FSD Kenya

Affordable Housing Program

May 2022 Update
Presentation Overview

FSD Kenya Overview Page 3
FSD Kenya’s Affordable Housing Program Page 4
Background Research and Strategy Page 5
FSD Kenya ongoing interventions Page 6
Electronic Land Information Management System with Makueni County Page 7 - 8
Base maps with aerial imagery Page 9 - 10
Housing Dashboard with KNBS Page 11 - 12
Stakeholder Engagement, Policy and Regulatory Support, Open Access Page 13 - 15
Policy and Regulatory support Page 17-18
Microinsurance Page 19-20
Last mile sanitation fund Page 20-21
Incremental housing and WASH in rural areas Page 22-23
Jenga Green Library Page 24-25
Greening delivery of housing units Page 26-27
FSD Kenya Overview

The Financial Sector Deeping Kenya (FSD Kenya) is an independent trust dedicated to the achievement of an inclusive finance system that supports Kenya’s long-term development goals. The 2022 – 2026 Strategy promotes a financial system that increasingly delivers value for a green & inclusive digital economy while improving financial health & capability for women & micro and small enterprises (MSEs).
FSD Kenya’s Affordable Housing Program

FSD launched an Affordable Housing Program with funding from UKAid (FCDO), in collaboration with its sister organisations, FSD Africa and FSDAi. Housing is recognized as an asset with real and diverse investment potential and profound impact on 14 SDGs.

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

- Economic growth & job creation
- Social asset
- Sustainable human settlements
- Financial asset
- Economic (income-earning) asset

As developed by CAHF. See http://housingfinanceafrica.org/documents/an-analytical-framework-for-understanding-housing-markets/
The Network undertook significant background research to define its strategy which is available online at fsdkenya.org and was undertaken in conjunction with Centre for Affordable Housing Finance. The value chains failures and opportunities in 4 distinct sub-markets were evaluated.

### Sub-market:

- **Incremental:**
  - Rural
  - Peri-urban

- **Informal Settlements:**
  - Urban

- **Small landlord:**
  - Urban

- **Formal:**
  - Urban

### Key features:

- **Incremental:**
  - Estimated size: 9 million households
  - Typical HH Income range: KShs 50,000/month
  - Typical tenure: Ownership

- **Informal Settlements:**
  - Estimated size: 1.6 million households
  - Typical HH Income range: <KShs 30,000/month
  - Typical tenure: rental, absentee landlordism

- **Small landlord:**
  - Estimated size: 1.1 million HH
  - Typical Income range: KShs 30,000 - 75,000
  - Typical tenure: Rental

- **Formal:**
  - Estimated size: 360,000 households
  - Typical Income range: >KShs 75,000
  - Typical tenure: Owner (30%), Rental (70% - and enters rental pool inefficiently)

### Key failures which limit access to finance and undermine sub-market performance:

- **Incremental:**
  - Poor quality, long time to deliver
  - Poor, disjointed, supply value chains
  - Poor land title rights for securitization

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

- **Small landlord:**
  - Lack of scale, limited amenities
  - Variable compliance
  - Pressures on municipality infrastructure

- **Formal:**
  - Long time to deliver and high costs
  - Difficulty exit due to land registry challenges
  - Mortgage / Rent x 2
  - Limited long term in design and management

---

**Background Research and Strategy**

The Network undertook significant background research to define its strategy which is available online at fsdkenya.org and was undertaken in conjunction with Centre for Affordable Housing Finance. The value chains failures and opportunities in 4 distinct sub-markets were evaluated.

**Key features:**

- **Incremental:**
  - Estimated size: 9 million households
  - Typical HH Income range: KShs 50,000/month
  - Typical tenure: Ownership

- **Informal Settlements:**
  - Estimated size: 1.6 million households
  - Typical HH Income range: <KShs 30,000/month
  - Typical tenure: rental, absentee landlordism

- **Small landlord:**
  - Estimated size: 1.1 million HH
  - Typical Income range: KShs 30,000 - 75,000
  - Typical tenure: Rental

- **Formal:**
  - Estimated size: 360,000 households
  - Typical Income range: >KShs 75,000
  - Typical tenure: Owner (30%), Rental (70% - and enters rental pool inefficiently)

---

**Background Research and Strategy**

The Network undertook significant background research to define its strategy which is available online at fsdkenya.org and was undertaken in conjunction with Centre for Affordable Housing Finance. The value chains failures and opportunities in 4 distinct sub-markets were evaluated.

**Key features:**

- **Incremental:**
  - Estimated size: 9 million households
  - Typical HH Income range: KShs 50,000/month
  - Typical tenure: Ownership

- **Informal Settlements:**
  - Estimated size: 1.6 million households
  - Typical HH Income range: <KShs 30,000/month
  - Typical tenure: rental, absentee landlordism

- **Small landlord:**
  - Estimated size: 1.1 million HH
  - Typical Income range: KShs 30,000 - 75,000
  - Typical tenure: Rental

- **Formal:**
  - Estimated size: 360,000 households
  - Typical Income range: >KShs 75,000
  - Typical tenure: Owner (30%), Rental (70% - and enters rental pool inefficiently)

---

**Background Research and Strategy**

The Network undertook significant background research to define its strategy which is available online at fsdkenya.org and was undertaken in conjunction with Centre for Affordable Housing Finance. The value chains failures and opportunities in 4 distinct sub-markets were evaluated.

**Key features:**

- **Incremental:**
  - Estimated size: 9 million households
  - Typical HH Income range: KShs 50,000/month
  - Typical tenure: Ownership

- **Informal Settlements:**
  - Estimated size: 1.6 million households
  - Typical HH Income range: <KShs 30,000/month
  - Typical tenure: rental, absentee landlordism

- **Small landlord:**
  - Estimated size: 1.1 million HH
  - Typical Income range: KShs 30,000 - 75,000
  - Typical tenure: Rental

- **Formal:**
  - Estimated size: 360,000 households
  - Typical Income range: >KShs 75,000
  - Typical tenure: Owner (30%), Rental (70% - and enters rental pool inefficiently)

---

**Background Research and Strategy**

The Network undertook significant background research to define its strategy which is available online at fsdkenya.org and was undertaken in conjunction with Centre for Affordable Housing Finance. The value chains failures and opportunities in 4 distinct sub-markets were evaluated.

**Key features:**

- **Incremental:**
  - Estimated size: 9 million households
  - Typical HH Income range: KShs 50,000/month
  - Typical tenure: Ownership

- **Informal Settlements:**
  - Estimated size: 1.6 million households
  - Typical HH Income range: <KShs 30,000/month
  - Typical tenure: rental, absentee landlordism

- **Small landlord:**
  - Estimated size: 1.1 million HH
  - Typical Income range: KShs 30,000 - 75,000
  - Typical tenure: Rental

- **Formal:**
  - Estimated size: 360,000 households
  - Typical Income range: >KShs 75,000
  - Typical tenure: Owner (30%), Rental (70% - and enters rental pool inefficiently)
## FSD Kenya ongoing interventions

### Building an Enabling Ecosystem

| 1a, 1b | Makueni LIMS |
| 2a, 2b, 2c | Base Mapping with aerial imagery |
| 3a, 3b | KNBS Data Dashboard |
| 9a, 9b | Policy and Regulatory engagement |
| 10a, 10b | Stakeholder Engagement and Open Access |

### Financial Products for Rental and Owner occupation

| 4a, 4b | Microinsurance |
| 5a, 5b | Last mile sanitation |
| 6a, 6b | Incremental housing and WASH |

### Climate Smart Resilient Housing

| 7a, 7b | Jenga Green library |
| 8a, 8b | Greening delivery of housing units |
1a. Electronic Land Information Management System (LIMS) with Makueni County

- **Objective:** Assist County government to effectively manage land resources

- **Process:** Move from outdated and manual systems to electronic systems, Aggregate land records data in a central repository using GIS technology

- **Partners:** Makueni County, Oakar Services Ltd (service provider)

- **Timeframe:** October 2021 – June 2022 with 1 year technical service contract
1b. Electronic Land Information Management System
Makueni County

**ADMIN PORTAL – LANDING PAGE**

The admin portal landing page shows parcels for Wote, Nunguni and Kikima Markets

- **Impact:** Enhance county revenue collection (rates, water, licence fees), collect gender disaggregated data, support sustainable urban planning

- **Potential for scale:** Aim to link with National LIMS for parallel management of land registration data
2a. Base maps with aerial imagery

- **Objective**: Provide topographic data that will inform planning of the central business district, improve management of the town using aerial imagery and geographic information system (GIS)

- **Process**: Establish Ground Control Points, and overlay with aerial imagery and digital elevation models to obtain GIS based vector data. Areas covered:
  - Laikipia County Nanyuki town 60 km²
  - Makueni county (Wote, Emali, Sultan Hamud & Makindu) totalling 77 km²

- **Partners**: Laikipia County, Makueni County, Ramani Geosystems (Service provider)

- **Timeframe**: 3 months each, completed December 2021
2b. Base maps with aerial imagery

- **Impact:**
  - County asset management
  - Transport & infrastructure
  - Spatial planning
  - Revenue collection & identification
  - Street addressing
  - Property valuation for tax purposes
  - Agricultural management
  - Disaster management

- **Potential for Scale:**
  - Other county towns
3a. Housing Dashboard with KNBS

- **Objective**: Create a central depository for housing data. Combining data from multiple sources in a reliable and uniform manner allows you to combine data points, enabling meaningful analysis and ability to disseminate widely.

- **Process**: Create a Data Pipeline to process and streamline data already collected in the sector; move from manual systems that are prone to error to traceable data to its source to validate legitimacy, capacity building, open source software for financial sustainability.

- **Partners**: KNBS, Reall, CAHF, 71point4

- **Timeframe**: November 2021 – June 2022

- **Impact**: Data driven policy influence and investment

- **Potential for scale**: Support collection of nationwide and county level data as required by Housing Bill

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Populate indicators</td>
<td>Use the housing indicators from CAHF as a baseline and populate the indicators using data from the KNBS</td>
</tr>
<tr>
<td>Workshop with KNBS</td>
<td>Online workshop on the development of indicator metadata</td>
</tr>
<tr>
<td>Pipeline and dashboard</td>
<td>Develop initial dashboard pipeline using data submitted by KNBS and create a dissemination tool in the form of a dashboard</td>
</tr>
</tbody>
</table>
3b. Housing Dashboard with KNBS

<table>
<thead>
<tr>
<th>COLLECT</th>
<th>CAPTURE</th>
<th>TRANSFORM AND OPTIMISE</th>
<th>STORE</th>
<th>ANALYZE</th>
<th>DISSEMINATE</th>
</tr>
</thead>
</table>

- Database
- Database 1
- App
- Database 2
- XLS
- Database 3

Golden copy of data

Analytical database 1

Dashboard showing live customer-level data

Analytical database 2

Flat report

Clear audit trail recorded for each step in the pipeline. Each data point can be traced back to its source, securing data integrity and allowing for easier resolution of data issues.
4a. Stakeholder Engagement

FSD has launched a working group with representatives from national and county government, financial sector providers, DFIs, professionals, academia, other sector players to promote market transformation

- 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
4b. Open Access – a market systems intervention

The Open Access initiative is a market systems intervention, which will holistically address information asymmetries in the housing market, by harnessing the collective experiences and learnings produced by DFIs (and other participating investors) through their investments in affordable housing.

By doing so it will offer benchmarking data for the respective markets, regional and continent-wide comparisons.

Through this a general liberalization of the housing finance and development market is anticipated, which in turn will stipulate affordable housing development.

The Open Access approach can contribute towards an overall cost saving in the actual product and the time taken to achieve its delivery, benefiting the original sharer, the investor, and the market as a whole.

In a nutshell, the sector players should not compete on how to access information but on how its used to optimize resources.

In addition to project data, standardised templates including legal documents, efficient and green building plans, management frameworks will also be developed for sharing with the sector.

Open Access relates to the dissemination of research outputs, online, free of cost, with an open license for copyright.

Source: Open Access Initiative Concept Note
4c. Policy and Regulatory support

- **Product**
  - Design, size, mix, Location, amenities, features
  - Delivery cost by value chain and unit size

- **Process**
  - Detailed project delivery tracking of costs and time by value chain/work stages
  - Statutory standards vs. actual experience
  - Relevant legislation and institutions involved at each step
  - Regulatory experience (procedures, approvals, fees)

- **People**
  - Household data, housing history, household income & assets, transport to work and school, basic monthly household budget, housing financing, satisfaction
  - Enabling demand segmentation by employment, income, transport, etc.

- **Performance**
  - Financial structuring, feasibility, budget vs. actual
  - Service charge components
  - Maintenance/sinking fund costs
  - Defaults, performance

---

- **Tax incentives for formal supply**
  - Streamline access to VAT exemption, map approval processes and time in conjunction with State Department of Housing and Urban Development and Kenya Property Developers Association

- **Landlord and Tenant Bill**
  - Contributions to Parliamentary Committee

- **Rating Bill**
  - Contributions to National Rating Bill

- **Building Code** (ongoing)

- **Green Building Guidelines**

---

**Data collected through housing delivery & management process**

- **Draw Open Access Data for Regulatory Engagement**
FSD Kenya ongoing interventions

1a, 1b Makueni LIMS
2a, 2b Base Mapping with aerial imagery
3a, 3b KNBS Data Dashboard
4a, 4b, 4c Policy and Regulatory engagement, Open Access

Building an Enabling Ecosystem

5a, 5b Microinsurance
6a, 6b Last mile sanitation
7a, 7b Incremental housing and WASH

Financial Products for Rental and Owner occupation

8a, 8b Jenga Green library
9a, 9b Greening delivery of housing units

Climate Smart Resilient Housing
4a. Microinsurance

**Objective:** Explore the feasibility of a bundled micro fire-property solution to informal settlement customer segment

**Process:** Human Centered Design Framework, in Mathare, Huruma and Mukuru informal settlements in Nairobi. Pilot prototype. Iterations of product design, invest in education and awareness of difference between insurance and savings

**Partner:** APA Insurance, Akiba Mashinani Trust

**Timeframe:** July 2021 onwards, pilot launched November 2021, ongoing product refinement and market
4b. Microinsurance

**Impact:** Provide a mechanism for households to overcome temporary shocks from fire or loss of income.

**Potential for scale:** Microinsurance continues to be extremely challenging due to affordability and awareness constraints. According to FinAccess 2021, 67% of adults with no insurance mention affordability as the main hinderance to getting insurance while 28% are not aware of it. FSD Kenya and APA are exploring tie in with financial product for uptake, build trust and invest in digital platform for lower transaction costs, collect fire related data to reinsurance.
5a. Last mile sanitation fund

- **Objective**: Affordable and accessible financing for structure owners to connect to newly laid sewer lines in Mukuru (no land or other collateral required)

- **Process**: Build on lessons of grant financed pilot in nearby locations, baseline analysis, engagement with stakeholders

- **Partners**: Nairobi Water, Akiba Mashinani Trust

- **Timeframe**: Jan 2022 – Dec 2022

- **Impact**: Increase access to safer, more hygienic sanitation. Reduce ratio from 31 HH to 10 HH to 1 toilet

- **Potential for scale**: Financial products for other incremental improvements (rainwater collection, flood mitigation, better structural materials etc)

Base line analysis:
- 5,690 Households share 183 toilets currently
- 31 Households to 1 pour flush toilet
5b. Pit latrines (covered and uncovered) dominate in human waste disposal

Source: FinAccess 2021
6a. Incremental housing and WASH in rural areas

- **Objective:** Incremental housing is the biggest sub-market yet least understood empirically. Enable data collection on loan usage, reduce leakage to non-housing uses and capture social performance metrics

- **Process:** Integrate loan systems with GIS enabled app

- **Partners:** KWFT, iBUILD

- **Timeframe:** Jan 2022 onwards, pilot to start in Jun 2022
6b. Incremental housing and WASH in rural areas

- **Impact:** Understand value chains by geographical location; deepen access to quality building material and skills; reduce time to deliver for borrowers; enable financial institutions to raise longer term, local currency finance

- **Potential for scale:** As most housing in Kenya is delivered incrementally, limitless potential to scale across country and with several players
FSD Kenya ongoing interventions

Building an Enabling Ecosystem

- 1a, 1b Makueni LIMS
- 2a, 2b, 2c Base Mapping with aerial imagery
- 3a, 3b KNBS Data Dashboard
- 9a, 9b Policy and Regulatory engagement
- 10a, 10b Stakeholder Engagement and Open Access

Financial Products for Rental and Owner occupation

- 4a, 4b Microinsurance
- 5a, 5b Last mile sanitation
- 6a, 6b Incremental housing and WASH

Climate Smart Resilient Housing

- 7a, 7b Jenga Green library
- 8a, 8b Greening delivery of housing units
7a. Jenga Green Library

• **Objective:** To provide a single source of reviewed green building materials and services directory into the market for ease of uptake of green building materials.

• **Process:** Engagement with stakeholders to collect data in standardised and transparent format. Create a free digital open-source library for all built environment stakeholders to access a wide range of materials and services.

• **Partners:** Kenya Green Building Services

• **Timeframe:** April 2021 to April 2022 (launched), yearly updates

jengagreenlibrary.com
7b. Jenga Green Library

- **Impact:**
  - Encourage the use of low-carbon materials in the built environment while also promoting regenerative sustainability
  - De-mystify green building products
  - Link potential developers to suppliers/providers
  - Understand pricing of green building materials
  - Obtain tax component of pricing to advocate for tax incentives

- **Potential for scale:** Currently hosts 140+ Products and 20+ Service Providers, to be continuously updated as demand grows
8a. Greening housing delivery

- **Objective:** Understand challenges and success of greener delivery (Open Source), promote locally made alternatively built technology, cleaner cooking

- **Process:** Identify and support design and build contractors / landlords, demand segmentation of tenants

- **Partners:** Kwangu Kwako Ltd, Fusion Ltd

- **Timeframe:** 3 years from April 2021
8b. Greening delivery of housing units

- **Impact**: Raise profile of rental sector players for access to fundraising, collect data on tenants, delivery costs and timeframe, operating costs and performance

- **Potential for scale**: Align partners with green funding, scale uptake of green designs and technologies, influence building code and certification of innovations

Manufacture and fabricate modular parts using locally available materials

**Cross Laminated Timber**: Education and linkages with Tanzanian supply

Developing **green building guidelines** for Homa Bay and Laikipia County, Seek to scale nationwide
Creating value through inclusive finance

www.fsdkenya.org

Seeta Shah
Seeta.shah@fsdkenya.org