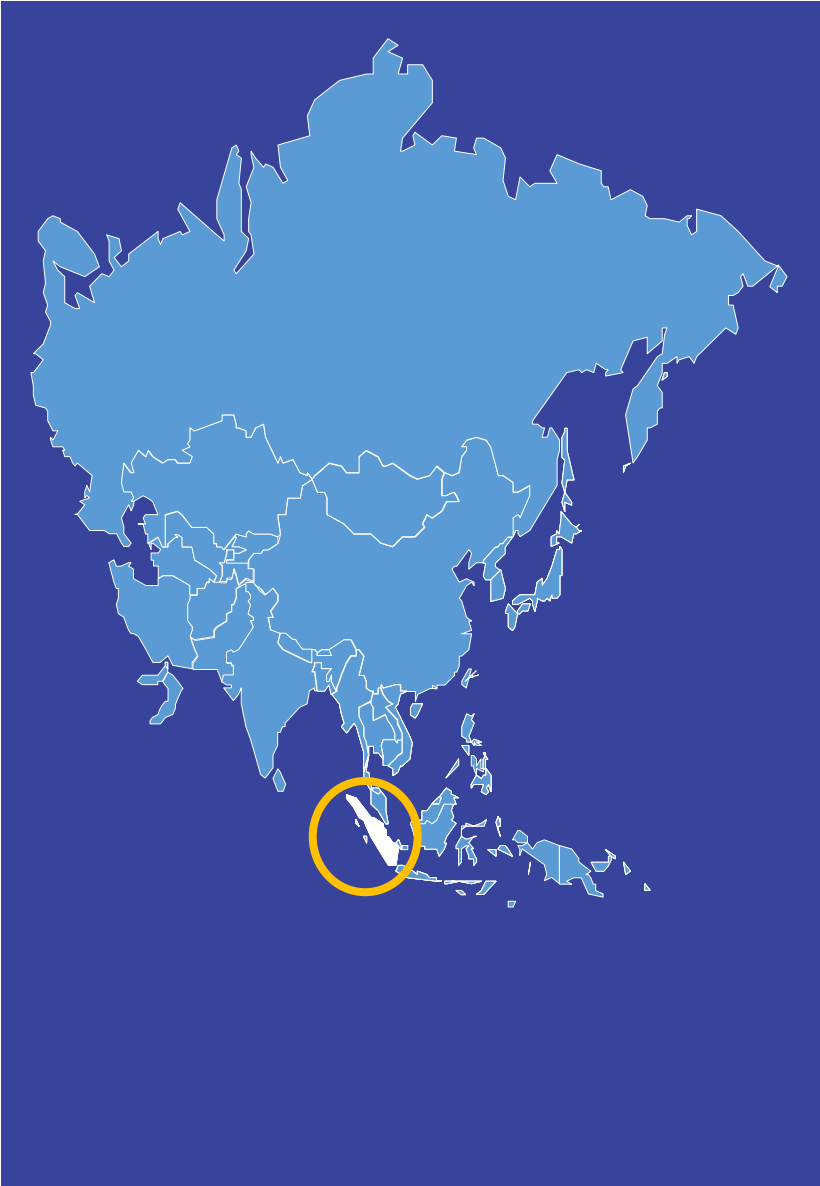
1.11.5 Key risks faced

- Affordability is the primary risk that governs the Ethiopian program. Initially the prices charged by the government was significantly low to sustain the programme, hence it had to hike them.
- Low income group is unable to afford the down payments for even the most subsidised units, those able to afford the down payment, often struggle to pay their mortgages.
- Appropriate allocation of houses has been a challenge under the IHDP program. While the government built 270,146 houses, however only 182,000 houses were allocated.
- Since the launch of the IHDP, the scheme had very ambitious slum clearance programme in Addis Ababa's inner city that has not been met to date.

1.11.6 Key takeaway/conclusion

- Commercial Bank of Ethiopia (CBE), a government bank, provides mortgage loans at lower than market rates to low income households
- The Addis Ababa City Administration (AACAA) provides subsidies by providing urban land for social housing projects, provides infrastructure and tax benefits
- Providing employment opportunities to the unemployed at the construction sites in tandem to the employee saving half of their earnings towards down payment of the completed units
- Lottery system is not considered effective for the lower income bands. Buyers who can afford down payment of 40% head to the front of the queue
- GoE reserves a land bank for investors/developers making land available to investors in real estate.

Singapore



2 Singapore

2.1 Country overview

Demographic and economic overview^{2,3,4}

Since its independence in 1965, Singapore has adopted a parliamentary democracy system. The country has a highly developed and successful free-market economy, with one of the highest per capita income in the world. The economy depends heavily on exports, particularly in information technology products and pharmaceuticals, as well as a vibrant financial services sector. The country provides one of the world's most business-friendly regulatory environment for local entrepreneurs and investors.

Key demographic and economic indicators	
Population	5.6 million (2017)
Area	700 km ² (1/5 th is comprised of reclaimed land)
Gross Domestic Product (GDP)	US\$ 323.9 billion (2017)
Per capita income	US\$ 52,600 (2017)
World Bank ease of doing business ranking	2 nd of 190 countries

Introduction to housing programme

The Government of Singapore (GoS) launched public housing programme to meet the housing shortage in the late 1950's with an aim to provide housing to all. Public housing in Singapore is managed by the Housing and Development Board (HDB) under temporary leaseholds for 99 years. The HDB is Singapore's public housing authority and a statutory board under the Ministry of National Development, which was formed in 1960 to develop public housing in towns.

Singapore has developed a unique housing system, with three-quarters of its housing stock built by HDB and homeownership financed through Central Provident Fund (CPF) savings. As a result, the country's homeownership rate of 90% is one of the highest around the world. CPF is a compulsory comprehensive savings plan for working Singaporeans and permanent residents primarily to fund their retirement, healthcare, and housing needs. As part of CPF, employers and employees contribute a maximum of 17% and 20% respectively of the individual employee's monthly salary (up to a monthly salary ceiling of US\$ 4,425 (S\$ 6,000))⁵ toward the employee's account in the fund. The HDB-CPF framework established in the 1960s has transformed the urban form of Singapore and remains largely intact five decades on. Currently, there are more than 1.1 million HDB apartments, largely clustered in 23 self-contained new towns that extend around the city's coastal core.⁶

Between 1960 and 2013, the ratio of housing investment to GDP averaged 7%, with the ratio of housing investment to total investment averaging 23%. These ratios are high by global standards and reflect the policy attention and resources channelled into the housing sector.⁷ Between 1960 and

² https://www.mfa.gov.sg/content/mfa/overseasmission/preTORIA/about_singapore/overview.html

³ <https://www.statista.com/statistics/378648/gross-domestic-product-gdp-in-singapore/>

⁴ <http://www.doingbusiness.org/data/exploreconomies/singapore>

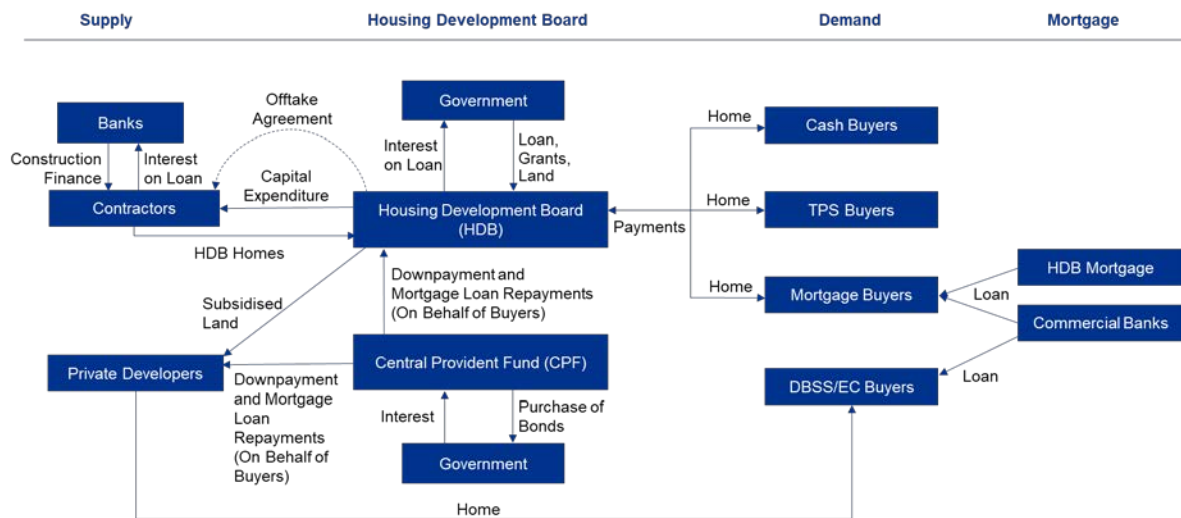
⁵ <https://www.cpf.gov.sg/Employers/EmployerGuides/employer-guides/paying-cpf-contributions/cpf-contribution-and-allocation-rates#item587>

⁶ <https://www.hdb.gov.sg/cs/infoweb/about-us/history>

⁷ <https://www.adb.org/sites/default/files/publication/181599/adbi-wp559.pdf>

2015, over 1.1 million apartments have been constructed by HDB; thus, averaging 20,300 apartments per annum.

Figure 10 Singapore housing programme framework



Source: KPMG analysis

The above diagram, (Figure 1) shows the working of HDB and other stakeholders, including the role of financial institutions in the housing programme.⁸ The housing programme in Singapore is implemented within an integrated network – the GoS owns around 90 % of the land and provides this to HDB. In addition, it also issues comprehensive HDB town planning.⁹ HDB holds periodic sale launches and applicants apply directly to HDB for an apartment. Finally, CPF furnishes payments to HDB on behalf of buyers for down payment or mortgage payments for the apartments. Tenants Priority Scheme (TPS): TPS buyers are tenants who are allowed to purchase their own home. To be eligible for this scheme, the applicant and his family must have been living in an apartment rented from HDB for at least 2 years.¹⁰

The three major stakeholders involved in the programme are:

- Ministry of National Development (MND): is responsible for guiding land use planning and delivering quality public housing.¹¹
- HDB: is responsible for planning and executing public housing programmes.¹²
- Developers and partners from other agencies: they range from developers – who are responsible for building and selling the Design-Build-Sell-Scheme (DBSS) and Executive Condominium (EC) apartments; material suppliers; business consultants; building contractors; manufacturers; banks; other GoS agencies such as the Building and Construction Authority (BCA), Urban Redevelopment Authority (URA) etc.

Affordability in Singapore^{13,14}

As per the 14th Annual Demographia International Housing Affordability survey, homes in Singapore were rated as seriously unaffordable with a median multiple of 4.8 in 2017. The median multiple is a measurement of housing affordability by linking median house prices to median household incomes. Meanwhile, the US got a 3.8 rating as having the most affordable homes, followed by Japan with 4.2, and Canada with 4.3.

⁸<https://www.economist.com/asia/2017/07/06/why-80-of-singaporeans-live-in-GoS-built-apartments>

⁹<https://www.adb.org/sites/default/files/publication/181599/adbi-wp559.pdf>

¹⁰ <https://www.hdb.gov.sg/cs/infoweb/residential/buying-a-flat/new/eligibility/priority-schemes>

¹¹ <https://www.mnd.gov.sg/about-us/introduction>

¹² <http://siteresources.worldbank.org/EXTSDNET/Resources/Presentation3.pdf>, Pg. 30

¹³ <https://sbr.com.sg/residential-property/in-focus/homes-are-still-seriously-unaffordable-in-singapore>

¹⁴ <http://www.demographia.com/dhi2018.pdf>

Key takeaway

A major policy innovation was for the GoS to utilise the CPF as a vehicle for mobilising domestic savings for housing finance. It has improved home ownership affordability and driven demand.

2.2 Funding strategies for both supply and demand

The GoS primarily funds the HDB as per the following:

1. Annual budgetary allocation to cover its deficits incurred for development, maintenance, and upgrading as part of the programme. The deficit refers to the difference in revenue generated from sale of HDB apartments and total development costs, and CPF housing grants for eligible home buyers. In FY 2016 - 2017, HDB incurred a deficit of ~ US\$ 630 million on its programme. The average deficit was about US\$ 1,264 million a year in the last 3 years (FY 2014 - 2017).¹⁵
2. Loans for mortgage lending and long-term development purposes; and
3. Land allocation for HDB housing and comprehensive HDB town planning

The key milestone for this programme happened when GoS allowed usage of CPF for financing the purchase of housing sold by the HDB. This boosted the demand for the HDB houses and led to overall increase in home ownership rate of the country. In the above-mentioned funding mechanisms, GoS has implemented the following schemes for supply and demand side:

Demand side schemes

- Mortgage from HDB at concessionary interest rates:¹⁶ HDB provides loans to buyers at concessionary interest rates at 0.10% above the prevailing CPF Ordinary Account (OA) interest rate – which is currently at 2.60% per annum. This not only led to increase in home ownership via increase in home sales, but- also, increased the ratio of housing mortgage loans to GDP by more than 13 times between 1970 and 2014.¹⁷
- CPF savings¹⁸: The public housing programme enables CPF members to use their CPF OA savings to buy new or resale HDB apartments. The integrated HDB–CPF framework has contributed to the overall growth of housing loans and the development of the mortgage sector as home ownership rates increased.
- Home Ownership for the People (1964) and Home Protection Scheme (HPS): the HPS ensures that dependents of apartment owners do not lose their homes, when they are unable to finance their loan in the event of death/permanent incapacity of the sole breadwinner¹⁹
- Other GoS schemes, including public rental scheme, acts as a final safety net for in-need Singaporeans and provides a minimum standard of housing for families. The various schemes have contributed to increase the demand of housing in the country.

Supply side schemes

- Merit Star Scheme (1973): Merit Star Scheme were awarded to contractors who performed consistently well – for every merit star earned, the contractor would enjoy a 0.5% bidding preference when tenders were evaluated.²⁰ This improved the contractor performances and led to competitive bidding.
- Interest-free financing (1981): The HDB introduced the scheme, which enabled contractors to receive pre-financing loans from HDB to run their projects – subject to a maximum ratio of loan: value of contract of 1:15 (payable by instalments).²¹ This increased the liquidity of the contractors and led to smooth implementation of the housing programme.

¹⁵ <https://www.hdb.gov.sg/cs/infoweb/hdbSpeaks/no-profits-from-public-housing>

¹⁶ <http://www.adb.org/publications/housing-policies-singapore/>

¹⁷ <https://www.hdb.gov.sg/cs/infoweb/residential/servicing-your-hdb-loan/mortgage-loan/interest-rate>

¹⁸ <https://www.cpf.gov.sg/Members/Schemes/schemes/housing/public-housing-scheme>

¹⁹ <https://www.cpf.gov.sg/Members/Schemes/schemes/housing/home-protection-scheme>

²⁰ <http://blogs.worldbank.org/sustainablecities/what-about-singapore-lessons-best-public-housing-programme-world>

²¹ *Managing Construction Industry Development: Lessons from Singapore's Experience* By George Ofori

- Core Contractor Scheme (1982): Contractors with a minimum paid-up capital of US\$ 368,756 (S\$500,000) and a minimum of five stars attained from the “Merit Star scheme” are offered a guaranteed annual workload of 1,000 apartments per year for a period of three years. By assuring workflow, this increased participation of new contractors in the programme, thus promoting entrepreneurship in the country.
- Both the Merit Star and Core Contractor schemes were terminated in 1988 and replaced with a scheme whereby contractors could bid for a package of three building projects to be delivered over a 40-month period, thereby also providing some stability of workflow.²²

2.3 Implementation approach including delivery timelines

The key implementation strategies in different areas are described below^{23,24}:

1 Land bank & resettlement policy	2 Construction, procurement & training
<ul style="list-style-type: none"> – The Land Acquisition (LA) Act, 1966 empowered the country to acquire land at low cost for public use. The key emphasis on LA that: (i) no private landowner should benefit from development which had taken place at public expense; and (ii) the price paid on the acquisition for public purposes should not be higher than what the land would have been worth had the GoS not contemplated development generally in the area. – Under the resettlement policy, people were resettled to houses closer to commercial establishments. 	<ul style="list-style-type: none"> – Hedging material prices: HDB executes long-term supply contracts and bulk purchases to ensure continuous supply of building materials and manage price fluctuation. – Developing internal labour force: The GoS established the Construction Industry Training Centre, now known as Building and Development Authority to train the workforce and set standards in the construction industry. – The HDB’s maintenance constitutes two components inside the apartment and common areas. It is undertaken as follows: <ul style="list-style-type: none"> – Apartments: Maintenance and minor repairs in the apartments is the responsibility of residents and is done by private contractors. The HDB recommends occupiers to get the repairs done by the contractors listed on the HDB website. – Common areas: Maintenance of common areas includes corridors, lifts, water tank, public lighting, and open spaces. This is undertaken by the Town Councils, which are autonomous legal entities. The maintenance fee is around US\$ 40 per month for a one-room HDB flat to around US\$ 70 per month for other apartments. The service and conservancy fee are payable by residents to the respective town councils.

²² <https://www.clc.gov.sg/docs/default-source/urban-systems-studies/working-with-markets.pdf>

²³ <https://blogs.worldbank.org/sustainablecities/what-about-singapore-lessons-best-public-housing-programme-world>

²⁴ <https://sso.agc.gov.sg/Act/LAA1966#pr6>

3 Design & technology	4 Offtake mechanism
<ul style="list-style-type: none"> – Promoting social cohesiveness: HDB allots apartments in a manner that ensures inter-mixing of various races within the developments. Buildings are also designed to encourage social interaction. – Dimensions of the apartments were standardised to easily automate the building and construction activities. – Prefabricated ferrolite partition wall system reduced the amount of concreting materials required by 30%. – Technology transfers: HDB promoted transfer of technology from foreign contractors to local contractors by mandating foreign firms to enter into JVs with the local firms where the foreign partners were only allowed a stake of 49%. 	<ul style="list-style-type: none"> – Various schemes including Merit Star and Core contractor have been launched for the benefit of the contractors and overall programme. While some focused on improving the operational efficiency, others provided the contractors with minimum workload/offtake guarantee – for maintaining a minimum performance.

Overall implementation across the key delivery timelines has been very efficient. HDB processes loan requests within 14 days and CPF applications for repayments of HDB loans are processed within 5 days. Successful applicants for BTO apartments generally wait three or four years for their blocks to be completed.^{25,26,27}

Ownership eligibility criteria

The HDB housing programme has categorised the overall houses (apartments) under three categories viz. Built-to-Order (BTO), Design-Build-Sell-Scheme (DBSS) and Executive Condominium (EC). The household income forms the eligibility criteria for applying for these houses. The current household income for this programme ranges from US\$ 4,425 (singles) to US\$ 13,275 (extended families) per month. The category wise household income ceiling is given in the table below:

Table 2 HBD housing programme - ownership criteria

Home ownership – eligibility criteria		
Types of apartments	Sub type and prices	Household income ceiling (US\$)
Build-to-Order (BTO) ²⁸	40 m ² (2 room): US\$ 56,204 - 72,262 (without grant) & US\$ 2,920 - 13,868 (with grant)	US\$ 8,850 (S\$ 12,000) per month for families; US\$ 13,275 (S\$ 18,000) per month for extended families; US\$ 4,425 (S\$ 6,000) per month for individual families
	69 m ² (3 room): US\$ 136,496 - 153,284 (without grant) & US\$ 81,751 - 138,686 (with grant)	

²⁵ <https://www.economist.com/asia/2017/07/06/why-80-of-singaporeans-live-in-GoS-built-apartments>

²⁶ <https://www.cpf.gov.sg/Members/Schemes/schemes/housing/public-housing-scheme>

²⁷ <https://www.hdb.gov.sg/cs/infoweb/residential/financing-a-apartment-purchase/housing-loan-from-hdb/hdb-loan-eligibility-application>

²⁸ <https://www.hdb.gov.sg/cs/Satellite?c=Page&cid=1383797553343&pagename=InfoWEB%2FPage%2FArticleDetailPage&rendermode=preview>

	93 m ² (4 room): US\$ 203,649 - 227,736 (without grant) & US\$ 143,065 - 224,087 (with grant)	
Design Build Sell Scheme (DBSS) ²⁹	86 m ² : US\$ 412,407 - US\$ 451,823	US\$ 8,850 (S\$ 12,000) per month for individual or family; US\$ 13,275 (S\$ 18,000) per month for extended families.
Executive Condominium (EC) ³⁰	93 m ² (3 room): US\$ 613,136	US\$ 10,325 (S\$ 14,000) per month for individual or family.

Key takeaway

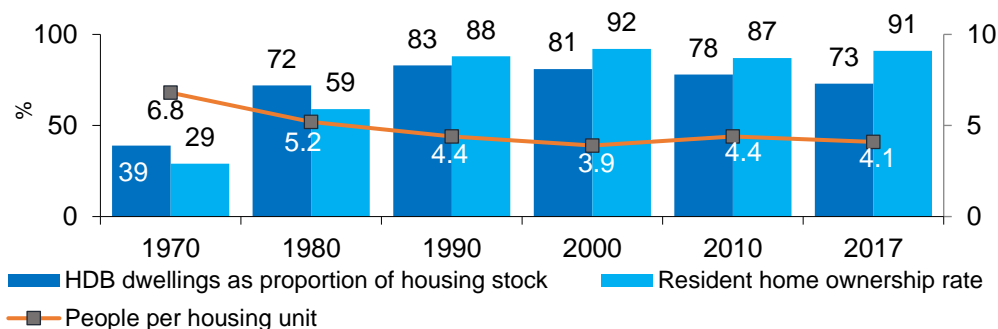
Establishing an integrated and clear land, housing supply and mortgage finance framework has driven implementation efficiency.

2.4 Success rate

Since its inception, HDB has been able to adequately address the acute housing shortage that plagued Singapore during the formative years of its independence. Some of the high level key success have been highlighted below^{31,32,33,34,35,36}:

- The home ownership rate has increased from 29% in 1970 to over 91% of the total population in 2017.
- Contribution of HDB houses has increased from 39% in 1970 to over 82% of the total houses in 2017.
- Number of people per housing unit have declined by 65% between 1970 and 2017 i.e. from 6.8 in 1970 to 4.1 to 2017.
- The ratio of housing mortgage loans to GDP has increased from 4% in 1970 to 55.5% in 2014.

Figure 11 Singapore affordable housing transition



Source: Policy Innovations for Affordable Housing in Singapore, Sock-Yong Phang

²⁹ <https://www.hdb.gov.sg/cs/infoweb/residential/buying-a-apartment/new/dbss-apartment&rendermode=preview>

³⁰ <https://www.hdb.gov.sg/cs/infoweb/residential/buying-a-apartment/new/eligibility/executive-condominiums&rendermode=preview>

³¹ http://mirror.unhabitat.org/downloads/docs/9118_91744_HousingAndDevelopmentBoard_Singapore.pdf

³² <https://www.singstat.gov.sg/find-data/search-by-theme/households/households/latest-data>

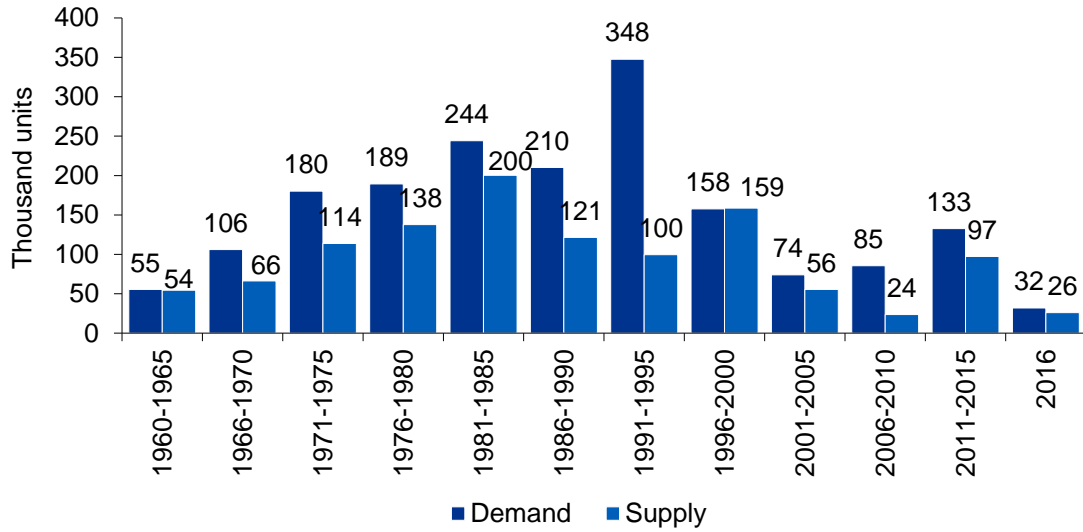
³³ <http://www20.hdb.gov.sg/fi10/fi10221p.nsf/client/hdb/index.html>

³⁴ Policy Innovations for Affordable Housing In Singapore, Sock-Yong Phang

³⁵ <https://data.gov.sg/dataset/households-that-benefitted-from-cpf-housing-grant>

³⁶ <https://data.gov.sg/dataset/key-stats-since-1960-demand-for-rental-and-sold-apartments>

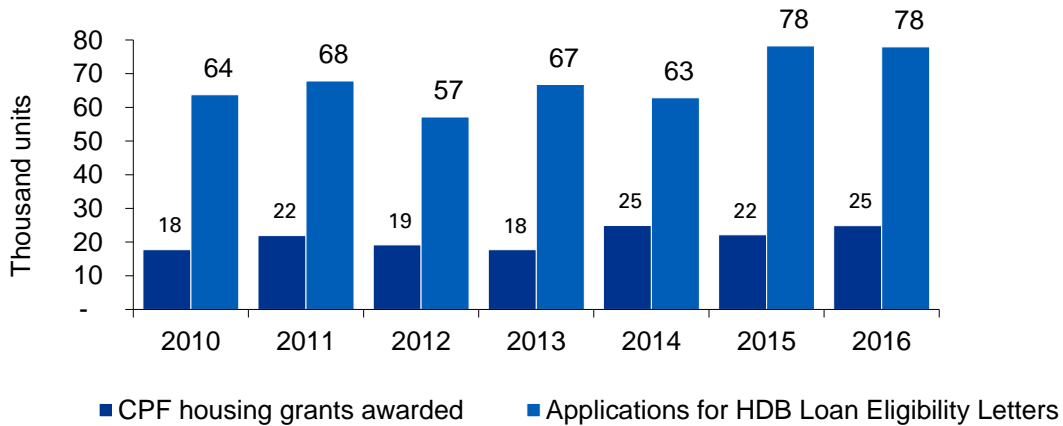
Figure 12 Singapore Housing need - HDB residential units demand and supply



Source: <https://www.hdb.gov.sg/cs/infoweb/about-us/news-and-publications/annual-reports>

Total Demand: 1,815,000 and Total supply: 1,155

Figure 13 Singapore housing financing



Source: <https://www.hdb.gov.sg/cs/infoweb/about-us/news-and-publications/annual-reports>

HDB awards loans at concessional rates to buyers. In addition, CPF also provides subsidies/grants to buyers based on certain income ceilings. These grants do not have to be repaid.

2.5 Key issues

1. Litigation and public agitation against resettlement	
Risk faced	HDB faced large scale agitation from the public against resettlement to new dwellings.
Mitigation measures	In 1960, the GoS had an estimated requirement of seven apartments against every slum structure demolished. The processes for public housing construction, land acquisition, slum clearance and resettlement, and urban renewal in Singapore were closely interrelated. Affordable and cheap mortgages were provided to adequately incentivise people living in slums, thereby encouraging adoption of affordable housing and avoiding large-scale retaliation against resettlements. Moreover, HDB allowed the public to own the new home they moved into, thereby reducing the angst of being resettled.
2. Price capping of properties	
Risk faced	The MND capped the prices to ensure houses stay affordable for the people. However, since the houses were already subsidised, HDB started facing financial challenges, as it had no other sources of revenue.
Mitigation measures	To assist HDB, GoS funded it with annual grants to cover the fund deficit. HDB diversified into the business of setting up parks, car parking, religious and recreational places and ventured into estate establishment for commercial and industrial complexes to hedge against any loss due to price capping of residential apartments.
3. Skilled labour sourcing	
Risk faced	The construction industry of Singapore lacked skilled labour that could implement programme of this magnitude. This resulted in cost and project time overruns for HDB, thereby delaying the progress and putting fiscal pressure on the GoS.
Mitigation measures	The GoS with the Construction Industry Training Centre for upgrading worker skills to be acquainted with the technological upgrades. This also paved the path towards use of pre-fabrication technology in 1981.
4. Speculative pricing of land	
Risk faced	Prior to 1975 amendment of the Land Acquisition Act, 1966, Singaporeans could demand very high compensation based on future land use, like housing, railway projects, roads including other infrastructure projects.
Mitigation measures	Land Acquisition Act gave power to the Collector to take the possession of land under the direction of the MND to resolve the problem of speculative land pricing as the land was to be purchased at prices as per the present use of land. In Singapore, the Collector is the officer appointed under the Land Acquisition Act to deal with the compensation issues. This will not be an issue in Kenya, as the Government of Kenya (GoK) will provide land.
5. Ambitious target	

Risk faced	The HDB began operations on 1 st February 1960. A target of 110,000 dwelling units to be built was set for 1960 - 1970. The private sector however, only had the ability to provide 2,500 houses per year and at price levels out of reach of the low-income groups.
Mitigation measures	Through standardisation of design and automation, over 54,000 apartments were built within 5 years. To hedge against the price fluctuation of raw materials the HDB went into long term contracts with the suppliers and stockpiled essential building material like sand, gravels, cement, bricks and bars on the site.
6. Property market collapse	
Risk faced	In 1988, the prices of middle and high income group houses collapsed due to escalation of supply by HDB. People opted to purchase private properties and stopped purchasing HDB apartments.
Mitigation measures	In response to the fall in demand in 1988, the GoS halted land sales and ended its long-standing policy of not providing housing subsidies for singles. ³⁷ In addition, instead of using the usual ballot systems HDB allowed people to walk in and purchase the property outright.

2.6 Project management approaches used

Segregation of duties among the stakeholders

The GoS had clear segregation of duties among all the stakeholders involved in the process. The three major stakeholders including their duties are: Ministry of National Development (MND); HDB; Suppliers and partners from other agencies.^{38,39,40} Through this scheme, HDB involves the private sector in the development of public housing so as to bring about greater innovation in building and design. HDB continues to work with the universities and industry players in research and development.

Accountability

The MND and HDB have clearly defined responsibilities, which allow them to be accountable for their respective areas in the programme. On a broad level, the major responsibilities of both the organizations are:

- **HDB:** Implements the housing and social policies prescribed by the GoS. It has minimal autonomy with respect to its housing role, urban development, financial operations or borrowing. The overall control framework includes clearly defined authority, delegation limits, reporting mechanisms, and appropriate terms of reference for management of core policy areas, comprehensive policies and procedures relating to operations and financial controls, and an annual budgeting and monthly financial reporting system for all operating units.⁴¹
- **MND:** MND has close oversight and involvement in HDB's operations.⁴² Budgetary operations are largely determined by the GoS. HDB's budget must be approved by and audited financial reports submitted to the Minister for National Development and the President of Singapore. It also approves borrowing by setting limits on the size of the HDB's Medium Term Note programme and bank lines.^{43,44}

³⁷ https://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=2803&context=soe_research

³⁸ <https://www.mnd.gov.sg/about-us/introduction>

³⁹ <https://www.hdb.gov.sg/cs/infoweb/about-us>

⁴⁰ <http://siteresources.worldbank.org/EXTSDNET/Resources/Presentation3.pdf>, Pg. 30

⁴¹ <http://www10.hdb.gov.sg/ebook/AR2017/annual-report.html>

⁴² <http://www.hdb.gov.sg/cs/infoweb/doc/moody-press-release-15-oct-2015>

⁴³ <http://www.hdb.gov.sg/cs/infoweb/doc/moody-press-release-15-oct-2015>

⁴⁴ https://www.transparency.org/news/feature/corruption_perceptions_index_2016

In addition, the Singapore GoS has long enforced a policy of zero tolerance for corruption. Accordingly, HDB has been able to prevent corruption in contracting and allocation of apartments to the public.

Key takeaway

- HDB with its Smart Regulation (SR) efforts has tried to ensure that the costs of regulation and the intended benefits are balanced. Such mechanism underpins formal rule review processes, rigorous feedback management and active engagement with stakeholders.
- Constituting HDB as a GoS department with a clearly defined scope of action and objectives has ensured continued progress in providing Singaporeans affordable housing. Zero tolerance policy for corruption (PCA, 1960) has been a major driver in the success of the programme with the country ranking 7 on the Corruption Perceptions Index 2016.*
- Involvement of private developers in the DBBS also enables HDB to provide buyers with customised options, along with bringing in newer capabilities and processes in the existing system.

2.7 Project impact

Socio-economic Impacts

- **Revenue for the GoS:** In most countries, housing is looked upon as a cost consuming exercise but such was not the case in Singapore. The HDB not only provided subsidised houses to lower income households but also provided luxury houses to middle and higher income groups. This led to increased revenue for HDB.⁴⁵
- **Job creation:** In addition to building houses, the HDB also built multi-storeyed factories and market places to generate employment for people living in the HDB apartments nearby. This generated substantial employment in the construction and building industry, both on-site and off-site.⁴⁶
- **Creation of a cohesive society:** Initially it became difficult to move people to new places due to their resistance to change of neighbourhood, but later it led to ethnic integration of different groups coming together making Singapore a more culturally cohesive country.⁴⁷
- **Technological advancements:** key impacts of housing programme on this front include:
 - **Solar capacity building programme:** The design of the solar photovoltaic (solar PV) systems has been optimised to maximise solar power generation for each HDB residential block, with the aim of achieving net zero-energy for common services. By June 2017, HDB had installed solar PV systems across an estimated number of 1,000 HDB blocks island-wide.⁴⁸
 - **Research and Development (R&D):** The Building Research Institute (BRI) is HDB's research arm to spearhead R&D efforts in building and environmental sustainability. Its master laboratory, The Centre of Building Research, is the incubation hub to develop and test-bed R&D initiatives.

Key takeaway

- HDB's business extended beyond affordable housing, contributing revenue to the GoS
- Housing programme improved the home ownership rates and took particular care of the elderly
- HDB enabled people not just by providing houses but places to work as well
- Ethnic Integration was a by-product of the housing programme

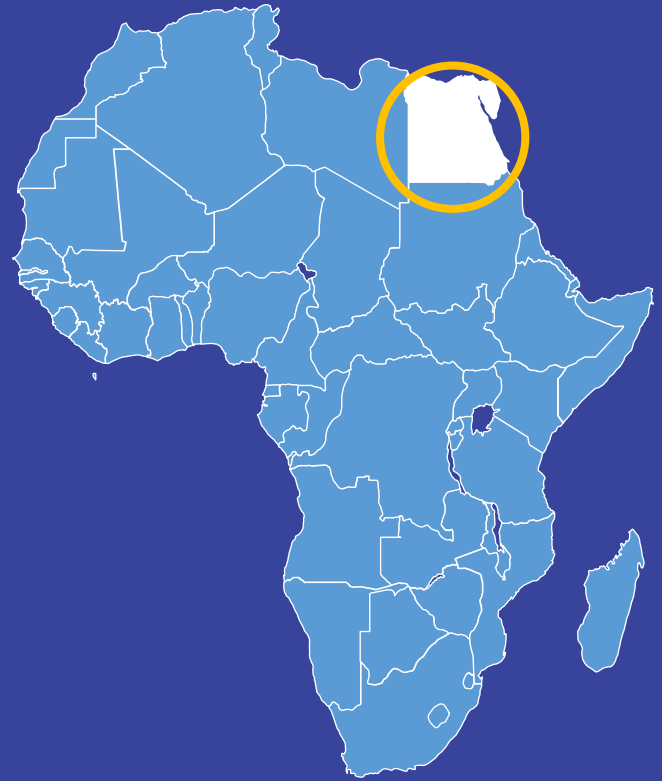
⁴⁵<https://tradingeconomics.com/singapore/housing-index>

⁴⁶<https://books.google.co.in/books?id=ldKwPQ2PyBAC&pg=PA182&lpg=PA182&dq=HDB+and+job+creation&source=bl&ots=kFwdSyku6X&sig=3Tk1DOHUW-VGbVQe3O0wgFF8X-Q&hl=en&sa=X&ved=0ahUKewjSspm6lJncAhWNmlkKHSFzBD8Q6AEIUDAE#v=onepage&q=HDB%20and%20job%20creation&f=false>

⁴⁷<https://books.google.co.in/books?id=ldKwPQ2PyBAC&pg=PA182&lpg=PA182&dq=HDB+and+job+creation&source=bl&ots=kFwdSyku6X&sig=3Tk1DOHUW-VGbVQe3O0wgFF8X-Q&hl=en&sa=X&ved=0ahUKewjSspm6lJncAhWNmlkKHSFzBD8Q6AEIUDAE#v=onepage&q=HDB%20and%20job%20creation&f=false>

⁴⁸<https://www.hdb.gov.sg/cs/infoweb/about-us/our-role/public-housing--a-singapore-icon>

Egypt



3 Egypt

3.1 Country overview

Demographic and economic overview ^{49 50}

Egypt is the most populous country in the Middle East and the third most populous country on the African continent, following Nigeria and Ethiopia. Most of the country is desert, hence vast majority of its citizens continue to live on just 5% of the country's land in the Nile Valley. Egypt's rapid population growth stresses limited natural resources, jobs, housing, sanitation, education, and health care.

With President Abdel Fattah Al-Sisi's re-election to the second four-year term in March 2018, the Government of Egypt (GoE) is trying to restore financial stability and improve the business environment through fiscal reforms. Egypt's Gross Domestic Product (GDP) is showing continuous and sustainable growth, over 10% of Egypt's GDP growth is from real estate development. Weak institutional capacity and stiff opposition from interest groups has stymied some necessary economic reforms.

Key demographic and economic indicators	
Population	97.6 million (2017)
Area	1.01 million km ²
Gross Domestic Product (GDP)	US\$ 235.7 billion (current, 2017)
Per capita income	US\$ 2,475 (2017)
World Bank ease of doing business ranking	128 of 190 countries

Introduction to housing programme

Egypt's population has more than tripled since 1960 and rapid urbanisation has stressed the housing capacities of major cities. The country has the largest deficit in the MENA region, with a requirement for 3.5 million new units, an affordability gap and under-funding of the sector. Egypt's housing crisis is an urgent political concern - there is a surplus of high-end housing built by the private sector, with over six million units standing empty⁵¹ vis-à-vis the shortage of affordable units for those who need them the most. According to a census released in October, 2017 by the state statistics agency CAPMAS, 13 million units are either under construction or finished but unoccupied, compared to 22.5 million units that are inhabited. Added together, this works out to 35.5 million units in a country with a population of 97.6 million, or 2.75 people per unit.

The Egyptian housing market suffers from major gaps, especially for the lower income households of society.⁵²

⁴⁹<http://documents.worldbank.org/curated/en/124621523639496916/pdf/125251-MEM-April2018-Egypt-EN.pdf>

⁵⁰https://www.cia.gov/library/publications/the-world-factbook/geos/print_eg.html

⁵¹<https://www.albawaba.com/business/egypt-housing-market-557799>

⁵²CAPMAS, *Income and Expenditure and Consumption Survey (2013)*

Table 3 Housing product gaps

Product Gaps					
Income Brackets	< US\$ 81	US\$ 81-105	US\$ 105-134	US\$ 134-176	> US\$ 176
Median household incomes	US\$ 61	US\$ 95	US\$ 117	US\$ 151	US\$ 229
Income Category	Very Low	Low	Middle	Upper Middle	Upper
Market Ownership				Potentially Available	Not Available
Subsidized Ownership		Not Available	Not Available	Potentially Available	
Rental Market	Potentially Available	Potentially Available	Potentially Available	Potentially Available	Potentially Available
Rent Control	Potentially Available	Potentially Available	Not Available	Not Available	Not Available
Informal housing units		Not Available	Not Available	Not Available	Potentially Available

Potentially Available

Partially Available

Not Available

Seeking to address the affordable housing shortage, the GoE came up with a number of programs. The first project to address the needs of the lower income bands and working classes was the Workers City, which began in 1952 in a suburb of Cairo. From that time until 2005, it is estimated that government entities delivered about 2.4 million public housing units. Some notable previous affordable housing programs included:

- 237,000 housing units in the New Urban Communities Authority (NUCA) program between 1982 and 2005.
- 68,400 housing units in Mubarak Youth Housing Program (MYHP) between 1996 and 2005.
- The National Housing Project (NHP) program targeting 500,000 units from 2005 to 2011.

However, these programs have been criticised as being insignificant to support Egypt's growing population- Egypt needs to build 500,000-600,000 new homes a year to keep up with demand, 70% of which should aim at the lower income bands. Private developers, who have built new suburbs around Cairo, are meeting the needs of middle and higher income Egyptians who can buy homes outright or obtain mortgages.

After the Egyptian revolution, the GoE took on an active role in the construction of new units and the Social Housing Program was launched at a cost of almost US\$ 21.42 billion (EGP 150 billion) in 2014 by strategically consolidating housing entities and programs under the umbrella of the newly established Social Housing Fund (SHF). The five year Social Housing project, which was launched in 2015, forecasted to build 200,000 new homes each year, meeting over half the annual demand of residential units for low income citizens, with a monthly family income of not more than EGP 3,000 and EGP 1,200 for individuals.⁵³ These units are 90 square metres in size, comprising three bedrooms and a living area and are sold fully finished via a mortgage system, in which owners pay a down payment and then instalments. The down payment is US\$ 1,571.4 (EGP 11,000), with monthly instalments ranging between US\$ 57.14 (EGP 400) and US\$ 128.57 (EGP 900) for up to 20 years⁵⁴

With 18% of Egypt's families living in single-room dwellings, the million-unit project was positively received. Egypt is financing its social housing scheme through land sales to developers building

⁵³<https://dailynewsegypt.com/2016/02/01/ministry-of-housing-secures-loans-of-egp-3bn-for-social-housing-fund/>

⁵⁴<http://english.ahram.org.eg/NewsContent/1/1189/291088/Egypt/EISisis-Balance-Sheet/Social-housing-Better-homes-in-Egypt.aspx>

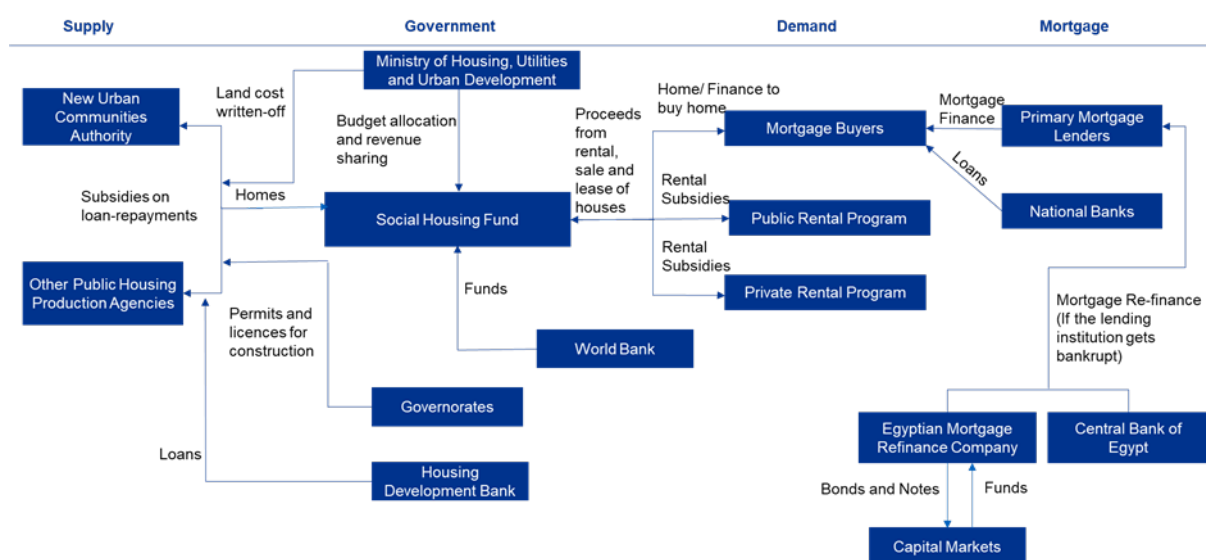
higher-end homes. Based on an elasticity of employment in the construction sector of 1.5, it was estimated that the total number of jobs generated through the Social Housing Program would be about 1.5 million.

In May 2015, the World Bank via the International Bank for Reconstruction and Development committed a loan of US\$ 500 million for the Egypt Inclusive Housing Finance Programme. It is expected to reach 3.6 million residents, 1.6 million of whom live below the poverty line. The loan had a maturity of 35 years with a grace period of 5 years.⁵⁵ The total number of program beneficiaries is expected to reach more than 3.6 million individuals or 827,400 households with an average household size of 4.3 individuals. As of July 31, 2018 an amount of US\$ 258.06 million was disbursed, the interest charge and rates was US\$ 17 million with Program-for-Results as a lending instrument.⁵⁶

Egypt had also planned to build 1 million homes for middle-income Egyptians by 2020 in a US\$ 40 billion (EGP 280 billion) joint venture with Dubai-based Arabtec on the land provided by armed forces. It will cover 160 million square meters across 13 sites in Egypt for lower income households.⁵⁷ Construction was supposed to begin before the end of 2014; however, the project was cut down to 100,000 units. The project is currently on hold- terms of financing were changed. In addition, instead of the military donating the land, GoE later planned to sell the land to Arabtec via the Ministry of Housing and the New Urban Communities Authority.^{58,59,60,61}

The following figure (Figure 2) represents the housing programme framework and working of all organisations in conjunction with each other.^{62,63,64,65}

Figure 14 Egypt housing programme framework



Source: KPMG analysis

Institutional arrangements

The main government organization concerned with housing in Egypt is the Ministry of Housing, Utilities and Urban Development.

⁵⁵<http://www.worldbank.org/en/news/loans-credits/2015/05/06/egypt-inclusive-housing-finance-program>

⁵⁶<http://projects.worldbank.org/P150993?lang=en&tab=financial>

⁵⁷<https://www.reuters.com/article/us-arabtec-egypt/uaes-arabtec-agrees-40-billion-housing-project-with-egypt-army-idUSBREA280KK20140309>

⁵⁸<https://www.reuters.com/article/us-usa-cyber-facebook/facebook-pledges-tough-u-s-election-security-efforts-as-critical-memo-surfaces-idUSKBN1KF0CA>

⁵⁹<http://www.jll-mena.com/mena/en-gb/research/middle-income-housing-report/report-download>

⁶⁰<https://www.madamasr.com/en/2015/03/01/news/economy/deal-with-arabtec-to-build-one-million-houses-suspended-local-media/>

⁶¹<https://www.arabianbusiness.com/arabtec-still-unclear-over-egyptian-housing-project-636383.html>

⁶²<http://documents.worldbank.org/curated/en/319851468023373777/pdf/957910PAD0P15000100OUO090Box391428B.pdf>

⁶³<http://shf.gov.eg/>

⁶⁴https://www.mff.gov.eg/wps/portal/MFF/ServicesOFMFF/LoanCalculator!/ut/p/z/1/04_Sj9CPykyssy0xPLMnMz0vMAFIjo8zizRwtzDwsTAX9_H2DTQ0cDf2Dg41M3A0MDIz1g1Pz9AuyHRUBFANCTA!!/#/

⁶⁵<http://www.emrc-online.com/>

The GoE also established a mortgage liquidity facility—EMRC to provide long term funding for primary mortgage institutions. It is a joint stock, wholesale (second tier), specialized liquidity facility operating on commercial principles with a profit-making goal. It is majority privately owned by the users of its financial services, mainly participating mortgage lenders (PMLs)—active banks and real estate lending companies. Many public and private lenders joined the capitalization of the EMRC. The CBE was the strategic investor with an approximate 20% ownership share, the GSF had a 2% ownership share, and 19 banks and 6 mortgage companies held the remaining shares.

EMRC's core business is the refinancing or purchase with recourse of longer-term residential mortgage loans originated by primary lenders for which it would raise term funding by issuing bonds and notes in the capital markets. Primary lenders use EMRC refinancing to improve the efficiency of their portfolio and risk-management activities, which helps lower financial spreads in the market to the benefit of borrowers, thus helping to set up prudential lending standards for mortgage lending while enhancing competition in the mortgage market by creating a longer term funding source accessible to both depository and non-depository institutions.

A summary of the other existing housing entities associated with the Social Housing Program along with their functions are shown below in Table 2.

Table 4 Existing Housing Entities

S.no.	Entity	Function
1.	Ministry of Housing, Utilities and Urban Development	<ul style="list-style-type: none"> - Budget allocations for inclusive housing. - Write-off land cost of developers for affordable housing. - Share revenues with SHF from sale of land and auction of state properties.
2.	Social Housing Fund (SHF)	<ul style="list-style-type: none"> - Consolidation and coordination of different housing entities, and social housing functions of the various agencies within and outside the Ministry. - Introduction and formulation of legislation, decrees, regulations and procedures to support social housing, as well as the unification of existing ones. - Receive funds from World Bank. - Supply-side incentives in the form of subsidies on loan-repayments. - Demand-side incentives in the form of finance to home buyers and rental subsidies under public and private rental programs. - Take-off homes from developers. - Provide homes for purchase and rent. - Manages and monitors the program.
3.	Housing Development Bank	<ul style="list-style-type: none"> - Provide loans to developers for inclusive housing projects (disbursed US\$ 0.3517 billion (EGP 2.5 billion) till 2017).
4.	Primary Mortgage Institutions (PMLs)	<ul style="list-style-type: none"> - Provides mortgage finance to Egyptian nationals for purchase of homes.
5.	National Banks	<ul style="list-style-type: none"> - Provides loans to buyers for purchase of homes (disbursed US\$ 0.607 billion (EGP 4.25 billion) until 2017).
6.	New Urban Communities Authority	<ul style="list-style-type: none"> - Manages the development of all new towns in Egypt with its own budgets. - Builds houses, develops infrastructure and manages lands within new towns.
7.	Governorates	<ul style="list-style-type: none"> - Perform a building control function. - Issue building permits and other licenses.

Affordability in Egypt

Egypt's property market is generally unregulated; consequently, a vast majority of Egyptians cannot afford to buy a formal accommodation unit in most Egyptian cities, which fits the number of the family members. High inflation has led to the growth of informal settlements, with lower income bands infrastructure and quality of living. With over 20% of Egyptians having incomes lower than US\$ 2 per person per day, housing affordability is limited despite government policy efforts. With real estate prices rising significantly, by at least 50% during the period from 2011 to 2014, and an average of 30-35 % per year in 2016⁶⁶, house prices in Egypt relative to income are more expensive than in Western Europe, double most Gulf countries, and four times more expensive than the USA. The following table summarises the affordability of middle income housing:⁶⁷

Table 5 Affordability of homes

Monthly Household Income of Middle-Income Households	Percentage of Middle-Income Households	Affordable Sale Price	Affordable Rent (per annum)
US\$ 714 – 1,786 (EGP 5,000 – 12,500)	60%	US\$ 6,857 (EGP 285,000)	US\$ 4,571 (EGP 32,000)

Source: <http://www.jll-mena.com/mena/en-gb/research/middle-income-housing-report/report-download>

Key takeaway

The creation of the SHF has led to strengthening existing programs and develop new ones for the low and middle-income housing sector, both on the supply-side (direct construction of units) and the demand-side (financial support linked to households and investors)

3.2 Funding strategies for both supply and demand

- In early 2001, the Real Estate Finance Law was passed, establishing the legal and regulatory framework, and allowing the formation of non-bank Mortgage Finance Companies (MFCs) that would have a greater interest in serving lower income households. A liquidity facility—the Egyptian Mortgage Refinance Company (EMRC) was also established in June 2006 to provide long term funding for primary mortgage institutions. The Guarantee and Subsidy Fund (GSF) was also established with the dual function of delivering subsidies to low-income households to expand access to mortgage finance down-market and providing a guarantee to lenders to protect them against short-term inability to pay by the borrowers.
- A second stimulus for the housing sector of below market-rate funds, totalling US\$ 2.9 billion (EGP 20 billion), into the mortgage sector was infused to stimulate the financing of houses for low and middle-income groups by the Central Bank of Egypt in 2014. It provides mortgage loans at 7% interest rates at a fixed margin of 4.5% with a 20 year term, allowing for the provision of mortgage-linked subsidies to creditworthy households with incomes just below the 20th percentile of the income distribution, i.e., households with incomes between US\$ 142.85 (EGP 1,000) and US\$ 357.14 (EGP 2,500) per month. Current market rates are in the order of 15% to 16%. Funds are made available through banks and their affiliated mortgage companies. The mortgage initiative was amended in 2017 to adjust the maximum for the low-income segment to become US\$ 116 (EGP 2,100) with a 5% interest rate. In addition, they raised the maximum monthly income limit for the middle-income segment to US\$ 1,429 (EGP 10,000) per single person and US\$ 2,000 (EGP 14,000) for family. Furthermore, they raised the maximum unit price for the middle-income segment to US\$ 100,000 (EGP 700,000) instead of US\$ 71,428 (EGP 500,000). SHF/GSF administers the program with the banks and its subsidy program is now linked to the special CBE financed loans.
- With the passing of a new mortgage law in early 2016, mortgage interest rates were lowered to 5% for people earning up to US\$ 200 (EGP 1,400) per month. Additionally, individuals earning US\$ 214

⁶⁶<https://qz.com/908391/egypts-real-estate-boom-has-turned-from-economic-safe-haven-to-rubble/>

⁶⁷<http://www.jll-mena.com/mena/en-gb/research/middle-income-housing-report/report-download>

(EGP 15,000) per month or families earning US\$ 2857 (EGP 20,000) per month will be eligible for mortgages with 10% annual interest under the scheme for a period of 20 years.

- 13 mortgage companies operate in the Egyptian housing market in addition to 12 banks out of 39 – and 197 real estate appraisers. Banks offer housing loan amount starts from US\$ 17,142 (EGP 120,000) up to US\$ 714,286 (EGP 5,000,000) with differential interest rates ranging between 7 to 10.5%.

Demand side programs

- Affordable Mortgage Program (AMP): It is the core home-ownership program of the SHF; providing demand-side subsidies to complement an affordable mortgage (with a maximum term of 15 years and a minimum 10% down payment). It serves households with incomes between US\$ 142 (EGP 1,000) and US\$ 357 (EGP 2,500) per month, average subsidy being US\$ 2714 (EGP 19,000) per household. To date 14,000 subsidised loans have been issued under the market mortgage rate program; It has to reach another 70,000 to 80,000 subsidies by July 2015 and needs to enhance its capacity for subsidy processing
- Public Rental Program: this program, part of the SHF was put in place by the Ministry of Housing, Utilities and Urban Development to urgently provide housing for households with incomes below US\$ 214 (EGP 1,500) per month. Rent levels are set based on rent-to-income ratios of 25%.
- Private Rental Program: consist of two distinct demand-side programs- for investors and for tenants. Incentive schemes, including upfront subsidies by the SHF will be offered to private rental investors who would commit themselves to rent out their units to households with moderate incomes (in the range of US\$ 129 (EGP 900) to US\$ 357 (EGP 2,500)) for a given period of time. The Program will also support the development of demand-side tenant subsidies aiming at filling the gap between the rent required by the investor and the payment affordable to the tenant, estimated at 25% of income.

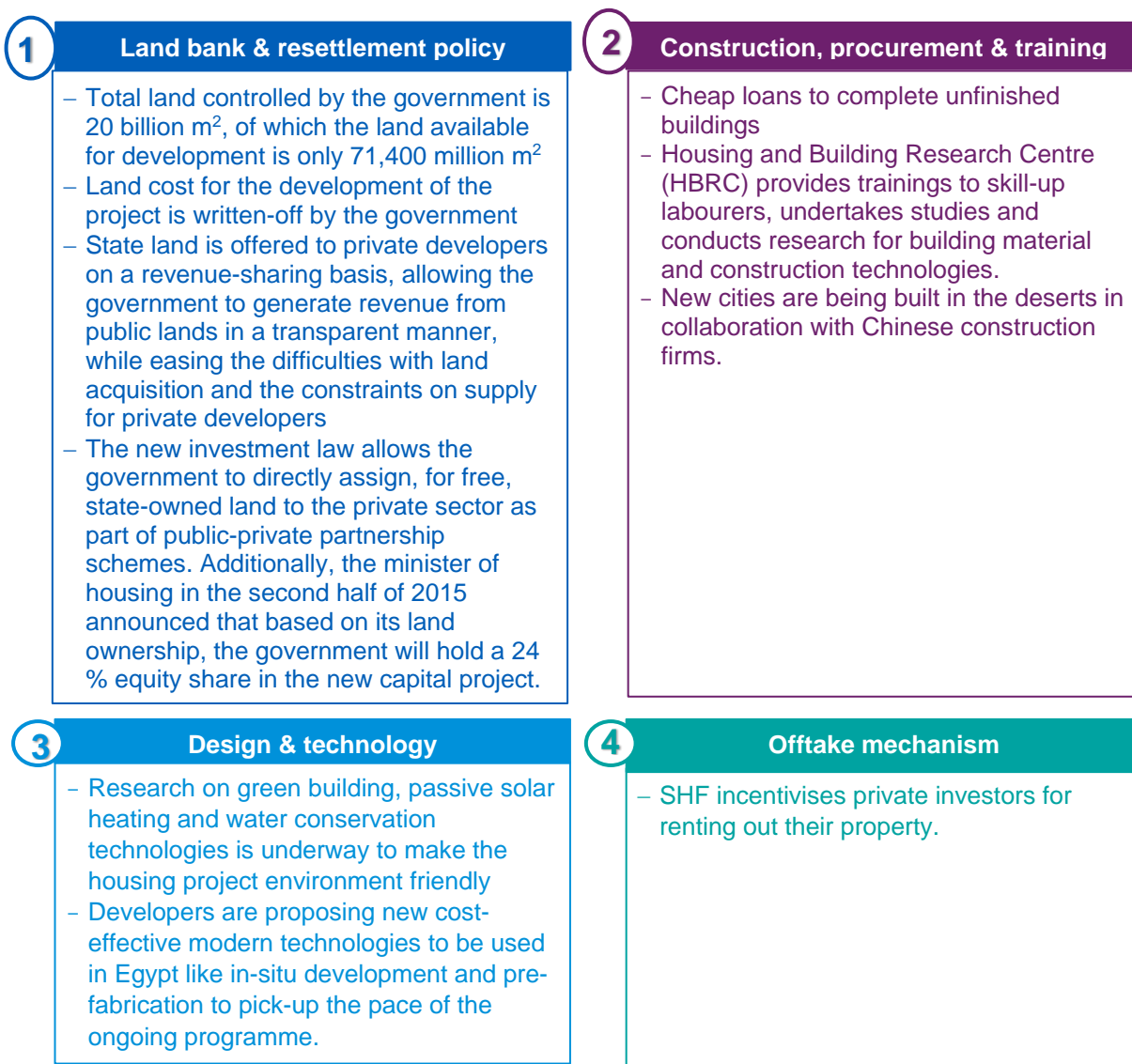
Supply side programs

Table 6 Supply-side Entities

S.no.	Entity	Function
1.	New Urban Communities Authority	– Builds housing, provides infrastructure, and manages land within the new towns.
2.	Central Agency for Development	– Executes large-scale infrastructure projects, including housing related to the projects.
3.	Housing Directorates	– Develops social housing and infrastructure projects in the Governorates.(Provincial divisions)
4.	Housing Companies	– Implement land concessions, manage specific urban, and build housing estates; there are five housing companies that have land concessions and manage specific urban areas. They also build housing estates.
5.	General Authority for Construction and Housing Cooperatives	– Builder of low and middle income housing for cooperative members.

3.3 Implementation approach including delivery timeline^{68 69 70 71 72}

The key implementation strategies in different areas are described below:



Ownership eligibility criteria⁷³

The programme has defined the eligibility for purchase of houses based on income levels. A capped unit price for purchase of homes and mortgage loan interest rates and term for the same is also defined for these categories of income groups.

⁶⁸<http://hbrc.edu.eg/under.html>

⁶⁹https://www.researchgate.net/publication/322405077_Water-Efficient_Construction_Practices_for_Housing_Projects_in_Egypt_A_Review_of_Literature

⁷⁰<https://www.forbes.com/sites/neilyeoh/2018/01/29/egyptian-millennial-entrepreneur-builds-sustainable-housing-in-the-desert/#1f52342e3c48>

⁷¹<http://documents.worldbank.org/curated/en/289771468037496435/pdf/365200EG0White10121041200701PUBLIC1.pdf>

⁷²<https://oxfordbusinessgroup.com/analysis/improved-supports-efforts-are-under-way-transform-existing-land-regulation-and-increase-transparency>

⁷³<http://housingfinanceafrica.org/countries/egypt/>

Table 7 Housing programme - ownership criteria

Home ownership – eligibility criteria				
Income Groups	Monthly Household Income Ceiling (US\$)	Price of household unit (US\$)	Mortgage interest rates	Mortgage term
Low Income Group	116	N/A	5%	20 years
Middle Income Group (Singles)	555	27,777	10%	20 years
Middle Income Group (Family)	778	27,777	10%	20 years

Table 8 Conditions for obtaining mortgage⁷⁴

Parameters	Conditions/ Values
Annual income	< US\$ 1,506
Egyptian nationality	✓
Investor age	21 years - 50 years
Unit price	< US\$ 7,251
Unit registration/ subjected to registration	✓

Key takeaway

Establishing an integrated and clear land, housing supply and mortgage finance framework has driven implementation efficiency. A shift from supply-side housing subsidies to mechanisms stimulating private sector involvement in the mortgage market promised to promote the rapid growth of Egypt's housing sector, stimulating broader economic growth in turn.

3.4 Success rate^{75 76 77}

Egypt has gone through various social housing programmes since 1982. Some of these projects marked milestones in the history of social housing namely, Mubarak Youth Housing Programme-1996, Social Housing Programme-2005 and the ongoing Inclusive Housing Programme-2015. The following figure (Figure 4) represents their targets and achievements, along-with the number of lower income bands population.

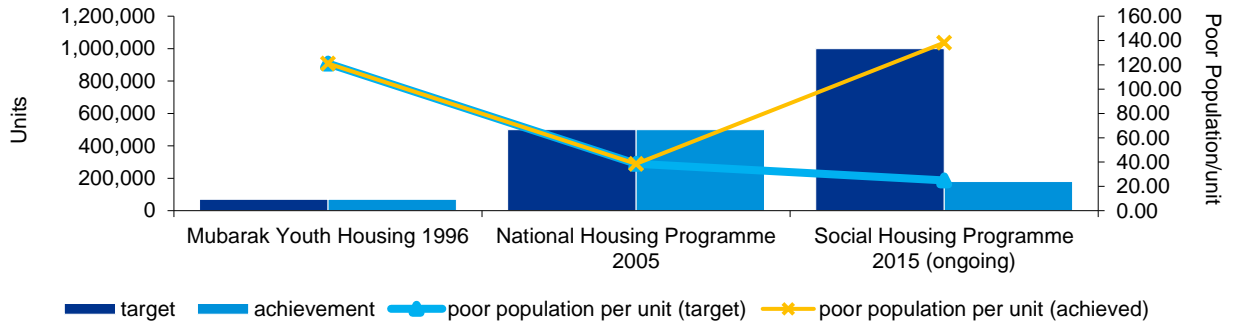
⁷⁴https://www.mff.gov.eg/wps/portal/MFF/MortgageFund/mortgage-benefits/!ut/p/z1/04_iUIDg4tKPAFJABjKBwtGPykssy0xPLMnMz0vM0Y_Qj4wyizdzDDzsDAX9PH3DTY1cDT0Dw42MnE3MHAX0g_Hp8Dd2Vg_ihj9BjiAowEh_V6oCizCDCwMHEONgwzDPH2MDdzNgBZE4TMD7ESwAnxuQDXBwABot2NoUKCThXkIkGOiH5yap1-QGxpRGeypCwAfoRHP/dz/d5/L2dBISEvZ0FBIS9nQSEh/

⁷⁵http://housingfinanceafrica.org/app/uploads/2017_CAHF_YEARBOOK_14.10-copy.compressed.pdf

⁷⁶<http://invest-gate.me/features/a-history-of-social-housing-strategies-in-egypt/>

⁷⁷<http://documents.worldbank.org/curated/en/908931468180574816/pdf/96548-WP-P150993-PUBLIC-Box391458B-ACS.pdf>

Figure 15 Milestones in housing programmes



Source: <http://invest-gate.me/features/a-history-of-social-housing-strategies-in-egypt/>

- The Mubarak Youth Housing initiative in 1996 achieved its targets of 70,000 housing units of 63 square meter over a span of 4 years; GoE invested 40% of the total program cost of about US\$ 1.21 billion. Still, the housing initiative proved to be insufficient for the population living under poverty.
- The National Housing programme in 2005 that aimed to build or enable the building of 500,000 affordable housing units in the six years to 2011 achieved its targets. 22% of the completed units were built by private developers who assumed all risk for the development and sale of affordable units, while government entities only produced less than 50% of completed units
- According to 2016 estimates, out of the target of 1 million housing units, around 656,000 social housing units were expected to be built in the first two phases at a total cost of US\$ 13.86 billion (EGP 97 billion). The first phase of the project has 256,000 housing units worth US\$ 5.3 billion (EGP 37 billion). The second phase will see the completion of 400,000 housing units at a total cost of US\$ 8.6 billion (EGP 60 billion). 180,000 units were delivered by 2016, with targets to achieve 256,000 by end of December 2016 and 275,000 by the mid of 2017, bringing the total of the two stages to 531,000 and remaining units by 2019.

The progress for the Public Housing Programmes from 1982 to 2016 in the following chart (Figure 5), shows that some of the programmes were not successful while others overachieved the targets. The achievements during the years 1997-2002 and 2007-2012 overshoot the targets by 25.4% and 4.8% respectively.

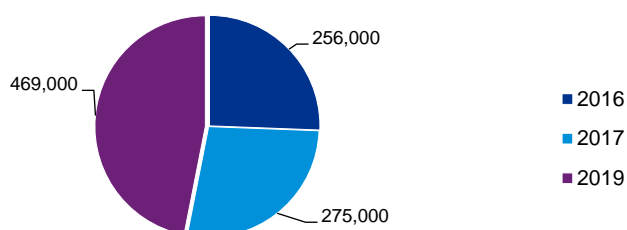
Figure 16 Year-wise progress of public housing programmes



Source: <http://www.egypttoday.com/Article/3/3721/Government-to-sell-land-affordable-housing-units-to-citizens-abroad>

The planned targets for the ongoing programme are given as follows (Figure 6), out of which 180,000 units were established in the mid of 2016 itself.

Figure 17 Current program phase-wise targets



Source: <https://www.wsj.com/articles/egypt-tries-to-fix-its-housing-shortage-1462294358>

3.5 Key issues

7. Budget deficit	
Risk faced	Political turmoil since Egypt's 2011 revolution has widened the country's budget deficit and drained its foreign currency reserves.
Mitigation measures	As a part of the "Nation's House" initiative, the GoE will offer land plots and housing units for Egyptians working abroad. The down payment should be 25% of the unit's total value and the rest paid in instalments over three year, will bridge the budget deficit and to attract the much-needed foreign currency. ⁷⁸
8. Shortage in skilled labour	
Risk faced	There is a shortage of labour for technologies and equipment that demand high skills despite high unemployment.
Mitigation measures	Housing and Building Research Centre (HBRC) provides trainings to skill-up labourers.
9. Informal sector housing	
Risk faced	In the eight years leading up to 2013, the price of the cheapest social housing units offered by the Ministry of Housing increased at an annual rate of 14%, according to data from the Middle East Institute. In the latter half of that same period, average incomes in the country increased at a minimal rate of 1% per year, while those living below the poverty line increased to 26% of the total population. Consequently, the World Bank estimates that between 12 million and 20 million Egyptians live in informal housing. ⁷⁹
Mitigation measures	The GoE has laid out a number of policies to address the housing crisis. This includes a number of plans to make lower-income customers more accessible to the formal market, through schemes to improve the financing environment and plans to reduce the cost of development for real estate firms. Arabtec, a construction firm from the UAE, would build 1 million

⁷⁸<http://www.egypttoday.com/Article/3/3721/Government-to-sell-land-affordable-housing-units-to-citizens-abroad>

⁷⁹<https://oxfordbusinessgroup.com/analysis/stand-and-deliver-looking-ways-address-housing-deficit>

	homes across the country over the next decade. International donor programmes also support the government.
10. Input price increase	
Risk faced	The price of construction materials (steel, cement and other metal producers) has increased due to natural gas shortages and electricity tariff increases. ⁸⁰
Mitigation measures	The GoE agreed to allow coal imports for use in electricity generation and cement production. In addition, to help it in meeting its short-term demand, the GoE began renting two floating storage and regasification units (FSRU) in 2015 to allow imports of liquefied natural gas, which are converted into natural gas for electricity generation.
11. Capacity	
Risk faced	With many mega-projects in the pipeline, there is a requirement of new companies to enter the market or the expansion of existing ones.
Mitigation measures	In an attempt to improve the investment environment, the GoE is aiming to fast track the adoption of a new investment law, which is now undergoing final regulatory stages. This law aims to attract investment into real estate and other sectors by removing longstanding bureaucratic obstacles. This new law should increase investor confidence and create new development opportunities.
12. Funding for low-income housing	
Risk faced	To provide cheap public housing, prices of the homes built rose beyond the reach of the lower income bands – a problem in the entire Egyptian housing market where deregulated housing prices have far outstripped incomes. Further, the bureaucratic requirements of some of the schemes, such as proving income statements, have made the housing more available to the middle class than the lower income bands, who often operate in the informal economy. ⁸¹
Mitigation measures	In addition to land sales and seeking funding from abroad, the government has announced its intention to support low-income housing via the implementation of a tax on real estate.

3.6 Project management approaches used⁸²

Segregation of duties among the stakeholders

The Ministry is responsible for allocation of budget to the programmes for its smooth functioning and provide lands to the developers. All the rest of the functions for the programme fall under the gambit of the Social Housing Fund (SHF). The organisations, which were under the Ministry of Housing, were consolidated under the SHF in 2014-15 to coordinate their actions towards the unified goal of providing affordable public housing to the people of Egypt.

- Under the programme development of houses and supporting infrastructure is taken up by NUCA.
- The Governorates are responsible for giving out licenses and permits to construct homes while the HBRC is responsible for training and skilling up the workforce.
- The HDB is responsible to give out loans to developers for these projects.

⁸⁰<https://oxfordbusinessgroup.com/interview/factoring-growth-obg-talks-mohamed-mohsen-salah-el-din-chairman-arab-contractors>

⁸¹<https://www.madamasr.com/en/2016/01/03/feature/economy/ministry-announces-more-plans-to-solve-egypts-urban-housing-crises/>

⁸²<http://documents.worldbank.org/curated/en/908931468180574816/pdf/96548-WP-P150993-PUBLIC-Box391458B-ACS.pdf>

- The National Banks and their Mortgage Finance arms are responsible to aid demand side of the equation.
- The EMRC aids the refinance of mortgage.

Accountability

The Monitoring & Evaluation (M&E) arm of the SHF is responsible to monitor the progress and evaluate the implementation strategies during and after implementation. It is also entitled to collect data from organisations involved in the implementation of these projects and to use this data for research, policy formulation, legislating acts and monitoring and evaluation.

The M&E arm keeps a check on accountability of each organisation and provides data to assess the bottlenecks in the implementation of the projects.

The Egyptian Financial Supervisory Authority (EFSA) analyses the needs of the society for easy accessibility of mortgage finance to buy new homes. With this, the mortgage finance norms have been eased over time and the organisations providing mortgage finance have become more accountable for the disbursement of such loans.

3.7 Project impact⁸³

Socio-economic Impacts

- Employment generation: It will contribute to generating an estimated 1.5 million construction jobs over a 5-year period from 2015 to 2019, the life of the program.
- Increase in home ownership: the Affordable Mortgage Program has been successful in filling the gap in the financial package consisting of savings, subsidy, and mortgage to improve home ownership rates. In parallel to measures being taken in the GOE to re-catalyse the private and public production of low-income housing, the AMP needs to be scaled up to meet the current and future demand for this income segment.
- Foreign Direct Investment: the government of UAE has infused a capital of US\$ 1.4 billion for the housing programme in Egypt. World Bank has also offered to infuse US\$ 500 million for providing social housing to lower income bands people in Egypt.
- Developing workplaces: the Program supports the design and financing of demand-side social housing programs that address market distortions. It includes measures to improve the targeting and location of units closer to employment opportunities and services.

⁸³<http://documents.worldbank.org/curated/en/838261468036832196/pdf/E47100V10P15090Box385406B00PUBLIC0.pdf>

Tanzania



4 Tanzania

4.1 Country overview

Demographic and economic overview

The Government of the United Republic of Tanzania (GoT) is a unitary republic based on multiparty parliamentary democracy. All state authorities are exercised and controlled by the GoT and the Revolutionary Government of Zanzibar (RGZ).

The country has sustained high economic growth over the past decade, averaging 6 to 7 % per annum. In 2016, real GDP growth was mainly driven by construction (20.3%); information and communication (8.3%); transport and storage (10.7%); wholesale and retail trade (9.9%); and manufacturing activities (8.2%). The real estate sector contributed 1% of the total GDP growth rate of the country in the same period. In 2017, the real estate sector contributed 3.8% of Tanzania's GDP in the first quarter, a decline from 4.0% contribution during the same period in 2016. The sector grew by 2.3% in 2017 compared to 2.4% growth during the same period in 2016.

Key demographic and economic indicators	
Population	56.9 million (2017)
Area	945,000 square kilometers
Gross Domestic Product (GDP)	US\$ 49.3 Billion
Per capita income	US\$ 672
World Bank ease of doing business ranking	137 out of 190 countries

Introduction to the housing programme^{84 85}

Strong economic growth and high population growth rate, expected to be more than double by 2050, have significantly contributed to a growing demand for housing units. The housing demand has also been boosted by access to mortgages, with the number of mortgage lenders increasing from 3 in 2010 to over 30 as at 2017, although Tanzania's mortgage market is among the smallest in East African region. The current housing deficit in Tanzania is estimated to be 3 million units and is increasing at a rate of 200,000 units yearly.

The following major players dominate Tanzania's housing sector: National Housing Corporation (NHC), Watumishi Housing Corporation (WHC), Tanzania Building Agency (TBA) and National Social Security Fund (NSSF).

NHC sits within the Ministry of Lands, Housing and Human Settlements Development (MLHHSD). NHC was formed because of GoT's decision to dissolve the former Register of Building (RoB) through an Act of Parliament, which then assigned RoB's responsibilities to NHC. Its mandate includes the following:

- construction of houses for sale and as part of approved schemes
- facilitate provision of building materials and other components
- business of building contractors, planners and consultants
- renting out and managing houses and properties built by the corporation and those acquired by the government

⁸⁴ <http://www.nbs.go.tz/>

⁸⁵ <http://www.nhc.co.tz/en/about-me>

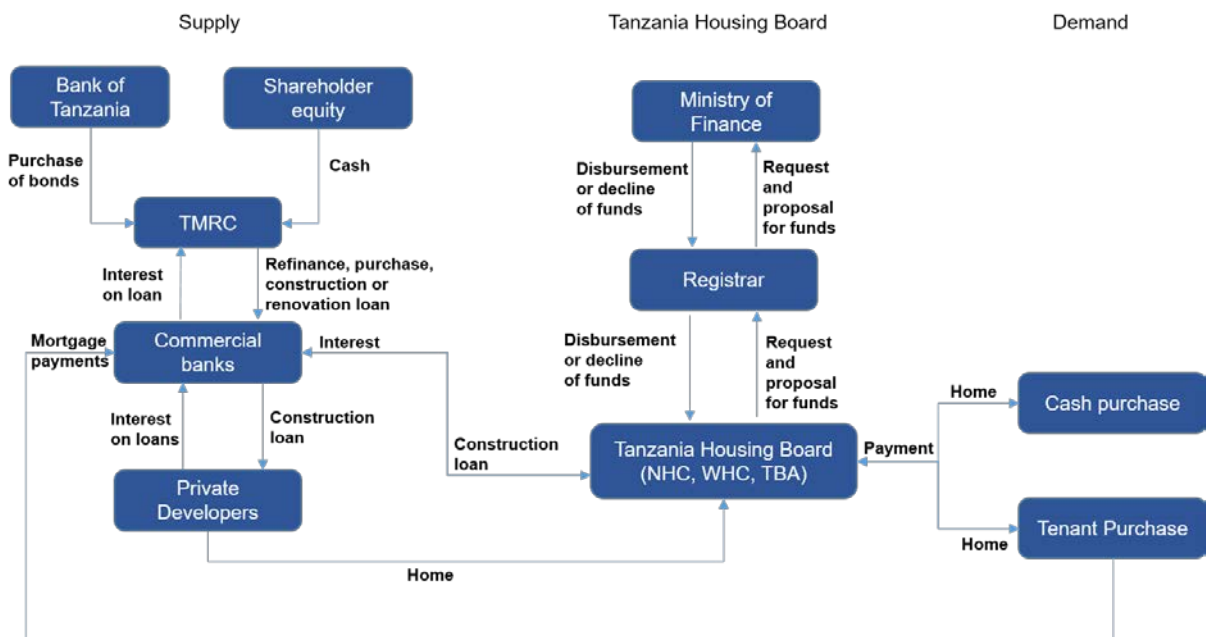
- carrying out other activities related to construction of houses or other buildings built or acquired by the corporation

In 2013, NHC initiated countrywide affordable housing project called 'My Home My Life' with an aim of developing 5,000 housing units. The prices quoted for two bedroom (56m²) and three bedroom (70m² and 85m²) in various regions of the country ranged between TZS 44.7 million (US\$ 20,175) to TZS 128 million (US\$ 57,773) VAT inclusive.

WHC is a property developer and a fund manager established in 2013. As a property developer, it is the main implementer of Tanzania Public Servant Housing Scheme tasked to build of 50,000 housing units since 2014/15 financial year.

TBA, which is under the Ministry of Works (MoW) is mandated to provide quality accommodation to the Government and public servants as well as building consultancy services to Government.

Figure 18 Tanzania housing program framework



Source: KPMG analysis

The above chart shows working of the Tanzania Housing Board (THB) and other stakeholders, including role of financial institutions in the housing sector. THB is made of three government institutions namely: NHC, WHC and TBA.

Tanzania Mortgage Refinance Company (TMRC)

GoT has developed a unique housing system to address housing deficit in the market and to grow the mortgage market. This has been done through provision of long term funding by the TMRC in 2010 under the Housing Finance Project (HFP). TMRC is a private sector financial institution owned by member banks with a sole purpose of supporting banks to do mortgage lending by refinancing banks' mortgage portfolios and not individual borrowers⁸⁶.

Each of the member banks/shareholders has subscribed to the issued share capital of the company with a minimum of TZS 500 million (US\$ 250,000). TMRC's initial funding came from GoT through the Bank of Tanzania, a US\$ 30 million loan to GoT from the World Bank to expand access to housing finance in Tanzania. The base lending rate is 6 % on the loan and interest rate 1.5 % hence the loan

⁸⁶ <http://www.tmrc.co.tz/index.php/members/view/tanzania-investment-bank>

was priced at 7.5%. TMRC lends member banks at nine 9% and non-member banks at 10% per annum.

It is estimated that currently the total mortgage loan book is US\$ 100 million consisting of approximately 2,000 loans at an average loan size of US\$ 50,000.

TMRC has the following broad mandates:

- Improving housing finance market – providing long term liquidity to banks for mortgages, working with private sector developers for the housing supply
- Supporting large developers to reduce the cost of house development. This is done through research, development and training provided to these institutions
- Providing technical support and mortgage awareness creation countrywide.

Key takeaway

The base lending rate is 6 % on the loan and interest rate 1.5 %hence the loan was priced at 7.5%. TMRC lends member banks at nine 9 % and non-member banks at 10% per annum.

Affordability in Tanzania

NHC has categorised its housing units into three broad classes: affordable, mid-range and high-end:

Housing program	
Affordable	TZS 30 – 249 million (US\$ 15,000 – 124,500)
Mid-range	TZS 250 – 500 million (US\$ 125,000 – 249,500)
High-end	Above TZS 500 million (US\$ 250,000).

4.2 Funding strategies for both supply and demand

The GoT primarily funds NHC as follows:

- Pre-finance, estimated to contribute about 20% of total funds
- Loans from banks. Recently, the GoT has introduced a policy that requires NHC to get approval from the Ministry of Finance’s Debt Committee. This additional step has become a bottleneck in the speed of delivery of housing projects.
- NHC equity finance, which forms a minor chunk of its total funds.

Demand side funding strategies

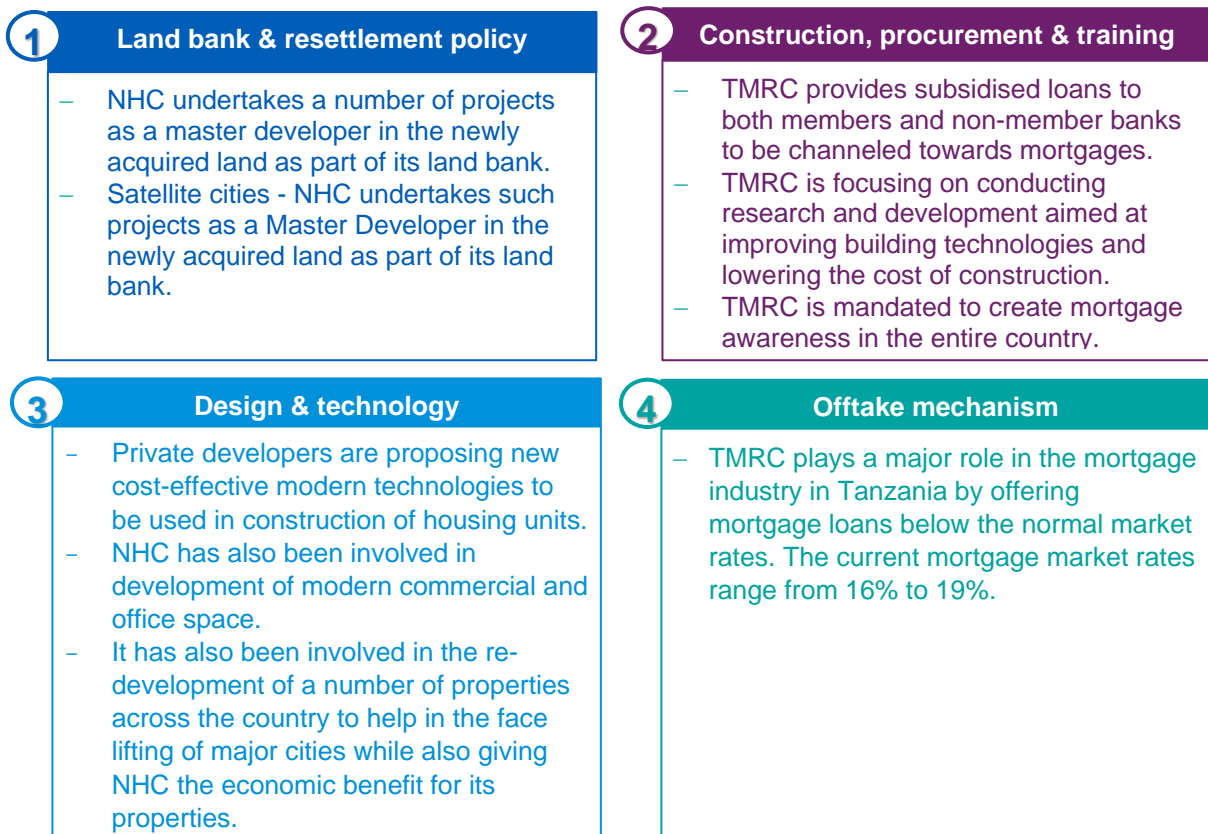
- NHC is funded by the GoT through grants, which it uses to develop properties, and is a member of TMRC and eligible for TMRC mortgage loans at 9% interest rate per annum. Over the period between 2012 and 2016, NHC managed to complete a total of 23 projects consisting of 1,510 housing units across the country and 27 ongoing projects consisting of 6,237 housing units.
- By December 2015 NHC reported to have a balance sheet worth US\$ 2 billion and US\$ 400 million worth of ongoing projects in real estate (expected to reach US\$ 800 million in the next five years).
- WHC continues with the implementation of the Public Servants Housing Scheme, where 50,000 affordable housing units are expected to be constructed in 5 phases. In line with the government move to Dodoma as the capital city, WHC launched a project in August 2017 to deliver 500 house units in Njedengwe, Dodoma. The price range for WHC houses ranges from TZS 27 to TZS 85 million (US\$ 12, 186 to US\$ 38,364).
- There are a number of private sector developers in the market focusing on housing development and sells to customers. Private developers mostly focus on high end market and these are usually not affordable to a majority of middle and low income earners.

- Most pension funds are actively involved in housing projects. The National Social Security Fund (NSSF) in 2017 constructed housing units in Kigamboni (the Dege Eco Village satellite city) which brought to the market a supply of 7,460 housing units by 2017. Total project costs are estimated at around US\$ 544 million.

Supply side strategies

- TMRC receives loans from the GoT at 7.5% per annum, and lends member banks at 9 % and non-member banks at 10% per annum. This enables banks to extend mortgage loans to their customers at lower interest rates. Mortgage rates range from 16% to 19% per annum at normal market rates. Provision of long term funding by TMRC at attractive rates has lowered the cost of funds leading to lower mortgage rates and hence improving affordability and extending the range of potential borrowers.
- In December 2015, the NHC announced its commitment to delivering not less than 1,500 units each year for the coming 10 years in an attempt to address acute shortage of housing in the country.
- A Household Budget Survey for year 2011/2012 published in July 2014 by the Tanzania National Bureau of Statistics (NBS) showed that more than 75% of households in Tanzania mainland owned the houses in which they were currently living.

4.3 Implementation approach including delivery timelines



- Since its formation, NHC has been involved in the construction and sale of a number of housing units across the entire country. The housing units range from affordable and high end residential houses.
- NHC has also been involved in the development of commercial and office space. It has also been involved in the re-development of a number of properties across the country to help in the face lifting of major cities while also giving NHC the economic benefit for its properties.

Ownership eligibility criteria

The NHC housing program is open to all eligible applicants and customers who are able to afford the various housing units.

There is no eligibility criterion for the housing units. Once construction is completed, NHC advertises the units. Eligible applicants can pay either in cash or through mortgage. Mortgage applicants are required to pay a down payment of 10% of the price and the rest as a mortgage up to a maximum period of 20 years. The houses are awarded on a first come, first serve basis.

4.4 Success rate

- According to Bank of Tanzania, the mortgage market recorded an annual growth rate in mortgage loan balances of 11% in June 2017.
- NHC has managed to involve 16 banks for mortgage lending to customers.
- NHC has introduced progressive payment plan, which offers flexibility to its customers.
- Involvement of District and Town Councils to offer affordable land for construction of the housing units.
- Development of satellite cities has led to job creation, revenue to the government, improvement of livelihoods and creation of a new Central Business District (CBD) that will accommodate the growing demand of the main commercial city.
- According to BoT, the mortgage market recorded an annual growth rate in mortgage loan balances of 11% in June 2017. A key element in the growth of the mortgage market has been the provision of long term funding by TMRC.
- Mortgage debt through TMRC has increased from TZS 1 billion (US\$ 500,000) in 2010 to TZS 340 billion (US\$ 170 million) in 2017.

4.5 Key issues

- Low income levels of citizens and consequently leading to a low housing demand.
- Nascent mortgage system (tough lending conditions) and lack of targeted monetary policy.
- Inadequate budgetary support to NHC from the GoT hence NHC has not been able to adequately meet its housing unit targets.
- Lack of a comprehensive housing policy.
- High cost of housing building materials.
- Lack of formal infrastructure
- Delayed government approval on loans – NHC has to seek approval from the Ministry to be able to borrow loans from banks and this takes long.
- Affordability – the mortgage interest rates charged by the banks are relatively high (ranging between 16% and 19%) and the majority of citizens are not able to afford them.
- Lack of enough developers in the market who are able to match the demand/the deficit in the market. There is need for the GoT to provide subsidies to encourage developers.
- Transfer of title deeds is very bureaucratic and takes a very long time slowing down the development process of the housing units.

4.6 Project management approaches used

Segregation of duties among the stakeholders

The GoT has clear segregation of duties among all the stakeholders involved in the process. The three major stakeholders include:

- Ministry of Lands, Housing and Settlements Development (MoLHSD): It is responsible preparing land use plans; manage urban and village planning; land testing and mapping; provide land ownership documents and trademarks; registering land ownership documents and legal documents; valuation; encouraging and empowering citizens to have a better home; solving land and housing disputes; manage availability and maintenance of land records; manage the collection of government subsidies from land sector services; managing the National Housing Agency, the

National Commission for land use plans, the National Research Project for Housing and Construction Materials and the New Town Development Agent of Kigamboni; manage the operation of Tabora Land Colleges and Morogoro; and manage the interests and functions of land sector servants.

- NHC, WHC and TBA (Tanzania Housing Board): responsible for planning and executing housing estates and is the sole providers of public housing.
- Suppliers and partners from other agencies: they range from material suppliers, business consultants, building contractors, manufacturers, research academicians, banks to professionals from either GoT agencies e.g. TBA or from the private sectors.
- Through this scheme, THB involve the private sector players in the development of public housing to bring about greater innovation in building and design.

Accountability

MoLHSD and THB have clearly defined responsibilities, which allow them to be accountable for their respective areas in the program. On a broad level, the major responsibilities of both the organisations are:

- **THB:** implements the housing and is governed by social policies prescribed by the government. It has minimal autonomy with respect to its housing role, urban development, financial operations or borrowing. The overall control framework includes clearly defined authority, delegation limits, reporting mechanisms, and appropriate terms of reference for management of core policy areas, comprehensive policies and procedures relating to operations and financial controls, and an annual budgeting and monthly financial reporting system for all operating units.
- **Ministry:** The Ministry has close oversight and involvement in THB's operations. Budgetary operations are largely determined by the government. THB's budget must be approved by and audited financial reports submitted to TMRC and MoLHSD.

4.7 Project impact

Socio-economic impact

- **Revenue for the government:** The government earns its revenue in the form of VAT, land rent, property tax, service development levy and corporation tax.
- **Increase in home ownership rates.**
- **Job creation and economic empowerment:** Affordable housing project under NHC created a total direct employment of 6,034 while total indirect employment created was 3,019.

Cameroon



5 Cameroon

5.1 Country overview

Demographic and economic overview^{87,88,89,90}

Cameroon is a low to middle income Sub-Saharan African country and it is the most significant market in the Economic and Monetary Community of Central Africa (CEMAC). It has a diverse economy based on oil and gas, timber, aluminium, agriculture, mining and the service sector. However, economic activity has witnessed a slowdown since 2016.

With an annual population growth rate of 2.5% and an annual urbanisation growth rate of 4%, Cameroon is 55% urbanised and cities account for 65% of the Gross Domestic Product (GDP).⁹¹ Coupled with economic growth and increasing investments, this has created an expanding middle class with a strong demand for products and services, including housing.⁹²

Key demographic and economic indicators	
Population	24.05 million (2017)
Area	475,442 km ²
Gross Domestic Product (GDP)	US\$ 34.8 billion (2017)
Per capita income	US\$ 1,503.5 (2017)
World Bank ease of doing business ranking	163 rd of 190 countries

Introduction to housing sector

Cameroon is facing a challenge in providing housing for its population. Urban centres do not yet possess the necessary infrastructure and lodging facilities for the growing urban population⁹³ and almost 50% of Cameroonians live in informal dwellings and settlement. In 2014, an estimated 59% of households owned their own homes, 32% were tenants and 8% were accommodated free of charge.⁹⁴

Table 9 Structures in Cameroon's rental housing

Breakup of rental market in Cameroon	
Multi-dwelling units that can accommodate multiple households in adjoined structures	41.3%
Concessions	24.3%
Detached houses	22.7%
Flats/apartment buildings	7.9%
Modern villas	2.3%

⁸⁷<https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=CM>

⁸⁸<https://data.worldbank.org/indicator/SP.POP.TOTL?locations=CM>

⁸⁹<http://www.doingbusiness.org/data/exploreeconomies/cameroon>

⁹⁰<https://tradingeconomics.com/cameroon/gdp-per-capita>

⁹¹<http://capecoafrika.com/article/read/353>

⁹²Housing Finance in Africa: A review of some of Africa's housing finance markets

⁹³<https://www.apisummit.co.za/wp-content/uploads/2017/08/Cameroon-API-Presentation.pdf>

⁹⁴http://slmp-550-104.slc.westdc.net/~stat54/downloads/2017/Pauvrete_et_conditions_de_vie_au_Cameroun_en_2014.pdf

Source: World Bank⁹⁵

Cameroon has a housing deficit of over 1.2 million units (2015) and experiences annual additional housing shortage of 100,000 units.⁹⁶ Hence, access to housing has become increasingly expensive, witnessing a price increase of almost 10% year-on-year. It is estimated that Cameroonians use half of their income to pay their rent.⁹⁷

Government, private companies and individual investors (local and foreign) are investing in increasing housing supply as demand for both ownership and rentals are high. However, the formal real estate market is concentrated in the urban and peri-urban areas, focused on middle-to-higher value market. Informal channels are the dominant system of housing provision and meets 97% of the demand in the country.⁹⁸

Affordability

As of 2014, 40% of the population was living below the poverty line. Unemployment is high and most people are involved in the informal economy. The formal private sector is underdeveloped and the Government of Cameroon (GoC) is the largest formal sector employer. The average monthly income per household is US\$ 386 in the formal public sector and US\$ 472 in the private sector.

- **Renting a house:** On average, it costs up to US\$ 223 a month to rent a standard three-bedroom house in main cities of Douala and Yaounde. This gets almost 40% cheaper in the smaller cities like Limbe, Bafoussam and Bamenda.
- **Building a house:** It costs up to US\$ 17,885 to build a standard three-bedroom house (averaging 300 m² in size) excluding the cost of land in Douala and Yaounde. This cost is about the same and can even be more expensive in the smaller cities due to higher input costs. Cost of standard inputs increases outside main cities as these are mostly manufactured here or imported. For some inputs, costs can be cheaper in smaller cities.
- **Land costs:** The cost of a serviced 500 m² piece of land is US\$ 8,943 in urban areas and US\$ 7,154 in the smaller cities.^{99,100}

Housing policies

The agenda of GoC's housing policy has evolved through three distinct periods: 1950 to 1976, 1977 to 2003-2004 and 2004 to date. During the first phase, GoC laid emphasis on direct construction of houses. Subsequently, in phase II, focus was on development and improvement of the broader housing environment including housing services and infrastructure. At present, focus is both on construction of social infrastructural amenities and provision or upgrading of basic services in informal settlements through partnerships with local and international private players.

The housing market is not well developed and GoC is increasingly adopting a public-private partnership (PPP) approach to build social housing due to constrained public resources.¹⁰¹ The following are some main players in Cameroon's housing sector.

⁹⁵<https://openknowledge.worldbank.org/bitstream/handle/10986/23358/main0report.pdf?sequence=1&isAllowed=y>

⁹⁶<https://openknowledge.worldbank.org/bitstream/handle/10986/23358/main0report.pdf?sequence=1&isAllowed=y>

⁹⁷<https://www.businessincameroon.com/public-management/1512-6773-cameroon-government-announces-sale-of-1-520-social-housing-in-2017>

⁹⁸<http://documents.worldbank.org/curated/en/278501468000627643/text/101153-v2-FRENCH-P149330-PUBLIC-FrenchHousingMainReportMarch2016.txt>

⁹⁹Housing Finance In Africa: A review of some of Africa's housing finance markets, CAHF 2017

¹⁰⁰<http://housingfinanceafrica.org/countries/cameroon/>

¹⁰¹<http://www.sic.cm/index.php/fr/component/content/article/89-actualites/104-les-contrats-de-partenariat-pour-financer-la-production-de-logements-au-cameroun.html?Itemid=548>

Table 10 Roles of various agencies

Agencies and responsibilities	
Body	Description
Ministry of Urban Development and Housing (MINDHU)	Apex ministry for policy and coordination on urban development.
Cameroon Real Estate Corporation (abbreviated to SIC in French)	<p>Centrally funded public limited company in charge of implementing housing policies and developing the real estate market, working under the purview of MINDHU.</p> <p>Main responsibilities include prioritising the study and execution of all projects and operations related to social housing; constructing and buying buildings which are then sold for cash, credit or rentals; financing (total or partial) and construction on lands; common services and public amenities and carrying out all movable, real estate, commercial and financial transactions relating to housing and infrastructure in accordance with CFC.¹⁰²</p> <p>SIC has historically received contributions from GoC in terms of real estate assets, drawn from its private stock and subsidies in the form of landscaping by MAETUR. In addition, the funding of its operations has also come from internal resources (federal budget and local banks) and from external resources – French Development Agency.¹⁰³ With decreasing funding from GoC, it is now increasingly positioning itself as an experienced partner (technical, financial, land-provider, etc.) for private promoters with a profit-sharing mechanism for real-estate development.¹⁰⁴</p> <p>Leasing: SIC offers affordable rental housing in individual houses and apartments of various standings. There are over 5,000 units of rental assets distributed in various cities.¹⁰⁵</p> <p>Sales: Over 50% of the housing stock built by SIC is for homeownership. It has focused on optimising the land in the city centre, by the development of the free parcels in the existing cities and the available land reserves. Since 2005, new housing projects called Residences, offer luxury housing mainly in Yaounde, pending deployment in other cities.¹⁰⁶</p>
Cameroon Housing Loan Fund (CFC)	<p>A building and loan association setup by GoC, it is the top mortgage bank and provides funds for social housing to individuals and developers. It also provides expertise for the realisation of any project intended to promote housing in general and social housing in particular.</p> <p>CFC provides financing for development of plots and construction of housing for ownership and rentals. It also provides necessary financing to public or private real estate companies, individuals, municipal cities and for implementation of any social housing programme.</p>

¹⁰²<https://www.sic.cm/index.php/fr/societe/presentation/presentation-de-la-sic.html>

¹⁰³http://www.minhdu.gov.cm/documents/assemblee-log/expose_dg_sic_seminaire_des_parlementaires_eng.pdf

¹⁰⁴<http://www.sic.cm/index.php/fr/partenariats.html>

¹⁰⁵<http://www.sic.cm/index.php/fr/projets/location.html>

¹⁰⁶<http://www.sic.cm/index.php/fr/projets/ventes.html>

	Contribution to CFC comes from an indirect tax levied on employees and employers of private and public sectors, which is collected by the tax authorities and transferred to the Fund (currently about FCFA 32 billion or US\$ 57.6 million per year). The employer generally calculates the tax by applying a rate of 1% for employees on the gross wage and 1.5% for employers on the remunerations paid, including benefits in cash and kind. It also collects and receives savings deposits from natural or legal persons. ¹⁰⁷
Urban and Rural Land Development and Servicing Mission (MAETUR)	It acquires and develops land, which is sold to willing buyers at affordable prices.
The Mission for the Promotion of Local Materials (MIPROMALO)	The local material promotion authority, which develops local materials for use by construction companies.
National Investment Corporation of Cameroon	Invests government funds in profitable projects in different sectors, including housing.
Cameroon Cooperative Credit Union League (CAMCCUL)	Micro-finance institutions (MFIs) are an integral part of providing finance to Cameroonians. About half of the MFIs belong to CAMCCUL.
Support Council for the implementation of partnership contracts (CARPA)	This expert institution in PPP sector makes it possible for private funds to be used for public projects.
Private developers	The number of private developers is increasing with many foreign companies setting up local subsidiaries. For example, Options for Homes in Cameroon is a local subsidiary of a Canadian Housing Company and it is involved in a mixed-use development in the coastal city of Limbe aimed at high income earners. The private developers have mostly focused on high-end housing market due to affordability and easier access to finance. However, there are new and emerging developers who are focusing on the middle class and lower income households, as this presents the biggest opportunity for development and financing. Private developers also partner with municipalities (for authorization of land-use ¹⁰⁸) to build affordable housing.
Individuals	Individuals (both local and immigrants) are also heavily investing in housing, building standalone houses, mini cites and small estates.

Source: KPMG analysis

¹⁰⁷<http://www.minfi.gov.cm/index.php/en/deductions-and-contributions>

¹⁰⁸https://optionsforhomes.ca/news/article.go?article_id=67

https://www.land-links.org/wp-content/uploads/2016/09/USAID_Land_Tenure_Cameroon_Profile.pdf

1	MINDHU	2	Others
	<ul style="list-style-type: none"> - In 2009, GoC launched a flagship programme to build 10,000 social housing units and develop 50,000 buildable plots in ten regional capitals by 2020. It is collaborating with local councils, energy and water utility companies, financing agencies, etc. to execute the project. This is being led by MINHUDU and SIC is the contracting authority. The project is worth US\$ 110 million and is being financed through GoC and agreements with international banks. The pilot phase of work is currently under implementation is being carried out by internal firms like Italian business group Pizzarotti-Basics and other Chinese companies. - MINHDU is also pursuing a programme of construction of 8,000 social housing units in eight regions of the country (excluding Douala and Yaounde) as part of GoC's Triennial Emergency Development Plan (PLANUT) and a project for constructing over 5,000 social housing units in Lendi, a locality around Douala. - It has recently developed a slum upgrading strategy that needs to be operationalised and is looking to develop a pro-low income earners housing policy and technical guidelines. 		<ul style="list-style-type: none"> - Local councils also undertake housing projects. The city council of Douala has undertaken a project to build more than 1,000 social, affordable and private houses along with community, commercial, retail and leisure facilities in the Mbanga-Japoma area at a cost of US\$ 220 million. It has undertaken another project to deliver 2,500 affordable houses in Bonamatoumbe. - CFC, the Special Fund for Equipment and Inter-Municipal Intervention (FEICOM) and association of municipalities (CVUC) have also signed an agreement in 2013 to develop municipal social housing initiated by municipal governments.

Key private sector projects:

- Cameroon Living Project: An English company NMS Infrastructure in partnership with some Cameroon banks has entered a contract for constructing up to 10,000 social housing units over a six-year period in 2015. The flats will be built in a number of areas as directed by MINDHU. It is valued at US\$ 273 million (GBP 208 million) and will be financed by British Government and GoC governmental and financial institutions. 85% of the contract value will be direct lending from UK Export Finance to Ministry of Economy, Planning and Regional Development (MINEPAT), guaranteed by the Ministry of Finance (MINFI). The remaining 15% will be provided by GoC through Ecobank.¹¹⁴
- Dibamba Beach Project: SCI Dibamba Beach Cameroon is planning to construct over 10,000 residential homes in a new Beach City near Douala.

¹⁰⁹https://www.researchgate.net/publication/283644360_Identification_analysis_evaluation_and_possible_solutions_of_the_problem_of_housing_in_Cameroon_Case_study_of_Douala_and_Yaounde

¹¹⁰<https://unhabitat.org/wp-content/uploads/2016/02-old/CAMEROON%20IMPACT%20STORY%20-%20Reduced.pdf>

¹¹¹<http://capecoafrika.com/article/read/353>

¹¹²<https://www.apisummit.co.za/wp-content/uploads/2017/08/Cameroon-API-Presentation.pdf>

¹¹³For the conversion, FCFA 1 = US\$ 0.0018

¹¹⁴http://www.nmsigrp.com/_webedit/uploaded-files/All%20Files/1932%20Cameroon%20Stakeholder%20Booklet%20%28120516%29%20Final.pdf

- Other local companies are also embarking on several smaller projects across the country in partnership with foreign companies.¹¹⁵

Housing and finance

Though Cameroon's financial system is the largest in the CEMAC region, it is still underdeveloped. The banking sector is highly concentrated in the main urban areas and dominated by foreign commercial banks. The top three banks control 50.1% of the loan market and 52.2% of deposits. These banks do not address the demand from small or medium businesses adequately and prefer to deal with established companies, government or high net worth individuals. Only 15% of the population accesses commercial banks and about 5% of Cameroonians have access to mortgage finance from the formal private banking system. Others rely on informal institutions or MFIs. MFIs officially account for 1% of total loans granted. A loose regulatory and supervisory framework has hampered the development of MFIs and many MFIs are only able to satisfy a third of their customers at any time due to liquidity constraints.

Hence, the mortgage finance market is still in its infancy in Cameroon. A typical mortgage lending in Cameroon involves a term of 15 years and a down payment of 20%. The interest rate is about 12.5%. Only about 11% of the population can afford the cheapest newly built house (corresponding to an area of 50 m²) by a private developer (US\$ 18,500) given current mortgage financing arrangements.¹¹⁶

Key takeaway

An underdeveloped housing finance market based on traditional financing products has impeded provision of affordable housing despite huge demand.

5.2 Funding strategies for supply and demand

US\$ 690 million has been allocated towards the major projects under the 2009 Growth and Employment Strategy Paper (GESP) and PLANUT to prioritise large public infrastructure projects (including housing) that will promote private investment and growth.¹¹⁷

Demand side schemes

- GoC has instituted reforms like providing financial guarantees and broadening assets that can be used as collateral to make it easier to access housing finance.
- To improve MFI liquidity, GoC has established a wholesale fund financed by the African Development Bank (AfDB). The fund is worth US\$ 40 million (FCFA 21 billion) and has helped to usher financial reforms.
- Real estate companies are collaborating with local commercial banks to extend end-user financing opportunities to the growing middle class.¹¹⁸

Supply side schemes

- GoC also provides sovereign guarantees to private developers. To increase construction of affordable housing across the country, individuals can provide 20% of the investment as their equity investment upfront and take a loan for the remaining 80%, which is guaranteed by GoC. Beneficiaries include individuals in the private and informal sectors.
- GoC has also helped to reduce housing production costs by encouraging the use of local materials and to reduce the price of land and inputs such as cement and sand. It has stepped up funding for government agencies in this sector.

¹¹⁵<https://www.apisummit.co.za/wp-content/uploads/2017/08/Cameroon-API-Presentation.pdf>

¹¹⁶Housing Finance In Africa: A review of some of Africa's housing finance markets, CAHF 2017

¹¹⁷<https://www.imf.org/en/Publications/CR/Issues/2017/07/05/Cameroon-Request-for-a-Three-Year-Arrangement-Under-the-Extended-Credit-Facility-Press-45038> —press release; staff report; and statement by the executive director for Cameroon, July 2017

¹¹⁸Housing Finance In Africa: A review of some of Africa's housing finance markets, CAHF 2017

5.3 Implementation approach including delivery timelines

As land has become very scarce in the urban centers of Yaounde and Douala, SIC has oriented its activity towards the production of housing and transacting its valuable property assets. It is opting to optimise its land by redevelopment of spaces and vertical densification of housing.^{119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129}

Following are the execution details for the programme to build 10,000 social housing units –

- **Pilot phase:** It is deployed in two main cities – Yaounde and Douala. This phase, financed entirely by GoC, commenced in 2010 and involves construction of 1,675 social housing units. For this purpose, 36 sites have been allocated to local small and medium enterprises (SMEs).

Pilot phase					
Region	Number of sites	Number of units	Range of size of units (area in m ²)	Range of total cost (US\$ '000)	Status (As of 2017)
Olembé (Yaounde)	13	500	99.3 to 122.89	32.46 to 41.07	80 units have been delivered and another 380 units have achieved 80% completion. The overall execution rate of the works is approximately 87.2%.
Mbanga-Bakoko (Douala)	23	1,175	89.9 to 111.25	29.74 to 37.04	250 units have been delivered and 70 dwellings are in the process of provisional acceptance.

Source: MINDHU^{130, 131}

- 1,500 units have been contracted to Chinese company SNC SHENYANG for construction in six towns. Currently, around 1,320 housing units have been constructed of which half are in Yaounde and the remaining half are in Douala.
- Another 640 housing units are under construction by COFFOR-CEMAC, an international firm, with funding from a financial syndicate headed by CFC.¹³²

¹¹⁹<https://www.businessincameroun.com/business-in-cameroon/3105-4857-in-37-years-credit-foncier-du-cameroun-has-financed-the-construction-of-69-500-low-income-housing-units>

¹²⁰Housing Finance in Africa – A review of some of Africa's housing finance markets, 2017

¹²¹<https://openknowledge.worldbank.org/bitstream/handle/10986/23358/main0report.pdf?sequence=1&isAllowed=y>

¹²²<http://sic.cm/index.php/fr/sp-property/properties/9-residences-etetak.html>

¹²³<http://documents.worldbank.org/curated/en/832091503626454254/pdf/CAMEROON-PAD-NEW-08032017.pdf>

¹²⁴http://www.nmsigrp.com/_webedit/uploaded-files/All%20Files/1932%20Cameroon%20Stakeholder%20Booklet%20%28120516%29%20Final.pdf

¹²⁵<http://capecoafrafrica.com/article/read/353>

¹²⁶<https://www.investiraucameroun.com/tags/mbanga-bakoko>

¹²⁷<https://www.creditfoncier.cm/fr/liste-architectes-et-bet-agrees.html>

¹²⁸http://www.minhdu.gov.cm/index.php?option=com_content&view=article&id=720%3Anote-de-presentation-du-programme-gouvernemental-de-construction-des-logements-sociaux-et-damenagement-des-parcelles-constructibles&catid=116%3Aprogramme-gouvernemental-10000-logements&Itemid=200038&lang=fr

¹²⁹<http://www.sic.cm/index.php/fr/nos-projets.html>

¹³⁰<http://capecoafrafrica.com/article/read/353>

¹³¹http://www.minhdu.gov.cm/index.php?option=com_content&view=article&id=721%3Apresentation-des-1675-logements-a-vendre&catid=116%3Aprogramme-gouvernemental-10000-logements&Itemid=200038&lang=fr

¹³²http://www.minhdu.gov.cm/documents/assemble-log/expose_dg_sic_seminaire_des_parlementaires_eng.pdf

The key implementation strategies in different areas are described below:

1

Land bank & resettlement policy

- There is high land tenure insecurity, which poses a serious challenge to inclusive urban planning. To mitigate this, the Ministry of State Property, Surveys, and Land Tenure (MINDCAF) has launched a land reform in 2009 and a broad program to modernise the land registry in 2011, which is being supported by the AfDB.
- However, modernization of land supply chains is advancing very slowly given the weak institutional and technical capacity. Infrastructure development projects also face lengthy and cumbersome resettlement and compensation procedures.
- Funds have been allocated to MINHDU for securing the sites and for the compensation and operational expenses required to execute the flagship programme.
- A matrix of land needs by 2020, covering all the cities targeted according to pre-defined criteria (demography, economic weight, industrial cities, tourist academics, etc.) was produced and transmitted to MINDCAF for programming and development planning of land bases.

2

Construction, procurement & training

- Use of a local workforce: NMSI has committed to employing a local workforce, providing jobs and training to Cameroonian workers of all skill levels. Besides knowledge transfer, this also improves the prospects of future employment.
- Domestic manufacturing of materials: private sector investors have set up factories to manufacture and distribute building materials, which will potentially reduce input costs. These materials are exported to all other Central African Economic and Monetary Community countries. For instance, NMSI will also produce all of the structural insulated panels required for housing construction by employing local workers in a new purpose built factory in Cameroon. Southwest International Construction Corporation has also setup a factory for construction of prefabricated buildings.
- GoC has set up local production facilities for some of the inputs and has established MIPROMALO to promote the use of locally manufactured materials. This will help reduce the cost of inputs and potentially increase housing supply.
- In order to guarantee the quality and safety of buildings, work is carried out under the supervision of the Public Procurement Authority and SIC. Besides regulation of architectural design, SIC provides supervision through a multi-disciplinary team from management, projects, finance departments, etc.
- CFC also maintains a list of approved architects and real estate experts.
- It also works in partnership with local and foreign private construction companies to handle large-scale projects and train the local workforce.

3 Design & technology	4 Offtake mechanism
<ul style="list-style-type: none"> - In July 2014, GoC signed an agreement with UN-Habitat for sustainable housing, committing to observe UN standards for energy efficiency in buildings, focusing on renewables and developing more environmentally conscious construction technologies. - Private players like NMSI Group are also deploying low carbon technologies like LED solar units to reduce power consumption and meeting power demands through Solar PV installations. - NMSI Estates will also be fully master planned and will include ancillary infrastructure such as roads, water, electricity, walkways, drains, sewerage and lighting. The sites will also promote social cohesion with open spaces and facilities for the community and shared communal areas. 	<ul style="list-style-type: none"> - GoC has taken a step to provide sovereign guarantees to private developers. - It also engages informal sector small scale contractors in the government social housing programme. - On March 3, 2014, CFC and FEICOM signed an agreement for the opening of a line of credit of US\$ 18 million to facilitate the financing of low-income home construction projects for Cameroonian districts.

Key takeaway

GoC has introduced various schemes to address issues like materials, labour, registry, etc. in the housing sector. However, lack of strong fundamentals like public funds and population incomes have posed serious challenges to bringing large-scale transformation.

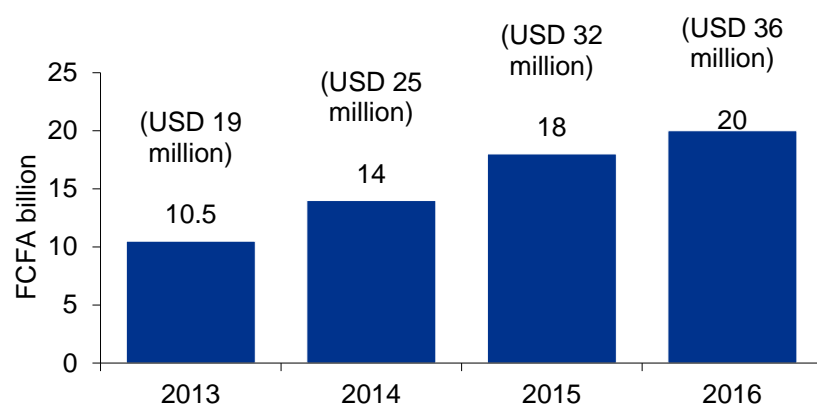
5.4 Success rate

CFC's financing activities have increased over the past few decades. Between 1990 and 2011, it provided US\$ 350 million in loans. This included US\$ 290 million for 35,184 individual projects and US\$ 65 million for 2,533 housing units (the average cost per unit is US\$ 25,661) and 2,390 plots in the grouped sector.¹³³

¹³³<https://www.creditfoncier.cm/fr/nos-realizations/nos-realizations-page-3.html>

The following figure depicts amount of CFC's loans issued since 2013.¹³⁴

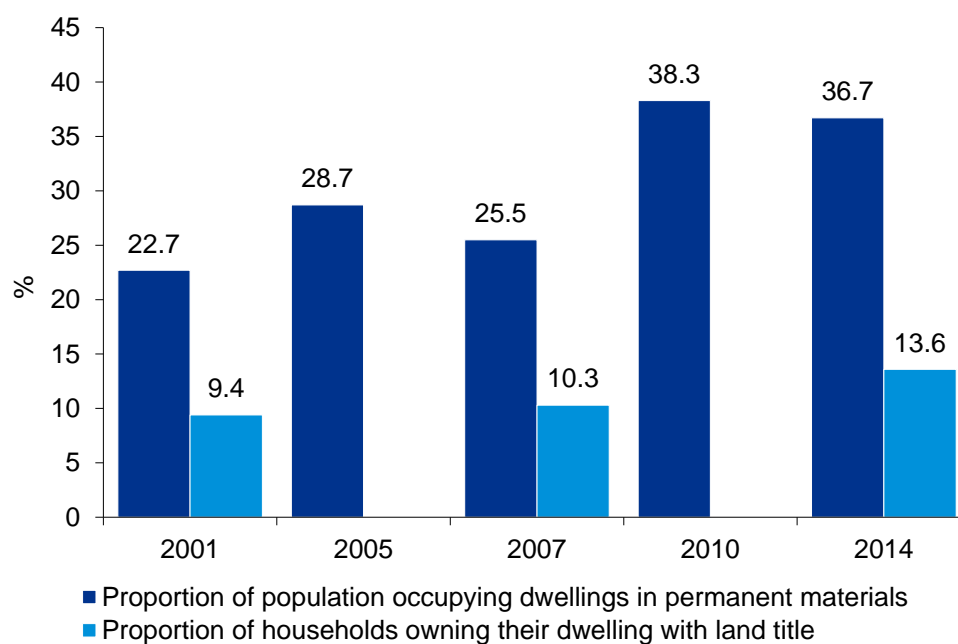
Figure 19 Roles of various agencies



Source: CFC

At the same time, available data on housing demonstrates that the proportion of population living in permanent dwellings has increased since 2001.

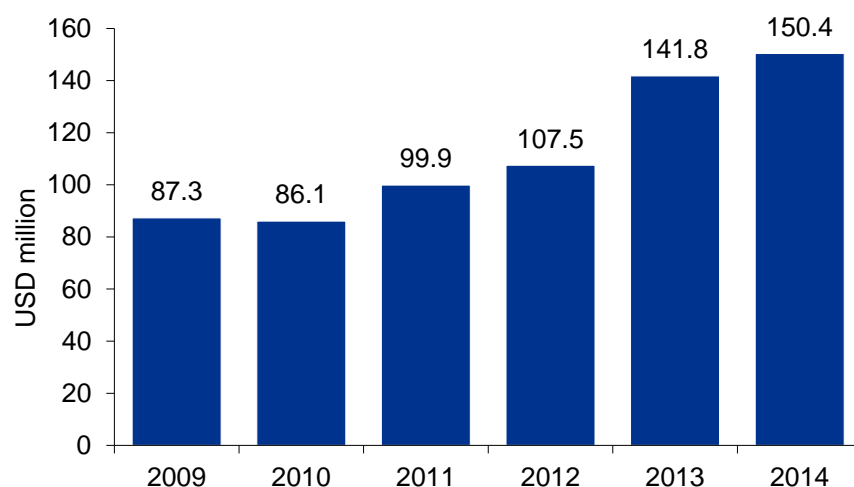
Figure 20 Indicators of housing



Source: Cameroon National Statistics

¹³⁴<http://www.creditfoncier.cm/fr/actualites-1/596-journ%C3%A9e-mondiale-de-l%E2%80%99habitat-interview-de-monsieur-le-directeur-g%C3%A9n%C3%A9ral-%C3%A0-la-crtv-radio.html>

Figure 21 Housing investment component of Gross Capital Formation



Source: JICA¹³⁵

Table 11 Occupancy status of dwellings

Evolution of occupancy status of dwellings by region												
Region	Owners				Tenants				Lodged free			
	2001	2007	2010	2014	2001	2007	2010	2014	2001	2007	2010	2014
Urban	37.7	34.6	37	35.9	52.3	56	56.8	54.7	10.1	9.3	5.8	8.2
Rural	76.6	73.2	76.4	76.9	8.6	14.4	17.3	14.3	14.8	12.4	5.1	7.6
Overall	63	58.9	59.9	58.7	23.8	29.8	32.6	32.3	13.1	11.3	7.2	7.9

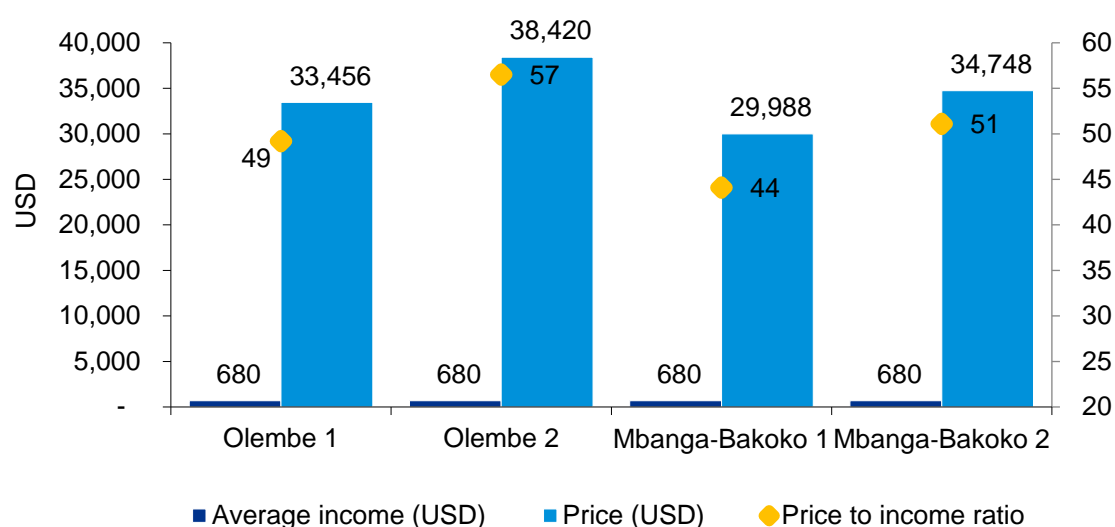
Source: *Annuaire Statistique du Cameroun, édition 2015*

However, public housing remains unaffordable. As per World Bank estimates, 80% of Cameroon's population cannot afford these social housing units. The study describes that in conventional affordability terms, these units are far outside the typical price-to-income range of between 3:1 and 5:1, with prices 44-51 times the typical income levels. Even for public employees who earn higher incomes on average in Cameroon, price-to-income ratios range between 10.5-13.5 mean incomes, or two to three times affordability thresholds.¹³⁶

¹³⁵https://www.jica.go.jp/cameroon/english/activities/c8h0vm00004b26wp-att/data_collection_survey.pdf

¹³⁶<https://openknowledge.worldbank.org/bitstream/handle/10986/23358/main0report.pdf?sequence=1&isAllowed=y>

Figure 22 Housing price-to-income ratios for government social housing programme



Source: Stocktaking of the Housing Sector in Sub-Saharan Africa, World Bank

5.5 Key issues

1. Economic recession¹³⁷

Risk faced

In the two decades of economic recession, housing deficit has worsened due to population growth and rural exodus, coupled with the degradation of the existing housing stock.

Mitigation measures

A think tank was set up in the form of an inter-ministerial committee including institutional and private stakeholders in the sector. For implementation, government actions were based on two major axes: the reform of the legal framework concerning real estate which has been compiled into a code and the production of housing units in order to reduce the deficit.

2. Land tenure^{138,139}

Risk faced

Information on the number of land titles and other forms of registered land rights is difficult to gather and often inconsistent. Only a small percentage of Cameroon's plots are registered and titled.

Mitigation measures

MINDCAF launched a land reform in 2009 and a broad programme to modernise the land registry in 2011, which is supported by AfDB. The government also reduced the number of steps in the land titling procedure and established a timeline for processing applications leading to reduced time to obtain a land title.

¹³⁷http://www.minhdu.gov.cm/documents/assemb-log/expose_dg_sic_seminaire_des_parlementaires_eng.pdf

¹³⁸<http://www.focusonland.com/fola/en/countries/brief-land-registration-in-cameroon/>

¹³⁹http://www.minhdu.gov.cm/documents/assemb-log/expose_dg_sic_seminaire_des_parlementaires_eng.pdf

Key Challenges

Some of the key challenges identified are:

- Significant proportion of the population lives at or below the international poverty line of US\$ 2 per day or about US\$ 60 per month. The cost of a mortgage far exceeds the ability of most to pay. Only the top 2% of the population has access to mortgage finance.¹⁴⁰
- According to the 2017 Doing Business Report, Cameroon's ranking dropped to 133rd in terms of ease of getting credit due to limited progress in improving access to credit information.
- There is a lack of transparency in Cameroon's banking sector. A 2011 report by the Commission Nationale Anti-Corruption stated that GoC found transactions worth US\$ 700 million linked to money laundering between 2006 and 2011.¹⁴¹
- In many financial institutions, over 75% of the deposits are short-term, which renders them impractical for housing lending.¹⁴²
- Parallel systems of land administration cause complications in tenure security and establishment of development rights. Cameroon is a bi-jural state as it inherited foreign systems from both French and British colonial administrations. Consequently, these two different legal systems operate concurrently in different parts of the country along with a customary system.¹⁴³
- There is a significant proportion of the population seeking rental housing. However, government policy has placed more emphasis on home ownership which has led to a huge shortage of rental housing units.¹⁴⁴
- Ordinary funding opportunities are bound to rigid securities conditions and are associated with high costs. Lack of adapted funding mechanisms and the low level of subventions dedicated to social housing, are major drawbacks to the promotion of social housing.¹⁴⁵
- Absence of a prior technical study on the site before the start of work has often resulted in additional expenses.¹⁴⁶
- MFI deposit and lending rates are not regulated leading to huge variations in interest rates. For savings, interest rates vary from 3.25% to 15% annually, while interest rates on loans vary from 3 to 10% monthly for overdrafts.¹⁴⁷
- There is inadequate data on urban areas due to which urban strategies and investment choices remain ill-informed.
- GoC has implemented legislations to inspect and notify before construction permits are issued and decentralised the process of obtaining building permits with a time limit of 90 days. However, this is yet to be achieved as it takes up to 135 days to obtain a building permit.
- Though GoC engages informal sector small scale contractors in the government social housing programme, many contractors have demonstrated inadequate technical and financial ability and also receive irregular payments for work completed. As a result, construction works on some of the project sites have stalled.
- CFC's financial situation is marred by its high level of nonperforming loans, estimated at US\$ 140 million in 2013. The state's outstanding obligations vis-à-vis the CFC were estimated at about US\$ 530 million at end-2013.¹⁴⁸

5.6 Project management approaches used

Segregation of duties among the stakeholders

Cameroon has faced issues of coordination and overlapping of roles and responsibilities between the various stakeholders as legal instruments governing social housing promotion are incomplete, diffuse and linked to many ministerial Departments (Housing, Land tenure, Water and Energy, Planning, Territorial Administration, Finance, etc.). MINDHU envisages establishment of a one-stop shop

¹⁴⁰<https://openknowledge.worldbank.org/bitstream/handle/10986/23358/main0report.pdf?sequence=1&isAllowed=y>

¹⁴¹<http://www.theafricareport.com/Central-Africa/bankings-uneven-development-in-cameroon.html>

¹⁴²<https://openknowledge.worldbank.org/bitstream/handle/10986/23358/main0report.pdf?sequence=1&isAllowed=y>

¹⁴³Housing Finance in Africa – A review of some of Africa's housing finance markets, CAHF, 2017

¹⁴⁴<https://www.sciencedirect.com/science/article/pii/S2226585615000023>

¹⁴⁵http://www.minhdu.gov.cm/documents/assemblee-log/expose_dg_sic_seminaire_des_parlementaires_eng.pdf

¹⁴⁶<https://www.investiraucameroun.com/tags/mbanga-bakoko>

¹⁴⁷<https://openknowledge.worldbank.org/bitstream/handle/10986/23358/main0report.pdf?sequence=1&isAllowed=y>

¹⁴⁸<https://www.imf.org/external/pubs/ft/scr/2014/cr14213.pdf>

approach to bring together all the concerned ministries, departments and administrations to execute housing projects.¹⁴⁹

Accountability

GoC has passed regulation for the establishment and operation of a credit registry database to improve credit information system in the economy. It has also simplified the process of obtaining construction permits through increased transparency, strict timelines and greater decentralisation.¹⁵⁰

Key takeaway

One of the key roles of SIC is to manage agreements with the State, other local authorities, any establishment or public or private enterprise concerning construction or management of any immovable.

5.7 Project impact

1. **Job creation:** MIPROMALO's promotion of local materials has led to creation of direct and indirect jobs. The authority is also working towards upgrading skills of the workforce by providing trainings on the fabrication of local materials for construction.¹⁵¹ This is generating employment across the value chain.
2. **Industrialisation:** Companies like Quality Habitat Corp have set up factories to manufacture building materials in order to reduce cost of inputs. Three new cement companies were established in 2015 to increase the supply of cement.¹⁵²
3. **Foreign Direct Investment:** Property developers and private equity funds with money are seeking local partnerships to provide end-user financing for housing. A few partnerships which are already in place are Ecobank and Credit Foncier, China Development Bank and Afriland First Bank.¹⁵³
4. **Construction sector:** GoC and private companies like Options for Homes in Africa, Quality Habitat Corporation, Cameroon Property Company and MG Constructions as well as an increasing number of individuals are investing in the sector.
Technological advancements: The government is partnering with the private companies to adopt latest technologies in the sector.

¹⁴⁹http://www.minhdu.gov.cm/index.php?option=com_content&view=article&id=720%3Anote-de-presentation-du-programme-gouvernemental-de-construction-des-logements-sociaux-et-damenagement-des-parcelles-constructibles&catid=116%3Aprogramme-gouvernemental-10000-logements&Itemid=200038&lang=fr

¹⁵⁰Housing Finance in Africa – A review of some of Africa's housing finance markets, CAHF, 2017

¹⁵¹<http://www.cameroonpostline.com/mipromalo-trains-youth-on-brick-production/>

¹⁵²Housing Finance in Africa – A review of some of Africa's housing finance markets, CAHF, 2017

¹⁵³Housing Finance in Africa – A review of some of Africa's housing finance markets, CAHF, 2017

India



6 India

6.1 Country overview

Demographic and economic overview

India is a democratic republic with a parliamentary system of government. India's diverse economy encompasses traditional village farming, modern agriculture, handicrafts, a wide range of modern industries, and a multitude of services. Less than half of the workforce is in agriculture, but services are the major source of economic growth, accounting for nearly two-thirds of India's Gross Domestic Product (GDP) and employing less than one-third of its labour force. India continues to be a major exporter of information technology and business outsourcing services. The country has witnessed an average economic growth of nearly 7% per annum between 1997 and 2017.¹⁵⁴ The economy is projected to grow at 7.2% in 2018-19 and 7.4% in 2019-20.¹⁵⁵

Key demographic and economic indicators	
Population	1.2 billion (2011)
Area	3,287,263 km ²
Gross Domestic Product (GDP)	US\$ 2,597.49 billion (2017)
Per capita income	US\$ 1,820 (2017)
World Bank ease of doing business ranking	100 th of 190 countries

Introduction to Housing programme

Since its independence in 1947, Government of India (GoI) has implemented several affordable housing programmes viz: Industrial Housing Scheme, 1949; Low Income Group Housing Scheme, 1954; Indira Awas Yojana (IAY), 1985; Two Million Housing Programme, 1998; Valmiki Ambedkar Awas Yojana, 2001; Jawaharlal Nehru National Urban Renewal Mission (JnNURM), 2005 and Rajiv Awas Yojana (RAY), 2013.¹⁵⁶ Between 1947 and 2014, more than 8.75 million affordable houses were built under various schemes. Most of these housing programmes have either closed or rebranded into new programmes due to changes in ruling government at the central level.

Based on the learnings from the earlier programmes, the first national housing policy was formulated in 1988, including updates in 1994 and 1998. This housing policy changed the course of housing programmes in the 1990s by changing the role of GoI from a direct provider of finished housing, finance, or developed sites to that of a facilitator channeling private sector investment in housing and encouraging private-sector-led construction. During this phase, GoI's role evolved to that of an organizer of a legal, regulatory, and financial framework within which housing could be developed and supplied by the private sector.¹⁵⁷

With a growth rate of 11-12 million per annum, the Indian urban population is set to take over its rural population by 2050. On an average India's housing requirement is increasing at a rate of 2.5-3 million homes per annum. To cater to the housing needs of this growing urban population, GoI in 2015 launched the Pradhan Mantri Awas Yojana – Urban (PMAY-U) with the aim of addressing the shortage of over 20 million houses in urban India by 2022. Under this programme, GoI provides assistance to

¹⁵⁴<https://www.cia.gov/library/publications/the-world-factbook/geos/in.html>

¹⁵⁵<http://pib.nic.in/newsite/PrintRelease.aspx?relid=175362>

¹⁵⁶<https://www.adb.org/publications/major-challenges-facing-small-and-medium-sized-enterprises-asia-and-solutions>

¹⁵⁷<http://www.jll.co.in/india/en-gb/research/303/affordable-housing-icc>

the Urban Local Bodies (ULBs) and other implementing agencies through Union Territories (UTs)/States. In 2016, GoI expanded the scheme to include rural areas with the launch of Pradhan Mantri Awas Yojana – Gramin/Rural (PMAY-G). This programme aims to develop about 30 million houses in rural India by 2022. Under the overall PMAY mission, an estimated 50 million houses are to be built in urban and rural areas combined by 2022. GoI has categorised the target group under affordable housing primarily under three groups viz: Economically Weaker Sections (EWS), Low Income Groups (LIGs) and Middle Income Groups (MIGs).

PMAY-U

The programme will be implemented through four verticals giving option to beneficiaries, ULBs and State Governments. These four verticals are as below:¹⁵⁸

- Rehabilitation of slum dwellers with participation of private developers
- Promotion of affordable housing for weaker section through Credit Linked Subsidy Scheme (CLSS)
- Developing affordable housing in partnership with public and private sectors, and
- Providing subsidy for beneficiary-led individual house construction or enhancement

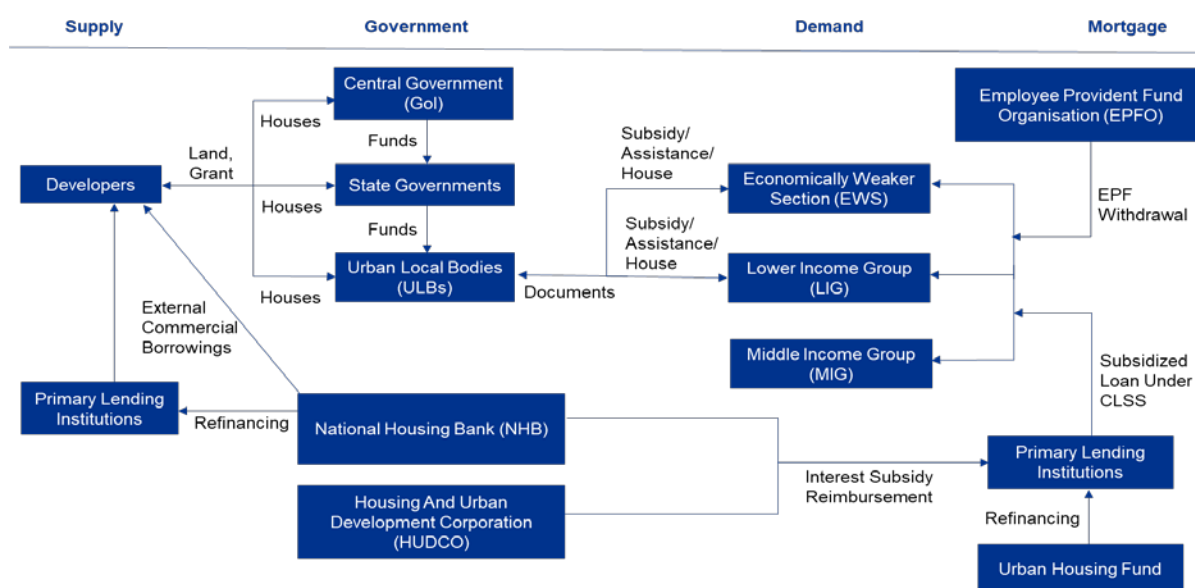
Figure 1 shows the working of Urban housing programme (PMAY-U). This programme covers entire urban area consisting of 4,041 statutory towns with initial focus on 500 cities in three phases as follows:

¹⁵⁸<http://mohua.gov.in/cms/pradhan-mantri-awas-yojana.php>

Figure 23 Phase-wise rollout of scheme



Figure 24 Urban housing programme framework



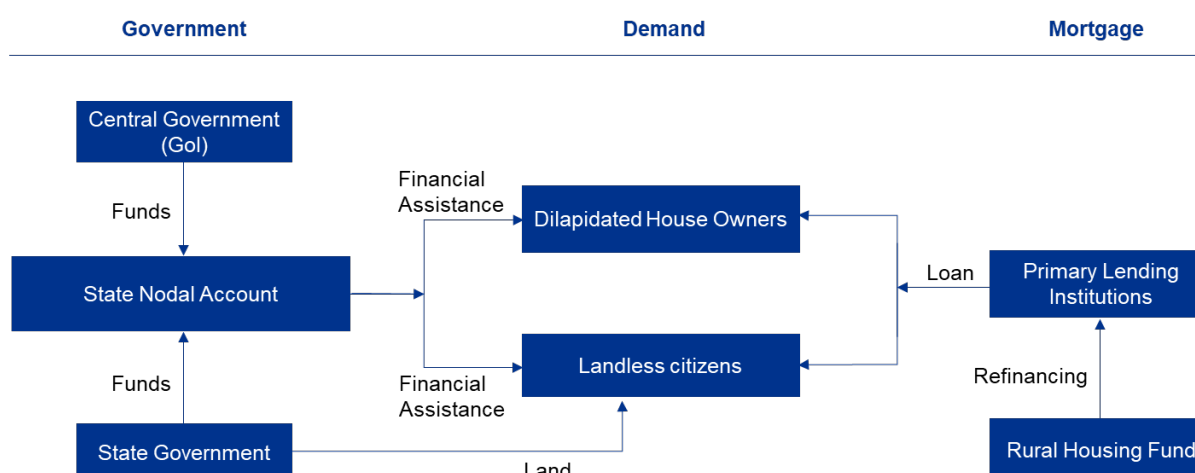
Source: KPMG analysis

PMAY-G

The programme launched in 2016, aims to provide a house with basic amenities to all households in rural India, including people living in dilapidated houses. Under this programme, Department of Rural Development was given a target of 30 million houses by 2022, with 10.2 million houses to be completed by 2018-19. This was broken up in 5.1 million houses in 2017-18 and 5.1 million houses in 2018-19.¹⁵⁹ The cost of these houses is to be shared between Central and State governments in the ratio 60:40 in plain areas and 90:10 for North Eastern and Himalayan states (hilly regions). Such contributed funds are then held in the State Nodal Account, from where the further disbursement takes place. Figure 2 shows the working of rural housing programme.

¹⁵⁹<http://pib.nic.in/newsite/PrintRelease.aspx?relid=177838>

Figure 25 Rural housing programme framework



Source: KPMG analysis

Affordability¹⁶⁰

In India, the Ministry of Housing and Urban Poverty Alleviation (MHUPA) provides guidelines on the affordability and construction of such housing according to income groups. Affordable housing refers to any housing that meets some form of affordable criterion, the prime ones being (i) income level, (ii) size of the dwelling unit, and (iii) proportion of expenditure required for the housing. The same have been covered in the below table.

Table 12 House affordability in India

House affordability for various income groups in India				
Income group	Monthly income of household (US\$, 2010)	House Size (m ²)	Affordability: House price (rent/EMI) as percentage of monthly income	Affordability: Ratio of house price to annual income of household
Below Poverty Line (BPL)	≤ US\$ 60 (INR 2,690)	21 - 27	5	2
Economically Weaker Section (EWS)	US\$ 12 - 75 (INR 539 - 3,300)		20	3
Lower-Income Group (LIG)	US\$ 75 - 164 (INR 3,301 - 7,300)	28 - 40/41 - 60	30	4
Middle-Income Group (MIG)/MIG-1	US\$ 165 - 326 (INR 7,301 - 14,500)	61 - 112	30 – 40	5
Higher-Middle-Income	US\$ 581 (INR 25,829 (avg.))	>112	30 – 40	5

¹⁶⁰<https://www.adb.org/sites/default/files/publication/182734/adbi-wp565.pdf>

Group (HMIG)/MIG-2			
Higher-Income Group (HIG)	US\$ 1,915 (INR 85,152 (avg.))	30 – 40	5

Key takeaway

In light of the failure/non-achievement of targets from previous schemes, under PMAY Gol has taken up the role of facilitator, ensuring decentralised operations and have made several funding mechanisms available.

6.2 Funding strategies for both supply and demand

Gol has been following the decentralisation approach, providing flexibility to state governments/ULBs to choose the option, which can best meet the demand of housing in their states/ cities and also empowers them to formulate and approve projects for faster implementation of projects. The National Housing Bank (NHB), a central nodal agency has taken up many initiatives to bridge the financing gap that had previously led to the failure of several schemes. Gol had given approval for creation of National Urban Housing Fund (NUHF) for US\$ 8.78 billion (INR 600 billion). This fund will be situated in Building Management and Technology Promotion Council (BMTPC), an autonomous body under the Ministry of Housing and Urban Affairs.¹⁶¹

Demand side schemes

- Under CLSS (PMAY-U), an interest subsidy of 6.5% is available for EWS and LIG, 4% for MIG and 3% for HMIG. These subsidies aim to reduce to the cost of borrowing for the lower income bands, thereby reducing the expenditure on housing for the household.
- The loan tenure under CLSS has been extended from 15 to 20 years from 2017. An extension in the tenure will benefit the beneficiaries by reducing the net monthly interest payments, hence, increasing the affordability of houses.
- Under PMAY-G, beneficiaries are provided a grant of US\$ 1,756 – US\$ 1,902 (INR 120,000 - 130,000) to build their houses. Such assistance is helping the homeless rural population to own a house.
- To bring more people under affordable housing scheme Gol has changed the eligibility criteria of home size from built up area to carpet area.¹⁶² This has led to an increase in the reach of the programme, thereby increasing the number of beneficiaries.
- Withdrawal of up to 90% of the corpus from their Employee Provident Fund (EPF) by the citizens to build affordable housing for the working class is allowed. This will help in channelling these savings into affordable housing programme, also bridging any funding shortfall.¹⁶³ EPF is a retirement benefit scheme that's available to all salaried employees. This fund is maintained and overseen by the Employees Provident Fund Organisation of India (EPFO) and any company with over 20 employees is required by law to register with the EPFO. The employer and employee (earning US\$ 218 (INR 15,000) or above per month) both compulsorily contribute 12% each towards this scheme. This generates an interest of 8 – 12%, which is decided by Gol and the central board of trustees.
- The housing projects in the affordable segment in the country would now attract Goods and Services Tax (GST) of 8% instead of 12% (after deducting value of land).¹⁶⁴ This will reduce the tax inclusive cost to the home buyer, thereby increasing the demand. GST is an indirect tax (or consumption tax) levied in India on the supply of goods and services. GST is levied at every step

¹⁶¹ <http://pib.nic.in/newsite/PrintRelease.aspx?relid=176688>

¹⁶² <http://pib.nic.in/newsite/printrelease.aspx?relid=157954>

¹⁶³ <http://pib.nic.in/newsite/PrintRelease.aspx?relid=165825>

¹⁶⁴ <http://www.pib.nic.in/Pressreleaseshare.aspx?PRID=1519373>

in the production process, but is refunded to all parties in the chain of production other than the final consumer.

- ‘Refinance scheme for Urban Housing fund’ will provide refinance assistance to eligible Primary Lending Institutions (PLIs) in respect of their loans extended to affordable housing beneficiaries in urban areas.¹⁶⁵ This assistance will increase the willingness of banks to lend to EWS/LIG/MIG sections for housing. Under the scheme, the loan extended to the citizen should not exceed US\$ 14,559 (INR 1 million) with the carpet area and cost of the house not exceeding 60 m² and US\$ 23,294 (INR 1.6 million) respectively.

Supply side schemes

- The developers of affordable houses have been allowed to raise funds through External Commercial Borrowings (ECBs) as they are considered attractive because cost of raising the loan is lower than that of domestic borrowings.¹⁶⁶ This initiative will bring the cost of construction down, thereby reducing the cost to the buyer.
- GoI incentivised builders to take up affordable housing projects, allowing profits from these as a full deduction from their total income under section 80IBA of the Income Tax Act.¹⁶⁷ This incentive will act as a catalyst in increasing the willingness of builders to take up affordable housing projects.
- NHB aims to provide refinancing assistance to PLIs - Scheduled Commercial Banks and Housing Finance Companies, which address the credit needs of developers.¹⁶⁸ The refinancing will improve the PLIs’ ability to provide construction finance to the developers.
- .Increased budgetary allocation by GoI for housing subsidies to US\$ 146.31 million (INR 10 billion) for LIG and EWS category and US\$ 131.68 million (INR 9 billion) for MIG category.

Key Takeaway

To achieve the targets under PMAY GoI has:

- Increased budgetary allocation of subsidies under the programme based on the marginal utility of housing for each category
- Giving tax exemptions to the developers to make the projects more attractive
- Provided Single Window Clearance to Private players involved in project implementation for EWS

6.3 Implementation approach including delivery timelines

GoI’s PMAY programme, has tweaked the Land Acquisition Act 2013, for easy availability of land and laid down guidelines for resettlement and offtake mechanism, supporting both the demand and supply sides. Use of green and energy efficient technologies and raw materials and upgrading labour skills is another important aspect emphasized by GoI. The key implementation strategies in different areas are listed below:

¹⁶⁵<http://mohua.gov.in/upload/uploadfiles/files/10RFUrbanHousingFundUCBs.pdf>

¹⁶⁶<https://test.nhb.org.in/Archives/External-Commercial-Borrowing-.php>

¹⁶⁷<https://incometaxindia.gov.in/Acts/Finance%20Acts/2016/10212000000058876.htm>

¹⁶⁸<http://mohua.gov.in/upload/uploadfiles/files/12RFAffordableHousingFinance.pdf>

1**Land bank & resettlement policy**

- **Amendments to the Land Acquisition Act, 2013:** Land acquisition for affordable housing does not require any consent from the land owner for affordable housing programme, which has significantly improved the land availability for the project.
- **Transfer of Development Rights (TDR):** In the slum redevelopment policy under PMAY-(U) certain built-up areas are made available to land owners who surrender their lands for redevelopment activities to prevent any agitation from people being displaced from their homes.

2**Construction, procurement & training**

- **Construction methods:** Use of monolithic construction using plastic/aluminum, precast RCC, expanded polystyrene, glass fiber reinforced gypsum, pre-stressed hollow core slab, to enhance structural strength of the buildings being made under this programme.
- **Procurement:** Use of green materials like fly-ash bricks and energy efficient building material approved by Bureau of Energy Efficiency (BEE), for example tinted glasses to eradicate the need of air conditioning.
- **Skilling-up and training of workers:**
 - BMTPC aims to make workers acquainted with new technology and material handling.
 - States collaborating with Indian Institute of Technology (IITs) and National Institute of Technology (NITs) to develop technology to meet the timelines.

3	Design & technology	4	Offtake mechanism
	<ul style="list-style-type: none"> – Light Gauge Steel Framed Structure: Can be assembled at site, for faster erection of walls to ease the load of the ambitious target. – Pre-cast Panels: Advanced pre-cast construction technology saves a lot of wastage. Some technologies used are: <ul style="list-style-type: none"> – Waffle-Crete Building system consist of reinforced concrete ribs bolted together with spaces between the joints filled to form walls, floors, pitched or flat roofs, reduces the use of concrete and steel by 60% – Use of various pre-casted elements like walls, columns, staircases to minimize on-site time and material wastage – Patented Stay-in place structural framework: Load bearing monolithic structures based on a shear wall concept, to make the buildings resilient enough to stand-through any natural disaster. – Mechanized Tunnel Form System: With this technology, entire floor of a building can be done in a single go and then lifted up to next level, which reduces risk of casualties at the site. 		<ul style="list-style-type: none"> – Milestone based payments: In Gol's land based subsidised housing under PPP mechanism, the developer transfers property to public authority at predetermined prices. The price is based on the milestone achieved by the developer, which encourages developer to bring in operational efficiencies and complete work within the given timelines. – Annuity payments: Developer provides affordable houses to government on a Design, Build, Finance, Operate and Transfer (DBFOT) mechanism getting annuity amount for 10 years. – Annuity and upfront grants: Another model with the same principle as Annuity Payments model in addition to which government gives an upfront grant to the developer for the smooth initiation of projects. – Exemptions, financial incentives and single window clearance: developers developing affordable housing for EWS get tax exemptions, financial incentives and a single window clearance for the projects, promoting new developers and social entrepreneurs to enter the market.

Eligibility Criteria

The PMAY programme covers housing for both rural and urban areas. In the urban areas, people are classified on the basis of their income levels into three categories, which are: Economically Weaker Section (EWS), Lower Income Group (LIG) and Middle Income Group (MIG); and in rural areas people below poverty line and those living in dilapidated houses are eligible for the scheme.

Table 13 PMAY eligibility criteria

Scheme	Section of Society	Monthly Household income ceiling
PMAY- U	EWS	< US\$ 365 (< INR 25,000)
	LIG	US\$ 365 - 730 (INR 25,000 - 50,000)
	MIG	MIG-1 US\$ 730 – 1,460 (INR 50,000 - 100,000)
	MIG	MIG-2 US\$ 1,460 – 2,189 (INR 100,000 - 150,000)

PMAY- G	BPL & people living in dilapidated houses	US\$ 45 (INR 3,333)
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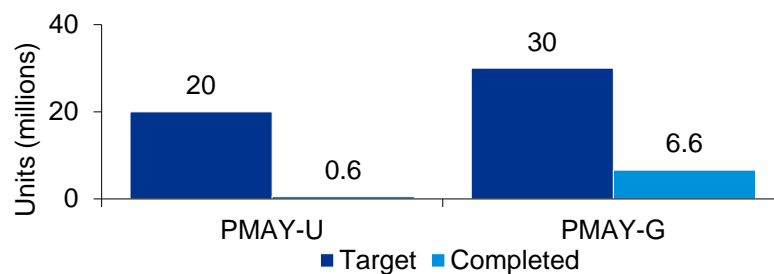
Key takeaway

- Segregation of target population on basis of their household income makes it easier for the government to grant subsidies on loans.
- Resilient construction and design adaptations with strong offtake mechanisms for encouraging the participation of private developers could be game-changers in the Indian scenario.

6.4 Success rate

- Between 1947 and 2014, more than 8.75 million affordable houses were built under various schemes for both rural and urban areas.^{169,170,171,172,173}
- Since 2016, about 6.6 million houses have been built under PMAY-G.¹⁷⁴
- Since 2015, about 0.6 million houses have been built and another 1.65 million are under development under PMAY-U.¹⁷⁵

Figure 26 Progress under PMAY (since 2015)



Source: *The Wire*, KPMG analysis

Key Takeaway

Gol has launched various programmes for both rural and urban housing since the country's independence. More than 8.75 million houses have been built, with the programmes missing the targets mostly due to change in government (after elections), which often leads to rebranding or closure of the earlier programmes.

6.5 Key issues

13. Insufficient funding for the scheme

Risk faced

While the responsibility for implementation of housing schemes was increasingly devolved to the state governments and their housing agencies, they remained dependent on Gol for funding.

¹⁶⁹*Business Standard*, February 7, 2018

¹⁷⁰*Ministry of Rural Development – press release*

¹⁷¹*PMAY-U – state wise progress*

¹⁷²*Ministry of Housing and Urban Affairs – progress of JNNURM*

¹⁷³*Ministry of Housing and Urban Affairs – RAY & AHP*

¹⁷⁴*Government's 'Housing for All' Project Is Running Behind Schedule*

¹⁷⁵*Financial Express - Construction of houses in rural India under scheme on target in 2017*

Mitigation measures	Housing Development Finance Corporation (HDFC), HUDCO and NHB were set up to mobilise savings and other resources for channelling investment in housing which made available housing loans and construction finance. To strengthen the finances of ULBs, these entities have been encouraged to access capital market financing through issue of bonds or public-private partnerships (PPPs). A national level fund (NUHF) and state nodal accounts have further decreased the funding gap.
14. Unavailability of suitable land	
Risk faced	The location of affordable housing, where land was available at lower cost, which precluded most city locations, made them unattractive to LIGs. These locations necessitated long commutes to work which added to the cost of living of the lower income bands.
Mitigation measures	Under JnNURM, GoI removed bottlenecks by modifying laws that distorted the functioning of land and housing markets, aimed at formalising property right system. It also mandated to repeal the Urban Land Act, which had locked tracts of land in legal litigation.
15. Overlapping schemes	
Risk faced	The previous schemes remained ineffective because programmes were fragmented, overlapping in their objectives and often administered by different ministries or government departments that did not collaborate.
Mitigation measures	Under the current scheme – PMAY, a national level agenda has been put in place, with specific schemes targeting both urban and rural lower income bands. GoI has delegated the implementation of affordable housing scheme to the state governments, which set their respective targets.
16. Leakage of funds	
Risk faced	Inadequate funding and leakages led to unachieved targets in the previous schemes, thus an ever-increasing deficit of affordable housing in the country.
Mitigation measures	A direct benefit transfer mechanism for beneficiaries has been put in place to reduce losses due to fund leakage. Under the Direct Benefit Transfer (DBT) framework, funds are directly transferred to citizens' bank accounts. Third party monitoring agencies have been included in the overall framework of PMAY for performance guarantees and timely achievement of targets. To boost the flow of funds for housing, Reserve Bank of India (RBI) allowed banks to allocate 1.5% of their incremental deposits to housing loans and developers/ agencies.

6.6 Project management approaches used¹⁷⁶

Segregation of duties

The roles and responsibilities of all agencies involved in the PMAY programme are well defined. The process of planning begins with the state governments and its agencies including private developers. The state level appraisal agencies appraise the Detailed Project Reports (DPRs) to get the required financial assistance by the Central and State Sanctioning and Monitoring Committees (CSMC & SLSMC). Thereafter, programme implementation and monitoring is undertaken by Gol's appointed third-party agencies.

Roles & Responsibilities	Agencies
Planning	States with ULBs/ other agencies
Training & Raw Material testing	BMTPC & IIT-Kanpur
Appraisal of DPRs	SLAC
Approval of Funds	CSMC & SLSMC
Monitoring	Third party agencies appointed by Gol

Accountability

Third party appointed by state and city governments is responsible to ensure developers accountability and review their work in the fields during pre-construction phase, construction phase and post-completion phase. In addition, the funds released by Gol are based on a milestone based mechanism which brings in operational efficiency and improves the performance of the developers. The Third Party Quality Management Agency (TPQMA) are selected through an open and transparent bidding process. The selection of TPQMA is based on their experience, absence of conflicts of interest and the ability to deploy optimum number of experts required for the project.

The TPQMA undertakes field visits at different stages of the projects to review:

- Land availability, site preparation, statutory clearances and timely reporting
- Project implementation plan, procurement and quality of raw materials
- Safety and health aspects of workers and beneficiaries
- Beneficiary satisfaction

Key Takeaway

- Segregation of roles right from planning to monitoring have been defined clearly, giving a clear view of roles and responsibilities of all bodies avoiding any conflicts amongst them.
- Approval of financial assistance is based on appraisal and approval of DPRs which makes the process transparent and brings in operational efficiencies.
- Non-government third party agency monitors the projects right from the state of inception to completion keeping a check on quality and statutory mandates.

¹⁷⁶<http://mohua.gov.in/upload/uploadfiles/files/2csmc20-TPQM.pdf>

6.7 Project Impact

Socio-economic Impacts^{177,178}

The estimated changes in the macro-economic parameters suggest that Gol's ongoing investment in PMAY is expected to increase the GDP, employment and Gross Value Added (GVA) by 0.65%, 1.77% and 0.55% respectively.

- **Indicative increase in affordability:** A decline in the growth rate of Housing Price Index from 23.7% to 8.5% in the past 6 years indicating an increase in affordability of houses¹⁷⁹.
- **Employment generation:** It is estimated that under PMAY-G, the direct employment generated through completed houses stands at 400.7 million person-days (240.3 million person-days unskilled and 160.4 million person-days skilled labour force) and that of under construction houses is 124.2 million person-days (76.0 million person-days unskilled and 48.2 million person-days skilled labour force). Moreover, it is estimated that the scheme has generated 9.45 million jobs (both direct and indirect) in the economy since its inception, out of which 8.335 million are directly employed in the residential construction sector. PMAY-U is estimated to generate 74 million jobs by 2022.

Technology and R&D

- **Focus on green buildings:** Gol with the help of IITs and NITs are working towards adopting raw materials and technologies which are environment-friendly, to achieve the housing goals in a sustainable manner knitting all the aspects of sustainability together.
- **Energy efficient technologies:** Gol with the BEE of India is focusing on the use of simple techniques that could reduce the overall energy demand of the buildings like using tinted windows to eradicate need for air-conditioning.

Key Takeaway

The programme is estimated to have an overall positive impact on the GDP and employment generation, attracting a lot of Foreign Direct Investment (FDI) inflows. Gol is also working on knitting sustainability objectives in a single fabric to promote affordable housing, and energy efficient green building technologies.

¹⁷⁷https://rural.nic.in/sites/default/files/IMPACT_OF_PMAI-G_ON_INCOME_AND_EMPLOYMENT_REPORT.pdf

¹⁷⁸<https://www.ibef.org/industry/real-estate-india.aspx>

¹⁷⁹<https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/AFFORDABLE609D506CB8C247DAB526C40DAF461881.PDF>

Nigeria



7 Nigeria

7.1 Country overview

Demographic and economic overview

Nigeria is Sub Saharan Africa's largest economy and relies heavily on oil as its main source of foreign exchange earnings and government revenues. Major growth drivers of the Nigerian economy are agriculture, telecommunications and services. After a dip in 2016, the GDP grew by 0.8% in 2017 as global oil prices recovered. However, the country's economic diversification and strong growth have not resulted into a significant decline in poverty levels as over 62% of Nigerians still live in extreme poverty¹⁸⁰.

Key demographic and economic indicators ¹⁸¹	
Population	190.88 million (2017)
Area	923,770 km ²
Gross Domestic Product (GDP)	US\$ 375.77 billion (2017)
Per capita income	US\$ 2,080 (2017)
World Bank ease of doing business ranking	145 th of 190 countries

Introduction to housing sector

Almost half of Nigeria's population live in urban areas and with an urbanisation rate of 4.23% (estimated from 2015-2020)¹⁸⁰ and population growth of 2.59% (2016-17)¹⁸², demand for affordable housing is expected to remain strong, both for rental and purchase. Nigeria has a low home ownership rate of 25%, as compared to 73% in Kenya. The major issues that continue to affect housing in Nigeria include inadequate access to finance, slow administrative procedures, and the high cost of land registration and titling.

According to the Federal Mortgage Bank of Nigeria (FMBN), the country's housing deficit is estimated to be in the range of 17 to 20 million houses and at least 1 million houses are needed annually to bridge the deficit by 2033. Currently, the Government of Nigeria (GoN) is only able to develop 100,000 houses per year, leaving an annual deficit of 900,000 houses. In 2017, GoN's housing budget stood at US\$ 114 million (N 41 billion). It is estimated that the cost to bridge the current housing deficit till 2033 would be approximately US\$ 363 billion.

Despite the need for housing, citizens do not have the capacity to pay for the mortgages. 91% of the population have limited to no access of finance, as evident in the table below (Table 14):

Table 14 Nigeria's income classification

Income Classification ¹⁸³				
Income Group (Annual income)	Description	Share of population	Supply of Housing	Financing sources

¹⁸⁰<https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html>

¹⁸¹<http://www.worldbank.org>

¹⁸²<https://data.worldbank.org/indicator/SP.POP.GROW?locations=NG>

¹⁸³Based on KPMG Mortgage Industry Overview (2015) and AfDB

Bottom of the pyramid below US\$ 1380 (N 500,000)	No access to finance due to very low income levels, informal income sources and inability to provide collateral	77%	Slum redevelopment, upgrading	Housing microfinance, cooperatives
Floating class and lower income	Difficult to access finance due to low income levels, informal income sources and inability to provide collateral	14%	Social housing, incremental housing	Housing microfinance, home improvement loans
Middle income US\$ 13,251 - 138,037 (N 4.8 – 50 million)	Less able to access finance due to info due to low income levels, informal income sources and inability to provide collateral (difficulties securing land title)	4%	Limited market rate housing	Micro-mortgage
High income Above US\$ 138,037 (above N 50 million)	Formal employment and title, can obtain mortgages	4.5%	Market rate housing	Mortgage

Introduction to housing programme

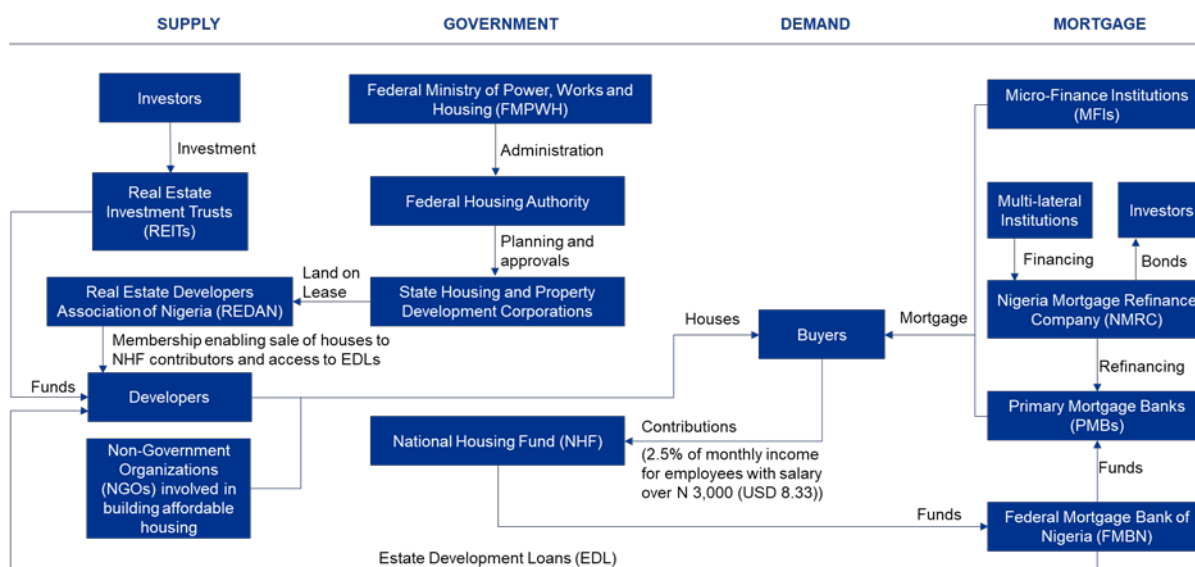
The GoN introduced the National Housing Policy in 2012 to provide affordable housing to the citizens and emphasised the role of private sector financing in housing sector. In 2015, President Muhammad Buhari stated that GoN would provide 5 million new middle-class homes between 2015 and 2019. Subsequently GoN launched two housing programmes viz. National Housing Programme (NHP), 2016 and Social Housing scheme, 2018.

1. NHP: Under this, Federal Ministry of Power, Works and Housing (FMPWH) commenced the pilot phase with the sum of US\$ 96.76 million (N 35 billion) and till date has announced development of 165 blocks of 2,000 houses across various states.
2. The Social Housing scheme: It targets to develop 100,000 houses per annum and aims to cover the population who could afford to contribute US\$ 83.3 (N 30,000) per month. Under the scheme, the houses will be priced at US\$ 5,526 (N 2 million) and US\$ 13,815 (N 5 million) for one-bedroom and three-bedroom respectively.^{184 185}

¹⁸⁴<http://www.tribuneonlineng.com/151207/>

¹⁸⁵http://housingfinanceafrica.org/app/uploads/2017_CAHF_YEARBOOK_14.10-copy.compressed.pdf (page-18)

Figure 27 Institutional Framework



Source: KPMG Analysis

The above diagram (Figure 1) shows the working of National Housing Programme (NHP) and other stakeholders, including the role of financial institutions under the Nigeria Housing Finance Programme (NHFP). The National Housing Policy forms the basis of the programme and guides the achievement of annual targets through establishment of organisations such as Nigerian Mortgage Refinance Company (NMRC). The workings of various aspects of the NHP are as follows:

Regulatory Framework: The FMPWH is responsible for formulating and implementing GoN’s policies with respect to provision of habitat and affordable housing. The Federal Housing Authority (FHA), which is supervised by the FMPWH is charged with the preparation and submission of proposals for NHP to the GoN from time to time. The State Housing and Property Development Corporations in turn provide land and in some cases basic infrastructure for housing development. On the mortgage side, the FMBN is Nigeria’s main mortgage institution, which promotes mortgage lending and manages the Housing Policy.

National Housing Fund (NHF): The FMBN raises capital through the NHF, which obtains funding mostly by contributions from salaried employees earning monthly US\$ 8.33 (N 3,000) and above. These individuals are mandated to contribute 2.5% of their salary to the NHF. The working of NHF and its related entities is as follows:

- Contributors receive a 2% interest rate per annum on their contributions to NHF and are entitled to apply for the NHF sponsored loan. Financial contributions from GoN, commercial and merchant banks, and insurance companies also fund NHF¹⁸⁶. It is mandatory for insurance companies to invest 20% of non-life and 40% of life funds in the housing sector.
- The FMBN lends to Primary Mortgage Banks (PMBs) at a concessionary rate of 4%. The banks on-lend NHF loans to homeowners at 6%, compared to non-NHF mortgage from banks, which range from 16-32%.
- An amount of up to US\$ 41,667 (N 15 million) can be borrowed, where the borrower must make a deposit of between 10-30% with a maximum tenor of 30 years.
- Between January to June 2017, the FMBN made a total collection of US\$ 26 million (N 9.5 billion) under the NHF contributions and disbursed a sum of US\$ 3 million (N 1.1 billion).

Nigerian Mortgage Refinance Company (NMRC): NMRC was established to bridge the funding cost of residential mortgages and promote availability and affordability of housing to the citizens by

¹⁸⁶<http://www.fmbn.gov.ng/doc/Funding.html>

providing increased liquidity in the mortgage market through the PMBs and commercial banks. Key features are:

- The NMRC is a Public Private Partnership (PPP) arrangement between the GoN and the private sector and forms a key component of the NHFP initiated by the Federal Ministry of Finance (FMOF), the Central Bank of Nigeria (CBN), Federal Ministry of Lands & Urban Development & Housing and the World Bank/ International Finance Corporation (IFC).
- NMRC accesses the capital market by issuing long-term bonds to the investors. The proceeds of the bonds issued are utilised to provide liquidity to PMBs using refinancing facilities. As at the end of 2016, the Nigerian NMRC had refinanced mortgages amounting to US\$ 22 million (N 8 billion) the amount of its inaugural bond issue.

Supply side entities: Developers and NGOs are the major suppliers of homes to the citizens. Developers raise construction financing through REITs. NGOs partner with MFIs to help citizens finance the mortgage for their homes. The Real Estate Developers Association of Nigeria (REDAN) is the principal agency and umbrella body of the organized private sector responsible for housing development in Nigeria. Developers and contractors are members of REDAN.

Affordability in Nigeria

More than half of Nigeria's population lives on less than US\$ 1 per day. A standard three bedroom middle income apartment currently commands a rent of US\$ 5,000 per annum and purchase price of US\$ 100,000. As a result of the high cost of housing in Nigeria, 51% of Nigerians live in rented accommodation, 40% of which are paying between US\$ 55.56 (N 20,000) and US\$ 222.22 (N 100,000) annually.

Key takeaway

A major policy innovation by the GoN was the setting up of NHF and NMRC. This provided assistance in making available necessary financing for housing market and providing liquidity to mortgage market.

7.2 Funding strategies for both supply and demand

Demand side schemes

- My Own Home Scheme (2017): The scheme, housed under Nigeria Housing NHFP and funded by the World Bank, the African Development Bank and GoN, seeks to improve access to housing finance. The Mortgage Banking Association of Nigeria (MBAN)'s member banks deliver the scheme through three components:
 - Refinancing of long-term mortgages: NMRC securitises long-term loans from PMBs and issues bonds. This establishes for mortgages a route to the capital markets improving the liquidity in the mortgage market.
 - Mortgage Guarantee Scheme: Home owners who cannot pay initial down payment can also access mortgage through a third-party guarantee.
 - Housing Microfinance Scheme: Low income earners can access microcredit for incremental construction and housing improvement under this scheme.
- Easy Home: a private sector Microfinance product initiated by Lafarge Africa plc and delivered through partner banks, targets low income earners US\$ 55.26 – 82.89 (N 20,000-30,000). The scheme received US\$ 5.84 million in funding from the French Development Agency (AFD) and Lift Above Poverty Organization (LAPO MfB). Lafarge will provide the construction materials for houses financed by the scheme along with access to house designs.

Supply side schemes

- Estate Development Loans (EDL): For proposed projects where the housing apartment's target prices are not more than US\$ 13,815 (N 5 million), the Loans and Advances Department of the FMBN extends loans to private developers and state housing corporations at a rate of 10% for a maximum tenor of 24 months with revision clauses.¹⁸⁷ This is 7% less than CBN's March 2018 prime lending rate.¹⁸⁸

7.3 Implementation approach including delivery timelines

The key implementation strategies^{189, 190, 191, 192, 193}

1 Land bank & resettlement policy

- GoN doesn't own the land but is the statutory occupant and the sole trustee of the land in Nigeria, so the land restructuring and use falls under its jurisdiction.
- As a result of the defective land policy (Land Use Act of 1978), the FHA land application usually takes a long time and is subjected to the same commercial rates which other corporate and non-government organizations in the housing sector pay.
- GoN is trying to get rid of any unnecessary permits for development of housing to boost the pace of the schemes initiated for affordable housing.

2 Construction, procurement & training

- The Nigerian Building and Road Research Institute (NBRI) is a GoN institute responsible for researching and developing building materials for the Nigerian building industry.
- Construction materials are procured from private suppliers (like Lafarge) working with microfinance institutions.
- Private companies (like Chevron) and country's own vocational training institutes provide training to the construction workers to get acquainted with the required technical skills for the use of new building material and technology available in the sector.

¹⁸⁷ http://www.globaltrustsavings.com/?_com_content=pm_f8dd8_361f2_265c0_c89e4_dcc61&lb=NHF

¹⁸⁸ <https://www.cbn.gov.ng/rates/mnymktind.asp>

¹⁸⁹ <https://guardian.ng/property/building-technology-now-makes-home-delivery-faster-affordable/>

¹⁹⁰ <http://housingfinanceafrica.org/countries/nigeria/>

¹⁹¹ [http://web.usm.my/jcdc/vol15_2_2010/JCDC_percent2015\(2\)_percent202010-ART_percent2020_corrected_\(23-48\)_21.12.2010.pdf](http://web.usm.my/jcdc/vol15_2_2010/JCDC_percent2015(2)_percent202010-ART_percent2020_corrected_(23-48)_21.12.2010.pdf)

¹⁹² <http://www.fha.gov.ng/housing>

¹⁹³ <https://www.nigeriagallery.com/News/fed-govt-housing-programme-created-over-4000-jobs-in-oyo/>

3**Design & technology**

- Fiber Cement Roofing and Stonecrete blocks using NBRRI's in-house technology for building houses in a cost-effective manner.
- Efficient foundation building methods adopted to deliver houses in about 4 days.
- A pilot plant for production of blended cement from clay and volcanic ash plant to reduce the cost of building materials further and to make the project environmentally friendly.
- The ground floors of the buildings will house differently abled people and have ramps to support them.
- Community events, workshops and opening of any booth or kiosk in open spaces in or near the estates is prohibited by FHA.

4**Offtake mechanism**

- PPP in the housing schemes are implemented based on Memorandum of Understanding (MOUs) and Development Lease Agreements (DLAs) with the State corporations. DLAs indicate the commitments of the State corporations to provide land and other assistance to developers like water supply and electricity works required for construction.

Ownership eligibility criteria¹⁹⁴

Under the Social housing scheme, citizens earning US\$ 83.3 (N 30,000) per month are eligible to own their own home.

Key takeaway

Adopting technologies which can boost the pace of the ambitious programme could become more effective with a clear definition of the eligibility criteria and have far reaching positive impacts on the society as a whole.

7.4 Success rate

Overall, the housing programme considerably lags behind its annual targets and even after six years of National Housing Policy, there is very slow progress on the ground. The key developments under various housing programmes are as follows^{195, 196, 197, 198}:

- Between 1962 and 2010, GoN was able to build only 95,594 of the proposed 653,271 houses (14.6%) under various affordable housing schemes.
- By the mid of 2018, Edo and Oyo state housing projects for 64 and 72 houses have achieved 80 and 70% of their targets respectively, with the balance expected to be completed by the end of 2018.
- The FMPWH's programme, targeting 112 houses in Sedona estate in the Lagos suburbs, was completed in July 2018.
- To date, the NHP has attracted investments of US\$ 300 million from the World Bank. In addition, China plans to invest about US\$ 300 million in the country's housing development projects in the form of monetary and infrastructural contributions, like electrical works, solar power etc.

¹⁹⁴<https://www.premiumtimesng.com/business/business-news/212539-nigeria-raising-n1-trillion-social-housing-scheme.html>

¹⁹⁵<https://mobile.apanews.net/en/news/china-to-invest-300m-in-nigerias-housing-sector>

¹⁹⁶<http://www.thetidenewsonline.com/2018/04/25/nhp-creates-3000-jobs-in-edo/>

¹⁹⁷<https://www.nigeriagallery.com/News/fed-govt-housing-programme-created-over-4000-jobs-in-oyo/>

¹⁹⁸CAHF yearbooks 2014, 2015, 2016 and 2017

- States such as Lagos have their own initiatives as the Rent-to-Own scheme under which tenants pay 5% of the home's cost as down payment and are allowed to pay the balance amount in the following ten years on an annual basis such that the installments do not exceed above 33% of their salaries. To be eligible under this scheme one needs to be above 21 years of age and a first time buyer. Additionally, they must have a Lagos State Residents Registration Card (LASRRA).

7.5 Key issues

17. Lack of regulatory framework	
Risk faced	Nigeria did not have a housing policy until 1991 and all housing projects were a part of the national development plans.
Mitigation measures	In 2012, the National Housing Policy was formulated to provide affordable housing to the citizens. However, even after 6 years, the progress is slow and there are very few affordable housing projects being developed across the country.
18. Lower income bands implementation of the housing programme	
Risk faced	Most of the studies on implementation of various housing schemes have revealed the following reason for lower income bands implementation: absence of strict enforcement, corruption, lack of adequate funding, inconsistency in the allocation of complete housing units, political interference and the lack of adequate monitoring and evaluation of the programmes etc.
Mitigation measures	As part of the NHP, GoN aims a three-tier institutional framework, involving Federal, State and Local Government, where Federal is responsible for 80% of the programme including offering subsidies to the targeted group, land use act review, establish secondary mortgage market. However, as per reports GoN has been able to meet just 20% of these objectives.
19. Absence of clearly defined parameters for participation in the programme	
Risk faced	The NHP does not have clearly defined parameters (eligibility criteria) for participation into housing program. There is no clearly defined ceiling price and target income for allocation of houses.
Mitigation measures	There are still no clear guidelines available on the participation in the housing programme. However under the Social housing scheme, citizens earning US\$ 83.3 (N 30,000) per month are eligible to own their own home.
20. Currency fluctuations	
Risk faced	Imports form a large part of building material and about 50 to 60% of the total construction input goes to building materials. Thus, it is expected that the price of construction would increase due to changes in exchange rate.
Mitigation measures	GoN added many construction items on the list of 44 items disqualified from getting foreign exchange from the CBN. Thus, forcing importers to source from local markets. However, this has promoted black markets due to scarce supply.

7.6 Project management approaches used

Segregation of duties among the stakeholders^{199,200,201,202,203}

- FMPWH is responsible for planning the affordable housing programmes and overseeing the functions of agencies involved in their implementation.
- FHA proposes and executes housing programmes. It is also responsible for development of allied infrastructure like transportation, communication, sewage and water supply systems.
- REDAN provides credibility and recognition to developers and helps them in procuring finance from loan syndication and through development of REITs. It also provides them with project advisory, consultation on procurement and construction, and acquaints them with foreign and international practices. It also helps the citizens procure finance from mortgage banks.
- NMRC bridges the funding cost of residential mortgages and promote availability and affordability of housing to citizens by providing increased liquidity in the mortgage market through the mortgage and commercial banks.
- FMBN provides long term credit facilities to Nigerian Mortgage institutions and manages the NHF.

Accountability

- The FMPWH has the function to oversee the execution of the programme and monitor the implementation agencies.
- The REDAN keeps a check on the supply side of the equation, ensures the development of the projects in time, and supports the developers in achieving the same by its various initiatives.
- The MBAN is the umbrella body for all Mortgage Banks licensed by the CBN to engage in mortgage business in Nigeria. Its main focus is to ensure the access to mortgage finance for the provision of affordable housing through effective advocacy for improved legal/regulatory/operating environments for home-ownership finance in Nigeria.

Key takeaway

Association like REDAN and MBAN keep a check on the functions of discrete organisations, so as to standardise their operations and support them in their operations which helps these discrete units to deliver and operate efficiently.

7.7 Project impact

Socio-economic Impacts

- **Mortgage funding:** Between May, 2015 and March, 2018 FMBN has issued 2,724 mortgages amounting US\$ 55.91 million (N 20.237 billion) to assist Nigerians buy their own homes under the National Housing Fund.²⁰⁴
- **Job Creation:** MBAN estimates that, each mortgage taken to build a house under NHP would create 35 direct and 35 indirect jobs.²⁰⁵
- As per FMPWH, the NHP has so far has created 14,000 direct and 40,000 indirect jobs in the country.²⁰⁶
- About 4,090 and 3,000 jobs have been created in Oyo and Edo states respectively under the NHP.^{207,208}

¹⁹⁹nmrc.com.ng/

²⁰⁰redanonline.org/about-us

²⁰¹mban.org.ng/

²⁰²fmbn.gov.ng/

²⁰³www.fha.gov.ng/

²⁰⁴<http://thenationonlineng.net/housing-plan-provides-jobs-women-artisans/>

²⁰⁵<https://leadership.ng/2018/03/07/mortgage-loan-can-create-70-jobs-mban/>

²⁰⁶<https://leadership.ng/2018/07/27/investments-in-construction-building-sectors-reason-for-economic-recovery-fashola/>

²⁰⁷<https://www.nigeriagallery.com/News/fed-govt-housing-programme-created-over-4000-jobs-in-oyo/>

²⁰⁸<http://www.thetidewebsonline.com/2018/04/25/nhp-creates-3000-jobs-in-edo/>

- **Technological advancements:** The pilot brick housing project under the NHP with sites in Niger, Ekiti, Enugu and Ondo states has designed and produced energy efficient brick houses to suit the tropical climate in the country. The laterite used in producing the brick houses is non-conductive, thereby preventing heat within the buildings.²⁰⁹

²⁰⁹<https://www.today.ng/news/nigeria/nhp-construction-cheaper-brick-houses-suit-tropical-climate-94340>

Mexico



8 Mexico

8.1 Country overview

Demographic and economic overview^{210,211,212,213}

Mexico is a federal republic in the southern portion of North America. The economy is oriented towards manufacturing and is strongly linked to the North American Free Trade Agreement (NAFTA) partners, especially the United States of America. The economic growth has averaged 2% annually since 2013. Most of the population resides in the middle of the country between the states of Jalisco and Veracruz. Approximately a quarter of the population lives in and around Mexico City.

The Government of Mexico (GoM) has emphasised economic reforms by implementing large-scale energy, financial, fiscal and telecommunications reform legislation, among others, with the long-term aim to improve competitiveness and economic growth. However, issues such as low productivity, high inequality, large informal sector employment, weak rule of law and corruption continue to pose challenges.

Key demographic and economic indicators	
Population	129.2 million (2017)
Area	1,943,945 km ²
Gross Domestic Product (GDP)	US\$ 1,151.7 billion (2017)
Per capita income	US\$ 9,946.2 (2017)
World Bank ease of doing business ranking	49 th of 190 countries

Introduction to the housing programme

According to the latest available national statistics, Mexico has a housing deficit of 9.2 million dwellings as of 2016. To meet this demand, GoM has focused its efforts on providing a range of financial schemes and subsidies to assist residents in acquiring, building and expanding homes.

From 2016 to 2030, Mexico expects an annual average growth of 594,000 housing units.²¹⁴ The residential construction sector contributes 5.7% of GDP and witnessed an annual growth of 3.2% in 2016.²¹⁵

The table below describes various categories of housing in the Mexican economy. Affordable housing includes the economic, popular and traditional categories of homes.

²¹⁰<https://www.cia.gov/library/publications/the-world-factbook/geos/mx.html> |

²¹¹<https://tradingeconomics.com/mexico/gdp-per-capita>

²¹²<http://www.doingbusiness.org/rankings>

²¹³Economist Intelligence Unit

²¹⁴<http://pubdocs.worldbank.org/en/773591464879251915/housing-finance-conference2016-session-1-presentations.pdf>

²¹⁵<http://pubdocs.worldbank.org/en/667031528392957464/EcoCasa-Ernesto-Infante-Barbosa.pdf>

Table 15 Housing segmentation

Market segmentation in Mexican housing			
Price range	Area	Characteristics	Annual income
< US\$ 16,613 Economic	30 m ²	1-2 rooms, generally not titled, electricity, possibly water and sewage. Mostly self-built.	< US\$ 3,379
US\$ 16,613 - US\$ 28,158 Popular	35-50 m ²	Kitchen, Living-dining area, 1-2 bedrooms, 1 bath, 1 parking, titled, all services. Homes and apartment condos.	US\$ 3-9,292
US\$ 28,158 - US\$ 49,276 Traditional	50-75 m ²	Kitchen, living-dining area, 2-3 bedrooms, 1 bath, 1 parking, titled, all services. Joined homes and apartment condos.	US\$ 9-18,584
US\$ 49,276 - US\$ 105,591 Middle	65-130 m ²	Kitchen, living room, dining room, 2-3 bedrooms, 2-3 bath, 1-2 parking, service quarters, titled, all services. Joined homes and apartment condos.	US\$ 19-43,926
US\$ 105,591- US\$ 211,182 Residential	65-130 m ²	Kitchen, family room, living room, dining room, 3-4 bedrooms, 3-5 bath, 2-4 parking, service quarters, titled, all services. Homes and apartment condos.	US\$ 44-109,815
> US\$ 211,182 Residential Plus	100-350 m ²	Kitchen, family room, living room, dining room, 3-4 bedrooms, 3-5 bath, 3-6 parking, service quarters, titled, all services. Homes and apartment condos.	> US\$ 109,815

Source: Mexican housing overview, 2016

Mexico's latest National Housing Policy, Programa Nacional de Vivienda 2014-2018 (PNV) was introduced in 2013 to address the prevailing housing deficit in the country by increasing subsidies. The policy focuses on incentivising appropriate locations for new developments and providing environmental-conscious and socially sustainable housing.²¹⁶

PNV aims to meet the different housing needs of the population and provide optimal financing schemes, especially for those who are unable to access a loan within the formal market. Hence, it endeavours not only to strengthen the new housing market, but also to promote a dynamic secondary market. Diverse solutions like acquisition of housing, income, social production and self-production are considered within the purview of the programme.²¹⁷

It maintains the population coverage under the previous housing policy and financing programmes, and stimulates further demand through an additional subsidy for low-income beneficiaries.^{218, 219} Specifically, it covers affiliated workers with an income of up to 2.6 SMGVM²²⁰ (US\$ 374.4 per month) and unaffiliated workers with an income of up to 5 SMGVM (US\$ 720 per month). Those with an income of up to 1.5 SMGVM (US\$ 216 per month) receive an additional subsidy of 3 SMGVM (US\$ 432) for acquiring homes. For the 2014-18 policy, the maximum subsidy amounts range between 29

²¹⁶http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/Session1_Paloma_Silva.pdf

²¹⁷Respuesta al Cuestionario sobre estrategias efectivas de vivienda con enfoque de Derechos Humanos

²¹⁸<http://boletin.dseinformavit.org.mx/084/documentos/SEDATUReglasdeOperacion2014.pdf>

²¹⁹<http://boletin.dseinformavit.org.mx/084/documentos/SEDATUReglasdeOperacion2014.pdf>

²²⁰SMGVM (General Minimum Effective Monthly Salary) is a dynamic Mexican measure of minimum wage. For this report, we have used the conversion 1 SMGVM = MXN 2,686.14 = US\$ 144

and 34 SMGVM (US\$ 4,176 to US\$ 4,896). For low-income beneficiaries, it ranges between 32 and 37 SMGVM (US\$ 4,608 - US\$ 5,328).

Table 16 Roles of various agencies

The following table describes the roles of the various agencies involved in housing.

Agencies and responsibilities	
Body	Description
Ministry of Agrarian, Territorial and Urban Development (SEDATU)	Created in 2013 as a single ministry tasked with housing and urban policy.
National Housing Commission (CONAVI)	A decentralised body for promotion, coordination and implementation of PNV National Housing Policy and the National Housing Program. It acts as the technical arm specialising in housing matters and is responsible for the preparation of the National Housing Program and the operation of subsidies. It is funded by GoM.
Sociedad Hipotecaria Federal (SHF)	SHF is a GoM bank, which aims at promoting the development of the mortgage loans market, by providing guaranties or financial instruments to build, acquire and enhance social housing.
National Workers' Housing Fund Institute (INFONAVIT) and Housing Fund of the Institute for Social Security and Services for State Workers (FOVISSSTE)	<ul style="list-style-type: none"> – INFONAVIT and FOVISSSTE are two housing institutions tasked with providing finance for formal housing. INFONAVIT is responsible for private sector workers and FOVISSSTE is responsible for federal workers. – The institutions are funded through (i) a compulsory 5% payroll tax on affiliated formal-sector workers (employers contribute 5% of salaries into the funds) and (ii) loan payments, alternative funding sources and interest on financial products. – Their activities include both housing finance and complementary retirement income.

Source: KPMG analysis^{221,222,223}

Key takeaway

Objectives of the housing policy include generating optimal credit and subsidy schemes as well as strengthening inter-institutional coordination to guarantee the co-responsibility of the federal, state and local governments.

8.2 Funding strategies for supply and demand

There are three main ways to access financial support for housing in Mexico.

- 1 Through financing and co-financing of loans, mainly through the operation of the housing sub-accounts managed by the National Housing Agencies (ONAVIS), as well as through the direct operation of federal and state resources from the National Fund for Popular Housing Trust (FONHAPO) and the State Housing Organisations (OREVIS).
- 2 By accessing direct support from SHF or through bridge loans from financial intermediaries for real estate developers.

²²¹<https://www.oecd.org/gov/policy-highlights-mexico.pdf>

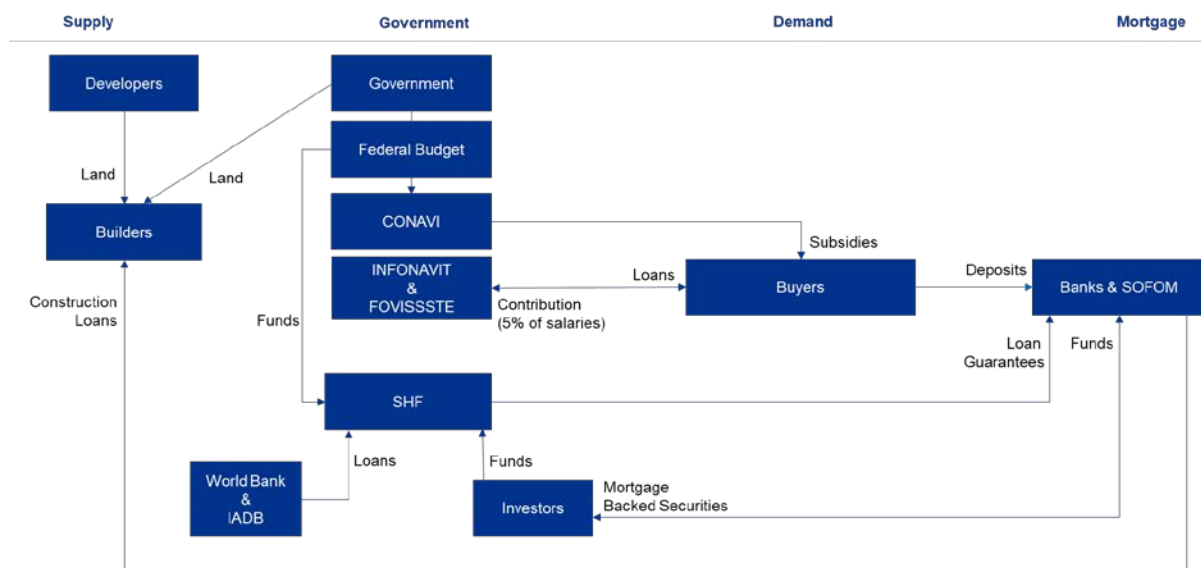
²²²<https://www.bnamericas.com/company-profile/en/sociedad-hipotecaria-federal-snc-institucion-de-banca-de-desarrollo-shf>

²²³<https://www.oecd.org/gov/policy-highlights-mexico.pdf>

- 3 Availing subsidies through the programmes implemented by CONAVI and FONHAPO. Subsidies form only a small portion of the overall housing finance, around 2% while the total financing in Mexico stood at US\$ 133.8 billion as of May 2018.

Besides providing more subsidies, PNV also envisages reviving the market of mortgage-backed bonds and encouraging greater private sector participation to provide a source of alternative financing.²²⁴

Figure 28 Mexican Housing Market Structure



Source: *An economic approach to Mexico's Housing Market*²²⁵

Demand side schemes

- INFONAVIT is the largest financier of formally-built housing in Mexico. It provides loans to homeowners/clients at rates lower than those prevalent in the market. These loans are indexed to the minimum wage and interest rates vary between 4 to 9% (market rates range between 11 to 15%).^{226,227,228} The second-largest lender by loan volume is SHF. Besides loans, it also provides mortgage insurances and guarantees to banks, which are then able to provide loans to consumers.
- FOVISSSTE provides loans by lottery to eligible workers and is the second-largest public capital source after SHF.
- CONAVI grants housing subsidies at the low end of the market, both in amount and in interest rate.²²⁹

Supply side schemes

- SHF supplies funding and guarantees to support mortgage lending as well as indirect partial guarantees to support housing construction. It channels funds through Mexican commercial banks and Sociedades Financieras de Objeto Limitado (SOFOMES).
- It also provides loans to financial intermediaries and guarantees to banks, both of which then provide loans to developers.²³⁰

²²⁴<http://www.cmic.org.mx/comisiones/Sectoriales/vivienda/2016/REGLAS%20DE%20OPERACION/PROGRAMA%20Nacional%20de%20Vivienda%202014.pdf>

²²⁵http://www.housingfinance2014.org/fileadmin/2014/Presentations_English/5_2_Jose_Luis_Romero_Hicks_English.pdf

²²⁶www.housing-finance-network.org/index.php?id=353

²²⁷Metropolisonline.com.mx/creditos-2/?lang=en

²²⁸www.mexperience.com/real-estate/real-estate-finance/

²²⁹<https://dspace.mit.edu/bitstream/handle/1721.1/92599/898145941-MIT.pdf;sequence=2>

²³⁰<http://pubdocs.worldbank.org/en/667031528392957464/EcoCasa-Ernesto-Infante-Barbosa.pdf>, Pg 3

8.3 Implementation approach including delivery timelines

The key implementation strategies^{231,232,233} in different areas are described below:

1

Land bank & resettlement policy

- The land-use design and building code is decided at a local level in Mexico.
- SEDATU is responsible for promoting land planning in coordination with the state and municipal authorities.
- Executors of housing projects have implemented actions to give certainty to property, such as the signing of agreements through public notaries and channeling subsidies for regularisation of property.

2

Construction, procurement & training

- CONAVI provides training in the construction sector and conducts capacity building modules at different levels of local authorities and governments.
- It also undertakes research and development and sets standards for construction materials, supplies, etc.

²³¹<https://blogs.worldbank.org/sustainablecities/what-about-singapore-lessons-best-public-housing-programme-world>

²³²<https://sso.agc.gov.sg/Act/LAA1966#pr6>

²³³<https://www.world-habitat.org/world-habitat-awards/winners-and-finalists/green-mortgage/>

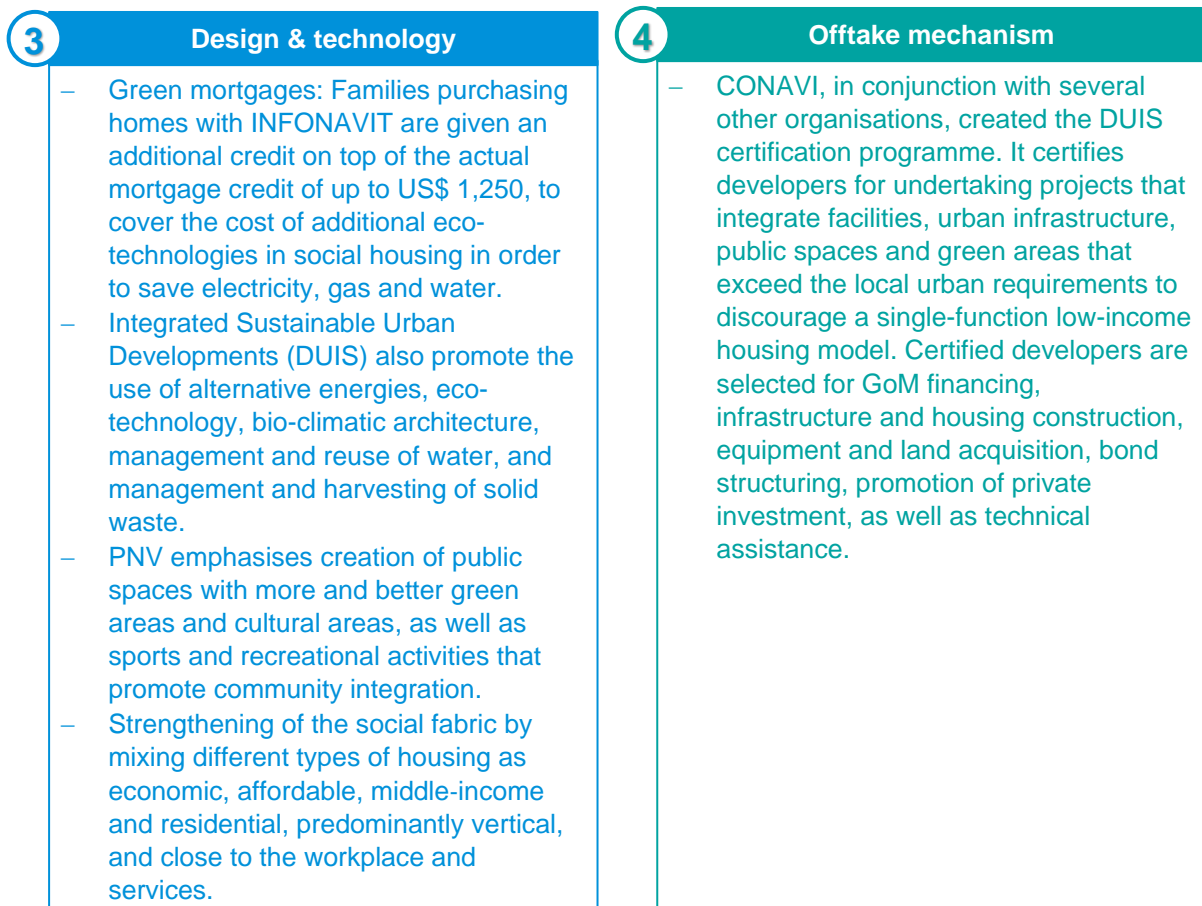
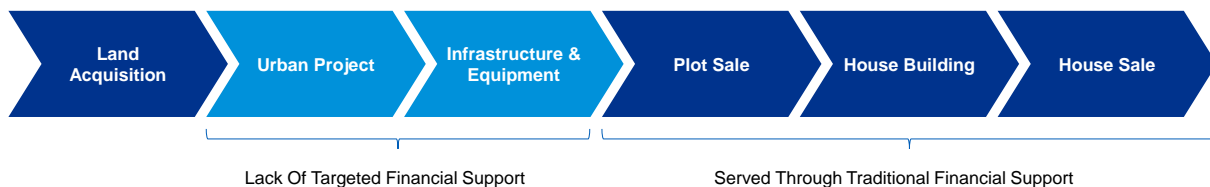


Figure 29 Stages of the housing production process



Source: GoM²³⁴

Subsidy calculation criteria^{235,236}

The subsidy amount is determined based on a scoring system with a scale of 0 to 1,000 and prices of homes. The scoring system qualifies the home and the environment in four dimensions – location, density, facilities and competitiveness.

²³⁴https://www.gob.mx/cms/uploads/attachment/file/103040/Servicios_Municipales_2.pdf

²³⁵<https://blogs.worldbank.org/sustainablecities/what-about-singapore-lessons-best-public-housing-program-world>

²³⁶<https://sso.agc.gov.sg/Act/LAA1966#pr6>

Table 17 Scoring considerations for housing

Scoring system for calculation of subsidies		
Dimension	Main variables	Points
Location	Urban Containment Perimeters (relates to proximity to an urban centre and status of land and infrastructure development)	400
Densification	Housing/hectare in the project, type of housing (verticality)	230
Facilities	Educational, health and recreational centres, transport services	270
Competitiveness	Sustainability of housing and the environment	100

Source: *Reforming Mexico City's Housing Market*²³⁷

Housing is divided into four categories based on its price. Category IV housing is limited to individuals making US\$ 158.4 (MXN 2,953) per month or less.

Table 18 Housing categories

Segregation of housing		
Categories	Price (SMGVM)	Price (monthly US\$ equivalent)
I	159 – 200	22,896 – 28,800
II	129 – 158	18,576 – 22,752
III	60 – 128	8,640 – 18,432
IV	60 – 128	8,640 – 18,432

Source: *Reforming Mexico City's Housing Market*²³⁸

Subsequently, subsidy allocation is computed on the basis of housing category and points as below.

Table 19 Subsidy matrix

Category	Value of home (SMGVM)	Points range												
		0 to 349	350 to 400	401 to 450	451 to 500	501 to 550	551 to 600	601 to 650	651 to 700	701 to 750	751 to 800	801 to 850	851 to 900	901 to 1000
		Maximum amount of subsidy (SMGVM)												
I	159-200	0	0	0	0	0	0	0	30	31	32	32	33	33
II	129-158	0	0	0	29	30	30	31	31	32	32	33	33	34
III	60-128	0	29	30	30	30	31	31	32	32	33	33	34	34
IV	60-128	0	32	33	33	33	34	34	35	35	36	36	37	37

²³⁷https://politicalscience.yale.edu/sites/default/files/files/Morrison_Drew.pdf

²³⁸https://politicalscience.yale.edu/sites/default/files/files/Morrison_Drew.pdf

Key takeaway

Subsidy mechanism for GoM varies according to the level of income of home-owner. While this complex system may give rise to issues in implementation, it has been put in place to cater to various objectives (development in urban centres in place of peripheries, increasing verticality, provision of basic infrastructure services, etc.)

8.4 Success rate

The following table ^{240,241} provides the achievements of PNV against its identified goals, as reported by GoM.

Table 20 Indicators of the National Housing Program, 2014-2018 (%)

Objective	Indicator	Period	Base line	2018 Goal	2013	2014	2015	2016	2017 (provisional)
Control the expansion of urban spots through the housing policy	Percentage of housing in urban containment perimeters	Annual	56% (2012)	65.4	57.6	70.5	80.7	80.6	81.3
Improve the quality of rural and urban housing and its surroundings, while reducing the housing deficit	Percentage of homes with minimum quality needed	Biennial	50.3% (2012)	51.5	n.a.	53.1	n.a.	53.6	n.a.
Diversify the offer of quality housing solutions in a way that responds effectively to the diverse needs of the population	Percentage of financing for used housing, self-production, income, improvements and extensions	Annual	55.1% (2013)	57	55.1	56.1	57	55.8	58
Generate optimal credit and subsidy schemes for housing actions	Percentage of annual financing for housing solutions regarding the housing deficit and	Biennial	7.42% (2012)	7.9	n.a.	8.9	n.a.	7	n.a.

²³⁹https://politicalscience.yale.edu/sites/default/files/files/Morrison_Drew.pdf

²⁴⁰<http://sniiv.conavi.gob.mx/Reports/Indicadores/Indicadores%20Programas%20Nacionales.pdf>

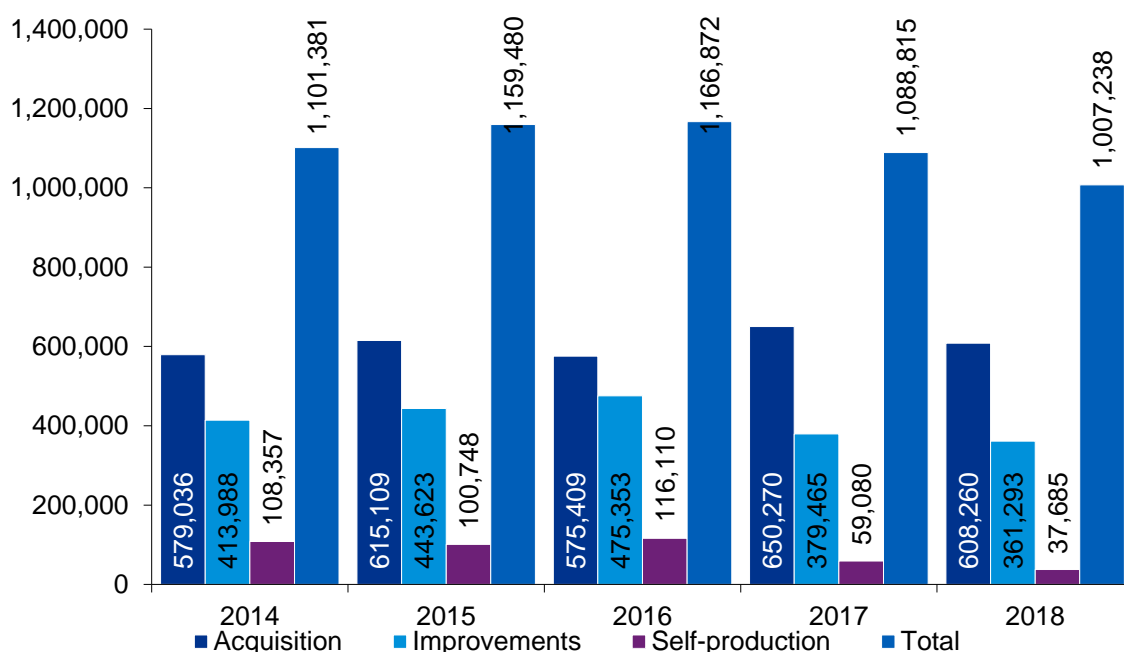
²⁴¹https://www.gob.mx/cms/uploads/attachment/file/301423/Demanda_2018.pdf

	housing needs								
Strengthen inter-institutional coordination that guarantees the co-responsibility of the three levels of government in the National Housing Policy	Average percentage of indirect costs of housing	Annual	6.5 (2013)	6.4	6.5	11.8	11.1	n.a.	11.5
Generate quality and timely information to contribute to better decision making in the housing sector	Percentage of information on housing actions at the registry level, from the ONAVIS integrated into an information system	Monthly	0 (2013)	100	0	100	100	100	100

Source: Indicadores del Programa Nacional de Vivienda, 2014-2018, CONAVI

Besides meeting its targets, the policy has been able to decrease self-production of housing since its introduction in 2014. Self-constructed homes in Mexico are mostly makeshift arrangements made with lower income bands quality materials. They also lack access to adequate infrastructure and urban services.

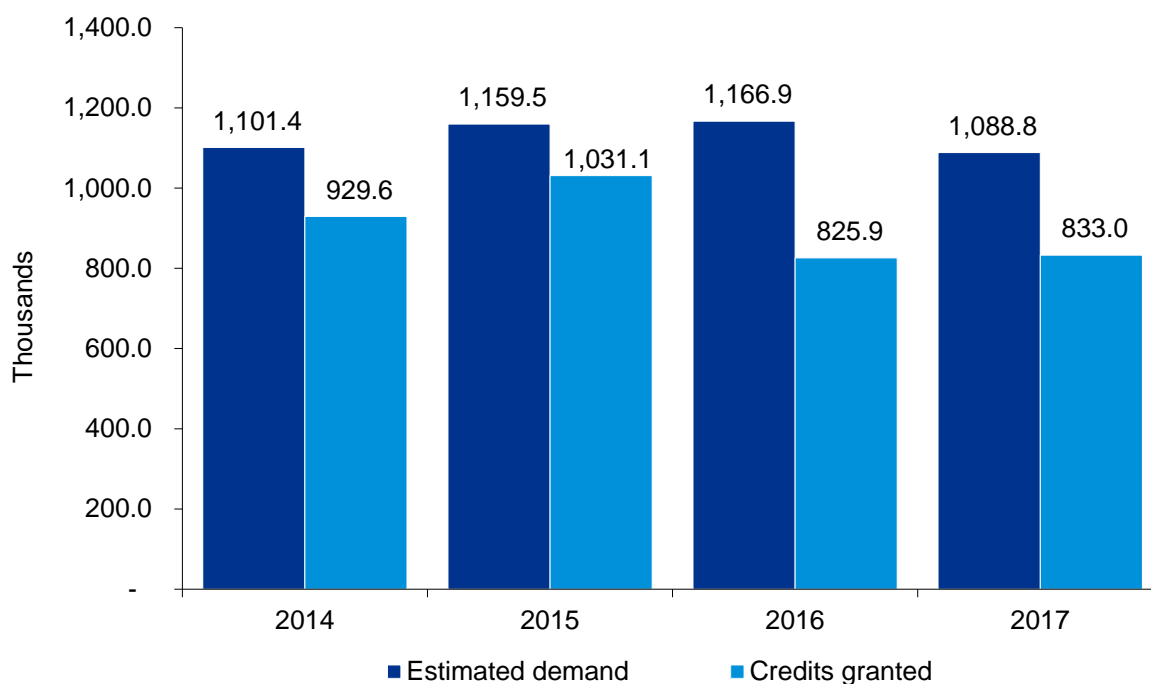
Figure 30 Number of credits by type of solution



Source: Sociedad Hipotecaria Federal²⁴²

²⁴²https://www.gob.mx/cms/uploads/attachment/file/301423/Demanda_2018.pdf

Figure 31 Comparison of estimated demand for financing and credits granted 2014-2017



Source: Sociedad Hipotecaria Federal²⁴³

8.5 Key issues

3. Absence of clearly defined urban codes

Risk faced

Despite the policy push towards urbanisation, Mexico has until very recently lacked a clear urban policy to guide urban development.

Mitigation measures

PNV specifically set up SEDATU to coordinate between various ministries and agencies involved in housing, transport and urban-related services at federal level, as well as across the different levels of GoM.

4. Abandoning homes

Risk faced

Previously, homebuilders have focused large amounts of capital in acquiring land and constructing homes on the outskirts of cities, which put the burden of commuting on homeowners. This led to many homes being abandoned or remaining unsold, as owners chose to remain closer to the centre.

Mitigation measures

A switch in policy implemented by GoM has seen housing construction return to the central area of cities. The home developers have been able to negotiate with the banks, making the banks part owners of home assets that had been abandoned. In turn, banks now finance the building of new homes in other more sought-after areas of the city, and with the profits of these new homes, the developers pay back the banks.²⁴⁴

²⁴³https://www.gob.mx/cms/uploads/attachment/file/301423/Demanda_2018.pdf

²⁴⁴<https://oxfordbusinessgroup.com/overview/building-blocks-private-sector-investment-coupled-focused-infrastructure-spending-driving-growth>

Key Challenges^{245,246,247,248}

Challenges in providing affordable housing in the country remain. More than 50% of homeowners whose homes were financed by INFONAVIT did not receive their property on time, 36% of all homeowners did not get occupancy until at least one year after mortgage payments commenced and 48% refused to acquire a home from the same developer again due to lower income bands quality of work, corruption and delays.

Some of the key challenges identified in the Mexican housing programme are noted below:

- **Lack of densification in existing areas:** There exists a lack of consensus on urban densification which has led to a situation where most of the homes are single family units or a close approximation. While developers blame lack of demand as the reason for lack of densification, local authorities are not keen to bring large number of low income residents in the neighbourhood via vertical housing and densification.
- **Lack of municipal and local authority involvement:** Local authorities and municipalities lack the independent resources to address any issues or concerns with the housing programme. This lack of coordination between federal and municipal authorities has created scenarios where new housing is being developed in regions with high abandonment rate despite unmet demand in other areas.
- **Disconnect between cost logic of developers and objectives of the housing programme:** Large scale developers started shying away from building social housing once caps were laid down on new developments to eradicate concentration of social housing in peripheral areas of the country which lack basic infrastructure.
- **Society and community:** Both the developers and GoM have not been able to identify the broad social and community benefits of providing affordable housing. They have failed to situate their housing priorities in the context of urbanism, and to link them to building better cities.
- **Municipal planning and permitting practices:** Poor planning and permitting practices as well as the absence of adequate land available to low-income populations have resulted in the location of many settlements in risk-prone areas, such as river banks and unstable hills, which impose social and economic costs in case of disasters.

8.6 Project management approaches used

Segregation of duties among the stakeholders

PNV considers strengthening of inter-institutional coordination that guarantees the co-responsibility of the three levels of GoM as a core objective. It is carried out through the National Housing System (SNV), which has been designed as a permanent mechanism for coordination between the public, social and private sectors. It ensures that institutions comply with the objectives, priorities and strategies of the National Housing Policy, and also act in a coherent manner.^{249,250}

Accountability

Institutions that depend on the GoM implement the mechanisms of accountability and some have an autonomous character. The National Institute of Transparency, Access to Information and Protection of Personal Data responds to citizen petitions and percolates it to other governmental institutions. The Superior Audit of the Federation depends on the Legislative Branch and performs review functions on the use of public under various plans and programs carried out by the federal executive branch. The

²⁴⁵<https://urbanland.uli.org/planning-design/rethinking-public-housing-mexico/>

²⁴⁶<http://www.latimes.com/projects/la-me-mexico-housing/#>

²⁴⁷http://research.gsd.harvard.edu/socialhousingmexico/files/2016/09/RP_BOOK_090116_LP_HQ.pdf

²⁴⁸https://research.gsd.harvard.edu/socialhousingmexico/files/2014/10/BetterCities_FINAL_121616.pdf

²⁴⁹Programa de labors 2016

²⁵⁰Respuesta al Cuestionario sobre estrategias efectivas de vivienda con enfoque de Derechos Humanos

Ministry of Finance and Public Credit also provides public policy evaluation results through the Performance Evaluation System.²⁵¹

Key takeaway

Inter-institutional coordination is envisioned to be achieved by promoting a model of urban and sustainable development, maximising resources and programmes of the three levels of GoM and prioritising sustainability and the environment in housing and its surroundings.

8.7 Project impact

Socio-economic Impacts^{252,253,254}

The investment made by INFONAVIT and FOVISSSTE grew commercial banking by 6.1% from March 2018 until April 2018 in Mexico. The residential construction sector also contributed 14% new jobs in Mexico from March 2018 to April 2018.

- **Jobs:** The number of workers in the construction sector reached 1,673,000 at the end of April 2018. This represents an increase of 7.8% compared to the same month of 2017. The 120,000 jobs generated by the sector represented the highest year-on-year growth since August 2015 and 14% of the total number of new formal jobs generated by the economy in 2017.
- **Construction:** In a similar sense, the industrial activity indicator for the construction subsector had an annual growth of 10.8% in April 2018, which represented the greatest variation in the last 18 months.
- **Environmental:** PNV is expected to minimise the negative environmental impacts that would arise from the development of new housing in undeveloped areas by reducing time and congestion to each urban areas. This would also have direct and indirect mitigation benefits in terms of climate change. The use of eco-technologies can lead to reductions in the emissions of greenhouse gases as well as savings in the use and cost of energy to the beneficiaries.
- **Economic:** The residential construction sector grew by 6% from 2017 to 2018 boosted by the housing units constructed through Mexico's housing programme. The good performance of the sector had a favourable effect on the behaviour of the economy, which had a growth of 2.1% in January 2018 compared to January 2017, according to the Global Indicator of the Economic Activity.

²⁵¹ Respuesta al Cuestionario sobre estrategias efectivas de vivienda con enfoque de Derechos Humanos

²⁵² <http://sniiv.beta.conavi.gob.mx/reportes/mensual.aspx>

²⁵³ https://www.gob.mx/cms/uploads/attachment/file/215797/MGAS_Vivienda_21abril_2017_2.pdf

²⁵⁴ http://centromariomolina.org/wp-content/uploads/2012/09/14.-Evaluaci%C3%B3nSustetabilidadViviendaM%C3%A9xico_fin.pdf

Brazil



9 Brazil

9.1 Country overview

Demographic and economic overview^{255,256,257,258}

The United Nations Conference on Trade and Development (UNCTAD) named Brazil, the second largest economy in the Americas, as the eighth largest destination for global Foreign Direct Investment (FDI) flows in 2015. In 2014, the country was hit by a recession due to which Brazil's nominal GDP reduced by 27% in 2015. The country faced a political crisis in 2016 when the incumbent president was impeached on charges of mishandling the government budget and because of multiple corruption scandals.

Key demographic and economic indicators	
Population	207 million (2017)
Area	8,500,000 km ²
Gross Domestic Product (GDP)	US\$ 2.05 trillion (2017)
Per capita income	US\$ 9,821.4 (2017)
World Bank ease of doing business ranking	125 th of 190 countries (2018)

Introduction to Housing programme

“Programa Minha Casa Minha Vida”- PMCMV (My House My Life) or MCMV, the largest housing programme in Latin America was launched by the Government of Brazil (GoB) in partnership with states, municipalities and non-profit entities to provide housing to the low and middle income families (gross monthly income of US\$ 1,680).^{259,260,261}

The plan was launched in 2009 with an initial target of 1 million homes and a budget of US\$ 8.8 billion. Through the PMCMV, the lowest income band of Brazilian households with monthly incomes less than three national minimal wages (US\$ 614) in 2009, have been able to procure homes with payments as low as US\$ 11 per month over 10 years with no upfront payment.²⁶²

PMCMV is designed as an umbrella programme, which contains various benefits for low income households and a detailed range of housing provision modalities.²⁶³ The PMCMV programme has been divided into two sub-programmes – the National Urban Housing Programme and the National Rural Housing Programme.²⁶⁴

The programme has been implemented by splitting its potential beneficiaries into four groups divided by their monthly income; this division also dictates the amount of subsidies and grants allowed for each group. The details of various groups and subsidies are mentioned in section 1.3 of this report.

²⁵⁵<https://www.bbc.com/news/world-latin-america-18909529>, <http://country.eiu.com/brazil>

²⁵⁶Data sourced from EIU, <http://www.doingbusiness.org/reports/global-reports/-/media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB18-print-report.pdf>

²⁵⁷<https://www.cia.gov/library/publications/the-world-factbook/geos/br.html>

²⁵⁸https://www.mitsui.com/mgssi/en/report/detail/_icsFiles/afieldfile/2017/08/28/170510k_katano_e_2.pdf

²⁵⁹<https://www.sienge.com.br/minha-casa-minha-vida/>

²⁶⁰<http://www.hamiltonleite.com.br/lar.pdf>

²⁶¹http://www2.camara.leg.br/orcamento-da-uniao/estudos/2017/InformativoAvaliacaoPoliticPublicasPMCMV_WEB.pdf

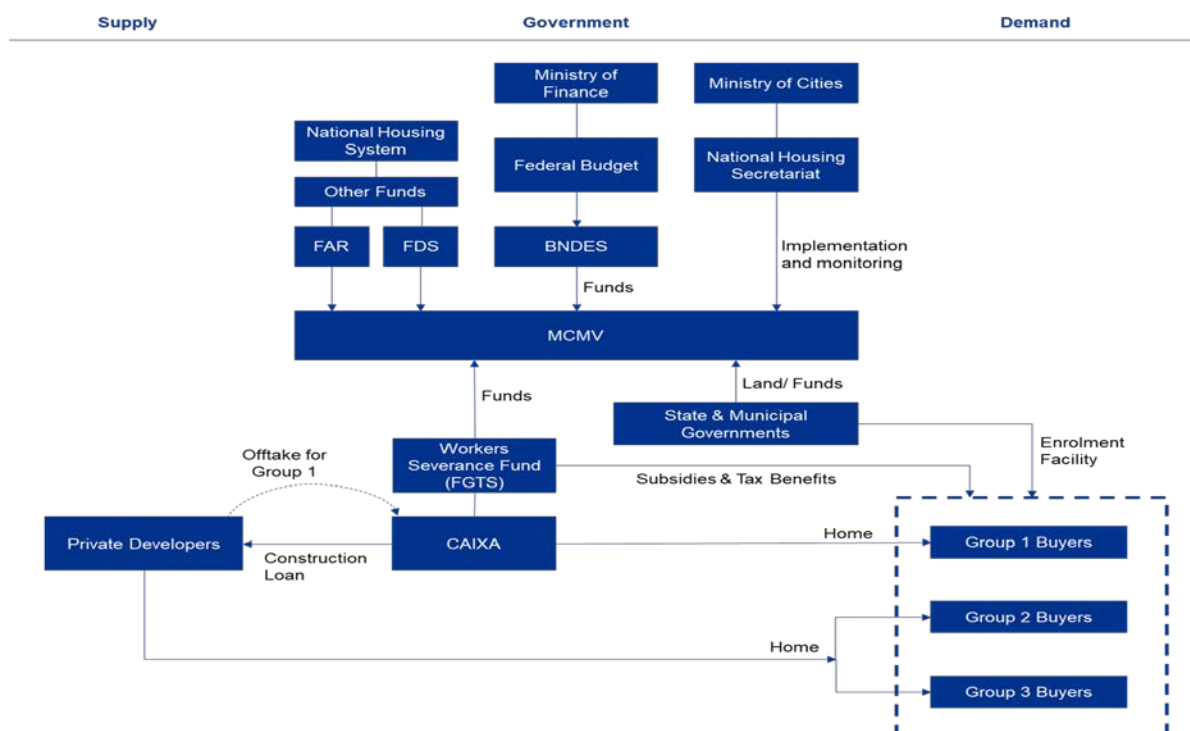
²⁶²https://www.lincolinst.edu/sites/default/files/pubfiles/nada_wp18ln1.pdf

²⁶³http://www2.camara.leg.br/orcamento-da-uniao/estudos/2017/Est_Tec_Conj_20171016_PMCMV.pdf

²⁶⁴<http://mirror.unhabitat.org/pmss/getElectronicVersion.aspx?nr=3453&alt=1>

Figure 34 shows the working of various stakeholders, including financial institutions in the housing programmes.

Figure 32 Brazil housing programme framework



Source: KPMG Analysis

9.2 Funding strategies for both supply and demand

The PMCMV Programme derives most of its funding from the federal budget surplus and the Workers Severance Fund (WSF). While federal contribution is a non-refundable subsidy that is not required to be paid back, contributions from the WSF requires repayment. The Social Development Bank (BNDES) has also allocated funds for infrastructure financing.

In the first phase of the PMCMV programme, which was launched in 2009, 75% of total budget came from non-refundable sources, refundable sources accounted for 25% and BNDES provided the remaining 3% for infrastructure financing.

Non-refundable grants from the government form the bulk of the Residential Leasing Fund (FAR) which is utilised for private sector housing provision and the Social Development Fund for non-profits to assist in building social-oriented housing provisions.

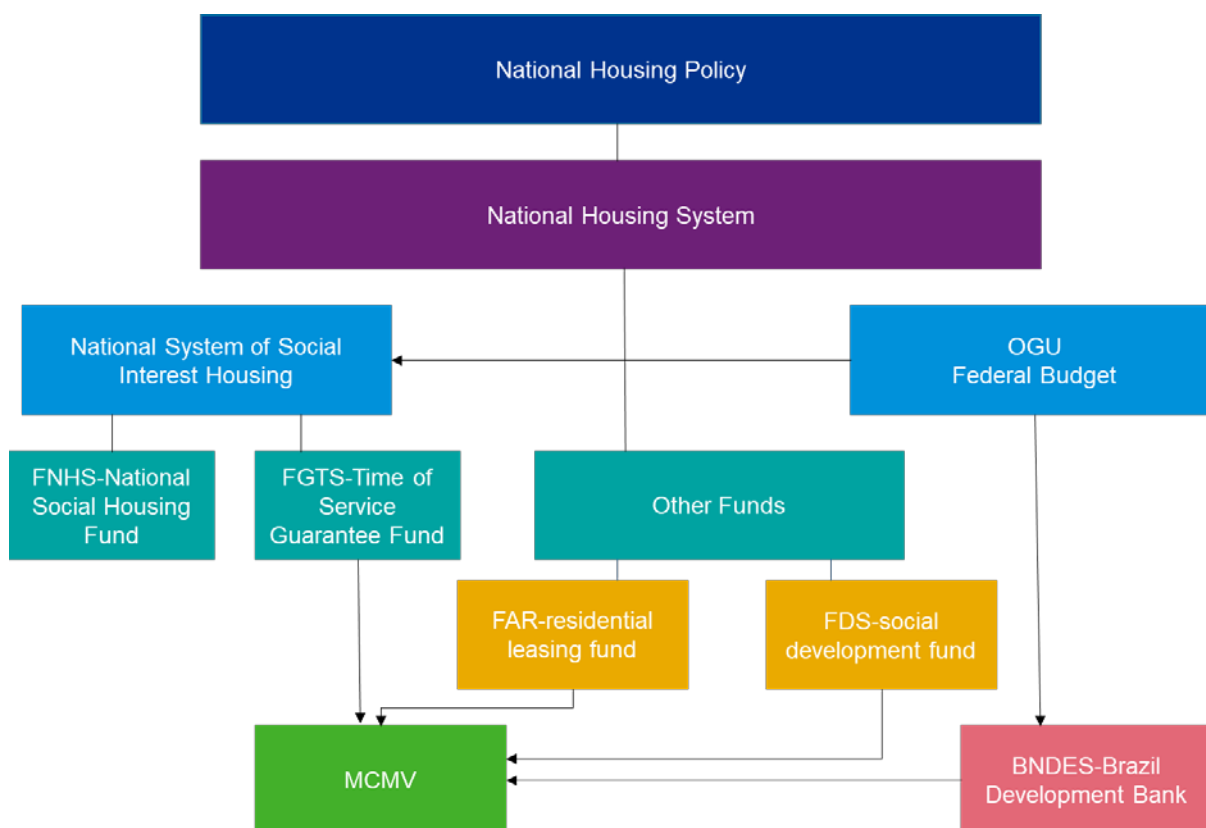
It is worth noting that National Social Housing Fund (NSHF), which was created by GoB in 2005 to operate the overall resources allocated to social housing in Brazil does not allocate its resources to the program. PMCMV's funding was channelled through FAR because of its flexibility compared to the

Key takeaway

PMCMV draws on various schemes to develop a financial structure and funding mechanisms. The previous Residential Leasing Programme is referred for defining private sector role and the experience from Solidarity Credit programme is used to reinforce social-oriented housing provision. PMCMV also attempts to scale up the experience of the Housing Subsidy Programme in creating a budget financed upfront housing subsidy system for low-income groups in small municipalities.

NSHF, which has a rigid financing structure. Use of FAR has allowed GoB to shorten the lengthy procurement processes and reduce the burden of managing the financing on the municipalities.

Figure 33 Flows of financial resources to PMCMV



Source: KPMG Analysis

Demand side schemes

- Government grants: The government provides varying levels of direct subsidies, insurance exemption or reduction, tax reduction for housing developments and exemption or reduction of property registration costs to different income groups. For phase three of the PMCMV programme US\$ 54 billion have been allocated by the government with close to 20% of funding expected to be direct government grants.
- Workers Severance Fund (FGTS): Created in 1969, FGTS was formed through deposits from the employer equalling 8% of the employee's salary into a current account in the Caixa Econômica Federal (CAIXA) linked with the employment contract. It provides long-term housing finance loans for beneficiaries of various groups of the PMCMV program. In 2017, FGTS provided funding up to US\$ 2 billion to the PMCMV program. Over 61% of PMCMV's phase three financing is expected to be done through FGTS.²⁶⁵ CAIXA, the government-owned bank manages the financial resources allocated by the Ministry of Finance to provide loans and grants to the PMCMV end beneficiaries (residents) and to developers. It also oversees the execution of the contracted projects and the application of all program-wide technical requirements regarding projects' location, design and infrastructure.

Supply side schemes

- Residential Leasing Fund (PMCMV-FAR): Government channels significant resources to the private-oriented housing provision fund. The design of the Leasing Fund allows for a more flexible transfer of federal resources and procurement processes of housing production, especially when

²⁶⁵<http://mirror.unhabitat.org/pmss/getElectronicVersion.aspx?nr=3453&alt=1>

the private sector is the executor. Until September 2017, the cumulative amount of US\$ 15.53 billion had been allocated by GoB to FAR.

- Social Development Fund (PMCMV-Entities-FDS): The government channels subsidies into this fund and it is exclusively aimed at the production of cooperative housing. Cooperative housing are residents led housing societies, in which the families themselves hire the contractors and architects to get their houses build.²⁶⁶
- Guarantor Social Housing Fund: It assures loan repayment to the lenders in case of default from a PMCMV beneficiary.^{267s}

9.3 Implementation approach including delivery timelines

Programme implementation is the responsibility of the Ministry of Cities, through the National Housing Secretariat. The Secretariat draws up specific norms and conditions and then provides detailed instructions on the implementation of the Programme modalities for local administrations and private developers.

The key implementation strategies in different areas are described below ^{268,269}:

1 Land bank & resettlement policy	2 Construction, procurement & training
<ul style="list-style-type: none">– PMCMV prioritises the distribution of federal funds to municipalities that have been able to increase the provision of serviced land in an urban area for the deployment of housing schemes.– The developers and landowners can coordinate amongst themselves or involve local governments/institutions as intermediators to develop housing using programme resources.	<ul style="list-style-type: none">– Besides being served by basic infrastructure, housing projects are approved if there is existence or commitment of local government to install or expand public facilities related to education, health, leisure and public transport.– Projects also have to prioritise the use of legally extracted timber.– It also requires use of building materials produced in accordance with national technical standards and the hiring of certified companies.

²⁶⁶ <http://www.rioonwatch.org/?p=12707>

²⁶⁷ https://www.lincolinst.edu/sites/default/files/pubfiles/nadal_wp18ln1.pdf

²⁶⁸ <https://blogs.worldbank.org/sustainablecities/what-about-singapore-lessons-best-public-housing-program-world>

²⁶⁹ <https://sso.agc.gov.sg/Act/LAA1966#pr6>

3 Design & technology	4 Offtake mechanism
<ul style="list-style-type: none"> – Promoting social cohesiveness: For households in condominium and multi-unit projects, beneficiaries are distributed randomly by lottery. This ensures a degree of social mix. – CAIXA defines the technical parameters, controls the execution and quality of projects and of the equipment installed. – Companies have invested in technological standardisation to achieve economies of scale and reduce construction costs. This also includes innovations like on-site prefabrication and assembly of concrete walls and slabs, etc. 	<ul style="list-style-type: none"> – Municipalities are responsible for enrolling (receiving and managing applications) the demand of beneficiaries for modalities targeting Group 1. – Groups 2 and Group 3 choose and buy their homes, provided the buildings meets the criteria established by the programme's income and price ceiling criteria. – The beneficiary eligibility criteria are defined at national and local level.

FGTS funds the PMCMV in two ways: through the granting of housing finance and with the concession of discounts linked to these loans (in the amount of the instalments or in the settlement of part of the value of the financed property).

Table 21 PMCMV housing programme categories^{270,271}

Four categories of urban social housing in Brazil				
Category	Description	Funding source	Subsidies and discounts	Budget allocation (2009-2017) US\$ billion
Bracket 1	Construction companies are hired by the government to build housing projects for families with a maximum monthly income of US\$ 472 (BRL 1,800)	FGTS and Government budget	Up to 90% of value of the property is paid and the remaining can be financed. The instalments should not exceed 10% of monthly family income, allowed maximum repayment period is 120 months.	23.21
Bracket 1.5	For families with a maximum monthly income of US\$ 681 (BRL 2,600)	FGTS (with discount) and Government budget	Maximum subsidy of US\$ 12,179 is provided, there is also a discount on the insurance payments and the interest rate per year is 5%.	4.01
Bracket 2	For families with monthly incomes between US\$ 681 (BRL 2,600) and US\$ 1,048 (BRL 4,000)	FGTS (with discount) and Government budget	Maximum subsidy of US\$ 7,515 is provided, interest rate ranges from 5.5% - 7%.	Not available

²⁷⁰https://www.tenda.com/static/assets/images/guia_mcmv.pdf

²⁷¹http://www2.camara.leg.br/orcamento-da-uniao/estudos/2017/InformativoAvaliacaoPoliticPublicasPMCMV_WEB.pdf

Bracket 3	For families with monthly incomes between US\$ 1,048 (BRL 4,000) and US\$ 2,358 (BRL 9,000)	FGTS (without discount)	Depending on family income, the interest rate may be 8.16% for families with gross income of up to US\$ 1,814 per month and 9.16% to those who have US\$ 2,332 monthly income.	Not available
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Key takeaway

A core difference in project implementation is that private developers or organised entities act as project executors and access funds directly for construction. Municipalities act as enabling agents and play a secondary role in project execution.

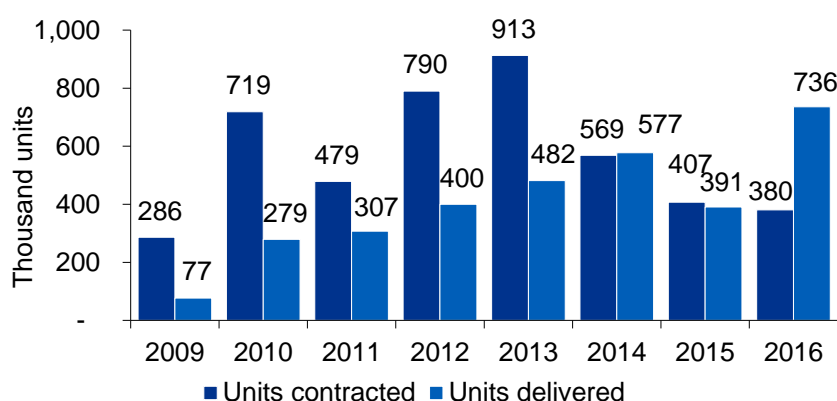
9.4 Success rate

Launched in 2009, PMCMV was implemented in three phases in the country. While PMCMV has effectively been able to deliver affordable housing units in large numbers, it has also faced increased criticism for the planning, design, and quality of its end products.

Since its launch in 2009, the program's ratio of housing units delivered to housing units contracted has increased from 0.27 in 2009 to 1.93 in 2016. The programme also contributed to the Brazilian housing deficit reducing from 6.9 million homes in 2009 to 5.4 million homes in 2012.

The program's progress was halted by the recession faced by Brazil in 2014, the recession also led to a cut in the PMCMV budget in 2016. The programme has drawn immense interest from Brazilian developers since its inception and has been deemed responsible for overall growth in the Brazilian civil construction industry. In 2010, most of the over 10% growth in the civil construction industry in 2010 was due to the programme. ^{272,273,274,275,276,277}

Figure 34 PMCMV number of housing units contracted and delivered



Source: Scaling-up affordable housing supply in Brazil – UNHS programme 2013

²⁷² <http://www.hofinet.org/countries/context.aspx?regionID=4&id=25>

²⁷³ https://www.joannastyles.com/wp-content/uploads/2014/03/Brazil_investment_guide.pdf

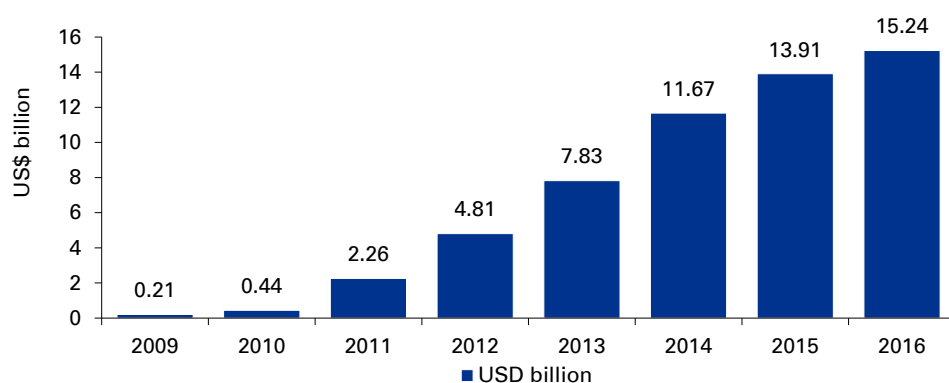
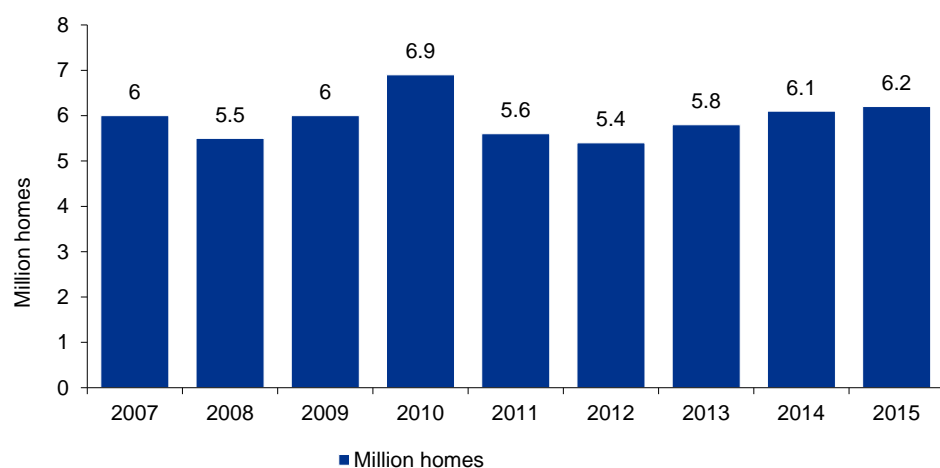
²⁷⁴ http://www2.camara.leg.br/orcamento-da-uniao/estudos/2017/InformativoAvaliacaoPoliticPublicasPMCMV_WEB.pdf

²⁷⁵ http://www2.camara.leg.br/orcamento-da-uniao/estudos/2017/Est_Tec_Conj_20171016_PMCMV.pdf

²⁷⁶ https://www.lincolninst.edu/sites/default/files/pubfiles/nadal_wp18ln1.pdf

²⁷⁷ <http://riotimesonline.com/brazil-news/rio-business/brazil-to-expand-minha-casa-vida-minha-housing-program/>

Figure 35 Housing deficit in Brazil



Source: *Scaling-up affordable housing supply in Brazil – UNHS programme 2013*

Key takeaway

- 72% of the units contracted have been delivered under the PMCMV programme in between 2009 and 2016.
- The cumulative government allocation to FAR stood at US\$ 15.24 billion in 2016, a 73% increase from when the programme started in 2009.
- The programme had contracted one million units by 2010 and by May 2012, 800,000 had been delivered, 68% under PMCMV Phase One and 32% under PMCMV Phase Two.

9.5 Key issues

21. PMCMV Phase 1 ^{278,279,280}	
Risk faced	Phase 1 of the PMCMV was criticised for the low quality of its projects and their social-spatial consequences. In 2010, the municipality of Rio de Janeiro suspended the approval of new PMCMV projects over fears that the programme was reinforcing existing patterns of social/spatial segregation in the city.
Mitigation measures	The government announced new project repartition objectives for the five planning areas in the city and increased the number of dwellings in the privileged and preferred Central, South, and South West Zones to 30% of total.
22. PMCMV Phase 2	
Risk faced	Phase 2 of the PMCMV programme was launched in 2011 with a target of two million additional homes. Although the plan addressed issues regarding project implementation, it devoted little attention to urban insertion and transit oriented urban design.
Mitigation measures	Federal Ordinance 168 was passed in 2013 tightening the locational choices of developers. As per the ordinance, PMCMV urban projects must be located either within the city or in the urban expansion zones approved by the government.

Some of the challenges faced by the government in the implementation of PMCMV are below –

- **Social-spatial segregation:** While PMCMV has largely improved the supply of housing to the Brazilian population, the programme still lags behind in promoting social integration. The programme has often been criticised for now allowing low income citizens houses in neighbourhoods with higher pricing of land and housing.
- **Lack of funding:** Brazil's federal budget deficit in 2016 was estimated at US\$ 52.03 billion. Federal, state and city governments in the country lack the funding required to support the housing demand generated from increasing population and urban growth.
- **PMCMV's mortgage criterions:** Mortgage criterions of PMCMV do not cover the lowest of income groups on the country. As a result a substantial number of people do not meet the minimum eligibility for the programme and hence are left out.
- **Unwillingness of people:** People employed in temporary jobs or who work in a different city the transaction costs associated with the purchase of a home would easily outweigh the benefits, as a result, significant portion of the country's population does not want to invest in purchasing a house.
- **Lack of range in housing products:** Currently, the PMCMV programme does not have preferred housing alternatives for larger households, youth or the elderly. The programme also needs to look at other ways apart from home ownership to provide housing to the Brazilian population.

²⁷⁸<http://www.hamiltonleite.com.br/lar.pdf>

²⁷⁹<http://mirror.unhabitat.org/pmss/getElectronicVersion.aspx?nr=3453&alt=1>

²⁸⁰https://www.lincolnst.edu/sites/default/files/pubfiles/nadal_wp18ln1.pdf

9.6 Project management approaches used

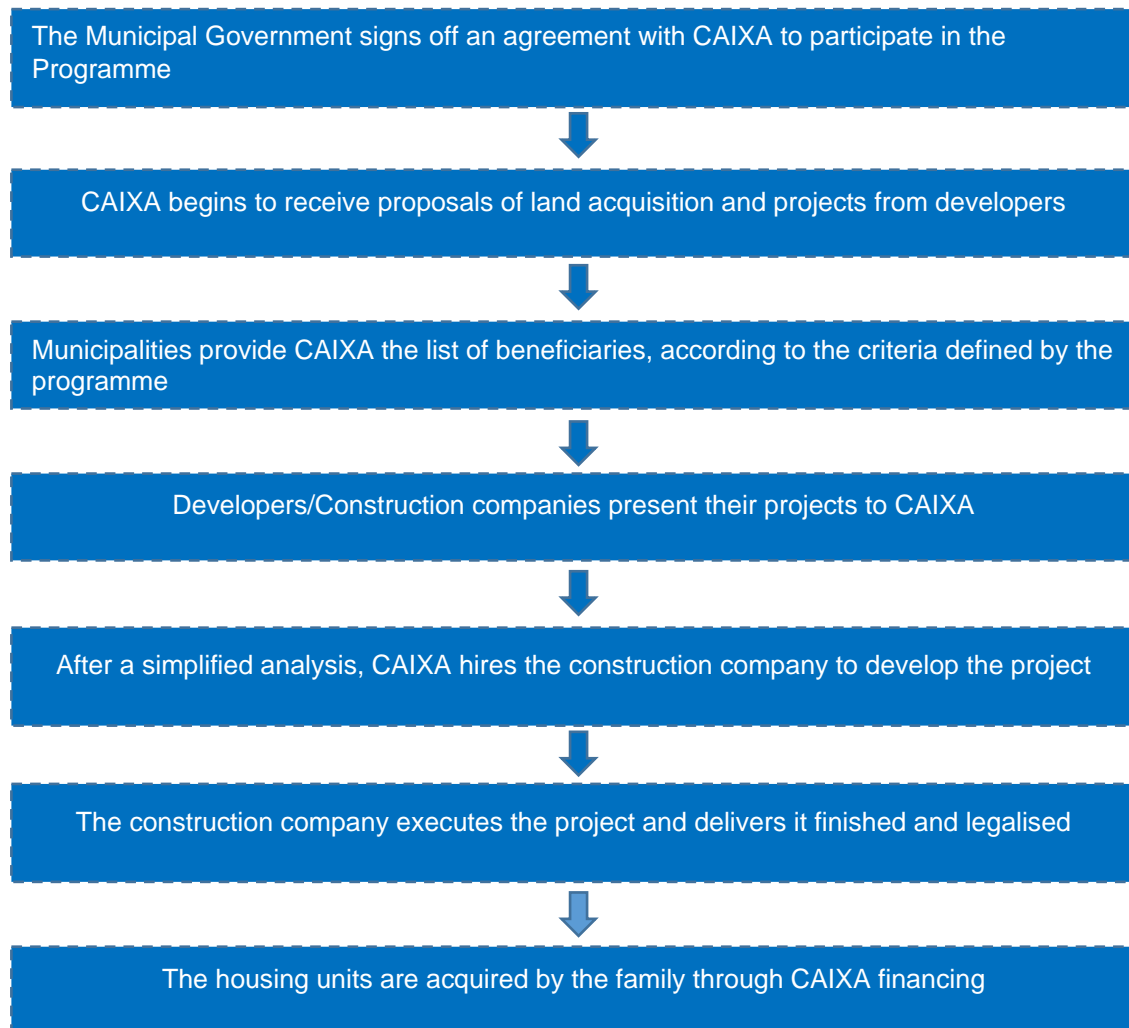
Segregation of duties among the stakeholders²⁸¹

The Government had clear segregation of duties among all the stakeholders involved in the process. The major stakeholders including their duties are:

- Ministry of the Finance (MoF): are the financial architects of the programme.
- Ministry of Cities (MoC): are the managers of the PMCMV programme. MoC formulates rules and regulations for all modalities of housing provision and defines the roles and responsibilities of organisations involved in the programme. They also monitor the programme implementation.
- CAIXA (Bank): is responsible for providing loans to developers for construction of houses and to beneficiaries for financing of their homes. CAIXA is also responsible for defining the technical criteria for project design and implementation and monitoring of project execution. It also manages the housing units for developments pertaining to the low income category and passes the units on to the beneficiaries once the construction is complete.
- Subnational governments (municipality): are expected to enrol potential beneficiaries of the programme and provide funding either in the form of money, land or the provision of services. They also issue license for projects to the developers.
- Private Sector: is responsible for construction of units and for commercialising units when targeting income groups that can afford to purchase property.
- Social movements and community-based organisations: Under the Within the “Entities” Modality (PMCMV-E) they can organise and enrol the demand, acquire land, elaborate, execute and manage projects.
- Built environment professionals: are involved for their technical expertise.

²⁸¹http://dspace.nwu.ac.za/bitstream/handle/10394/11970/Scheepers_EY.pdf?sequence=1

Typical steps in a PMCMV programme are below -



Key takeaway

- To enhance the PMCMV's implementation, GoB has effectively utilised the links and networks with local governments and civil society organisations that the Ministry had established in previous housing programmes.
- Role of municipalities is very critical for effective deployment of the PMCMV program, they handle a variety of challenges from issues related to availability of land, the provision of infrastructure, to the approval of projects and post-occupation plans.
- Group 1 of PMCMV has the tightest degree of intervention and control over project execution and selection of beneficiaries as the amount of subsidies involved in first group is also the highest. For the remaining groups project implementation is more lenient and vaguely resembles the structure in the general housing market.

9.7 Project impact

Socio-economic Impacts

- **Contribution to GDP**²⁸²: The programme provided direct income of US\$ 31.37 billion (R\$120 billion) to its citizen contributing about 7% of the GDP
- **Increase in ownership rates**²⁸³: The housing price index has been stagnant since 2015 to around 130 index points but a rising trend in the housing debt to GDP ratio could be indicative of increase in people's readiness to buy homes.

Job Creation²⁸⁴

In the past six years, 6% of the jobs related to the construction industry were tied back to the programme. The programme has generated and maintained 1.2 million direct and indirect jobs.

Creation of a Cohesive Society²⁸⁵

This programme houses people from different communities and backgrounds giving them a sense of community, identity and belongingness. By creating public and green spaces in the community for sports and other activities thereby, bringing people together.

Construction sector²⁸⁶

PMCMV has been instrumental in driving the growth in the Brazilian construction industry. Residential construction contributed 37% of construction sector's total value in 2016 and is estimated to retain its position by contributing 37.7% of the industry's total value in 2021. The market is expected to be supported by GoB's plan to balance demand and supply of affordable houses, coupled with rising population and ongoing urbanisation.

Sustainable housing development²⁸⁷

Solar heating is integrated to the programme for heating water, and reduce power demand for air-conditioning, refrigeration and ventilation by almost 30%, benefiting about 224,000 families.

9,000 SPV panels generate electricity for these homes and generate income by selling excess power to the grid out of which 60% is given as incomes to people living in these homes, 30% of it goes to PMCMV investment funds and 10% is kept for maintenance of the plant. Bio-digesters are used to dispose bio-degradable waste in the community areas. In addition to cleanliness it provides electricity, fertilisers and cooking gas to the community.

Key takeaway

- An increasing buyer readiness for houses in Brazil has significantly impacted the economy as a whole and integration of other sustainability goals is giving a boost to the programme as well.
- Housing has become one of the biggest contributor to the construction sector and is responsible for generation of 1.2 million jobs.

²⁸²scholarworks.rit.edu/theses/9205/

²⁸³<https://tradingeconomics.com/brazil>

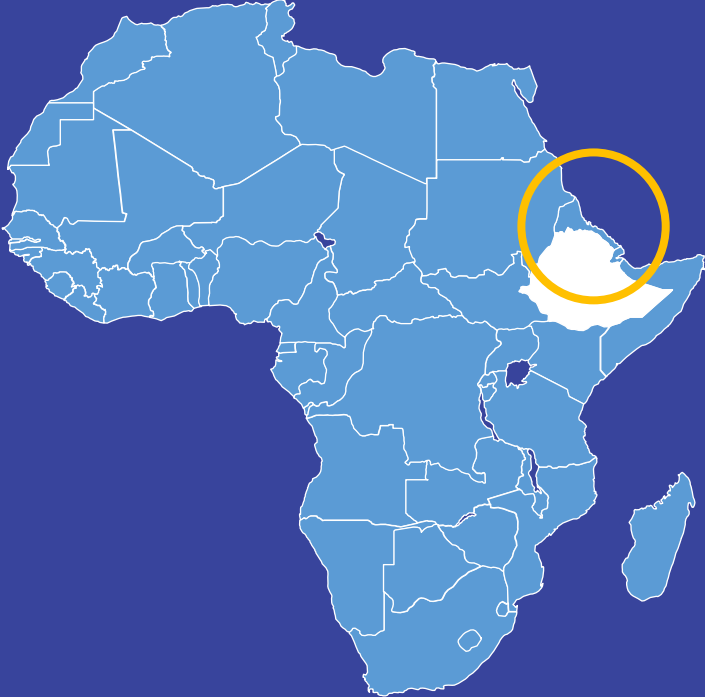
²⁸⁴scholarworks.rit.edu/theses/9205/

²⁸⁵scholarworks.rit.edu/theses/9205/

²⁸⁶<https://www.construction-ic.com/pressrelease/brazil-weakness-to-continue-6007990>

²⁸⁷<http://thecityfix.com/blog/sustainable-features-brazil-affordable-housing-program-good-people-environment-priscila-pacheco/>

Ethiopia



10 Ethiopia

10.1 Country overview

Demographic and economic overview

Ethiopia is the second most populous country in Africa. It is a one-party state with a planned economy. For more than a decade before 2016, Ethiopia grew at a rate between 8% and 11% annually, one of the fastest growing states among the 188 IMF member countries.

This growth was driven by the Government of Ethiopia's (GoE) investment in infrastructure, as well as sustained progress in the agricultural and service sectors. More than 70% of Ethiopia's population is still employed in the agricultural sector, however services have surpassed agriculture as the principal source of GDP.

Key demographic and economic indicators	
Population	104.95 million (2017)
Area	1,104,300 km ²
Gross Domestic Product (GDP)	US\$ 80.56 billion (2017)
Per capita income	US\$ 740 (2017)
World Bank ease of doing business ranking	161 th of 190 countries

Introduction to housing programme

Ethiopia's economic growth is accompanied by rapid rate of urbanization of approximately 5.3%.²⁸⁸ Due to the rapid population growth and urbanization, housing shortages and overcrowding are the primary issues faced by the country currently. Particularly, for the urban cities like Addis Ababa (one of the most populous city) homelessness and slum dwelling are also becoming an emerging problem. It is estimated that about 80% of the inhabitants in Addis Ababa are homeless or live in low-grade dwellings.²⁸⁹

In Ethiopia there are five categories of new residential developments taking place in the Housing sector:

- **Government-built Condominiums under the IHDP scheme:** Country's mass housing Integrated Housing Development Program (IHDP) is targeted towards lower and middle income group.
- **Private sector real estate developers:** Aimed at high-income households. More than 50 players are currently operating in the capital city and neighbouring areas, they obtain land on lease from the GoE.
- **Owner-built housing construction:** Self-built housing was by far the most common type of housing delivery approach prior to the introduction of the IHDP.
- **Housing co-operatives:** This is a primary mode of housing construction in Addis, constituting over half of the city's total formal sector housing stock.
- **Public Private Partnerships (PPPs) for housing development:** The pilot phase for housing development under PPPs is planned for in 2018-19.

²⁸⁸ UN-Economic Commission of Africa

²⁸⁹ *Sustainable Low-Cost Housing in Ethiopia- 2010 Report*

Table 22 Estimates of housing shortfall in Ethiopia

Estimates of housing shortfall in Ethiopia			
Source	Year	Shortfall Estimate	Rationale
Research (Abelti et al. 2000)	2000	630,000	Overcrowding
Organisation for the Review of Addis Ababa Master Plan (ORAAMP)	2002	50,000 (overcrowding); 210,000 (deficit)	Overcrowding and deficit
Urban Sector MDG Needs Assessment	2005	225,000	New dwellings per year needed to reach Millennium Development Goals (MDGs) by 2015
2007 Census	2007	340,000	Overcrowding (fit household sizes to crowding threshold)
Policy discussions – IHDP	2014	1,200,000	Number of applicants to IHDP programme plus a guess of 300,000 likely applicants

Source: *Stocktaking of the Housing Sector in Sub-Saharan Africa, a World Bank Collaboration 2014*

GoE formally launched the IHDP in 2005, as a part of the wider programme- 'Plan for Accelerated and Sustained Development to End Poverty' (PASDEP). Initially the programme was targeted for the Addis Ababa region, for construction of 150,000-200,000 housing units. The scheme was primarily targeted towards middle and lower income households and planned to construct 500,000 housing units.

The IHDP vision is to overall improve the living standards of the residents, especially the low-income population. Broadly the programme envisaged to achieve this through employment generation and creation of more affordable housing. The other objectives of the Vision also included:²⁹⁰

- Regenerate the slum areas of the city
- Adequately process densification
- Promote micro and small-scale enterprises
- Promoting cost efficient housing construction technology
- Empower citizens through ownership of houses and tenure security

The programme also aims to promote low-cost and low-skill intensive technologies which can be deployed in a short period of time, by involving micro and small scale enterprises (MSEs). The IHDP is divided into three different groups based on payment modalities:

- **10/90**: financed via a 10% down payment and 90% Commercial Bank of Ethiopia (CBE) mortgage, targeted at households with an income of less than US\$ 43 (ETB 1,200) a month.
- **20/80**: condominiums financed via a 20% down payment and 80% CBE mortgage, targeted at households with an income of more than US\$ 43 (ETB 1,200) a month.
- **40/60**: financed via a 40% down payment and 60% CBE mortgage, targeted at households with an income of more than US\$ 43 (ETB 1,200) a month.

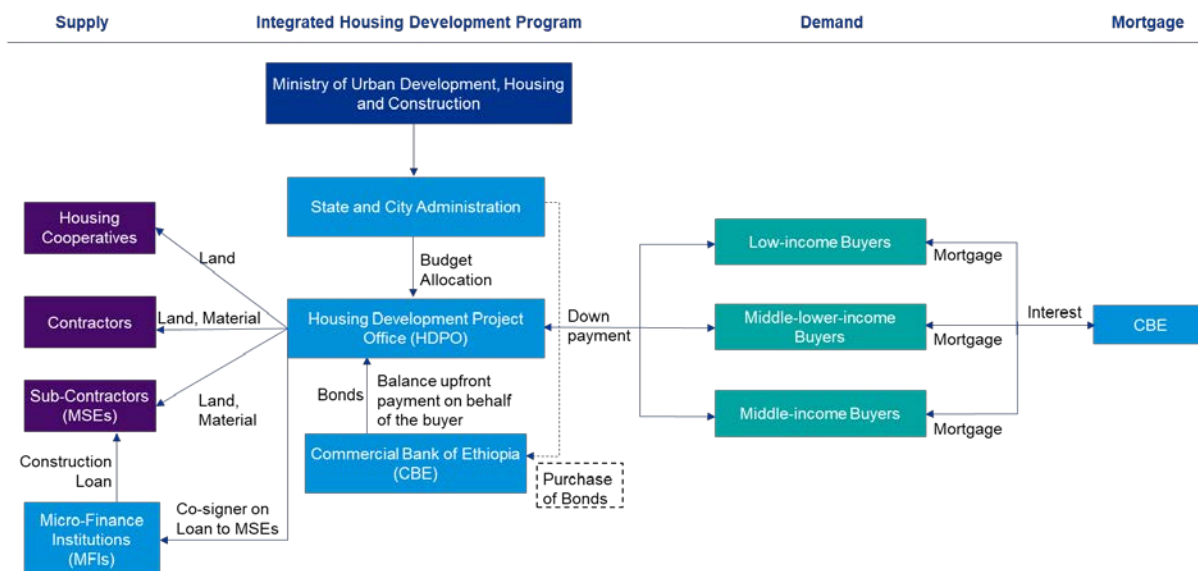
The GoE Housing Project was planned in two phases. In phase one 947,376 people registered for housing and the GoE built 270,146 houses however of the available stock only 182,000 houses were finally allocated.²⁹¹ This programme is entirely funded by public resources and without any support of multilateral agencies. The IHDP is a mass condominium programme, and is one of the unique mass

²⁹⁰ Ethiopia- *The Employment Creation Effects of the Addis Ababa Integrated Housing Program, World Bank report 2009*

²⁹¹ *Africa Housing Finance Yearbook 2017*

housing programmes in the African region. Additionally this programme is integrated with the associated infrastructure (with dedicated liaison officers) like roads, electricity, water / sanitation. However the respective utilities are responsible for the infrastructure elements.

Figure 36 Ethiopia housing programme framework



Source: KPMG analysis

The major stakeholders involved in the programme are:

- **Ministry of Urban Development, Housing and Construction (MUDHC):** MUDHC, erstwhile Ministry of Works and Urban Development (MWUD) is the department of GoE, responsible for the provision of housing
- **State and City administrations:** These are responsible for -
 - Selection of new sites for condominium blocks
 - Extraction of funds from the city’s budget to finance construction
 - Acquisition of bonds from the Commercial Bank of Ethiopia (CBE)
- **Housing Development Project Office (HDPO):** The HDPO was specifically created to manage the implementation of the IHDP throughout the country.
- **Commerical Bank of Ethiopia (CBE):** The CBE is a GoE owned bank. In 2006, it signed a Memorandum of Understanding(MOU) with the each of the five involved regional states and the city of Dire Dawa to purchase bonds, enabling the regions to finance the implementation of the IHDP.
 - CBE has an agreement with the HDPO to provide a mortgage to all condominium buyers.
 - CBE also provides mortgage to the 10/90, 20/80, 40/60 payment modalities group under the IHDP.
 - According to the Housing Development Bureau, CBE has granted loans of \$243 million or \$9,230 per household.²⁹²
 - In Addis Ababa alone, it has accumulated 37,000 new customers, and has issued a total US\$ \$130 million (ETB 1.7 billion) in loans at an 8.5% annual interest rate. Borrowers can pay back their loans at any of the 806 branches, but only in cash.

Under the IHDP, some other stakeholders include:

- **Contractors:** HDPO hires large contractors for foundational and structural works, on a fixed price basis.
- **Micro and Small Scale Enterprises (MSEs):** The task of fitting out the buildings, including the plumbing and electricity works and the application of finishes, is given to sub-contractors consisting of MSEs. The IHDP MSEs can access credit from Micro-Finance Institutions (MFIs) with the HDPO acting as a co-signer.

²⁹² *Stocktaking of the Housing Sector in Sub-Saharan Africa- A collaboration with World Bank*

Affordability of housing in Ethiopia

Affordability is one of the primary challenges of the housing sector in Ethiopia. In theory, the IHDP scheme is expected to pay for itself, as all land in the country is state-owned which reduces the upfront costs. Beneficiaries make a down payment to the state government ranging from 10% to 40% of the price of the flat, which is set by the state. The rest of the amount is expected to be paid off over a 10-20 years period. A state-owned bank holds the mortgage, providing affordable terms.

Historically, it has been witnessed that the prices charged by the GoE were significantly low to sustain the IHDP programme, hence over the years they have hiked the prices, making the segment less affordable for the citizens. Once allotted, the house owners often struggle to pay their mortgages and a numbers of owners opt to rent out the flats and move elsewhere.²⁹³

Key Takeaway

- It has been reported by Partnership for African Social & Governance Research (PASGR), since the launch of the IHDP programme the condominium housing costs have surged between 200 and 300 %.
- 53 % of the beneficiary households from the IHDP project in Addis Ababa are female-headed households

10.2 Funding strategies for both supply and demand

Since the launch of the programme in 2005, the HDPO established an agreement with the CBE to provide low interest mortgage loans to programme beneficiaries. While every condominium-housing owner is expected to make a down payment of 10, 20 or 40% of the total housing cost prior to property transfer, CBE provides the mortgage loans at a lower than market interest rate to individuals upon unit transfer.

Particularly for Addis Ababa, the IHDP project benefits from GoE subsidy in three vital ways²⁹⁴:

- The Addis Ababa City Administration (AACCA) subsidizes by providing urban land for the project,
- AACCA subsidizes basic infrastructure costs related to roads, water, electricity and sewerage lines, and
- Programme administration cost is fully subsidized, also the programme also enjoys tax-benefits.

Demand side schemes

- **Cross-subsidizing:** A scheme to cross-subsidize studio and one-bedroom units as a pricing strategy to increase affordability for low-income households. Studio and 1-bed units are sold lower than their individual construction costs, whereas, 2- and 3-bedroom units are sold at a higher cost. The subsidy percentages are: studio -30%, 1-bed -10%, 2-bed +5%, and 3-bed +10% of unit construction cost.
- **Empowering households:** In order to improve affordability for low-income unemployed households, the programme originally intended to employ families for six months on the construction sites where they could earn US\$ 0.15 (ETB 2) a day and save half of this to go towards the down-payment for a unit.
- **Loan for Down payment:** The Addis Credit Savings Institution (AdCSI), established in 2000 and capitalized with US\$ 39,000 (ETB 517,000) in city funds, provides savings accounts and lending services to individuals, cooperatives, small businesses, and others. It has experienced an increase in housing lending as it offers down-payment loans to low income beneficiaries of the IHDP.
- **Bypass the lottery:** In order to ensure financial sustainability of the program, GoE introduced a separate scheme in 2013 aimed at the middle-income buyers. The buyers who could afford down-

²⁹³ *The Economist*, 2017

²⁹⁴ UTAFITI SERA Policy Brief, December 2017

payment of 40% and had saved the whole price of the property would skip the lottery and head to the front of the queue.

- **Background check:** Under the program, no credit or income checks on potential beneficiaries are undertaken, on the assumption that if the beneficiaries have the financial capacity to meet their mortgage obligations, they will do so. If not, they will rent out their unit and finance the mortgage through this income.

Supply side schemes

- **Land Grant:** The IHDP tries to ensure MSEs have a place to work. The programme provides certain sites, such as Technical and Vocational Education and Training (TVET) compounds, for free if the working shed is built with wood (80% of cases), while it charges full rent if the shed on the site was constructed with metal (approximately 20% of all cases).
- **Access to credit without collateral:** The IHDP connects MSEs registered under the programme with MFIs. These MSEs can open a joint bank account with the IHDP and take credit without providing the collateral, which is normally required. The program's office signature provides the required collateral, even though the project office is not responsible for repayment in the case of default.
- **Inputs on Credit:** The IHDP provides re-bars, iron and cement (when not available in the market) on credit. The costs of inputs are deducted from future payments for the outputs.
- **Subsidized Machinery-Lease:** MSEs registered under IHDP and producing re-bars and/or hollow blocks can purchase machinery with leases below market rates.
- **Demand shielding:** Under IHDP, new and registered MSEs are awarded work, thus shielding them from competition by non-programme MSEs. However, MSEs which have been created by the programme are free to carry out jobs for clients other than the IHDP.
- **Land Bank:** In the city suburbs, the GoE reserves a land bank for investors/developers which makes available land to investors engaging in real estate development.

10.3 Implementation approach including delivery timelines

The key implementation strategies in different areas are described below:^{295,296}

1 Land bank & resettlement policy	2 Construction, procurement & training
<ul style="list-style-type: none">- Land in Ethiopia is owned by the State and can be acquired only on the basis of a lease, which is generally non-transferable.- However the lease value of the land along with the fixed assets may be mortgaged or transferred to third parties. Land administration is delegated to city governments and municipalities.- The duration of an urban land lease for real estate development is ~60 years for Addis Ababa and ~70 years for other cities and towns in Ethiopia. <p>Resettlement policy: The programme makes provision for relocated citizens through a dedicated office in the City Administration. People living in sites that are to be re-developed are given the option to acquire a condominium house in the same location (provided they can afford a down payment).</p>	<ul style="list-style-type: none">- Inputs mostly used in IHDP construction are produced by local firms, and are sold at a fixed price which is lower than the market price.- Sub-city project office takes care of procurement and organise the supply and distribution of inputs. They are also responsible for purchasing the construction inputs.- Programme MSEs construct the substructure and do the finishing wherever possible. Large contractors are usually hired for foundation and structural works, which are generally beyond the capacity of MSEs.- MSEs are awarded contracts and work under the supervision of engineers deputed from the project office.- Firms which engage in pre-cast beams and/or hollow block production are trained before deployment. IHDP also plans to organise courses to teach business skills in the near future.

²⁹⁵ Ethiopia- The Employment Creation Effects of the Addis Ababa Integrated Housing Program, 2009

²⁹⁶ CONDOMINIUM HOUSING IN ETHIOPIA, UN Habitat

3	Design & technology	4	Offtake mechanism
<ul style="list-style-type: none"> – The condominiums constructed under the programme are standard 4 to 5-story apartment buildings. IHDP clients can only choose among studio, one, two or three-bedroom apartment. Design is uniform which reduces the overall construction cost. – The two most prominent new inputs are pre-cast beams and ribslabs (prefabricated hollow blocks), which reduce material inputs and the need for formwork. – The site also accommodates Commercial units and Communal buildings. – 10% of each condominium site is allocated to commercial purposes, like small shops located at ground level. – The provision of communal buildings to condominium sites is an attempt to respond to the cultural needs of residents. 		<ul style="list-style-type: none"> – HDPO hires large contractors (Grade 6 and above) for foundational and structural works, on a fixed price basis. – The task of fitting out, including the plumbing and electricity works and the application of finishes, is given to sub-contractors consisting of MSEs. – This sub-contraction of smaller tasks is undertaken in order to increase the capacity and development of MSEs. This also helps to keep a tighter control on costs and helps to increase competition. 	

Ownership eligibility criteria

As mentioned earlier, homes under IHDP are divided into four different groups based on payment modalities - 10/90, 20/80, 40/60 and housing association. The payment modality for the last one requires a 100% upfront settlements, while the others incorporate 10, 20 and 40% down payment mixed with a long-term mortgage plan.

The table below outlines the condominium type and the respective floor area, cost and the monthly savings needed by the beneficiary under each scheme:

Table 23 Home ownership

Scheme	Condominium Type	Floor Type	Floor Area (m ²)	Cost	Monthly Saving	Years of Saving
10/90	Studio	G+2	29	US\$ 2,000 (ETB 38,000)	US\$ 9 (ETB 187)	3
20/80	1 BR (+1)	G+4/ G+7/ G+12	50	US\$ 66,695 (ETB 126,7210)	US\$ 10 (ETB 196)	7
	2 BR (+1)		70	US\$ 11,789 (ETB 224,000)	US\$ 21 (ETB 401)	
	3 BR (+1)		85	US\$ 16,011 (ETB 304,215)	US\$ 25 (ETB 489)	
40/60	1 BR	G+9/ G+12	55	US\$ 8,560 (ETB 162,645)	US\$ 54 (ETB 1,033)	5
	2 BR		75	US\$ 15,263	US\$ 82	

			(ETB 290,000)	(ETB 1,575)	
	3 BR	100	US\$ 20,336 (ETB 386,400)	US\$ 129 (ETB 2,453)	

Source: *Urban Housing Strategy of Ethiopia- 2013*

10.4 Success rate

Under IHDP 40,000 jobs²⁹⁷ are created per year. The programme has also led to advancement in status of sanitation and other associated infrastructure. Construction and handover data under the IHDP scheme is as follows:

Construction Year	Number of Units	Comments
2004 to 2010	81,266	Transferred to residents
2011	17,171	Transferred to residents
2012	44,876	Transferred to residents
2013	39,249	Transferred to residents
2014	52,651	Under construction
2015-2016	41,421	Under construction
	276,634	Contracted and transferred = 182,562, under construction = 94,072

Source: This table is created based on document acquired from Addis Ababa Housing development project office (November, 2017)

10.5 Key issues

Affordability	
Risk faced	<p>Affordability is the primary risk that governs this program. Initially the prices charged by the state government was significantly low to sustain the programme, hence it had to hike them.</p> <p>Currently the low income group is unable to afford the down payments for even the most subsidised units, those able to afford the down payment, often struggle to pay their mortgages.</p> <p>A number of occupant rent out the flats and move elsewhere.</p>
Mitigation measures	<p>In order to mitigate the fiscal unsustainability, in 2013 the GoE introduced a scheme particularly aimed at the middle class. Citizens who could afford down payments of 40% and people who had saved the whole price of the property would skip the lottery and get an outright allotment. While waiting, applicants had to keep putting money into a savings account.</p>
Allocation of houses	

²⁹⁷ KPMG Analysis (Primary interview)

Risk Faced	<p>Appropriate allocation of houses has been a challenge under the IHDP program. While the GoE built 270,146 houses, however only 182,000 houses were allocated.²⁹⁸</p> <p>Also, well-located complexes like Balderas are inhabited increasingly by reasonably well-off professionals, while peripheral sites tend to be populated by those on lower incomes.²⁹⁹</p>
Mitigation measures	<p>The GoE came up with a new rule of mandatory 30% allocation to women. This was primarily done to address issues faced by the lower income bands and single mothers with minimal education.</p>
Resettlement issues	
Risk Faced	<p>Since the launch of the IHDP, the scheme had very ambitious slum clearance programme in Addis Ababa's inner city. A latest report from Guardian suggests³⁰⁰ that 360 hectares and more than 3,000 homes is expected to be cleared over the next three years. A new city centre and business district comprising high-rises of at least nine storeys is expected to replace the old neighbourhoods.</p>
Mitigation measures	<p>As a part of the resettlement program, the evicted tenants are offered a condominium apartment, however many cannot afford it. The alternative for homeowners i.e. financial compensation and a new plot of land is often insignificant, and usually many miles from their original neighbourhoods.</p>

Some additional challenges include:

- Currently, there are approximately 600,000 people on the waiting list under IHDP, however, this does not necessarily represent demand. GoE doesn't have an effective systems to measure demand.
- The loans sanctioned by CBE are generally for a 10-15 year period. It is estimated that for a 15 year period mortgage, defaults (behind in payments by 2-5 years) are estimated to be 5-10%. However CBE lacks formal administration hence the defaults could be higher than originally estimated.
- CBE retains the title of property under the mortgage and can repossess the properties. However, there is limited evidence that they actually engage in such activities.
- Initially the planned output under the programme was 50,000 condominiums every 2 years. However, the actual time required was approximately 4 years.
- Delays in procurement of construction material due to shortage of supply has hindered the completion of targets significantly. However, this challenge was mitigated by gradually shifting responsibility from project office to contractors for procuring materials.

10.6 Project management approaches used³⁰¹

Segregation of duties

- In 2005, the national Ministry of Works and Urban Development (MWUD) was established to guide the overall development of Ethiopia's urban areas, however later it was renamed to Ministry of Urban Development, Housing and Construction.

²⁹⁸ https://housingfinanceafrica.org/app/uploads/2017_CAHF_YEARBOOK_14.10-copy.compressed.pdf

²⁹⁹ <https://www.reuters.com/article/us-ethiopia-landrights-cities-idUSKCN12P1SL>

³⁰⁰ <https://www.theguardian.com/cities/2017/dec/04/addis-ababa-ethiopia-redesign-housing-project>

³⁰¹ <http://mohua.gov.in/upload/uploadfiles/files/2csmc20-TPQM.pdf>

- Cities and regional governments are responsible for preparing physical urban development plans, and the Housing Development Bureau works towards the implementation. They are also responsible for the Micro and Small Enterprises Development Programs.

Accountability

In Ethiopia, anti-corruption campaigns have been strengthened, which has also resulted to a number of senior GoE officials being prosecuted through the legal system.

In spite of all these efforts the country ranks 148th out of 178, as per the Heritage Foundation 2016 Index of Economic Freedom, its score being 51.5 in 2015. While the country is considered to be 'unfree' its regulatory system is generally considered fair. Investment, business and other licenses can be obtained from the Ethiopian Investment Commission in limited time only.

The lottery system in place to determine who gets a house is overseen by Information Network Security Agency (INSA), which ensures transparency. However, with a lack of a formal national ID, anyone in the country (including from outside Addis Ababa) can apply for this, with little screening.

10.7 Project impact

Construction of multiple apartments

- GoE housing project was planned in two phases: in phase one 947,376 people registered for housing and the GoE was able to build 270,146 houses.
- While the overall target was not met, however the GoE was able to build 270,146 units between 2005 and 2015.

Employment generation

- The Ministry of Urban Development and Construction reports (2013) that so far the housing programme has been able to generate up to 370,000 job opportunities.
- The IHDP programme has provided opportunities in training and contracts for informal workers to prefabricate lintels, sills, floor joists, and floor slabs.

Slum development

- According to the 2004 MDGs report about 70% of Ethiopia's live in slum or standard living conditions.
- Through this programme the GoE plans to reduce slums by half until 2020.

MSEs

- The programme was able to give basis to 2,000 micro and small enterprises (MSEs).
- MSEs in the construction sector was done through screening qualified workers, teaching them how to form legal business enterprises, and allowing them to group themselves into new firms.

11 Sign off

We confirm that the contents of this Benchmarking Report meet the requirements of the scope of the Contract.

KPMG Representative:

Name Sheel Gill

Signature 

Witness

Name James Woodward

Signature 

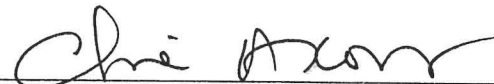
Principal Secretary

Name Charles Kinga Mwaura

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Witness

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