Background to the Affordable Housing Strategy for the FSD Network in Kenya

Prepared for the FSD Network by Kecia Rust and Seeta Shah

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This work has been compiled from interviews, on the ground research and desktop research with several stakeholders across Kenya

Any observations or corrections are welcomed

Some slides further explained in Nov 2020 AUHF presentation available here

fsdafrica fsdafrica INVESTMENTS UKaid from the British people fsd Kenya Centre for Affordable Housing Finance in Africa

from the British people

Framing the approach

FSD Kenya supports the development of inclusive financial markets in Kenya.

FSD Africa works to reduce poverty by strengthening Africa's financial markets. In support of this objective, FSDA provided support to the **Centre for Affordable Housing Finance in Africa** for its first six years of operation, with the intention of making Africa's housing finance markets work, and to see an increase of investment in affordable housing and housing finance throughout Africa.

FSD Africa Investments provides early-stage, risk-bearing capital to selected breakthrough firms that can strengthen financial markets in Africa.

In late 2020, the FSD Network agreed to incorporate affordable housing as part of their overall strategy for financial sector deepening in Kenya.

See www.fsdkenya.org | www.fsdafrica.org | www.housingfinanceafrica.org | www.fsdafrica.org/about-us/fsd-africa-investments/

Why housing as a financial sector deepening strategy?

The need for housing across Africa is immediately visible. In virtually every city across the continent, evidence of informal and inadequate housing conditions can be found in the proliferation of informal settlements and overcrowding. As the Covid-19 pandemic has highlighted so clearly, inadequate housing creates a key risk for infection, undermining efforts towards public health, while also failing to support household resilience in the face of emergency. Meanwhile, African cities have among the highest urbanisation, population and household growth rates globally – in some cities as high as 6 percent. Without the supply of adequate, affordable housing at scale, housing backlogs continue to grow almost to the point of absurdity: Nigeria claims a backlog of 19 million units; **in Kenya, the housing backlog is estimated at about 2 million units, growing at over 350 000 units per annum, given smaller household sizes of 3,25 members in urban and 4 members in rural households**; and in South Africa, notwithstanding its ambitious subsidised housing programme the backlog persists at an estimated 2 million units. Annual delivery rates of formal, developer driven housing, don't even begin to match growth, much less chip away at the backlog. As a result, most households build and finance their housing independently – and often poorly. Governments are at a loss of how to address the challenge and the private sector looks away, towards other opportunities.

And yet, the market opportunity, if the housing ecosystem were to function effectively, is tremendous. There are three broad reasons to see housing as a financial deepening strategy: (1) housing stimulates economic growth and job creation and supports enhanced financial intermediation; (2) housing addresses many of the SDGs; and (3) working housing markets improve the efficiencies of resource allocation, reducing dependence on the state and improving household capacity to meet their needs with their own resources - at the centre of this efficiency is finance.

Housing is a central feature of the real economy. As one of the most significant expenses for tenants, or the most most expensive investment a household will likely ever make, it cannot exist without finance. And as an asset that sits on household and lender balance sheets, it is a fundamental ingredient to a functioning financial sector that meets the needs of the full population in all its breadth. It is for these reasons that housing finance is a key financial sector development issue, and one that the FSD network should address in its work going forward.

1. The production and consumption of housing **stimulates economic growth and job creation**, and that growing property markets **support enhanced financial intermediation**, contributing to the efficient development of national economies.

2. Good housing can have a profound effect on household living conditions, **addressing many of the SDGs**.

3. Working housing markets improve efficiencies of resource allocation, reducing dependence on the state for affordable housing delivery. Finance is at the centre of market efficiency.

Why is housing important for financial sector deepening?

1. Housing is an asset with real & diverse investment potential

The house **as a private asset | *Housing sector* as a national asset**

As developed by CAHF. See http://housingfinanceafrica.org/documents/an-analytical-framework-for-understanding-housing-markets/

Social asset | a place in the settlement, an address, effective citizenship

Economic growth & job creation | backwards and forward linkages, impact of housing on the economy

See Gardner, D (2018) http://housingfinanceafrica.org/projects/housing-and-the-economy/ and in particular, for Kenya: http://housingfinanceafrica.org/documents/assessing-kenyas-affordable-housing-market/

Sustainable human settlements | integrated with functioning local economies

See http://housingfinanceafrica.org/documents/city-reports-cape-town-ethekwini-manguang/

Financial asset | can be traded for money and can be used as security against a loan

See http://housingfinanceafrica.org/projects/transaction-support-centre/

Economic (income-earning) asset | part of a household's economic strategy – backyard landlordism or home based entrepreneurialism

See http://housingfinanceafrica.org/projects/housing-entrepreneurs/ Work by Shisaka Development Management Services

Financial intermediation | financial sector development, and opportunities for domestic capital investment

See http://housingfinanceafrica.org/documents/bringing-life-to-mortgage-markets-in-south-africa/ Work by Illana Melzer & Claire Hayworth 71point4. Also see http://housingfinanceafrica.org/documents/residential-real-estate-investment-trusts-reits-and-their-potential-to-increase-investment-in-and-access-to-affordable-housing-in-africa/ Work by The Rebel Group

Why is housing important for financial sector deepening?

2. Good housing can have a profound effect on household living conditions, addressing many of the SDGs, enabling active and broad based participation in the economy and the financial sector

11 SUSTAINABLE CITIES AND COMMUNITIES

Target: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade informal settlements
Indicator 11.1.1: Proportion of urban population living in informal settlements or inadequate housing

2 ZERO HUNGER · 3 GOOD HEALTH AND WELL-BEING

Housing drives access to basic services and impacts profoundly on the health and well-being of low income households – *whether they own or rent*. With urban and home-based agriculture, it can provide a base for realising food security. Good accommodation can enhance the performance of school children, improving their ability to access quality education.

4 QUALITY EDUCATION · 6 CLEAN WATER AND SANITATION · 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Access to clean water and sanitation is secured at the household level through the delivery of good, affordable housing. Increasing access to affordable housing finance builds the economic infrastructure in support of productive housing markets for all.

1 NO POVERTY · 5 GENDER EQUALITY · 8 DECENT WORK AND ECONOMIC GROWTH · 10 REDUCED INEQUALITIES · 12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 17 PARTNERSHIPS FOR THE GOALS

Housing contributes towards inclusive growth. Home ownership builds asset wealth, enables job creation, supports economic growth and facilitates financial intermediation. Providing equal rights to economic resources, including ownership and control over land, or through equitable rental regulations, the legal framework governing housing supports gender quality and reduces levels of inequality. Housing is a productive investment and can shift credit usage away from consumption, increasing income-earning potential, through home-based enterprises. A functioning housing market enables municipal revenue collection, supporting sustainable cities.

7 AFFORDABLE AND CLEAN ENERGY · 13 CLIMATE ACTION

Housing contributes towards a sustainable future. Every step in the housing construction process should be configured in support of climate goals, improving the sustainability and affordability of housing and urban living. Renewable energy, sustainable sanitation and the use of sustainable building materials all contribute to the realisation of the SDGs at the household level. Green financing offers a key lever to effectively realise these goals.

While housing is explicitly articulated in Target 11 of the Sustainable Development Goals (SDGs), it is a key component of sustainable development across all of the goals.

Good housing drives access to basic services, contributes towards inclusive growth, and supports the development of a sustainable future, with a direct impact on the factors that contribute to, or mediate the effects of climate change.

Investment in affordable housing will therefore have a profound and direct impact on at least 14 of the SDGs.

Why is housing important for financial sector deepening?

3. Working housing markets improve efficiencies of resource allocation in meeting housing needs, especially important in the context of post Covid-19 economies in which governments will have fewer resources

The Covid-19 pandemic has exposed and exacerbated the persistent state of disaster facing a majority of households across the continent. At the most basic level this has to do with **households' access to water, sanitation, electricity, food security, tenure security**, and the ability to achieve sustainable livelihoods, not to mention space to make social distancing possible. These are not new crises that households are facing; they have persisted and been left unresolved.

The operational inefficiencies that persist and perpetuate this experience have also been exposed, whether in local governance and administration systems, or in the structure of local economies. These relate to the ability to secure and administer land effectively, to enable development, to register the property and include a household in local governance and data management systems, and so on – the basic business of getting things done at the local level is very difficult.

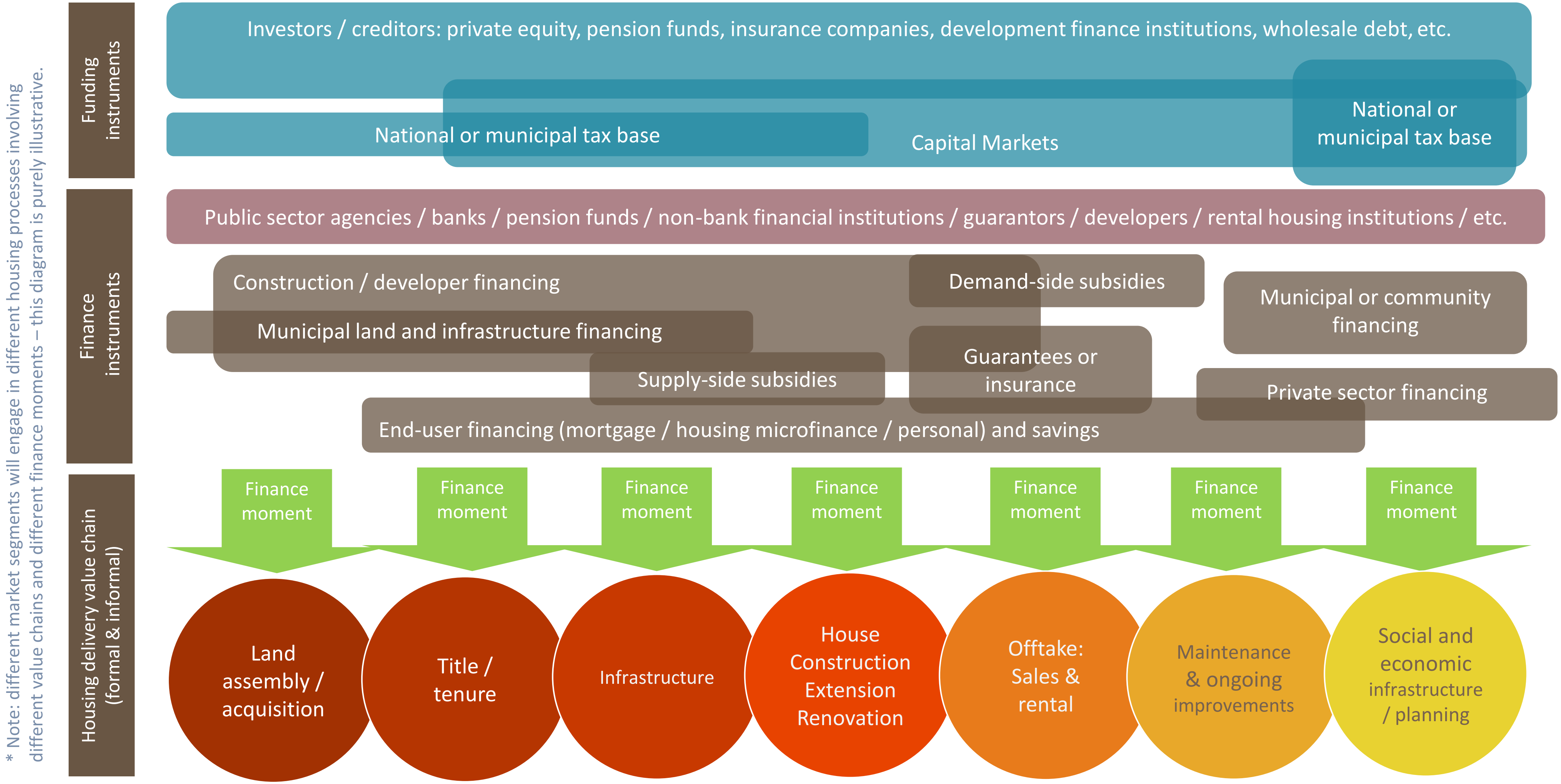
And, lastly, the barriers that we've created by our siloed approach to development are also apparent for how they undermine our interventions. These barriers relate to how we divide our understanding of what is possible from the public, private, NGO or household sectors; in the narrowly focused approach to subject matter we attend to, whether housing, health, education, food, job creation, etc.; and in the contradictions that exist in the design and implementation of legislation and policy, coming from either national or local, and how this plays itself out in what actually happens on the ground.

The financial resources at our disposal are more limited than ever before. The effects of the pandemic are putting more stresses on all the players, reducing our capacity to act, and feed deep into the financial sector. Just looking at the impact on the housing sector and where it connects with the financial sector: households have lower incomes which will reduce their affordability as housing consumers, putting pressure on developers with depressed demand, on lenders with rising NPLs, on landlords with rising rent arrears, and on the state with lower tax revenue. One outcome of this will be a decline in property values, which will further impact on the ability of asset holders – whether these are households, landlords or lenders – to leverage further resources against their property. This will undermine their ability to engage in the economy as they might otherwise have. Declining property values will impact on municipal revenue streams and undermine their ability to deliver services, which will further affect property values, not to mention access to basic services. Meanwhile, we will see shifting spending priorities of all the players: households will need to focus on their immediate health and safety needs and will have less income to spend on housing; businesses will need to focus on their lowest risk revenue earning efforts, and will be less able to experiment – this could have a negative impact on affordable housing. The Kenyan national government has a myriad of demands being placed on a narrowing fiscus – health expenditure and income and livelihoods support being at the top of the list.

The narrowing of financial capacity on the part of all players means that we cannot afford the operational inefficiencies and siloed thinking that we sustained in the past. Given the impetus we can see in the market, there is a real opportunity to leverage the know-how and investment of different players and make housing the growth sector that Kenya needs.

Why is housing important for financial sector deepening? Lastly…

Housing must be paid for. The intersection of the housing and finance value chains offer opportunities for intervention



Source: CAHF's Housing Finance Value Chain

So, what does the affordable housing sector need from the financial sector?

1. **Patient blended finance products** aligned with stimulating both early innovation and long term sectoral development
2. **Appropriate financing tools and deep regulatory support** that address the full value chain and not only particular links
3. **Mechanisms for local currency capital**, which are deep and untapped, to participate in housing, removing the problems of currency risk
4. **Market development and investment support** interventions, including accurate data tracking, monitoring and evaluation – so there is an honest acceptance on baseline supply capacity and demand affordability, and how this changes over time with concerted efforts.

These four factors are the basic building blocks of any sector, not just affordable housing. What is unique is the much deeper need for engagement with the state, as housing assets interlink with different, often unaligned, regulatory frameworks along the entire value chain. In Kenya, the public sector's delivery of housing has been very limited since the 1980s. The new Affordable Housing Program is also premised on public private partnerships, but struggling to scale due to the value chain blockages and lack of finance.

It **is evident that once an investment model is proven, there are large pools of capital that can be tapped to scale up the effort exponentially. The next five years requires carefully targeted investments with high levels of technical assistance, with data and monitoring across the value chain. It will be a concerted effort to deliver the first 100 – 1,000 homes in each geography, in each income segment, but thereafter, it will be easier to scale this to 10,000 and 100,000 units as all the data and delivery frameworks will be comprehensively collected and shared.**

Targeted Impact

1. The production and consumption of housing **stimulates economic growth and job creation**, and that growing property markets **support enhanced financial intermediation**, contributing to the efficient development of national economies.

2. Good housing can have a profound effect on household living conditions, **addressing many (14) of the SDGs**.

3. Working housing markets improve efficiencies of resource allocation, reducing dependence on the state for affordable housing delivery. Finance is at the centre of market efficiency and its ability to deliver to the poor.

Understanding Kenya

Sub-market analysis

Demand & supply challenges

Key market challenges & failures along the housing delivery value chain

Existing Interventions by other players

Kenya's Affordable Housing Programme

Findings as set out in this section were initially developed by Seeta Shah, on assignment for AfD/Proparco in early 2020, supported by other work that had been commissioned by CAHF in earlier months and years.

How are Kenyan households housed today, and what could they afford?

Four specific sub-markets operate across rural, per-urban and urban Kenya

Incremental: rural / peri-urban

Estimated size: 9 million households
Typical HH Income range: < KES 50,000/month
Tenure: owner occupied, limited rental

The vast majority of all housing in Kenya (and across Africa) is owner-built, incrementally, largely with savings. A key risk that owner builders face is the sustainability of their investment, when it becomes compromised by the building process.

An intervention here could be applied across all of Kenya, and would mobilise existing lender attention to this form of housing offering.

Informal settlement: urban

Estimated size: 1,6 million households
Typical HH Income range: <KES 30,000/month
Tenure: rental (absentee landlords)

Informal settlement housing in urban areas is a global challenge given explicit attention by goal 11.1.1 of the SDGs. Households predominantly (92%) rent. Kenyan informal settlements conditions are much worse than elsewhere: 3% of Nairobi informal settlements residents have access to a home with solid walls, water and power connection, vs 74% in Dakar. 20% of Nairobi informal settlements residents have access to infrastructure compared to 70% in Dakar

No formal sector housing delivery; poor quality; severe value chain blockages. **AHP expectations for subsidy have not materialized.**

Small landlord: urban

Estimated size: 1,1 million households
Typical Income range: KES 30,000 - 75,000
Tenure: rental

Single landlord rental offers more affordable and better located housing delivered as urban infill along spinal roads, with better access to transport, while also creating income-earning opportunities for entrepreneur landlords. These are the next step up after informal settlementss and tenements. Buildings are typically four to six storey walk-ups, offering attractive yields to landlords. However, many achieve affordability by not complying with formal building requirements. The model fails to achieve economies of scale.

Important gap with potential. **Currently only quasi-formal delivery with poor performance**

Formal: urban

Estimated size: 360 000 households
Typical Income range: >KES 75,000
Tenure: 70% rental / 30% owner-occupied (anecdotally)

Operates under very different regulatory regime to small landlords, higher quality housing, but unaffordable. Also low emphasis on long term management as built for exit via sales. Mortgage / Rent = x 2

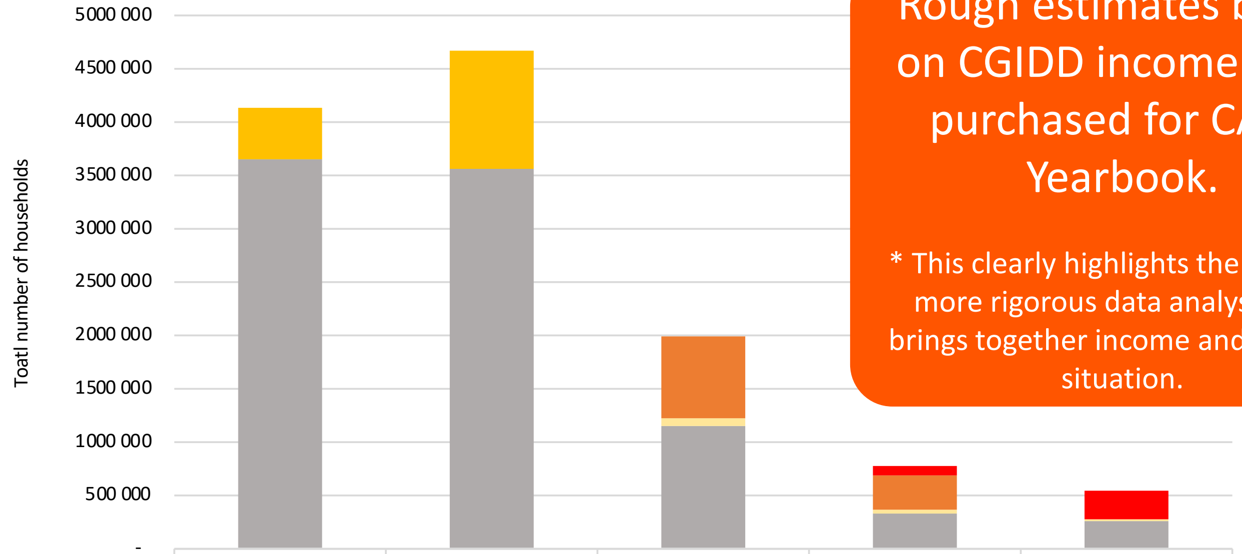
Scale and affordability are key challenges: A thorough survey of public, private and SACCO developers shows that hardly any developer has delivered >1,000 units in total since inception in Kenya

Formal market delivery focus, **primarily at the higher end**

How are households housed today, and what could they afford?

Estimated household distribution by income (affordability) and current sub-market

Kenyan **total** population distribution
(urban / rural) by household income and sub-market
Total households = 12,1m

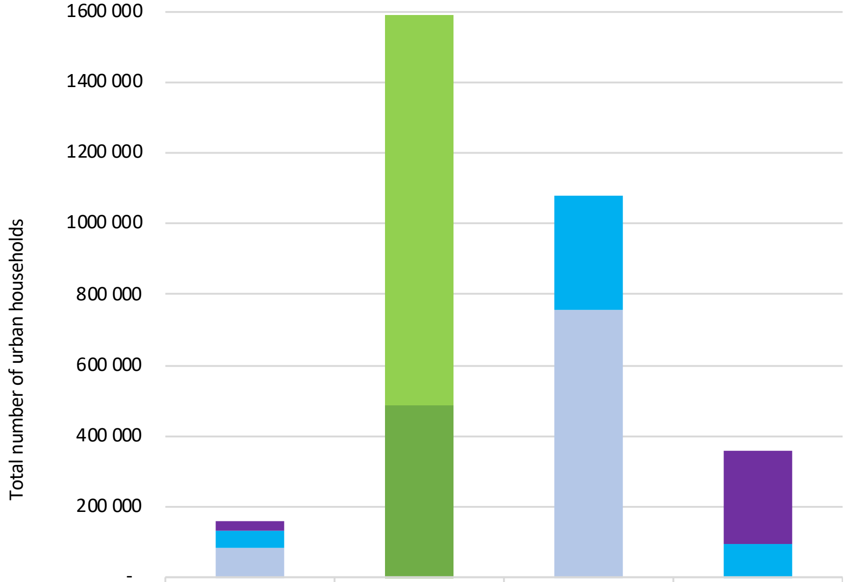


	Social (<Ksh 20k pm)	Affordable (Ksh 20k-50k pm)	Mtg Gap 1 (Ksh 50k-100k pm)	Mtg Gap 2 (Ksh 100k-150k pm)	Middle - High (>Ksh 150k pm)
Urban formal				92 000	267 000
Urban small landlord			755 000	323 000	
Urban slum	487 000	1103 000			
Peri-urban incremental			84 000	46 000	30 000
Rural incremental	3651 000	3560 000	1142 000	321 000	252 000

Rough estimates based on CGIDD income data, purchased for CAHF Yearbook.

* This clearly highlights the need for more rigorous data analysis that brings together income and housing situation.

Kenyan **urban** population distribution by sub-market
and household income) Total urban households = 3,2m



	Peri-urban incremental	Urban slum	Urban small landlord	Urban formal	Est. mortgage affordability:
Middle - High (>Ksh 150k pm)	30 000			267 000	>KSh 3 840 000
Mtg Gap 2 (Ksh 100k-150k pm)	46 000		323 000	92 000	<KSh 3 840 000
Mtg Gap 1 (Ksh 50k-100k pm)	84 000		755 000		<KSh 2 250 000
Affordable (Ksh 20k-50k pm)		1103 000			<KSh 1 060 000
Social (<Ksh 20k pm)		487 000			<KSh 430 000

Mortgage loan affordability calculations show the need for an alternative approach

<KSh 430 000 — <KSh 1 060 000: No formal sector housing delivery; poor quality; severe value chain blockages. **AHP expectations for subsidy have not materialized.**

<KSh 2 250 000: Important gap with potential. Currently only quasi-formal delivery with poor performance

<KSh 3 840 000 — >KSh 3,8m: Formal market delivery focus, primarily at the higher end

The key opportunity for addressing urban informal settlements is to extend urban small landlord into the “affordable” and “social” categories; and urban formal into the “Gap 1” and “affordable” categories, thereby pulling urban informal settlements households into move formal housing.

Market sizing by typology and rural / urban

RURAL			Assumed typology %				RURAL HH							
AHP Category	**Monthly Income**	**Rural Households**	**Incremental**	**Slum**	**Small landlord**	**Formal**	**Incremental**	**Slum**	**Small landlord**	**Formal**	30% income towards Housing	Less other housing costs (utilities, maintenance)	Balance income towards housing	Max Housing unit affordable (15% interest, 20 yr term, 10% deposit)
Social	KSH 0-19,999 pm	3,651,330	100%				3,651,000	-	-	-	**6,500**	**1,500**	**5,000**	430,000
Affordable	KSH 20,000 – 49,999 pm	3,560,087	100%				3,560,000	-	-	-	**15,000**	**2,500**	**12,500**	1,060,000
Mtg Gap 1	KSH 50,000 – 99,999 pm	1,141,797	100%				1,142,000	-	-	-	**30,000**	**3,500**	**26,500**	2,240,000
Mtg Gap 2	KSH 100,000 – 149,999 pm	320,735	100%				321,000	-	-	-	**50,000**	**4,500**	**45,500**	3,840,000
Middle - High	KSH 150,000 pm plus	252,087	100%				252,000	-	-	-	**100,000**	**6,000**	**94,000**	>3,840,000
	Total HH	**8,926,036**					**8,926,000**	**-**	**-**	**-**				

URBAN			Assumed typology %				URBAN HH							
AHP Category	**Monthly Income**	**Urban Households**	**Incremental**	**Slum**	**Small landlord**	**Formal**	**Incremental**	**Slum**	**Small landlord**	**Formal**	30% income towards Housing	Less other housing costs (utilities, maintenance)	Balance income towards housing	Max Housing unit affordable (15% interest, 20 yr term, 10% deposit)
Social	KSH 0-19,999 pm	487,288		100%			-	487,000	-	-	**6,500**	**1,500**	**5,000**	430,000
Affordable	KSH 20,000 – 49,999 pm	1,103,218		100%			-	1,103,000	-	-	**15,000**	**2,500**	**12,500**	1,060,000
Mtg Gap 1	KSH 50,000 – 99,999 pm	839,042	10%		90%		84,000	-	755,000	-	**30,000**	**3,500**	**26,500**	2,240,000
Mtg Gap 2	KSH 100,000 – 149,999 pm	462,047	10%		70%	20%	46,000	-	323,000	92,000	**50,000**	**4,500**	**45,500**	3,840,000
Middle - High	KSH 150,000 pm plus	296,615	10%			90%	30,000	-	-	267,000	**100,000**	**6,000**	**94,000**	>3,840,000
	Total HH	**3,188,209**					**160,000**	**1,590,000**	**1,078,000**	**359,000**				

This data is based on our best estimates (not an external or validated study) as to what % of income bracket lives in which HH condition, we see that:

- Base Data: C-GIDD 2018 data increased by 10% based on total population count in Kenya 2019 Census
- 9 million Rural HH building incrementally
- 1.6 million Urban HH live in slum conditions
- 1.1 million Urban HH live in small landlord rental housing
- 360k Urban HH live in formal built housing.

What are the key value chain challenges of each sub-market and who else is active?

Four specific sub-markets operate across rural, peri-urban and urban Kenya. In each value chain link, the intersection with the State is a key constraint.

Incremental: rural / peri-urban

- **Land assembly**: arduous process to formally assemble or sub-divide land
- **Title & tenure**: Lack of defined 'conventional' tenure; difficulty in accessing clear title
- **Infrastructure**: limited/insufficient supply by local authority
- **Construction**: limited skills & no oversight; long construction timeframes undermine building quality
- **Offtake**: none – owner occupied
- **Maint/Mngmt**: poor
- **Planning**: informal delivery undermines access to finance
- **Financing**: (i) Long time to deliver and variable quality due to piecemeal finance options and variable skill availability; (ii) lack of financing tools; (iii) lender fear of leakage

Existing interventions

- Microbuild Fund / KWFT Nyumba Smart Microhousing loans for incremental housing. Great success with 80,000 loans worth $80m, but *appears mainly successful for supplementary products (water tanks etc). Several instances of housing not built where money disbursed. Hence need to create an integrated platform.*
- Government Soil Stabilized blocks initiative
- Habitat for Humanity / iBUILD platform

Informal settlement: urban

- **Land assembly**: occupied land is encumbered by multiple rights making in situ upgrading difficult
- **Title & tenure**: very complex rights, often controlled by powerful (absent) elite
- **Infrastructure**: desperately underprovided and difficult to deliver in situ
- **Construction**: High lack of compliance – extremely limited access to utilities and poor housing conditions.
- **Offtake**: strict market principles; no protection for the most vulnerable
- **Maint/Mngmt**: poor
- **Planning**: limited
- **Financing**: Lack of defined tenure rights and poor construction limits investment; no appropriate finance products

Existing interventions

- KISIP
- KENSUP
- Railway Housing

Multiple interventions (DFI-, state, and NGO-led) but all struggle with scale and none explicitly address financing opportunities. All use subsidised responses which are unsustainable to replicate to the scale required.

Small landlord: urban

- **Land assembly**: No significant challenges
- **Title & tenure**: No significant challenges
- **Infrastructure**: individual metering prevalent, but densification putting critical pressures on availability
- **Construction**: limited skills, poor quality & no oversight; skirting regulations. Lack of compliance bleeds into the ecosystem
- **Offtake**: held as rental with term financing from banks, SACCOs prevalent, even if poor quality buildings
- **Maint/Mngmt**: poor
- **Planning**: no amenities
- **Financing**: mainly cash and personal loans; insufficient / inappropriate financial products available; potential for finance to drive quality is not realised

Existing interventions

- Microbuild Fund / Letshego rental product: too short, only 3 years
- iBUILD platform

Formal: urban

- **Land assembly**: arduous process to access sufficiently large, unencumbered time, typically peri-urban and often remote location
- **Title & tenure**: slow subdivisions and titling undermine the end user finance process
- **Infrastructure**: poor municipal capacity to deliver, often accommodated in the development, impacting on affordability
- **Construction**: Expensive due to compliance; but not uniformal quality – **limited long term design**; municipal approval delays adds to costs
- **Offtake**: sale to owner-occupiers or investors – mostly for cash. No consumer protection. **Mortgage / Rental ratio is x2**
- **Maint/Mngmt**: not addressed in delivery, so poor longevity and high operational costs
- **Planning**: limited
- **Financing**: Expensive construction finance; limited uptake of mortgage loans given registration delays and high interest rates

Existing interventions

- Gov AHP
- KMRC
- Partial Credit Guarantee
- I H S

Knowledge Platform: CAHF Housing Economic Value Chain (+ World Bank), Data Audit (+REALL, Case Studies, Housing Investment Landscape, Annual Yearbook

Investments / Interventions

Lower income ----------- Higher income

iBUILD Platform

PAHF : CDC, Shelter Afrique, IFC

Developer Financing, Shelter Afrique, Commercial Banks, REALL

SUED / IFC Municipal support

Acorn Senior Debt: Guarantco, DFID, IFC, Helios

SUED/ IFC municipal support

Public Land Database GoK

Land Registry digitization GoK

NAMSIP: bulk infrastructure (WB)

Pangea Sankalp Accelerator HFHI

Informal Settlements, KENSUP, Railway Housing

Kenya AHP: NHDF and Boma Yangu

Informal Settlements: KISIP, NYS

Incremental housing: Microbuild / HFHI, Letshego KWFT

These existing interventions were studied during Strategy formulation process

Land assembly / acquisition / planning

Title / tenure

Infrastructure

Construction Extension Renovation

Offtake: Sales & rental

Maintenance & ongoing improvements

Social and economic infrastructure / planning

Incremental Housing Interventions

Value chain failures for Incremental:
- Poor quality, long time to deliver, disjointed supply value chains, Poor land title rights

The KWFT Nyumba Smart program:
Investment size: $80m, 80,000 borrowers, 99% repayment rate
Investors: KWFT, Terwiliger Centre and Mastercard provided Technical Assistance.

1. **Group lending for small loan sizes (<$5,000), registered collateral (>$,5000)**
   - Encourage several cycles e.g roofing, flooring, lighting, one room at a time
2. **Added value through supplier relationships** (e.g. water tank supplier delivers & installs)
3. **High interest rates accepted by borrowers, but longer term, more affordable finance would of course improve affordability**
   - Loan Size: $50 - $10,000. Average: $650
   - Loan Term 60 months. Average 18 months
   - Interest rate: 24% flat, 2% application, 2.25% insurance
4. **KWFT is a shareholder of KMRC**

Opportunities:
- **Deeper demand segmentation and preferences**
- **Link lending with online platform like IBUILD to reduce leakage / promote efficiencies**
- **Deeper value chain support for house delivery itself: building technologies, plan approvals, contractors**

Informal Settlement Interventions

	KENSUP	KSUP	KISIP	NYS	Railway
Launch year	2004	2006	2011	2012	2013
Target Scale	National	Korogocho, Nairobi	15 municipalities nationwide	Kibera, Mathare, Korogocho, Mukuru	Kibera
Approach	Full decanting and upgrading	Gradual improvement + community mobilization	Minimum Infrastructure Package + title regularization	Infrastructure improvement	Full upgrading
Impact	<500 units	Regularization of tenure, Community involvement	Improved access to utilities and new title mechanism	Immediate reduction in flooding	10,000 bedsits, plus kiosks provided at peppercorn rent
Coordinating Agencies	Min of Housing, Min of Lands, Nairobi County Gov, UNHabitat	Min of Local Gov, Nairobi County Gov, UNHabitat	GoK, World Bank	Min of Dev and Planning	Kenya Railways Authority
Donors	GoK, UNHabitat, SIDA	GoK, Gov of Italy	World Bank AfD SIDA	GoK	World Bank, Kenya Railways
Cost	**Capital and Agency Cost unknown, Likely to be very high per unit**				
Evaluation / Takeaways	Long timeframe, high displacement, policy should allow G+5 used	Structure owners rights upheld disproportionately to tenants	Positive outcomes from access to infrastructure	Corruption stalled program	No displacement, but financial sustainability difficult

Value chain failures of Informal Settlements

- Extremely poor quality, Contested land rights
- Government / DFI initiatives to date often lead to displacement or take very long to deliver





Railway Housing, Kibera, Mukuru, Key Takeaways
- No displacement, mixed use
- Up to 10,000 units
- Actual subsidy unclear: peppercorn rent
- Evaluate alternative typologies – communal toilets, kitchens

KENSUP, Kibera, Key Takeaways

- High displacement, slow and limited delivery (500 units over 15 years)
- Actual subsidy unclear

Opportunities:
- **Emphasis on infrastructure provision rather than unit delivery**
- **Rental vs owner occupation more financially sustainable and can reach the millions required**
- **Integrate long term management**

Small Landlord: affordability plus attractive yields

Value chain failures for Small landlord:

- Lack of scale, limited amenities
- Variable compliance for housing delivery
- Pressures on municipality infrastructure due to poor municipal projections and planning
- Highly financeable but limited underwriting standards for product quality and compliance. Asset quality not suitable for capital markets

Elm Tower, Along Thika Road Appraisal (KES)

35 x 1 bedrooms, 37 sqm, Rent 14,000 pm
12 x 2 bedrooms, 59 sqm rent 18,000 pm
Land Size 0.2 acres Land Cost: 28 million
Dev Cost: 90 million
Annual Rent Potential: 9 million
Occupancy: 98%
Annual Expenses: 0.8 million
Gross Yield: 10.3%
Net Yield: 9.2%

11 units financed by Tier 2 Bank, Ongata Rongai

20 units financed by Large Sacco Ongata Rongai

Small landlord interventions

The Microbuild Fund :

Investment size: $120 million
Expected leverage: $1 billion
Equity Investors: Habitat for Humanity International, Omidyar Network, DFC (previously OPIC). Fund Manager Triple Jump

1. Debt and Technical Assistance to financial intermediaries
2. **Mainly hard currency, only 9% invested in Africa**
3. Letshego to promote small landlordism in peri-urban locations. Loan terms:
    - Promote rental asset creation as a business loan
    - Loan size: $10,000 - $100,000 (Average: $30,000)
    - Loan Term: 72 months, Interest rate: 14% flat
    - Security: registered collateral
    - Letshego's own funding constraints: e.g**. 3 year loan at 15% from Triple Jump**, but is able to blend sources to provide this product.
    - Understand cost of financing and **currency risk** from Triple Jump to Letshego is challenging for Letshego after building in risk and operating margins

Opportunity to expand this product with TA – build greener and more resilient housing
Integrate with tools for rental management, developing credit history as a step towards economic empowerement

What is scale in the Kenyan context?

	Public / Private	Total Projects	Completed units	Ongoing units	Accessed capital markets
LARGE DEV WITH INTERNATIONAL BACKING					
Actis	Private	2	159	624	YES
Acorn	Private		1,500	5,000	YES
AMS Properties	Private	10	655	10,162	NO
Britam	Private		-	-	YES
Centum	Private	5	100	802	YES
CITICC	Private		-	-	NO
Cytonn	Private	7	100	2,805	YES
Erdemann	Private	11	3,998	3,913	NO
Fusion Capital	Private	4	363	53	NO
Housing Finance historical	Public		15,000		YES
Housing Finance recent	Private	10	2,000	960	YES
Kaydee	Private	1	-	1,400	NO
NHC historical	Public		16,500		NO
NHC recent	Public	8	159	319	NO
Trident	Private	6	109	430	NO
Unity	Private	1	400	1,200	NO
LOCAL DEVELOPERS: TOTAL PROJECT SIZE 100 UNITS PLUS					
Chigwell	Private	3	393	250	NO
Everest Park	Private	2	440	-	NO
Green Park	Private	3	593	-	NO
Greenspan	Private	1	700	260	NO
Heri Homes	Private	10	517	709	NO
Karibu Homes	Private	2	575	1,200	NO
Lifestyle Homes	Private	4	520	-	NO
MOAD	Private	1	-	300	NO
Suraya	Private	18	1,810	579	NO
Riruta Gardens	Private	1		1,500	NO
TSAVO	Private	5	160	870	NO
Zamara	Private	1	259	-	NO

	Public / Private	Total Projects	Completed units	Ongoing units	Accessed capital markets
LOCAL DEVELOPERS: TOTAL PROJECT SIZE 50 - 100 UNITS					
BANDA	Private	18	77	1,895	NO
Mahiga	Private	12	69	491	NO
Natureville	Private	3	63	500	NO
SACCOS AND HOUSING COOPERATIVES					
NACHU	Private	20	1,456	1,457	NO
Mwalimu National Sacco	Private	1	800	0	NO
Stima Investment Coop	Private	2	416	1,434	NO
Safaricom Inv Coop	Private	6	554	331	NO
Urithi Cooperative	Private	10	622	989	NO
KUSCCO	Private				NO
Amref SACCO	Private				NO
Mhasibu Sacco	Private				NO
Kencom Sacco	Private				NO
Kamuthi Housing Cooperative	Private				NO
Airport Housing Cooperative	Private				NO

Value chain failures for formal housing:

- Long time to deliver and high costs
- Hardly any developer has delivered more than 1,000 units since inception
- Funded primarily by cash deposits – shifts risk onto buyers
- Difficulty exit due to land registry challenges
- Mortgage / Rent x 2
- Anecdotally only 30% of buyers are owner occupiers, with 70% renting their units out – leading to inefficient entry into the rental market
- Limited long term in design and management

Source: Study funded by AfD and Proparco

What about the Kenyan track record in affordable housing?

Value chain blockages undermine affordable housing delivery: all types of private sector struggling to deliver housing

NACHU
Apex Housing Co-op

- Affordable, decent quality but remote
- Delivered 1,500 units in 20 years
- Typical 2 BR starter, Size 20 sqm
- Sale price KES 1.15m (KES 57k p sm)
- Obtained concessional construction + end user finance

Key takeaway:
Challenges in scale and collecting end user instalments. Need to support specialized offtake vehicles.

Mwalimu SACCO
Kisaju Housing

- Remote, large project of 875 units
- Completed 2019, only 20 units occupied as of Feb 2020
- 1 – 4 BR units, Sizes 48 – 130 sqm
- Sale Price: KES 3 – 10m (KES 65kpm)

Key takeaway:
SACCOs struggle to deliver housing projects, better demand segmentation data and project positioning required

Suraya
Fourways Junction

- Suraya delivered an excellent masterplanned mixed typology estate at Fourways which was very affordable upon launch, and has achieved such great capital appreciation that it now competes with Westlands.
- 500 units delivered
- Suraya in distress due to failed JVs and struggle to access infrastructure at large Encasa project

Key Takeaway:
Poorly designed JVS and municipality incapacity undermines developer growth

Greenspan Housing
Estate

- Well located, mixed income, mixed use
- Delivered 700 housing units (mainly mortgage buyers) and shopping mall
- Developer could not recover investment in bulk infrastructure serving neighbouring parcels
- Exited mall to Fahari IREIT
- 3 BR, 90sqm apartments prices started at KES 4m, rose to KES 6.5 million

Key takeaway:
Full project timeframe 10 years. Less than 100 units per year – tie developer incentives to housing affordability, not speed

Karibu Homes
Riverview Development, Athi River

See http://housingfinanceafrica.org/app/uploads/Final-Karibu-Homes-Case-Study-13-web.pdf

- Award winning master planned estate that planned to cross subsidize to ensure affordability. Original business plan was to deliver 1,200 units in five years. After ten years, they have built only 700 units, of which only about 500 units have been sold.
- Lack of transport and water infrastructure undermined delivery and sales.
- Faced serious challenges in balancing the service charge budget as (a) the developer is holding onto units for much longer than expected; (b) occupiers are stretched financially (high transport and other costs); (c) investors buy units that then remain empty; and (d) unforeseen additional costs such as the borehole.

Key takeaway:
Municipal capacity constraints undermined timeframes which then put the project at risk of a changing economic context. Obtaining construction financing was difficult. Household affordability undermined by transport costs given land choice.

Search for Cheapest 2 BR formally delivered apartment is disappointing

ZONE	LOCATION	DEVELOPER	PROJECT NAME	UNIT TYPES	SIZE (SQM)	CASH PRICE	CASH PRICE PSM	MTG PMT CURRENT	RENT	RENT PSM	SERVICE CHARGE	EST YIELD	MTG/ NET RENT CURRENT	MTG PMT KMRC	MTG / NET RENT WITH KMRC
						A	B	C	D	E	F	G	H	J	K
1	Athi River	Karibu	Riverview	2 BR	55	3,560,000	64,727	42,190	18,000	327	3,000	4%	**2.81**	22,645	**1.51**
2	Kitengela	Mwalimu	Kisaju Park	2 BR	56	3,900,000	69,643	46,219	23,000	411	3,000	5%	**2.31**	24,808	**1.24**
3	Ongata R.		Erungu	2 BR	90	4,500,000	50,000	53,330	15,000	167	3,000	2%	**4.44**	28,625	**2.39**
4	Utawala		Evergreen	2 BR	73	3,900,000	53,425	46,219	25,000	342	3,000	5%	**2.10**	24,808	**1.13**
5	Kiambu	Heri	Kitisuru Spur	2 BR	85	6,800,000	80,000	80,588	40,000	471	3,000	5%	**2.18**	43,255	**1.17**
6	Kahawa West	Imani	Imani Court	2 BR	76	6,000,000	78,947	71,107	30,000	395	3,000	4%	**2.63**	38,166	**1.41**
7	Dagoretti	Heri	Kikuyu	2 BR	73	5,500,000	75,342	65,181	30,000	411	3,000	4%	**2.41**	34,986	**1.30**
8	Ruaka	Safaricom	Ruaka Ridge	2 BR	102	7,000,000	68,627	82,958	40,000	392	3,000	5%	**2.24**	44,527	**1.20**
2	Isinya	NACHU	Lenana	2 room starter	20	1,100,000	55,000	13,036	10,000	500	3,000	6%	**1.86**	6,997	**1.00**
3	Kajiado	NACHU	Tausi	2 room starter	20	1,150,000	57,500	13,629	12,000	600	3,000	7%	**1.51**	7,315	**0.81**
	Average						65,321					5%	**2.45**		**1.32**

Current mortgage metrics: 20 year term, 10% deposit, 15% interest rate. KMRC mortgage metrics: 25 year term, 10% deposit, 7% interest rate

KMRC will help to reduce discrepancy between Mortgage / Rental ratios from currently > x2.5 to around > 1.5 due to 50% subsidy in interest rates

- Cannot find a 2 BR delivered in the market, that meets government's offtake offered price of KES 50,000 per sqm
- Poor yields (<5%), high mortgage / rent instalment at >2, which will be brought down by KMRC eligible buyers.

What about the Kenyan track record in affordable housing?

Value chain blockages undermine affordable housing delivery: the public sector also struggles to deliver housing

High Profile AHP Projects

Park Rd: State Land

- High density masterplan: 1,370 units
- 230 units delivered (Almost 3 years after launch).
- Only project delivered under EPC+F (developer provides Engineering, procurement, construction and financing). Anecdotally understand delivered at a loss.
- Ground + 5 without lift – (appears to have market acceptance and hence policy should be changed to allow this).

Key takeaway:

- AHP requirement for private sector to deliver at KES 50,000 psm with own land and financing appears unfeasible.
- Lack of clarity on public sector land contribution framework
- Lack of long term maintenance and management integration into design

Jeevanjee: Nairobi County Land

- 1,800 units launched
    - 70% affordable units: KES 1.5m for 1 BR, KES 2.5 for 2 BR, KES 3.5 m for 3 BR)
    - 30% market units: KES 6.5 m 2BR, KES 8.5 m 3BR
- Unknown developer track record, construction financing risk born by individual buyers

Key takeaway:

- Financed by buyer instalments during construction – undermines affordability
- Affordable units all sold, despite requirement for construction financing instalments
- Key supply gap of units less than KES 3 million,
- Lack of clarity on public sector land contribution framework
- Difficult for private developers to 'cross subsidize' for urban fringe land which is not at premium location

National Housing Corporation Projects

Stoni Athi, for sale

- Less than 16,500 units delivered since inception before independence. Was more active till 1990s, with projects around the country, but then relatively inactive.
- New delivery missing affordability: 400 townhouses in KES 8 – 12 million price range in Athi River

Key takeaway:

- Alternative EPS technology not providing cost savings

Stoni Athi, Rental

- Delivered using Expanded Polysterene Technology
- Bedsitter, 1 BR, 2 BR units rental at KES 9,000 – 16,500/= per month
- Limited competitiveness due to distance from main road

Key takeaway:

- Lack of integration of green space, communal facilities, masterplanning in effort to gain affordability

Reliance on cash instalments for high profile gov projects

Project / Landowner	Unit Type	Unit size sqm	Purchase Price	Price psm	Deposit required	Monthly instalments during construction
Park Road / National Gov	1 BR	30	1,500,000	50,000	12.5% (KES 187K)	Dependent on bank financing
	2 BR	40	2,000,000	50,000	12.5% (KES 250K)	
Pangani / Nbi County Gov	1 BR social	25	1,000,000	40,000	40% (KES 400K)	36 monthly instalments of KES 17K
	2 BR social	50	2,500,000	50,000	40% (KES 1 M)	36 monthly instalments of KES 42K
Jivanji/ Nbi County Gov	1 BR A	30	1,300,000	43,333	10% (KES 130K)	24 monthly instalments of KES 49k
	2 BR A	40	2,500,000	62,500	10% (KES 250K)	24 monthly instalments of KES 94K
River Estate / Private land	2 BR	86	3,500,000	40,698	100% upfront	N/A
	2 BR	86	7,000,000	81,395	20% (KES 1.4M)	24 instalments of KES 235K
Habitat Heights / UN Habitat	Studio A	22	1,980,000	90,000	20% (KES 396K)	6 milestone instalments of 10 - 15%
	1 BR	44	3,400,000	77,273	20% (KES 680K)	6 milestone instalments of 10 - 15%
	2 BR	75	4,800,000	64,000	20% (KES 960K)	6 milestone instalments of 10 - 15%

- Understand Park Rd delivered at a loss despite government land contribution
- Pangani and Jivanji: high deposits and monthly payments
- River Estate: Cash instalment price 2 x 100% cash upfront price
- Habitat Heights: Very high per square meter cost, water availability unclear

fsdafrica fsdafrica INVESTMENTS UKaid from the British people fsd Kenya CAHF Centre for Affordable Housing Finance in Africa

Summarising, what are the key market challenges & failures along the value chain?

Land assembly / acquisition → Title / tenure → Infrastructure → House Construction Extension Renovation → Offtake: Sales & rental → Maintenance & ongoing improvements → Social and economic infrastructure / planning

While **land** is visibly available, and high densities reduces the land cost per housing unit, the underlying rights and encumbrances undermine its accessibility. Government efforts to provide land explicitly for affordable housing may help, but the lack of transparency undermines replicability, and significantly increases risks. The time to realise unencumbered land adds to project cost, undermining affordability.

A working **title system** is critical for a strong housing system. This may explain why Kenya has so few mortgages and such a low ratio of mortgages to GDP. While the titling system doesn't work, it is only the high-end formal developers who are able to secure the rights they need. Lack of tenure security is also a critical to promote investment in better housing conditions for a non-mortgage target market – that is, people living in informal settlements. This is a highly contested and political space.

Dependence on municipal delivery of **infrastructure** delays projects, or pushes developers to find their own approaches, both of which increase costs for the end-user and makes entry level, developer-driven housing unaffordable for the majority. Developers can only access finance after infrastructure approvals are in place, therefore, long approval durations hurt development feasibility.

Construction

Kenya's developer sector is poorly structured to meet the extent of the AHP goals. Skills gaps create housing quality issues that become relevant in the maintenance value chain link. Developer-driven housing barely reaches the poor. There is a need to recognise the incremental housing delivery activity of households, and to provide support that improves the efficiency and adequacy of this delivery approach.

Important efforts have been made to improve the regulatory framework and incentivize affordable housing delivery. Municipal incapacity to deliver the required approvals timeously is a serious constraint, and key risk in the process.

An under-developed construction finance sector has a narrow understanding of the "developer" and provides limited options to accommodate the diversity of housing suppliers. Key distinctions between 'large' and 'small' developers suggest different financing requirements. Consumers bear the brunt of the risk as they have no recourse when a cash-financed developer fails.

Offtake: Kenya has a surprisingly low mortgage to GDP ratio, given the relative sophistication of its housing delivery sector. Growing the mortgage market is a key strategy of the AHP and its KMRC, but this will require serious supply side interventions to create housing that is truly affordable to the market. At the same time, lenders need to engage with unconventional buyers – the majority of the Kenyan market – and explore new product options and underwriting & servicing approaches. A huge gap is the rental sector: while more people rent than own, a rental "sector" doesn't exist.

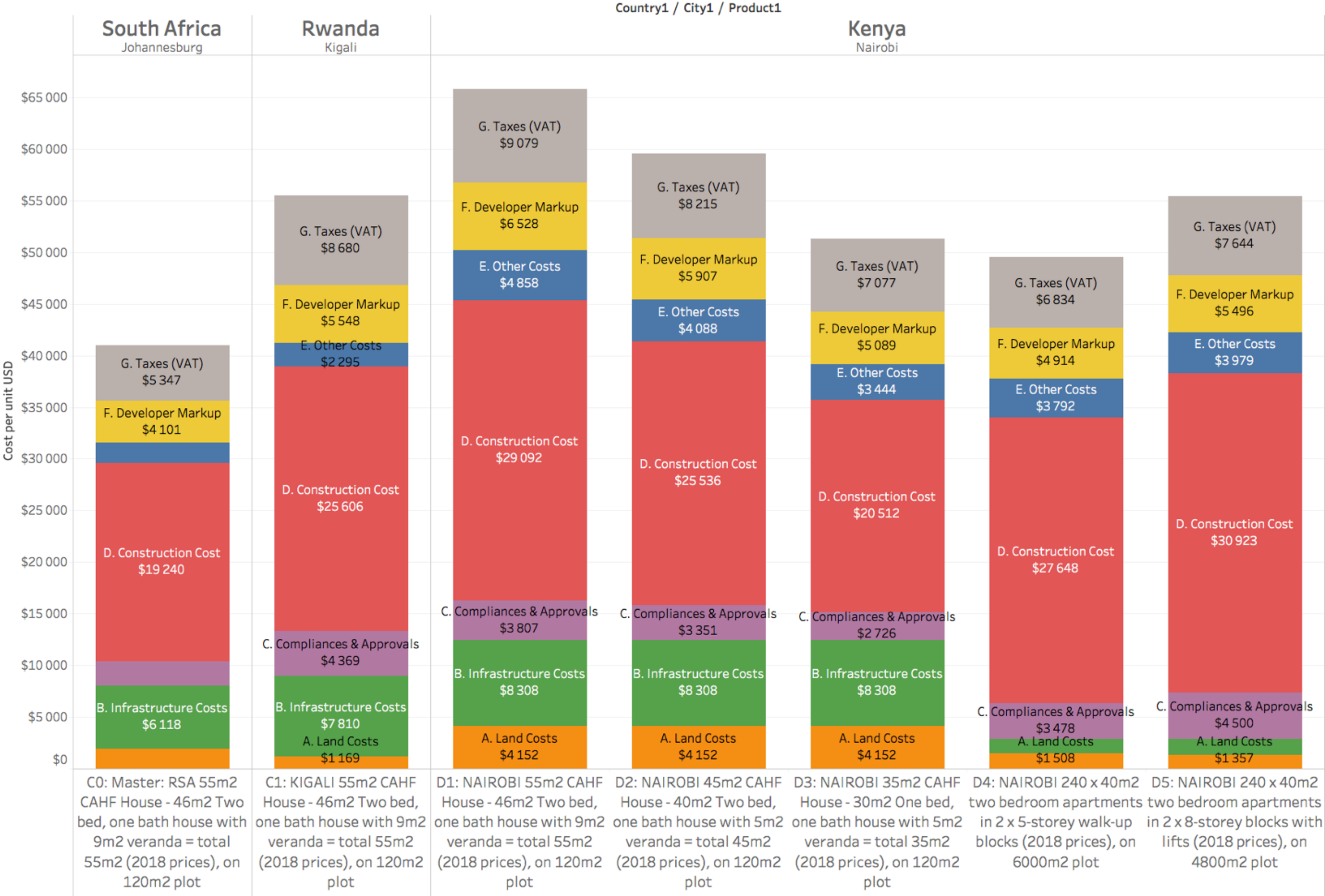
Kenya's housing sector gives very little attention to **maintenance/management**, and as a result units often fall into disrepair. While this creates a mortgage risks, it also creates downstream costs for buyers and landlords, and also for tenants. Poor maintenance and management capacity is also a serious constraint to investment in the delivery of rental accommodation.

Planning: A key constraint to sustainable human settlements and urban environments is the inability of county governments to realise property taxation effectively. This undermines county budgets and infrastructure investment capacity, which undermines the investability of areas and therefore access to capital.

Key takeaways:

-Kenya costs for standard 55sqm bungalow highest in Kenya due to higher land, infrastructure, taxes and other cost. Developer Mark up is commensurate.

- In Kenya typology D4 (2 BR walk up apartment) most cost effective, even compared to D5 (2 bedroom apartment with lift, due to high structural and mechanical costs of going higher up)



Source of Information: CAHF Housing Cost Benchmarking for Kenya, South Africa and Rwanda (2018)

2. Understanding Keny

from the British people

Different developers have different capacities and constraints – this offers clues on bridging the gap

Description	Factor	KSH per m^2	Explanation
Base construction cost for small developers		KSH 20,000	Input resulting in average sale price per m2 of KSH 35,000
Structure	25%	KSH 25,000	Additional steel, etc., for building high rise versus single storey
Labour	5%	KSH 26,250	Pay all regulatory dues on labour (NSSF, NHIF, PAYE)
Margin	20%	KSH 31,500	Add profit margin for contractor
		KSH 31,500	**Resulting cost per buildable m^2 from contractor to large developer**
Area adjustment	15%	KSH 36,225	Circulation space of apartments (corridors, staircases) is an additional cost factored onto sellable space
VAT	16%	KSH 42,021	16% VAT is an additional tax on final contractor price
Corresponding construction cost for Large Developers		**KSH 42,021**	**Input resulting average sale price per m^2 of KSH 65,000**

INFORMAL / SMALL SCALE

Strengths:
Lower cost base
Lower opportunity cost of capital
Constraints
Lack of capital to pursue larger projects

Opportunities
Positioning larger projects
Promoting compliance, green features, innovations, communities, resilience

FORMAL / LARGE SCALE

Strengths:
Higher compliance (infrastructure, taxation, employment, building code)
Constraints
Higher opportunity cost of capital

Opportunities
More quickly develop product suitable for capital markets
Share designs and delivery costing
Share management and legal frameworks and costings

'Small developers' struggle to gain scale due to lack of funding and governance, and may not incur full costs of delivery. Also prone to developer failure due to lack of governance. Consumers suffer the risks. See Banda Homes fights fraud claims

Important to consider value of single storey solutions due to lower construction costs, smaller phasing and high capital efficiency.

See Shah, S (2019) Case Study 16 - Construction Financing in Africa's Affordable Housing Sectors: Testing the Assumptions in Kenya's Affordable Housing Programme. http://housingfinanceafrica.org/documents/case-study-16-construction-financing-in-africas-affordable-housing-sectors-testing-the-assumptions-in-kenyas-affordable-housing-program/

Government's Affordable Housing Program AHP

Comprehensive approach, but with limited success to date, especially for lower value sub-markets

Finance Pillar 1: National Housing Development Fund

SOURCES
Mandatory tax on formally employed sector

USES
Guaranteed offtake to private developers and then allow deeply subsidized Tenant Purchase to 'affordable segment'

STATUS
Voluntary contributions only. Mandatory contributions legally challenged

Financing of high profile projects still by instalment cash buyers, undermining affordability

Enabler 1: Integrated Project Delivery Unit

STRUCTURE
Single point of regulatory approval for developments, approval for infrastructure provision, developer incentives etc

STATUS
Pending operationalization, selected consulting team led by Atkins to assist

Finance Pillar 2: Kenya Mortgage Refinance Corp

SOURCES
Sovereign loans from WB, AfDB, currency hedge from GoK, shareholder equity from IFC, Shelter Afrique and local banks and SACCOs

USES
Liquidity to Primary Mortgage Providers (Banks and SACCOs)

STATUS
KMRC launched in Q4, 2020. Provides subsidized interest rates at 7% to homebuyer for houses worth less than KES 4m, and HH earning less than KES 150k a month

Enabler 2: Boma Yangu Platform

STRUCTURE
An online market place connecting supply and demand

www.bomayangu.go.ke

STATUS
300,000 registered users but unclear who the users are and their financial strength

Government's Affordable Housing Program AHP

AHP expected to unlock value chain failures but limited success to date:

	LAND	INFRASTRUCTURE / CONSTRUCTION	FINANCING	OFFTAKE	DEVELOPER INCENTIVES
EXPECTATION AT LAUNCH: 2017	LAND: Public land contributed to JV, private land encouraged to participate via guaranteed offtake	INFRASTRUCTURE / CONSTRUCTION: • Bulk infrastructure promised to developers • Alternative building technologies (ABT) expected to reduce delivery costs	FINANCING • Expected banks would provide affordable construction financing due to guaranteed offtake	OFFTAKE Expected guaranteed offtake via NHDF and long term subsidized Tenant Purchase Schemes at 3%, 5% and 7%	DEVELOPER INCENTIVES Promised to 100+unit developments (e.g. lower corporate tax, VAT, import duties
STATUS: SEPT 2020	Public land registry complete, some JVs complete. Lack of transparency undermines replicability. Private land participation hindered by un-feasible offtake price	• Infrastructure provision by government, or structures to encourage PPPs pending • ABT cost savings appear limited	• Funded largely by individual buyers through typical instalment financing during construction – limited consumer protection and undermines affordability	OFFTAKE Directly to individual buyers with their deposit via Boma Yangu and mortgage (with KMRC)	DEVELOPER INCENTIVES In reality, appear very difficult to obtain.

KEY TAKEAWAY: THERE IS NO SILVER BULLET

Just as securitization is not silver bullet for offtake financing, and blockchain is not a silver bullet for title registries. The hard work needs to be done to honestly acknowledge market realities and bring private and public sector resources in most effective way.

Considerations towards an affordable housing strategy for the FSD Network in Kenya

1. The Kenyan Housing Landscape offers opportunities & challenges

a. Significant market positives: Kenya has ALL the necessary value chain components to unlock the delivery of affordable housing
   - Priority Government Program
   - Availability of land, building materials, innovative technologies, developer experience
   - Deep capital markets and well defined regulatory environment

b. However, Kenya's affordable housing programme is largely focused on owner occupation, overlooking the importance of rental options.
   - More than 80% of urban Kenya rents, yet renting conditions are poor and no support for rental within the government's AHP program
   - Discrepancy between formal and quasi / informal rental markets, where neither supply chain is suitable for institutional rental
     - Formal rental is average - good quality but poor yields of 4-5%
     - Quasi / Informal rental is average – poor quality and high yields of 9-12%
   - Rental tenure is logical 'starting platform' which can lead to 'tenant purchase' and 'mortgage' offtake. Can begin to build financial credibility of occupier during tenancy phase. Rental tenure can provide tested cashflows for exits to institutional capital. Influx of local currency capital into housing is an important goal for long term sustainable financing

c. Housing deficits point to value chain blockages which can be overcome with properly designed financial products on both demand and supply side, and the necessary regulatory support
   - Alternative Credit Tools and Financial Products can broaden access to housing finance for low-income households and those working in the informal sector
   - Pre-title lending, incremental, rental, tenant purchase schemes, microfinance products provide opportunities for addressing "finance moments" along the value chain
   - Entrepreneurial activities by small scale landlords suggest the opportunity for new products – hybrid SME / housing lending products and methodologies

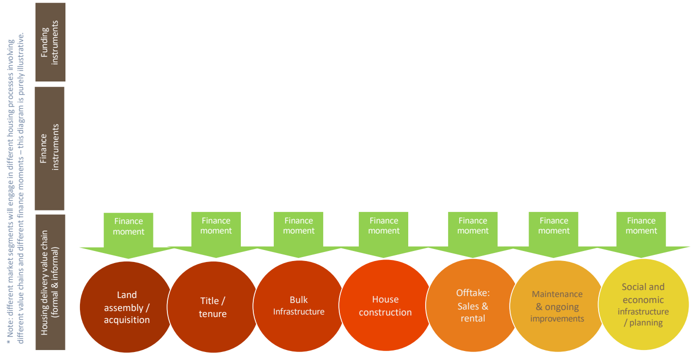
d. Finance can also influence the performance of the affordable housing sector in other ways:
   - Raising the bar on housing quality : mindful of 'lifecycle' costs, incentive to invest in green features, tested cashflows support exit to local institutional capital
   - Promoting demand side affordability: better quality housing available more affordably, lower upfront legal costs, logical 'starting platform' which can lead to 'tenant purchase' and 'mortgage' offtake OR demand building financial credibility for financial intermediation in other sectors (e.g. education, SMSE etc)
   - Encouraging municipal attention to delivery blockages and delays, with the promise for scale delivery

2. DFIs have already invested in affordable housing across Africa, but with limited success.

Pan African Housing Fund - Phatisa	AfDB investment in Kenya Police Housing	IFC CITICC Partnership	Shelter Afrique	Reall
• $42m fund closed in 2014 • Delivered only 1,000 of expected 3,500 units in Kenya, Zambia and Rwanda	• Invested in police housing with great challenges • Decided not to invest in supply again! • Heavily promoting KMRC including a Partial Credit Guarantee, as feel this is a safer route to assisting housing delivery	• IFC launched a $300 m equity fund in 2015 with goal of delivering 30,000 units in partnership with CITICC across Africa. The expectation was that CITICC would work with local developers and build Africa's developer capacity. • Housing units delivered: Nil.	• 2019 delivery: 3,800 houses across Africa (likely to be cumulative delivery over some years)	• REALL's targeted efforts to empower delivery for bottom 40% have failed to scale in Africa compared to Asia. • In Kenya, REALL partners (e.g. NACHU) delivered 1,971 homes to 2019. • In Nigeria, REALL partner delivered 212 homes to 2019 including Africa's cheapest house, the Millard Fuller House, but struggling with scale. Offtake for Phase 1 was to Family Homes Fund, but units still unoccupied.
Key takeaway: Institutional capital requires stronger developers AND local fund managers / TA Kenya strongest market of 3 geographies	**Key takeaway:** Need local market intelligence to deliver intended results	**Key takeaway:** Misalignment of incentives and risk/reward sharing that led to lack of delivery under the partnership.	**Key takeaway:** Need to build lending capacity and credible developers in the formal sector	**Key takeaway:** • Need offtake options for delivery (subsidized KMRC will help) • Market transparency on what formal market can deliver for owner occupation to bottom 40% in desired locations.

3. Interventions cannot simply focus on delivery – they must be market making..

A value chain approach that explicitly considers the intersection of the housing delivery chain and the housing financing chain. Interventions cannot be limited to housing construction, and should maximise the strengths of the FSD Network, with an explicit focus on financial sector development.



Engaging with the four key Kenyan sub-markets:

Incremental
Rural
Peri-urban
Ownership

informal settlen
Urban
Primarily rental

Small landlord
Urban
Rental

Formal
Urban
Rental (70%)
Own (30%)

Leveraging lessons for the wider sector in Kenya

- Replicability of investments
- Transferring innovations across sub-markets, from formal to small landlord; from incremental to informal settlements
- Market transparency
- Active collaboration with other DFIs & investors
- Cross-over products, finding the housing application of SME lending, approaching housing as a commercial good

4. The market data gap constrains investment and increases risk of project failure

Chronic lack of data to prepare project plans and to understand and price for risk

- Full housing cost usually not covered in feasibility
- Karibu Homes took three years of research and preparation
- KMRC was first Conceptualized in 2009, launching in 2020
- Numerous examples of unaffordable 'ghost cities'
- Government policy targets price range unachievable by developers
- Hidden subsidy for middle income products not disclosed

\+

Characteristics of the Kenyan market leaves little cushion for weak data

- Fragile demand, customers highly price sensitive
- Low sales velocities tie-up capital and prevent future investment
- Low margins, high costs of construction
- Fledgling developers, need to grow in experience and balance sheet to access large funding pools available
- Currency fluctuations increase delivery cost
- High non-performing loans within mortgage market

5. Not all developers are the same – there are real opportunities to be found in working with the spectrum because they have different capacities and focus on different sub-markets

FORMAL / LARGE SCALE

Strengths:
Higher compliance (infrastructure, taxation, employment, building code)
Constraints
Higher opportunity cost of capital

Opportunities
More quickly develop product suitable for capital markets
Share designs and delivery costing
Share management and legal frameworks and costings
Grow scale from <100 units / year to 1000+ units per year

Push formal /large suppliers further down market / encourage market development tools

By investing in / engaging with *both* sectors, you gain knowledge on actual realities, empower best practice sharing and transform market – and can promote cross-learning in the immediate term. FSD Network aims to leverage and catalyze other funders and players to enable them to reach their own market objectives, and acts as a bridge between the formal and informal segments.

Drive up compliance and standards by informal / quasi/small suppliers

INFORMAL / SMALL SCALE

Strengths:
Lower cost base
Lower opportunity cost of capital
Constraints
Lack of capital to pursue larger projects

Opportunities
Positioning larger projects
Promoting compliance, green features, innovations, communities, resilience
Increase capacity to shift delivery rate from 20-100 units over several years to that many per annum

6. Siloed, competitive thinking persists among all stakeholders. DFIs can use the force of their capital and capacity, to influence sharing and collaboration

Sector	Institution
Government	CBK, Ministry of Transport Infrastructure Housing Urban Development and Public Works plus consultants (e.g. Consortium to help deliver IPDU), particular County Gov
Global Multilateral	World Bank, IFC, UN Habitat
Pan African Multilateral	African Development Bank, Shelter Afrique, (East African Development Bank)
NGOs	Habitat for Humanity, REALL, (Slum Dwellers International), (Akiba Mashinani Trust), (Comic Relief)
DFIs	British Funded: FSD Network, DFID, CDC, SUED, Guarantco, Infraco European funded: AfD / Proparco, EU, EIB, SIDA, KfW US Funded: USDFC, USAID. Other: Cities Alliance
KMRC and key or all shareholders	KCB Group , Coop Bank , HF Group , Absa Kenya, KWFT, NCBA , Stanbic, DTB , Credit Bank, Stima, Safaricom, Kenya Police, Mwalimu, Ukulima, Bingwa, Imarisha, Unaitas, Imarika, Tower,Harambee
Industry / Research	CAHF, KPDA, KEPSA, KBA, KAM

There is an opportunity for the network to convene a working group of housing and finance sector players in Kenya

For illustration purposes, a (very) rough calculation:

Existing deficit		2 000 000 housing units
Annual requirement over 20 years	+	7 000 000 housing units (350 000 units pa)
Total housing need over 20 years	=	**9 000 000 housing units**

Assume average house cost:	KES 500 000	or	KES 1 000 000
Total investment required	KES 4 500 000 000 000		KES 9 000 000 000 000
	USD 45 000 000 000		**USD 90 000 000 000**

Kenya needs a (minimum) $45 billion - $90 billion investment in housing over the next 20 years to realise its goals for adequate housing. This is beyond the capacity of any single investor / player, or group of investors or players. Collaboration is critical.

Articulating potential interventions for Kenya

Centre for Affordable Housing Finance in Africa

A 4-pillar approach for affordable housing in Kenya

1. Coordinated and evidence-based investment decision-making

TRANSPARENCY ON MARKET REALITIES ALLOW PROGRESSIVE RISK MITIGATION

- Market need is too great: IP is in implementation, not in the knowledge
- Clarity on demand affordability ('full housing cost'), and preferences
- Clarity on delivery costs and reduction strategies across different typologies
- Collaboration in financial structuring tools sharing expected and actual risks, hidden subsidies, impact on affordability
- Build information infrastructure based on own experiences to reduce barriers to entry for other players
- Transaction Support to other sources of finance, providing comfort with actual FSD investment, standardized monitoring & evaluation

Success: Open Source enables progressive risk taking and mitigation, and crowds in local and international funding

2. Viable down market focus (Demand Side)

Demand side focus ADDRESSES KEY RISK POINTS TO ENABLE LOWER-DOWN MARKET FOCUS

- Promote affordable AND adequate shelter with access to basic utilities of water, sanitation, power
- Financial product innovation and de-risking to target lower market segments (alternative credit Scoring Tools, incremental construction, rental finance, equitable tenant purchase schemes, incentives for first time home buyers)

Success: Lower housing & infrastructure spend as a % of total income, better quality shelter for better health and educational outcomes, ability to leverage housing as a household economic asset

3. Effective delivery (Supply Side)

INVESTMENT INTO CONTINUUM

- Open to interventions along continuum between 'formal/large' and 'informal/small'
- Experimentation, demonstration, scalable
- Promote green technologies / life cycle evaluation of HOUSING and INFRASTRUCTURE
- Raise industry bar for building quality and building life
- Mixed income, mixed use masterplans

Success: reduce delivery cost, increase green elements and durability, raise industry bar , kickstart economy with jobs and construction value chain multiplier

4. Functioning Local Ecosystem

STRENGTHEN ENABLING FRAMEWORK

- Efficient land registries, regulatory and judicial processes
- Digital platforms for land & title, infrastructure, smart construction, offtake, maintenance
- Effective 'one voice' lobby for aligned private and public sector investment into affordable housing
- Reduce delivery time and hurdles
- Umbrella approvals
- Lobby regulations for more affordable definitions (KES 3.5m too expensive for average Kenyan)

Success: Efficient regulatory framework that actively draws in investment into housing

Keywords: market-based, pro-poor, job creation, green, sustainable, scalable, leverage, replicability

Summarising, what are the potential opportunities along the value chain?

Land assembly / acquisition | Title / tenure | Infrastructure | House construction / Extension/ Renovation | Offtake: Sales & rental | Maintenance & ongoing improvements | Social and economic infrastructure / planning

Land assembly is substantially dependent on local government capacity, as well as easy regulatory frameworks that reduce transaction costs. There is no broad market-enabling intervention in this regard, and lack of transparency makes the space politically fraught. FSD could provide important support in assisting government to understand how *land markets* might be better leveraged to support affordable housing delivery. FSD investments / engagement must ensure that land assembly is explicitly addressed in the deal. This is a key risk to any investment.

Efficient and effective **land titling** is critical to functioning housing finance markets, as well as to tenure security and access to housing. While there are various interventions underway, they are project based and stratified by sub-market. FSD could offer important leadership in creating an investment-friendly land tenure framework in Kenya, especially drawing on its digital finance expertise. Until that exists, FSD investments / engagement must ensure that title is addressed by other partners in the deal. This is a key risk to any investment.

Blended and well risk managed sources of **construction** finance that respond to borrower capacity are key to unlocking housing delivery. The FSD Network can usefully support product innovation and better market targeting. Promoting access to incentives so that developers can deliver profitably is key and FSD can provide technical assistance in defining these metrics. Aiming to reduce construction costs by 30% is a realistic medium term goal with comprehensive support.

While municipal **infrastructure** capacity is a key constraint to housing delivery, there is an opportunity to pursue off-grid solutions at a project and household level, satisfying life cycle and green requirements. At the same time, municipal infrastructure capacity constraints would also benefit from financing that accommodates / engages with their limitations – this is an important space for innovation. Any FSD investments or engagement must ensure that infrastructure availability is ensured in the deal, or must price for it in the feasibility. This is a key risk to any investment.

Maintenance is a grossly overlooked link in the value chain and an area in which the network could shift market practice significantly. A key challenge is raising the bar for what is understood as 'acceptable' – something the network could address through its own investments. Integrating long term management principles into design , funding and legal constitutions is key for buildings / building systems to enjoy their full life span, and a key factor in lender and investor risk assessment. This requires investment in technology platforms and personnel. A focus on long term maintenance and management of a building also allows for the incorporation of green principles at the design stage.

Offtake: On the rental side, there is a huge opportunity to make Kenya's existing rental market function more effectively, with better quality housing for lower income people. This will require multiple interventions – but it lends itself well to one or more pilot interventions which can generate lessons for wider sharing. Access to housing finance, and the linking of that finance to the housing delivery process (whether developer-built / mortgage or incremental / non-mortgage) also requires important attention with an explicit pro-poor focus.

Planning: The growth and development of Kenya's property market, particularly in Nairobi, presents an important revenue-earning opportunity for the county government through the property taxation framework. Many cities across Africa struggle with this aspect of municipal management, particularly in linking it with the financial system. A key opportunity is to provide technical assistance to the county government in rating and then taxing property. This would link well with the provision of technical assistance around land value capture and the development of a municipal bond to fund infrastructure for residential property.

What are the opportunities to begin market transformation and then scale?

Four specific sub-markets operate across rural, per-urban and urban Kenya

Incremental: rural / peri-urban

- Create demand side financial products (to enable faster delivery) to individual homeowners
- Link HMF loans to delivery platform that articulates quality & sources skills (i.e. iBUILD)
- Evaluate and demonstrate pilot development of 25 units using Alternative Building Technologies, to 1) establish delivery standards, 2) promote value chain linkages for supply of materials and skills 3) demonstrate creation of communities with enhanced infrastructure 4) provide scale-able model which can be replicated esp. in small towns.
- Explore financing of off-grid green infrastructure
- Multiple microfinance lenders, SACCOs and banks could offer an HMF product if they could see a clearer value-chain
- Promoting good rental options around small towns, and support worker rental (e.g. flower farms, tea farms etc), offers a new HMF product opportunity.
- Syndicated investment fund

Opportunities for scale

- Multiple microfinance lenders, SACCOs and banks could offer an HMF product if they could see a clearer value-chain
- Promoting good rental options around small towns, and support worker rental (e.g. flower farms, tea farms etc), offers a new HMF product opportunity.

Informal settlements: urban

- Evaluate and demonstrate 25 unit pilot using Alternative Building Technologies (for same reasons as above)
- Consider affordable single storey technologies as a 'medium term potential' while feasible high density technologies are developed
- Create supply side financial products to enable delivery of better housing for rental (at rental rates affordable to existing population taking into account all savings from better housing – e.g. do not lose assets to fire etc)
- Syndicated investment fund

Opportunities for scale

- Promoting good rental options on private land with defined land rights, while land tenure issues are regularized on public land
- Attract impact capital to scale

Small landlord: urban

- Supply side financing and TA to enable higher compliance to infrastructure (ongrid and offgrid options), integration with long term building resilience and better community infrastructure, transparent JV structures and land amalgamation TA
- Off-grid infrastructure
- Possible more easily with learnings from formal housing
- Syndicated investment fund

Opportunities for scale

- Syndicated finance vehicle with local banks and impact investors to provide longer terms
- *(demand stepping ladder – can prove credibility)*

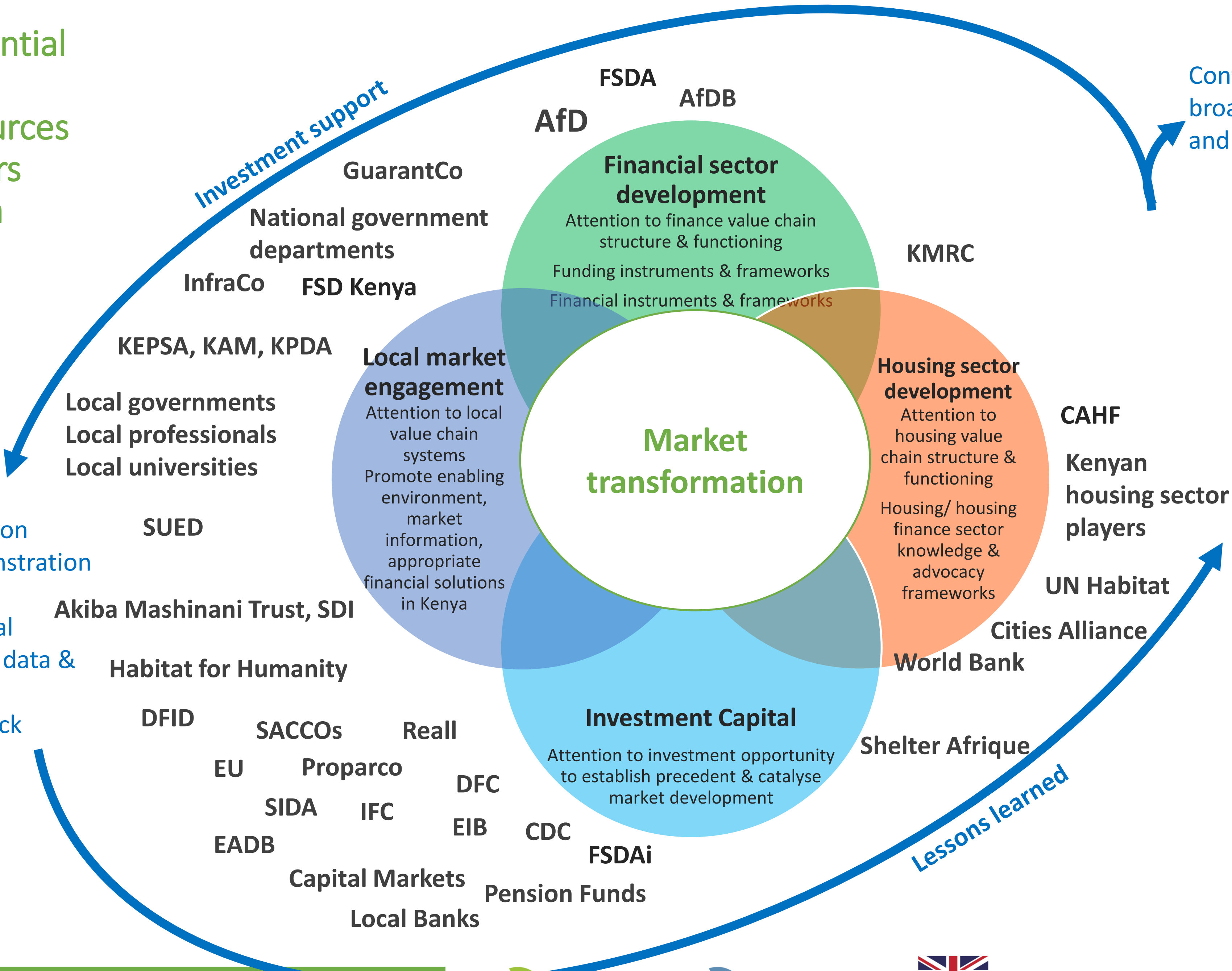
Formal: urban

- Invest in formal supply chain (preferably via institutional offtaker) to drive demand affordability up through economies of scale, better positioning, emphasis on long term management, integration of resilient greener building technologies, promoting one stop shop, raising supply industry bar – harness all learnings to share with open market
- Alternative Credit Scoring tools &TA for financial products for informal sector demand side
- Syndicated investment fund

Opportunities for scale

- Exist offtake to a REIT, link in local capital markets
- Syndicated finance vehicle, draw in funds from CDC, Proparco, EIB PLUS local banks

Use the full potential of the available capital and resources of all stakeholders working in Kenya



- Local intervention
- Creating demonstration & precedent
- Drawing on local networks, local data & experience
- Establishing track records

Contribution to the long view, broader market enablement and sector development

- Local intervention experience provides lessons & detailed approaches to inform further practice in Kenya and elsewhere: explicit focus on the detail – successes and challenges
- Value chain attention on stimulating the enabling environment
- DFI, regional, international networks
- Comparative data & experience

Assembling an Affordable Housing Working Group for Kenya

The FSD Network strategy has been influenced by the parallel activities of many parties, including the government's explicit focus on affordable housing, the research commissioned by AfD Proparco (which was presented to the wider DFI community in June 2020), and input from interviews held with a wide array of stakeholders from the public, private and DFI sectors.

A key takeaway from these stakeholder interactions was a willingness to collectively use the force of our capacity and capital to work together to overcome failures identified in the affordable housing value chain. Given this, FSD Kenya would like to invite you to join in the formation of an Affordable Housing Working Group for Kenya.

The purpose of this working group will be defined by its participants – but broadly, the vision is for participants to share their experiences and challenges, find points of synergy and consensus, and build a platform for better policy and investment.