

Scoping Rwanda's Affordable Housing Sector and its Financing

5. HOUSING SUB-MARKETS

November 2021



Centre for Affordable
Housing Finance
in Africa



Introduction

Rwanda has a developing housing and housing finance sector – but there are constraints. While Rwanda’s mortgage to GDP ratio (3,35 percent) is relatively high for the region, mortgage lending is concentrated at the upper end of the income pyramid; and while Rwanda’s microfinance sector is an important source of finance for lower income segments of the market, the products and services of microfinance providers are not typically addressed towards housing. In addition, Rwanda has a critical, but poorly documented residential rental sector. As is the case in most countries, the affordable rental sector operates off the radar, unattended by both policy and finance.

In 2020, the Government of Rwanda partnered with the World Bank to access two grants, one of which is for housing finance. US\$150 million has been approved to fund the Rwanda Housing Financing Project, the main objective of which is to expand access to long term housing finance for the benefit of middle-income segments that have limited or no access to mortgages, while also supporting capital market development. While this is important, it is unlikely to cover the breadth of the need for housing finance, specifically for lower income earners who are outside the scope of mortgage lending. How the end user finance intentions align with the availability of construction finance, and whether this addresses the needs of the so-called informal, or small-scale supply sector (and critically, rental accommodation) is also not clear. To this end, a broader and more detailed understanding of the demand and supply sides, how they intersect, and the specific housing value chains engaged with and served by each, is required.

Rwanda’s Vision 2050 “sets a new pathway that will lead the country to the livings standards of upper middle income by 2035 and high-income countries by 2050”. In line with this vision, the National Land Use Development Management Plan predicts a 2% annual growth rate, such that by 2050, Rwanda’s population will be 22.1 million people. To meet the housing needs of these people, the NLUDMP projects that 5,5 million dwelling units will be required by 2050, or an annual delivery of 150 000 dwelling units between 2020 and 2050. The research finds the urban figure to be an estimated 3,2 million units by 2050. Even just this urban projection demands a higher rate of annual delivery than current formal capacity has been able to achieve. The report finds that most housing in Rwanda is being delivered by smaller scale players and by households themselves, often informally. Meeting the Vision 2050 affordable housing targets both in terms of the anticipated scale and quality will require strong partnerships between market players and with government, while also explicitly leveraging and growing the capacity of smaller scale players.

As Rwanda develops in line with its vision, there is an opportunity for AFR to support the development of a housing finance sector in Rwanda that meets the needs of all residents and all housing supply approaches, with a variety of products and services designed explicitly to engage with the breadth and nuance of their capacity.

This review of Rwanda’s affordable housing sector and its financing explored the overall institutional, policy and legislative environment for affordable housing, scoped the demand side, interrogated the capacity and activities of the supply side, and considered where finance could make a difference. **This report focuses on the six housing sub-markets identified in the study.** The full study was presented to Rwandan stakeholders for a validation workshop on 24 August 2021. The team is grateful for the detailed engagement and inputs from all stakeholders and looks forward to further engagement on the recommendations.

Team



Centre for Affordable
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Six housing submarkets

Segmenting the supply side into six housing submarkets that reflect the diversity of housing form and type and tenure across Rwanda.

SUBSTANDARD / INFORMAL				FORMAL		
	Homeowner / incremental: rural + peri-urban	Backyard landlord/ unplanned settlement : urban	Household Landlord : urban	Employee housing : urban	Small-scale developer : urban	Large-scale developer : urban
MORPHOLOGY						
STRUCTURES						
TYPOLOGIES	 Mud brick shelter	 Informal House	 Bungalow	 Housing Block	 Villa	 Rowhouse
TYP. CON. COST	FRW 60,000 – 70,000 /m2	FRW 75,000 – 160,000 /m2	FRW 150,000 – 350,000 /m2	FRW 150,000 – 350,000 /m2	FRW 400,000 – 650,000 /m2	FRW 550,000 – 920,000 /m2
TYP. UNIT SALE PRICE	Owner-occupied	Owner-occupied	20 - 50,000,000 FRW	N/A	50 - 100,000,000 FRW	100 – 400,000,000 FRW







Six housing submarkets

SUBSTANDARD / INFORMAL

FORMAL



















































































































































SUB-MARKET

DESCRIPTION

Homeowner / incremental: rural + peri-urban	Backyard landlord / unplanned settlement : urban	Household Landlord : urban	Employee housing : urban	Small-scale developer : urban	Large-scale developer : urban
					
Owner-occupied single family homes built with mud bricks, mud cob and/or mud and mesh in peri-urban and rural communities across the country. Housing is constructed incrementally, with continuous upgrades provided through own-labour or local masons. Homes are designed to serve as accommodation but also as storage for business products (livestock, harvest, etc.).	Housing constructed in dense urban settlements on plots with limited direct access to formal transport and infrastructure. Rudimentary housing self-financed by owners and built by local masons with recycled materials made available by owner. Plots in most popular neighbourhoods typically include multiple rental rooms/units and may accommodate some commercial activity.	Centrally located housing delivered as urban infill along spinal roads, with better access to public transport routes. These are the next step up after unplanned settlements. Many property owners develop units for rental as a way of supplementing their income. Although the model fails to achieve economies of scale, it is popular because it creates income-earning opportunities for entrepreneurial landlords.	Housing constructed in proximity of special economic zones and manufacturing districts as designated in National Land Use Master Plan, District Development Plans and City Master Plans. Dense multi-story housing block for workers (who may travel back to the village on the weekends). Ready access to public transport networks. Housing provided by companies established in the industrial clusters.	Mid-range houses in small serviced estates built-to-code and eligible for government subsidies. Common model among local developers with access to finance. No rental options, direct sales preferred in order to ensure a quick return. Scale and affordability remain a challenge due to weak supply chains, high cost of capital and limited end-user finance.	Higher quality housing that remains unaffordable to majority of the population. Target market is largely foreigners and diaspora with a rental component for expats and consultants. Delivers the highest share of rental units in the formal sector. Developer typically has access to foreign capital.

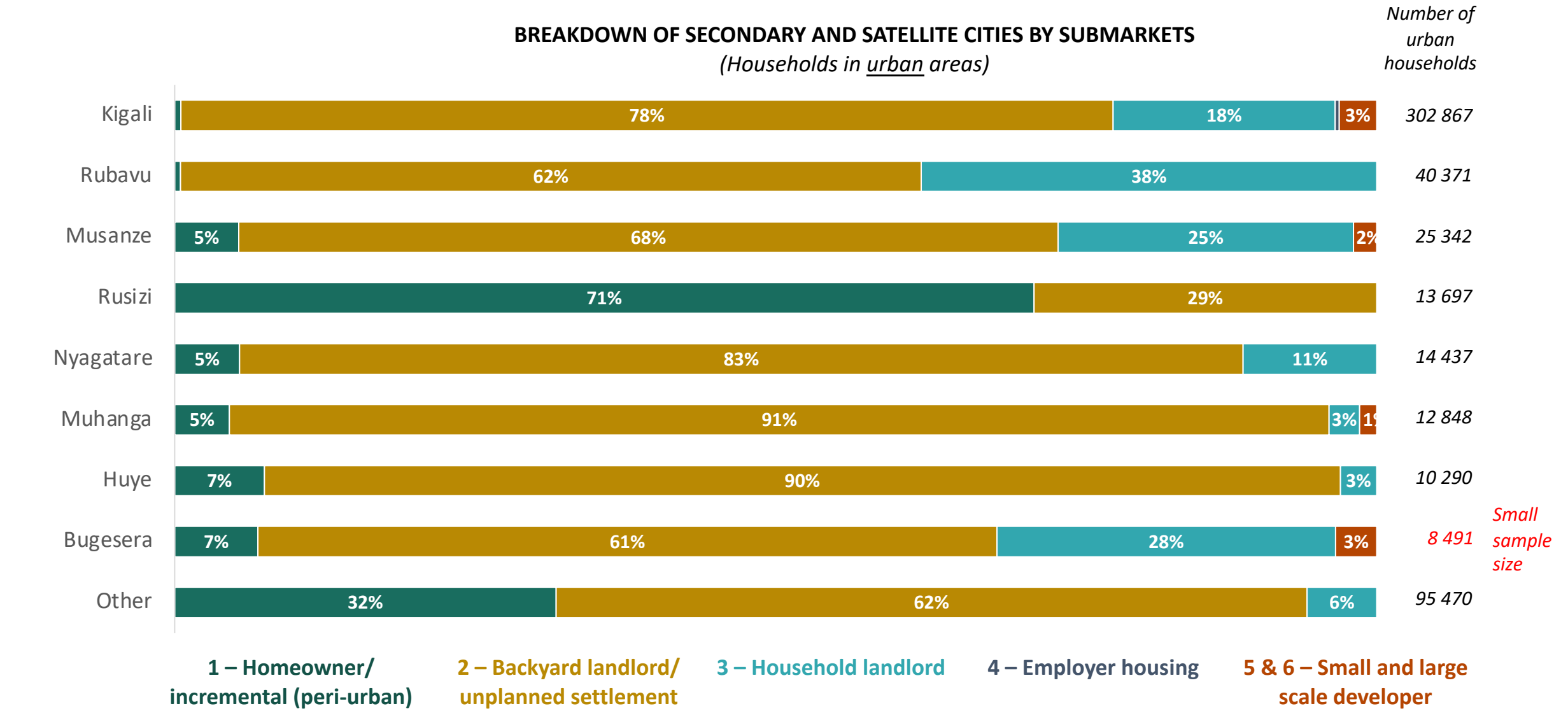
Six housing submarkets

EICV 5 data has been used to segment households into the six submarkets to provide an estimate of the size of each submarket. The distinction between submarkets can at times be blurry, for example the distinction between submarkets 2 and 3 (backyard landlords and household landlords), therefore segment sizes are an estimate based on various criteria described below:

	SUBSTANDARD / INFORMAL				FORMAL	
	Homeowner / incremental: rural + peri-urban	Backyard landlord / unplanned settlement : urban	Household Landlord : urban	Employee housing : urban	Small-scale developer : urban	Large-scale developer : urban
SUB-MARKET						
SURVEY DEFINITION	<ul style="list-style-type: none">Households in rural areasTo identify 'peri-urban', households in urban areas where habitat type is "Isolated rural housing", "Unplanned clustered rural housing", or "Small settlement" have been included	<ul style="list-style-type: none">Households in urban areasLive in "unplanned settlements"OR housing conditions are sub-standard; have a pit latrine without a slab, main source of water is not piped or from a public tap, walls are not cement bricks, oven fired bricks or mud bricks with cement)	<ul style="list-style-type: none">Households in urban areasHousehold income is less than RWF 300,000 per monthOR household income is above RWF 300,000 per month but there is no flush toilet or the walls are not made of oven fired bricks or cement bricks	<ul style="list-style-type: none">Households in urban areasHousing is provided by employer	<p><i>Small and large scale developers have merged due to their small size and difficulty in splitting them using the survey data</i></p> <ul style="list-style-type: none">Households in urban areasMust have a flush toiletWalls made of oven fired bricks, cement bricks or ABTsHousehold incomes must be over RWF 300,000 per month	
ESTIMATED HOUSEHOLDS	                                             ~2.23 million	                                     ~0.38 million	                            ~87,000	                     ~1000	         ~10,500	
% OF TOTAL HHs	82%	14%	3%	0.04%	0.4%	
% OF URBAN HHs	9%	72%	17%	0.2%	2%	

Six housing submarkets

Urban areas in Kigali, Bugesera and Musanze have the largest proportion of developer housing. However, this still only makes up 3% or less of households. Urban areas in Rubavu have the largest proportion of household landlords



ESTIMATED NUMBER
OF HOUSEHOLDS

2.23 million

% OF TOTAL HOUSEHOLDS



82%

% OF URBAN HOUSEHOLDS



9%

DOMINANT DWELLING TYPE



Mud brick shelters

MEDIAN MONTHLY
HOUSEHOLD INCOME

~ RWF 55,000

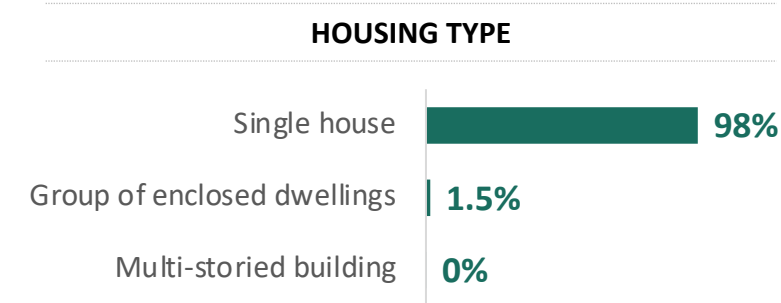
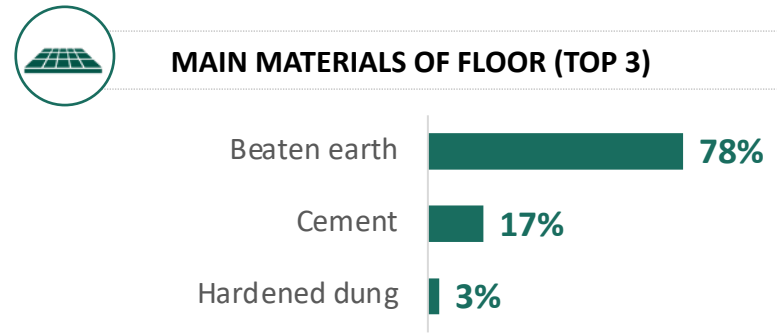
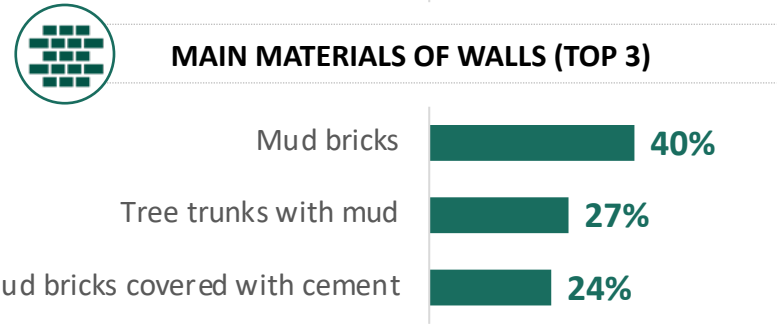
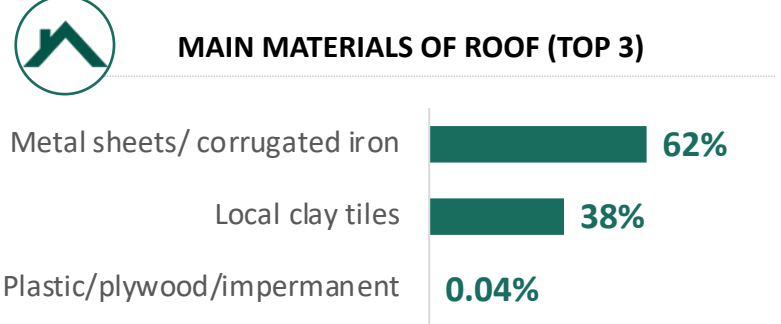
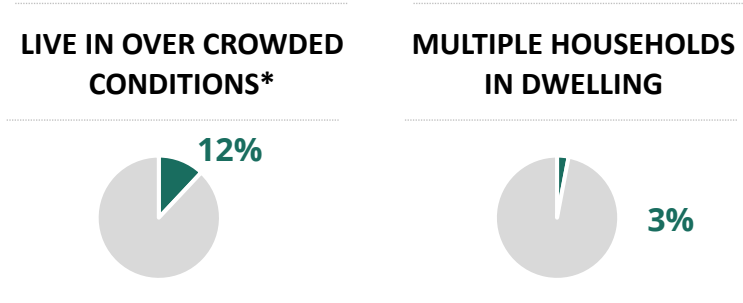
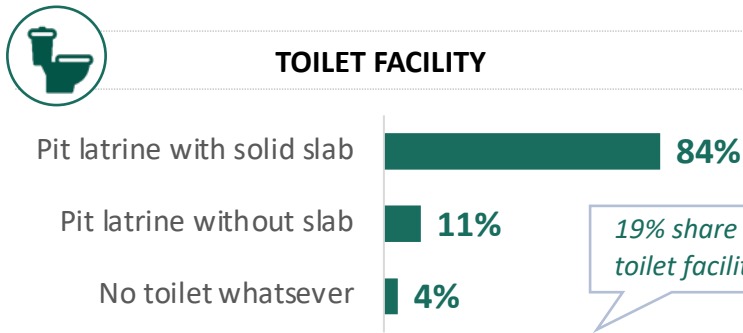
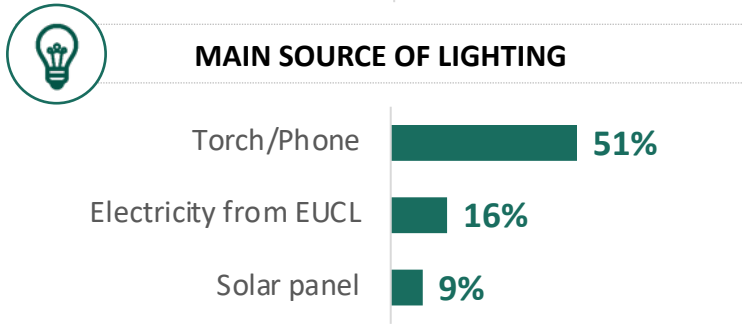
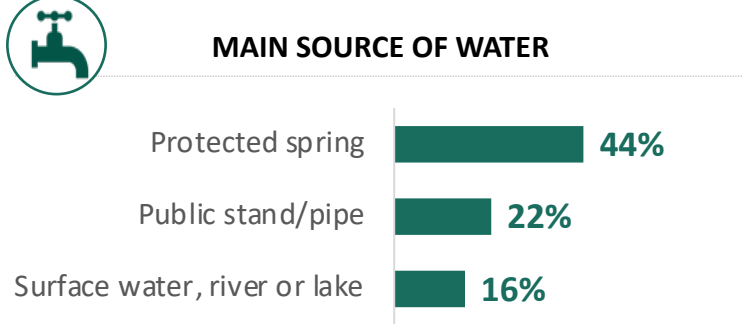
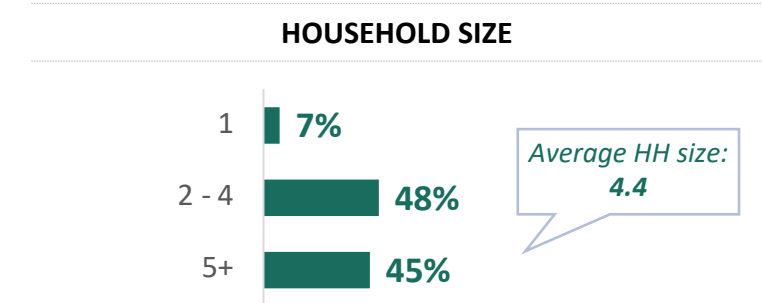
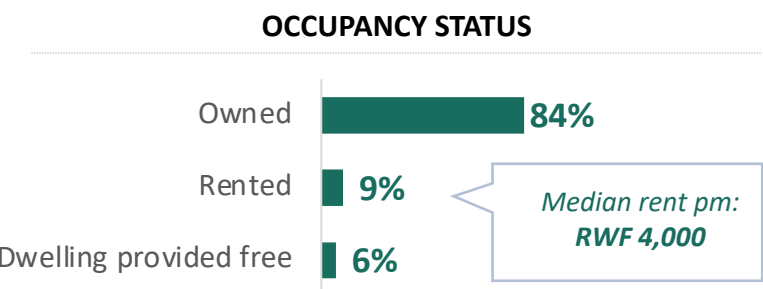
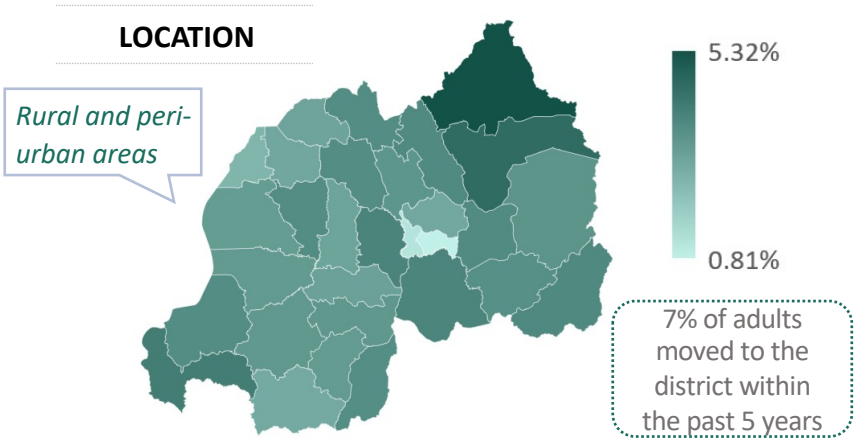
01 HOMEOWNER / INCREMENTAL | RURAL + PERI-URBAN

Self-built home solutions

SUBMARKET 01: HOMEOWNER/ INCREMENTAL

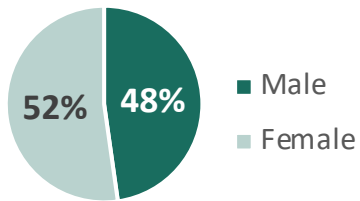
HOUSEHOLD OVERVIEW: 2.23 MILLION HH

(82% of all households)

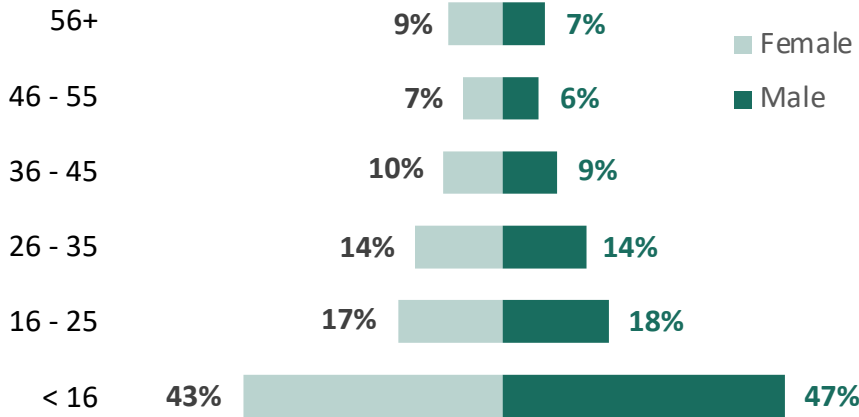


9.90 MILLION PEOPLE
(83% of the total population)

GENDER

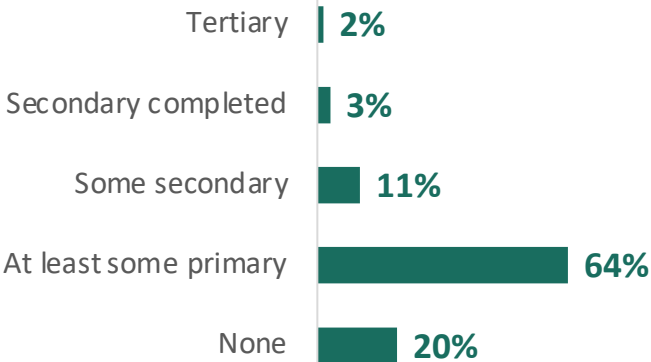


AGE GROUP



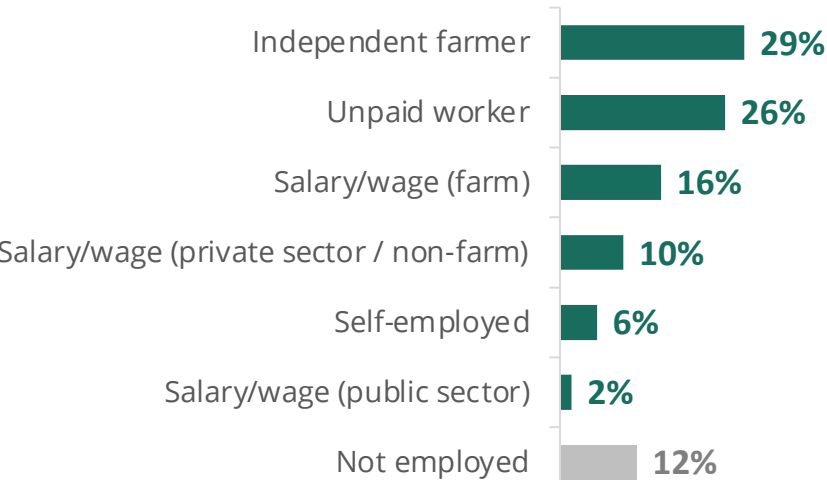
Female
Male

HIGHEST LEVEL OF EDUCATION
(ADULTS 16+)



INCOME SOURCES (ADULTS 16+)

OCCUPATIONAL ACTIVITY

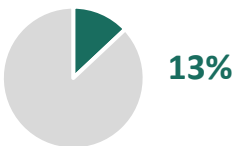


21% of salary or wage earners are permanently employed

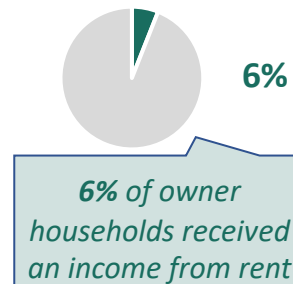
15% of self-employed are registered (RRA/RDB) business owners

INCOME SOURCES (HOUSEHOLDS)

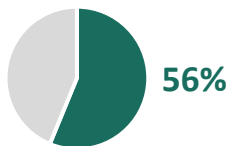
% of HHs with at least one formally employed person or registered business owner*



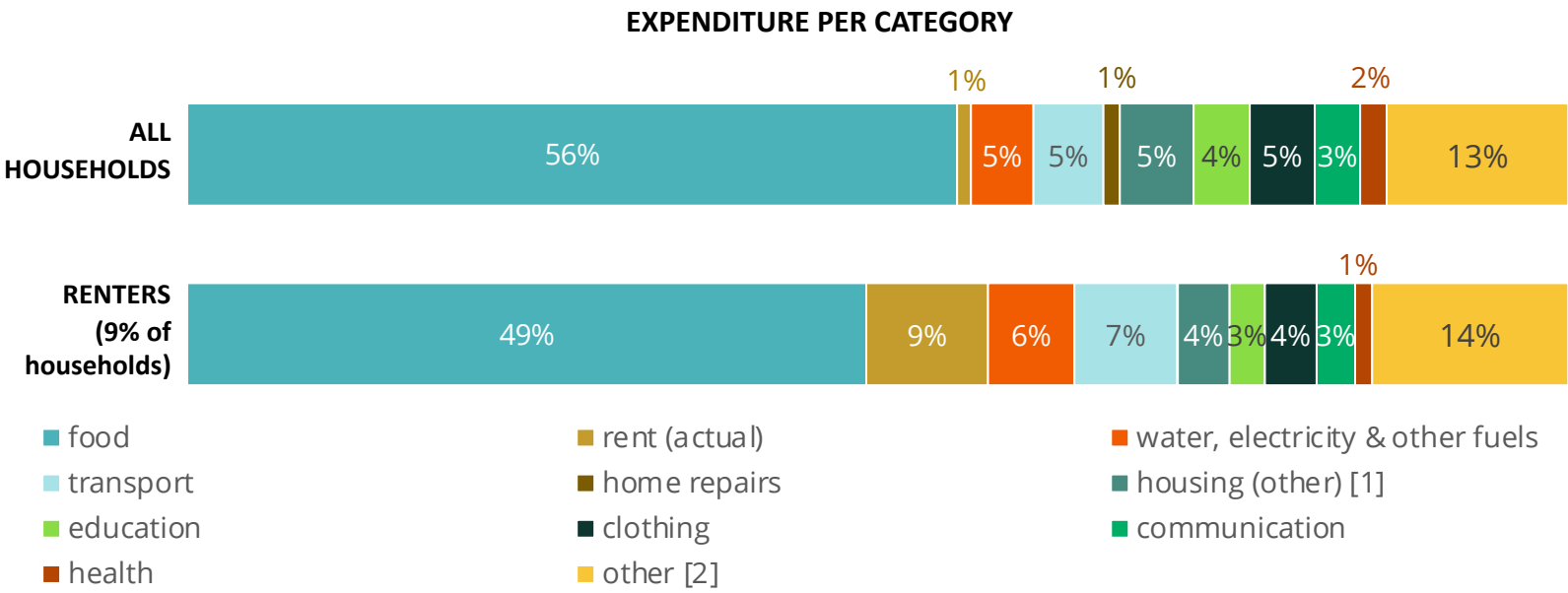
PERCENTAGE OF HOUSEHOLDS THAT RECEIVED AN INCOME FROM PROPERTY RENT IN THE PAST 12 MONTHS



PERCENTAGE OF HOUSEHOLDS THAT RECEIVED A REMITTANCE IN THE PAST 12 MONTHS



*Financial institutions typically require applicants to be formally employed or a registered business owner in order to be granted a loan.



[1] Housing (other): furnishings, appliances, domestic cleaning and hygiene
[2] Other: Equipment maintenance, recreation, alcohol and tobacco, miscellaneous

Percentage of households who spend 30% or more of their income on rent



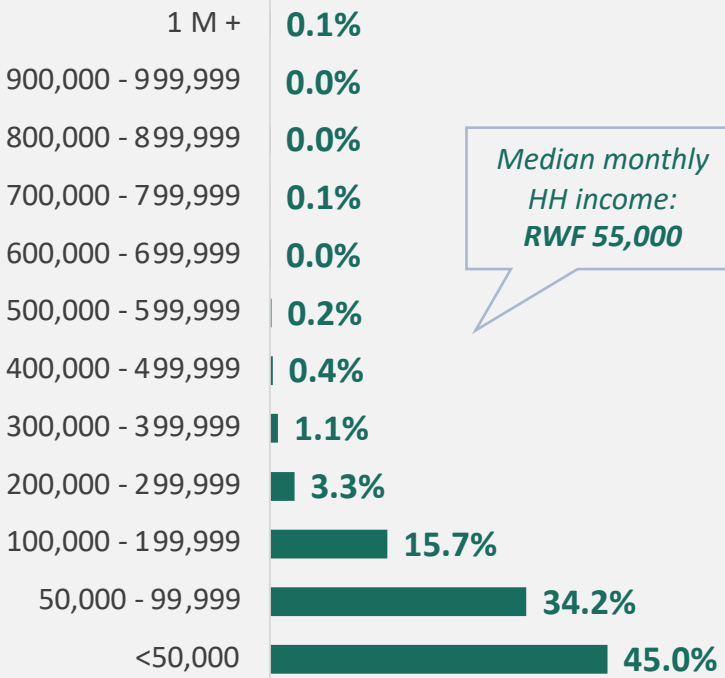
Percentage of all households who spend 45% or more of their income on housing and transport*



MEDIAN % SPENT ON HOUSING AND TRANSPORT*

6%

ESTIMATED MONTHLY HOUSEHOLD INCOME** (RWF)



Affordability calculations will assume that households are able to spend the average rent percentage of expenditure on monthly loan repayments

9%

% of HHs that could afford an unsecured RWF 50,000 loan (6 months, 20% interest)

22%

% of HHs that could afford an unsecured RWF 100,000 loan (6 months, 20% interest)

5%

Source: EICV 5.
*Includes rent, home repairs, water, electricity, fuels for cooking and lighting, and transport costs. **Income has been estimated using expenditure data. Amounts have been inflated from 2017 to 2021.

TYPICAL USER PROFILES

ALPHONSINE - BENEFICIARY



ALPHONSINE
GENDER: Female
AGE: 72
OCCUPATION: Retired
INCOME: (NA?)
LOCATION: Nyagatare

BACKGROUND

Alphonsine is a widow, living with her adult niece and her family. Her house was given to her by the government after the war. She relies on government assistance, contributions from her niece as well as remittances from her daughter who lives in Kigali.

CHALLENGES

- Ongoing home maintenance needs with no disposable income to finance renovations
- No banking history or access to housing finance or personal loans
- Alphonsine is eligible to move to an IDP model village but likely she would not be able to accommodate her niece and her family

OPPORTUNITIES / POTENTIAL SOLUTIONS

- Alphonsine is in the market redistribution zone
- She would benefit from remittance products through building material suppliers, so her children in the city could pay for her home improvements

SYLVESTRE - SUPPLIER



GENDER: Male
AGE: 44
OCCUPATION: Farmer
INCOME: Below 60,000 /month
LOCATION: Gisenyi

BACKGROUND

Sylvestre is a farmer, married with 8 children, living in a house he built himself with mud bricks and mud floors. He lives in the village of Gisenyi where he farms beans and maize on another farmer's land. On the weekends, he makes additional money by making mud bricks and blocks for neighbors.

CHALLENGES

- Lives in a house that is structurally unsound
- Limited access to finance

OPPORTUNITIES / POTENTIAL SOLUTIONS

- Sylvestre is in the market redistribution zone – as a supplier, however, he has an income stream which could support a housing microfinance loan
- Off-grid infrastructure solutions as a small-business opportunity
- Housing microfinance coupled with construction technical assistance, could enable Sylvestre to rebuild his home with appropriate foundations
- Digitised payments to create a visible track record of business activity and enable access to finance

JEAN PIERRE - CONSUMER



GENDER: Male
AGE: 25
OCCUPATION: Day labourer
INCOME: 50,000 month
LOCATION: Byumba

BACKGROUND

Jean Pierre is a mason from Byumba, who works as a day laborer. Some days he makes money, and other days he does not; it is largely up to luck.

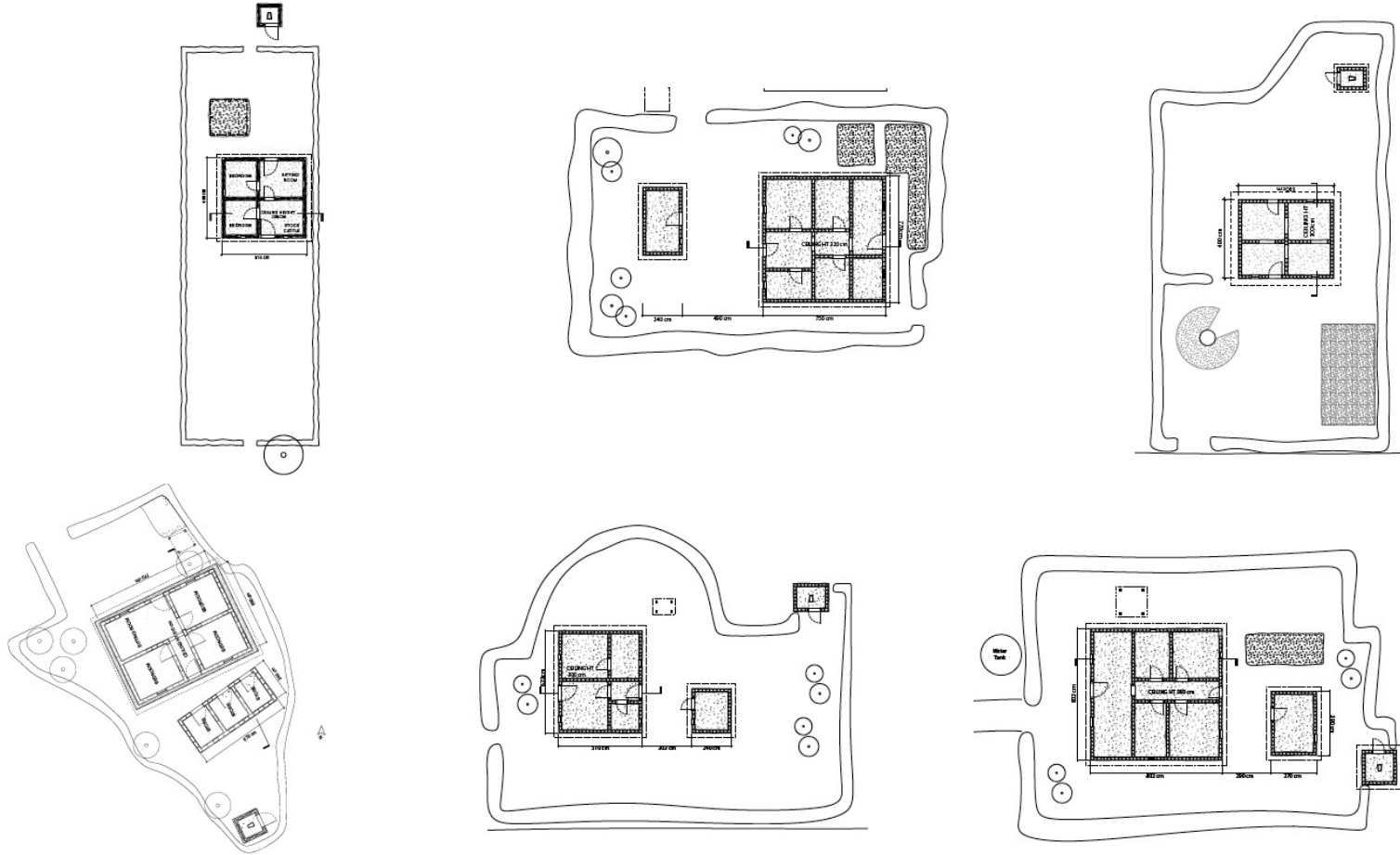
With no steady income, he is ineligible for a loan. He is newly married and while trying to save to acquire his own plot, he is renting a mudbrick structure from another family that has upgraded to a larger home.

CHALLENGES

- No real savings to get land and a house
- Does not have a steady income so cannot easily join a savings circle

OPPORTUNITIES / POTENTIAL SOLUTIONS

- If Jean Pierre could access top-up training he could integrate local construction companies like EarthEnable and assist in making improvements on people's homes.
- Jean Pierre is young and could be engaged into buying land



From 2019 - 2021, GA Collaborative, a Rwanda-based architecture and research firm conducted a detailed survey of 370 households from Ubudehe categories 1 and 2 in Masoro Sector, Rulindo District. Study includes dimensioned drawings (see above) of all 370 surveyed households. Drawings were done in collaboration with students from the University of Rwanda School of Architecture. Full study to be published by GA Collaborative.

Submarket 01 is comprised primarily of owner-occupied single family homes built with mud bricks, mud cob, wood and/or mud and mesh in peri-urban and rural communities across the country. Housing is constructed incrementally, with continuous upgrades provided through own-labour or local masons. Homes are often designed to serve a dual purpose: 1/ shelter and 2/ storage for business products (livestock, harvest, etc.).

The homes supplied in this Submarket are considered unplanned, substandard and/or informal – and therefore ineligible for permitting – as a result of important gaps in the value chain, namely:

- Ad-hoc neighbourhood and plot plans (regulations)
- Building materials and construction technologies not recognized by the Rwandan Building Code or Rwanda Standards Board (construction)
- Uncertified labour (construction)
- Limited access to water, electricity, sewerage (infrastructure)

The Government of Rwanda's IDP Model Village Program was designed to address many of these weak links by creating a high-performance supply chain for the delivery of housing solutions for Submarket 01. However, the sheer volume of demand in this segment makes the study of alternative supply chain improvement mechanisms a necessity.

EARTHENABLE

Low-cost flooring and walling solutions



EarthEnable is a for-profit company based in Rwanda and Uganda with the sole purpose of improving the health of the rural poor through the provision of improved flooring and walling technologies. EarthEnable's primary innovations are in their plant-based floor varnish, incremental finance packages and local distribution and sourcing networks.

Adobe wall technology is still awaiting approval from Rwanda Housing Authority for inclusion into the National Building Code. Once approved, EarthEnable has plans to pilot the rollout of a 1-2m FRW house to the market. A key opportunity will be to engage with lenders on the revised building regulations (that require a masonry foundation) and tie housing microfinance to this product to facilitate compliance with codes.

CURRENT PRODUCTS

- Earthen floors (~FRW 2,200 per square meter)
- Earthen plaster for exterior walls (~FRW 1,200 per square meter)

CLIENTS SERVED SINCE 2015

- 9,500 clients in 21 of 30 districts

PRODUCT DELIVERY METHODS

- Decentralized business model with certified franchisees attracting clients and offering basic services in their home districts. Varnish application conducted by EarthEnable quality assurance teams.

PRINCIPLE FINANCIAL PRODUCTS

- Clients can purchase floors room by room according to their means.
- EarthEnable finances 0% loans funded by grants to their franchisees (technicians responsible for installations) for the purchase of equipment (tools, transport, etc.) for installation of floors and windows.
- EarthEnable provides loans to cooperatives at a rate of 2,500 FRW per square meter (10% premium) for their members to pay back over a period of 6 – 12 months >> the cooperative serves as guarantor
- EarthEnable is piloting layaway payments through rotating savings groups.

Key Takeaways

- Product rollout is limited to the capacity of each franchisee (max 10 floors per month)
- Homeowners are engaged in seasonal work, therefore additional cash is not available year-round to finance home improvements
- Homes are currently deemed substandard and are located in unplanned settlements in both urban and rural areas, which makes them ineligible for permitting and they cannot serve as collateral for additional loans
- Products have demonstrable health benefits, however they do not replace the need for improved structural stability (i.e., a new house with proper foundation)
- Savings circles are common, typically 6 -8 persons in a group band together to consecutively finance upgrades on their homes
- As the company is not a financial institution, they cannot formally offer loan products

Opportunities

- Provide low-cost financing to SACCOs and assist them in crafting low-interest micro-loans to qualifying households (e.g., GIZ facilitating access to biogas cookstoves and solar nationwide)
- Offer construction technical assistance linked with housing microfinance
- Large farming cooperatives (e.g., Gatsibo District) with 500 members that pay out twice per year could be supported to apply and receive credit to pre-finance home improvements for their members.

ENGIE (formerly Mobisol)
Off-grid solar power solutions



ENGIE Mobisol offers state-of-the-art clean energy solutions for home and business. Plug and play products are offered on a rent-to-own system with affordable pre-payment plan managed via MTN Mobile Money. Solar Home System sizes range from 50W to 200W.

The company serves primarily underserved and rural off-grid communities. Productive use appliances allow customers to establish solar-powered businesses. Through the creation of jobs, especially for women and youths, and the opportunity to build a credit history via customer financing, the company and its work also has an important socio-economic impact.



Basic system



Family SHS 100W

Downpayment	Monthly Payment	Payment in 3 years	Cash Payment
52,000 Frw	16,500 Frw	646,000 Frw	413,400 Frw



Business SHS 200W

Downpayment	Monthly Payment	Payment in 3 years	Cash Payment
104,100 Frw	26,000 Frw	1,040,100 Frw	884,900 Frw

Solar TV System



STS Nezerwa

Downpayment	Monthly Payment	Payment in 40 months	Cash Payment
45,500 Frw	13,000 Frw	565,500 Frw	350,000 Frw

Standard system



Family package plus 100W with 24" TV

Downpayment	Monthly Payment	Payment in 3 years	Cash Payment
79,000 Frw	25,000 Frw	979,000 Frw	675,800 Frw



Family package 200W with 24" TV

Downpayment	Monthly Payment	Payment in 3 years	Cash Payment
139,400 Frw	34,900 Frw	1,395,800 Frw	1,184,900 Frw



Family package plus 200W with 32" TV

Downpayment	Monthly Payment	Payment in 3 years	Cash Payment
148,800 Frw	37,200 Frw	1,488,000 Frw	1,264,800 Frw



Family package plus 200W with 43" TV

Downpayment	Monthly Payment	Payment in 3 years	Cash Payment
156,600 Frw	39,100 Frw	1,564,200 Frw	1,330,900 Frw

Key Takeaways

- The company is very interested in penetrating the urban market, however growth requires upfront capital to purchase (and import) equipment bundles of all sizes – this option was taken off of the table during the pandemic
- Surprisingly, Mobisol's rural business did not suffer unduly during the lockdown. Rather, after a short adjustment period, farmers resumed work in the field and continued to make regular payments on their systems.

Opportunities

- Mobisol Engie has a network of clients who may not necessarily have a robust banking history, but now have a paper trail showing that they are capable of paying via installments
- Setting up a local supply chain would help alleviate costs provided demand were sufficiently high. In addition to expanding their rural clientele, Mobisol Engie would need to expand the marketing and distribution model to include clients across the region and/or for other providers offering similar services in country. This expanded market would finance investments into the production facility.

BBOXX

Tomorrow's Rural Home – Vision for 2025



Bboxx designs, manufactures, distributes and finances decentralized energy solutions. In 2018, they unveiled a prototype for a rural home with healthy earthen floors, solar-powered irrigation systems to improve farmer productivity, clean cooking solutions and internet connectivity. All systems were designed to be PAYG (pay as you go) enabled, allowing customers to make digital payments through mobile money.

The home was constructed using all local materials (rammed earth walls, bamboo ceilings, EarthEnable floors) collected within a 10 km radius.

The home reflects Bboxx's strategy to broaden from being a provider of solar home systems to a multi-utility company servicing vulnerable households.

GENERAL ARCHITECTURE COLLABORATIVE

Masoro Sector EarthBag Rural Home Solution



Polypropylene EarthBag structures are easy and quick to construct, thermally stable, rely on local materials, and are structurally sound for one story buildings. In 2013, GAC-R constructed Rwanda's first EarthBag home in Masoro sector. Originally developed as a military bunker construction technique, woven polypropylene bags are comprised of three chambers that can be packed with excavated earth to form stable load-bearing walls.

AFFORDABLE HUMAN NEEDS RWANDA

In 2019, AHN (a US-based company specializing in rural water solutions) announced that it would enter the affordable housing space with their design for an EarthBag house inspired by their work in Nepal.

MIT, RHA & SKAT/SDC PROECCO

The Umusambi House: A peri-urban housing typology



In 2017, students from the Massachusetts Institute of Technology designed a prototype for a village house in partnership with Rwanda Housing Authority with construction technology support provided by Skat (via the Swiss Cooperation's PROECCO project). The house's narrow profile was designed to easily follow a hill's natural contours and moveable interior StrawTec panel walls facilitate interior customization.

Key Takeaways

- Packaging basic services with housing delivery can increase accessibility to low-income households
- Upscaling and driving down costs requires investment to ensure a functioning supply chain



Submarket 01 supply chain is pared down to the basics (land, construction and maintenance) and is characterized by a cyclical construction/maintenance pattern.



Land acquisition Despite the unplanned and/or informal nature of many rural and peri-urban settlements, Submarket 01 is characterized by high land ownership and owner-occupancy rates. In the case of Masoro Sector, GA Collaborative reports that 91% of households were owner-occupied and could produce land titles with a mere 11 of the 370 homes surveyed (0.02%) being occupied by renters.



Construction Of the households surveyed in Masoro, 70.2% indicated that they had constructed their homes via own labour, while another 13% indicated that it had been built for them by the government.

The self-build model results in the biggest supply chain weakness of this submarket: homes are built without proper foundations or sturdy materials, leading to repeated structural failures, most typically at the level of the wall. Consequently, homeowners are perpetually in the construction phase.



Infrastructure Remote rural villages in Rwanda are not serviced by a formal grid. Consequently, the infrastructure chain link is minimized in this Submarket. Fewer than 3% of the surveyed households in Masoro reported having a water tap in their compound. Most respondents (68%) gather water from the public tap, followed by wells (15.7%) and springs (13.8%).

Forty households (10.8%) have an electrical connection, thirty (8.1%) have solar and the remaining 300 households use candles or torches for lighting.



Maintenance The survey of Masoro residents indicates that an overwhelming 95% of households (350 of 370) report living in unfinished homes. It is not surprising that 81.6% of owners report frequent spending on home repairs and upgrades (ranging from 5,000 – 20,000 FRW per month).

As expected, respondents ranked walls and floors among their most pressing repair needs. Few reported needing upgrades to the roof, likely due to the fact that 95.4% of respondents had acquired used iron sheets.



Financing of home construction and maintenance is done incrementally, according to the budget and needs of households. Limited financing packages available.



Land acquisition Land is typically acquired by homeowners via direct purchase (using savings or family loans) or is inherited. In the case of inheritance, larger parcels of land might have been subdivided to be shared among family members.

Even though the majority of this submarket are farmers, few own the land on which they work and live, meaning that they do not have farm land to use as potential collateral for home improvements. In the case of Masoro Sector, nearly 50% of households report they are wage farmers.



Construction Cash installments are the most common financing method for home construction and improvements in Submarket 01. For those who access funds from SACCOs, they often find that the loan terms are onerous: land title as collateral, minimum membership of 3 -6 months, 24 – 36% yearly interest rate loan. The incremental nature of construction payments is also a result of the type of repairs needed, which have a limited time-span before needing to be done again.

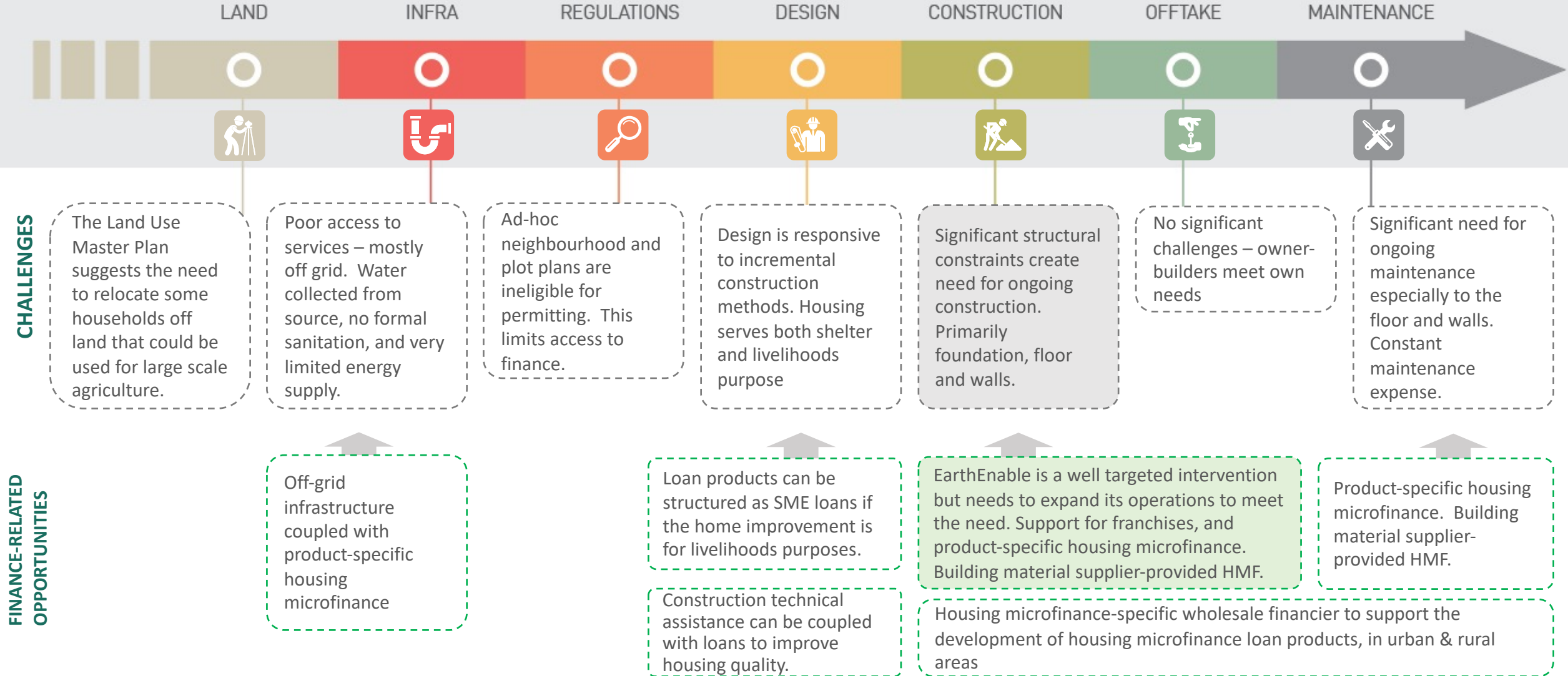


Infrastructure Most households collect water from the public tap and do not connect to electricity so expenses, if any, remain low.



Maintenance As with construction, critical home upgrades are typically made with savings or small loans from family, friends or savings groups.

Although more than three quarters of households report spending less than 20,000 FRW per home repair, this is an extremely heavy burden for the population, where 96.4% of respondents report earning less than 40,000 FRW per month. Given that the money they spend can only buy a temporary solution (house remains structurally unsound), it is imperative that new supply chains be developed.



RURAL HOUSING LOAN FUND

South African wholesale financier / apex fund



The Rural Housing Loan Fund (RHLF) was established in 1996 by the South African government with support from KfW to provide wholesale finance to microlenders for on-lending in housing-specific microloans to rural borrowers. RHLF required that its client lenders ensure that all loans were used for housing purposes, and in this effort, supported them in building their housing microloan product spec. The concomitant focus on housing and on rural was supported by the specialist capacity within RHLF, and over years built the lending capacity that was serving rural households in addressing their housing needs. In the five years before its closure in March 2019, it delivered 182 508 incremental loans through nine housing microlenders. (See <http://www.rhlf.co.za/wp-content/uploads/2019/09/RHLF-INTEGRATED-REPORT-FINAL-WEB-VERSION.pdf>)

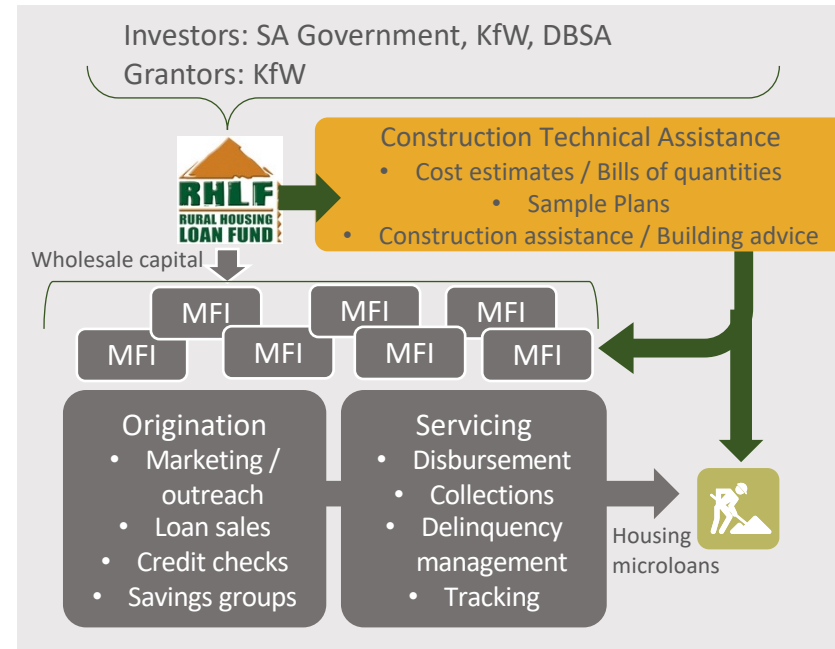
RHLF played a key role in championing the housing microfinance sector in South Africa. In addition to its lending activity, it provided capacity development support to housing microlenders, both financial and housing-related. It also developed a sample plan catalogue for lenders to share with their borrowers, and supported lenders in growing their markets. See www.rhlf.co.za

INTERNATIONAL EXAMPLE

MECHANISMS TO EXTEND HOUSING MICRO-FINANCE IN RURAL AND PERI-URBAN AREAS IN SOUTH AFRICA



Mud Brick Shelter



BUILD IT

South Africa

Build It—a building material retailer with more than 275 stores in South Africa, Lesotho, Namibia, Swaziland and Mozambique—partners with housing microlenders to provide in-store housing microfinance. In South Africa, Build It has four preferred lenders that each store can choose to work with. This moves credit risk away from Build It to the lenders and increases access to housing microfinance for households, while it also allows lenders to access the market that is Build It customers and ensure that lending is specifically for housing. See www.buildit.co.za and <https://housingfinanceafrica.org/documents/case-study-9-build-it-case-study-housing-microfinance-value-chains/>

Key Takeaways

- The wholesale financier acts as an apex fund, collecting investment capital from investors interested in the opportunity but unable to engage directly with relatively small MFIs.
- Focused on lending for housing purposes in rural areas, the RHLF investment officers develop specialist expertise that allows them to work with lenders and build their capacity and outreach.
- The delivery of housing support services, directly from RHLF, means that lenders can rely on their clients having technical assistance in support of quality outcomes, without having to build that capacity in-house.
- Building material supply retail outlets are a useful base from which to extend housing loans, enhancing borrower affordability and thereby broadening the target market.

Opportunities

- Wholesale finance apex fund to provide capital and housing support to MFIs, large scale farming cooperatives, and SACCOs specialise in lending unsecured loans for housing purposes.

ESTIMATED NUMBER
OF HOUSEHOLDS

0.38 million

% OF TOTAL HOUSEHOLDS



14%

% OF URBAN HOUSEHOLDS



72%

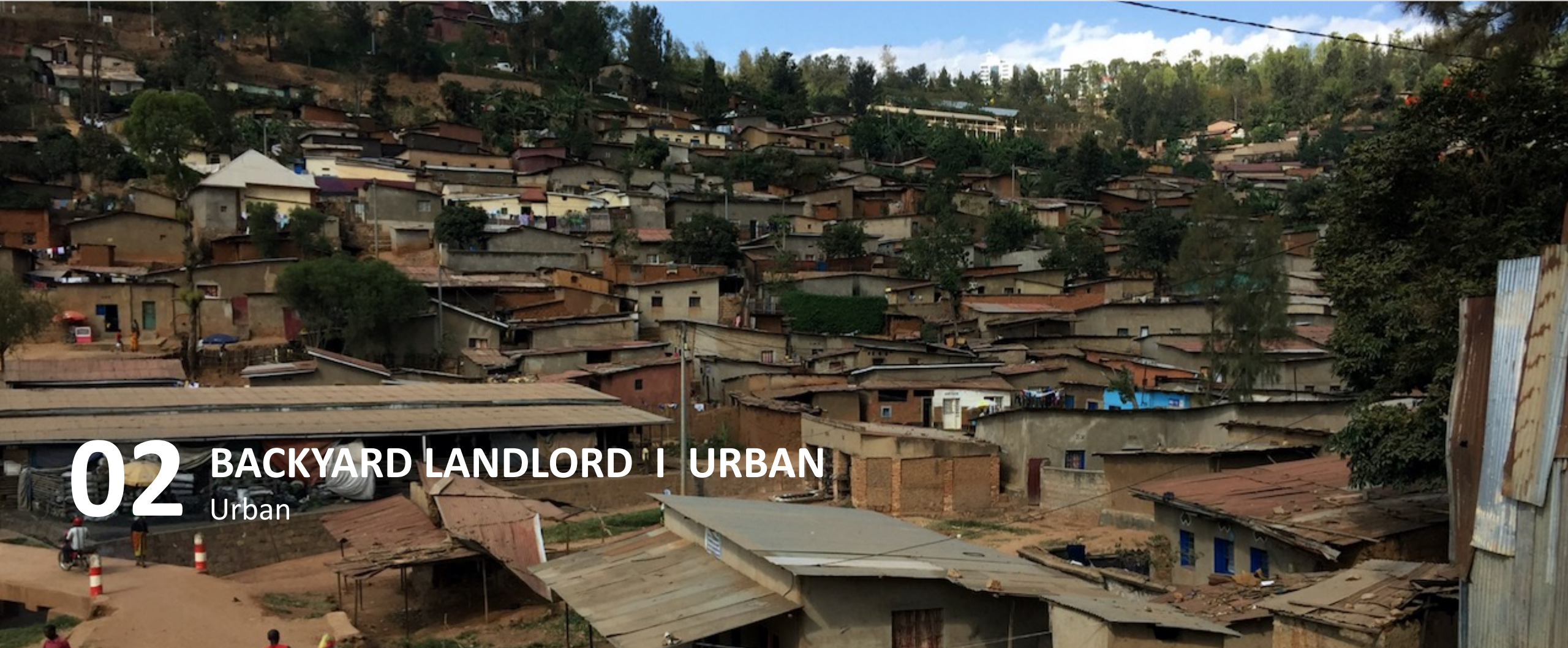
DOMINANT DWELLING TYPE



Informal and mud brick shelters

MEDIAN MONTHLY
HOUSEHOLD INCOME

~ RWF 133,000



02 BACKYARD LANDLORD | URBAN

Urban

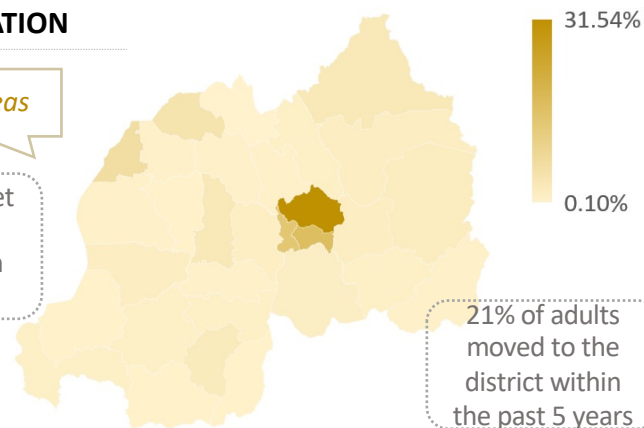
SUBMARKET 02: BACKYARD LANDLORD

HOUSEHOLD HOUSING CONDITIONS
0.38 MILLION HH (14% of all households)

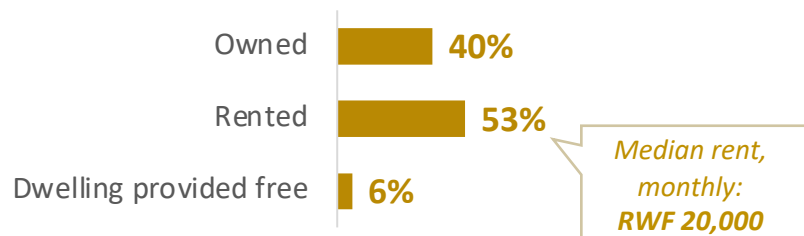
LOCATION

Urban areas

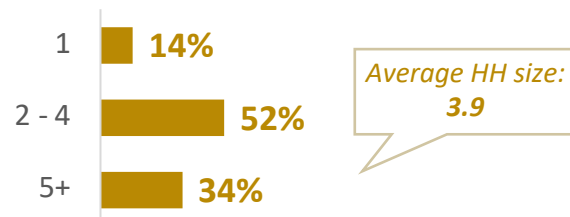
This submarket represents 72% of urban households



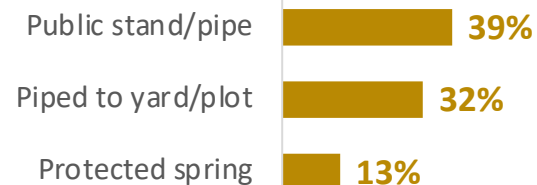
OCCUPANCY STATUS



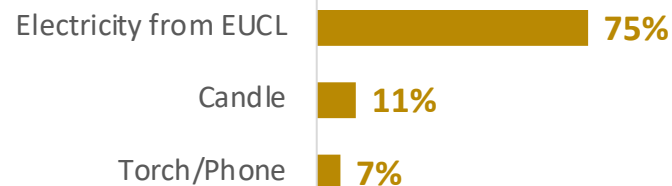
HOUSEHOLD SIZE



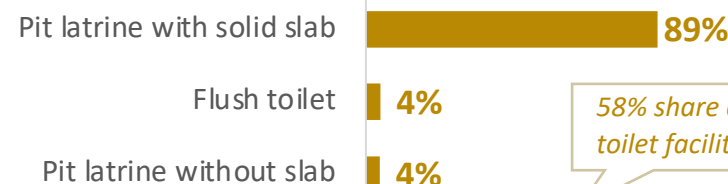
MAIN SOURCE OF WATER



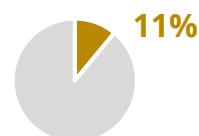
MAIN SOURCE OF LIGHTING



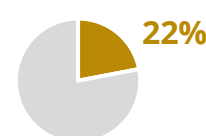
TOILET FACILITY



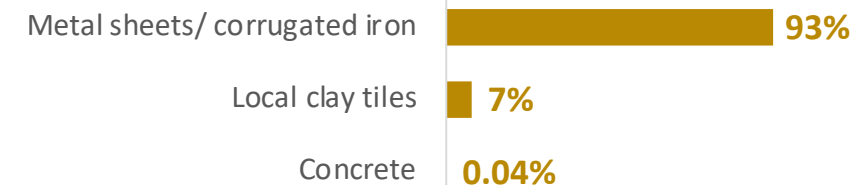
LIVE IN OVER CROWDED CONDITIONS*



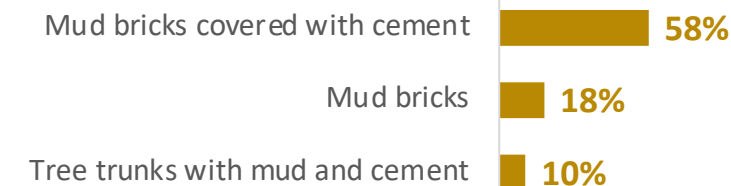
MULTIPLE HOUSEHOLDS IN DWELLING



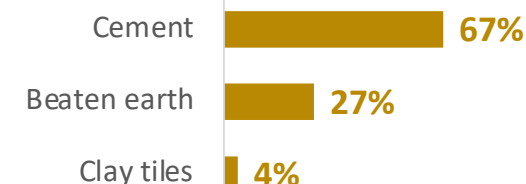
MAIN MATERIALS OF ROOF (TOP 3)



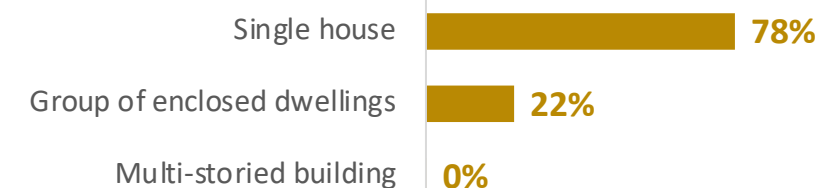
MAIN MATERIALS OF WALLS (TOP 3)



MAIN MATERIALS OF FLOOR (TOP 3)



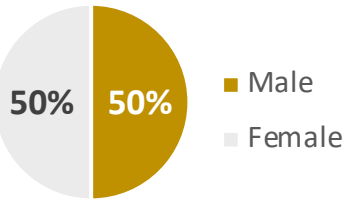
HOUSING TYPE



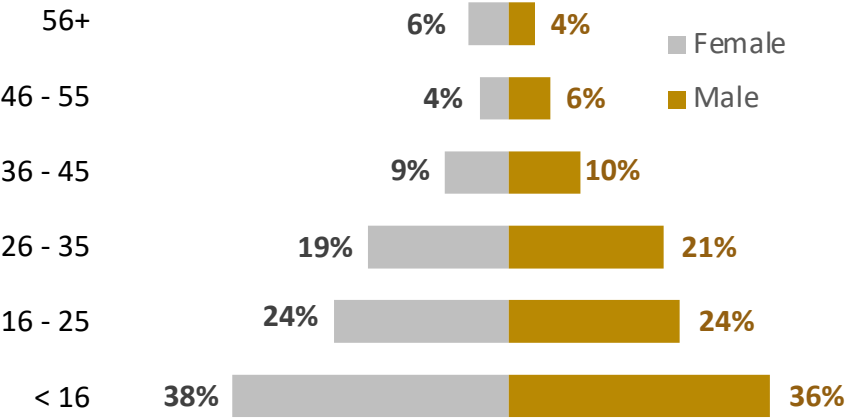
1.53 MILLION PEOPLE

(13% of the total population)

GENDER

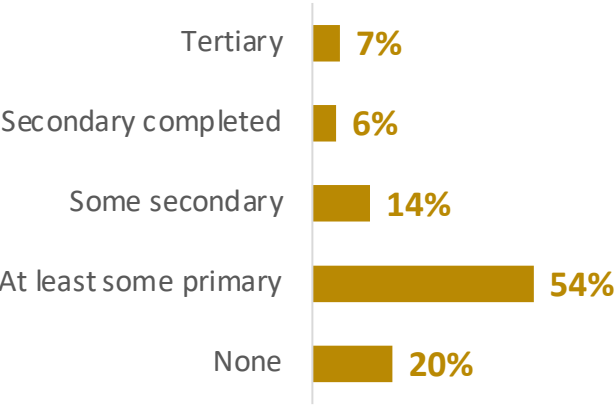


AGE GROUP



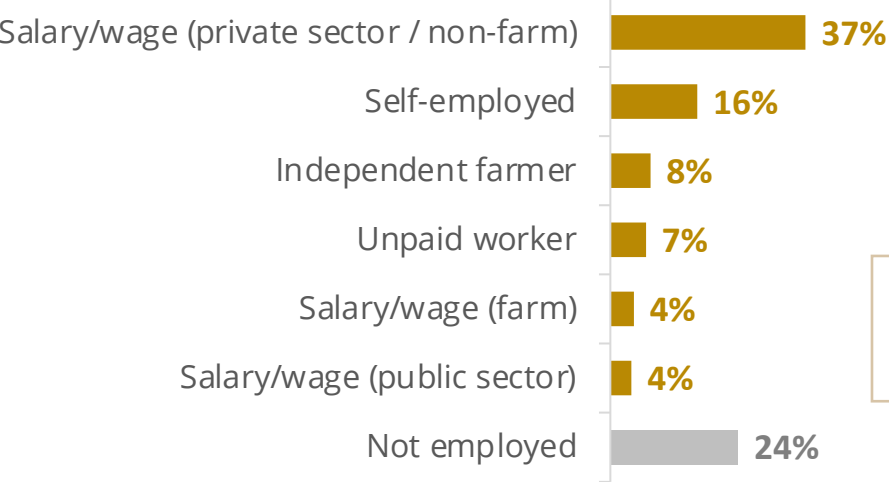
HIGHEST LEVEL OF EDUCATION

(ADULTS 16+)



INCOME SOURCES (ADULTS 16+)

OCCUPATIONAL ACTIVITY

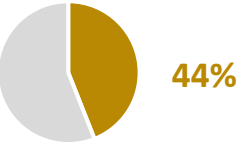


48% of salary or wage earners are permanently employed

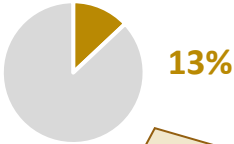
29% of self-employed are registered (RRA/RDB) business owners

INCOME SOURCES (HOUSEHOLDS)

% of HHs with at least one formally employed person or registered business owner*

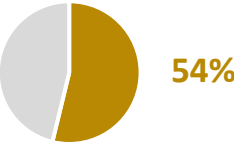


PERCENTAGE OF HOUSEHOLDS THAT RECEIVED AN INCOME FROM PROPERTY RENT IN THE PAST 12 MONTHS



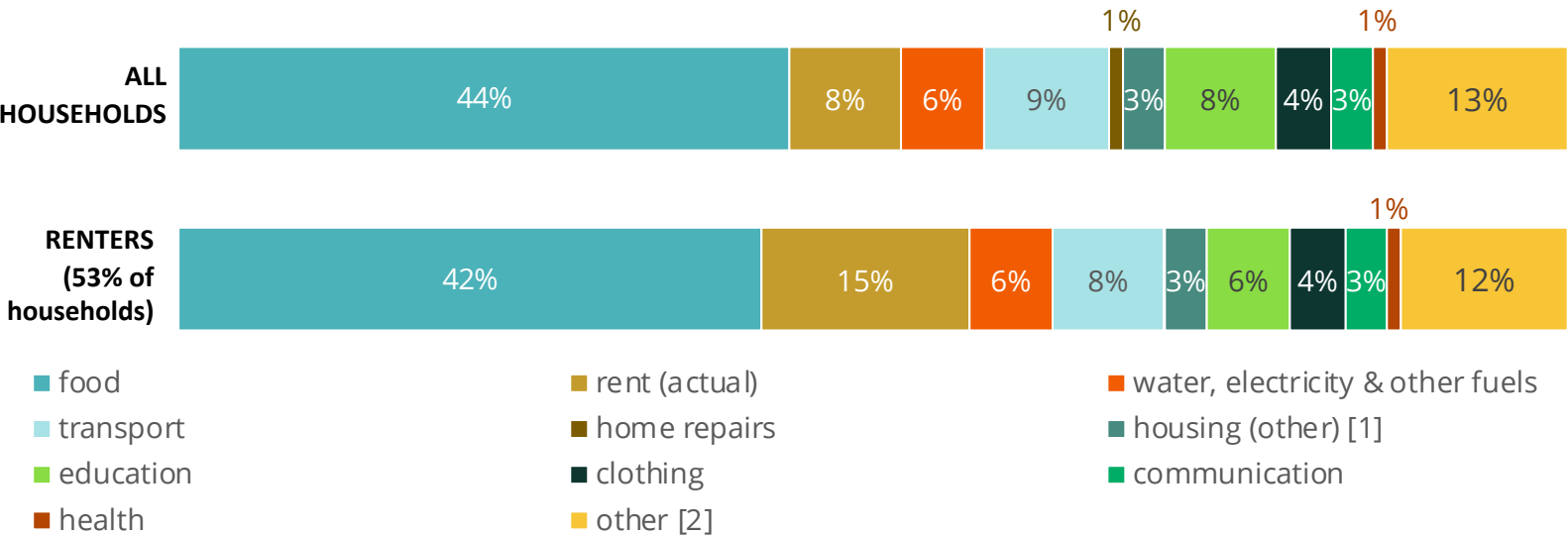
27% of owner households received an income from rent

PERCENTAGE OF HOUSEHOLDS THAT RECEIVED A REMITTANCE IN THE PAST 12 MONTHS



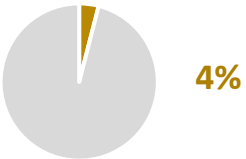
Source: EICV 5. * Financial institutions typically require applicants to be formally employed or a registered business owner in order to be granted a loan.

EXPENDITURE PER CATEGORY

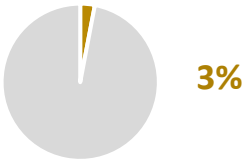


[1] Housing (other): furnishings, appliances, domestic cleaning and hygiene
[2] Other: Equipment maintenance, recreation, alcohol and tobacco, miscellaneous

Percentage of households who spend 30% or more of their income on rent



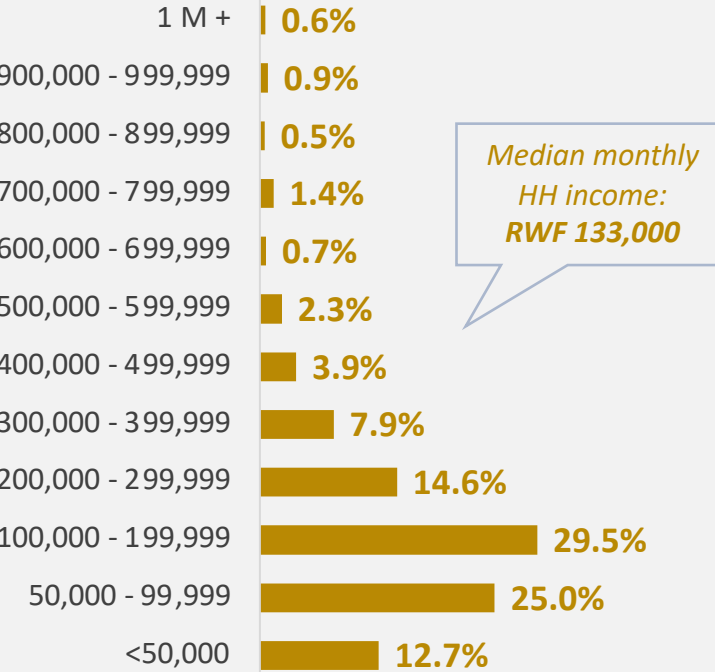
Percentage of all households who spend 45% or more of their income on housing and transport*



MEDIAN % SPENT ON HOUSING AND TRANSPORT*

21%

ESTIMATED MONTHLY HOUSEHOLD INCOME** (RWF)



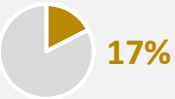
Affordability calculations will assume that households are able to spend the average rent percentage of expenditure on monthly loan repayments

15%

% of HHs that could afford an unsecured RWF 100,000 loan (6 months, 20% interest)




% of HHs that could afford an unsecured RWF 500,000 loan (12 months, 20% interest)



Source: EICV 5.
*Includes rent, home repairs, water, electricity, fuels for cooking and lighting, and transport costs. **Income has been estimated using expenditure data. Amounts have been inflated from 2017 to 2021.

SUBMARKET 02: BACKYARD LANDLORD

SOLANGE – CONSUMER / SUPPLIER



GENDER: Female
AGE: 55
OCCUPATION: Housekeeper
INCOME: 380,000 FRW /month
LOCATION: Kiyovu

BACKGROUND

Solange is a widow who works as a housekeeper for a British family living in the posh Kiyovu neighbourhood of Kigali. She lives nearby in a formal house located in an unplanned settlement that she shares with her sister and her sister’s family. Solange owns a plot with an older house across town in Gisozi where she used to live with her husband and children when they were small. She now rents that home to 2 young bachelors, but the rental income does not allow her to finance repairs to the home. Employment : 180,000 FRW /Rental income: 200,000 FRW

CHALLENGES


- Her current housing conditions in the informal settlement are poor
- Unable to find decent and affordable accommodation in the city close to her work, due to high demand and high rent rates

OPPORTUNITIES / POTENTIAL SOLUTIONS

- Solange is in the market redistribution zone for a 12,5M mortgage, but with her income could conceivably afford a lower-value, shorter-term mortgage, if the lender accepted all her income in calculating her affordability.

TYPICAL USER PROFILES

CANISIUS - SUPPLIER



GENDER: Male
AGE: 39
OCCUPATION: Store owner, landlord
INCOME: 215,000 – 245,000 FRW /month
LOCATION: Gatenga

BACKGROUND

Canisius is owner of a plot that is along a covered drainage channel. He has a small commercial business on his property but he makes the majority of his annual income from 3 tenant households. Base salary from shop: 90, 000 - 120,000 per month / Monthly rental income: 125,000 FRW

CHALLENGES

- The plot does not have direct access to a road, so it does not qualify for a building permit and cannot be used as collateral for a bank loan
- His plot is getting crowded and so he is not able to continue adding more rooms or digging new pits. He must consequently pay to empty the current pit (78,000K) more regularly than in the past
- The new master plan requires him to build a multi-story unit for which he does not have the means nor is his parcel big enough to comply
- Since he is located along a drainage channel in need of repair, the City’s infrastructure upgrading program might expropriate a portion of his plot, which is a main source of his monthly income
- Any additions/changes to his structures must be done covertly for fear of demolition by local authorities

OPPORTUNITIES / POTENTIAL SOLUTIONS

- In-situ housing upgrading program being piloted by the City of Kigali and SDC/Skat might assist in replotting the neighborhood so that he has a regularized plot and access to infrastructure
- A regularized plot would allow him to offer this land as collateral for micro-finance loan to rebuild with his neighbors who could jointly sell-off land to access capital

EMMANUEL – SUPPLIER / CONSUMER



GENDER: Male
AGE: 41
OCCUPATION: Master mason
INCOME: 125,000 FRW /month
LOCATION: Kimisagara

BACKGROUND

Emmanuel is a master mason earning 80,000 FRW per month in Kigali, where he lives during the week. He maintains a family home in the village where his wife does subsistence farming and takes care of the family. In Kigali, Emmanuel rents a room for 8,000 FRW per month (mud brick walls and floor, iron sheet roof) from a backyard landlord in Kimisagara (near Nyabugogo so he can take the bus back home on the weekends). Base salary: 80,000 FRW (top ups are unpredictable but do happen) / Household salary (he and his wife): 125,000 FRW/month

CHALLENGES

- Their combined income must sustain 2 households
- Backyard landlords are raising prices due to Covid financial challenges
- Emmanuel could lose his unit or be priced out if his landlord is upgraded
- No formal employment or rental agreement to guarantee income or protect against eviction

OPPORTUNITIES / POTENTIAL SOLUTIONS

- Emmanuel is in the market redistribution zone. His masonry skills could allow him to get a job rebuilding the neighborhood during upgrading exercises

SUBMARKET 02: BACKYARD LANDLORD

Sample plot from unplanned settlement study by CoK and Skat/SDC PROECCO in Gitega Sector (Nyarugenge District). Plot owner rents three 2-room units that generate a total rental income of **145,000 FRW per month**.

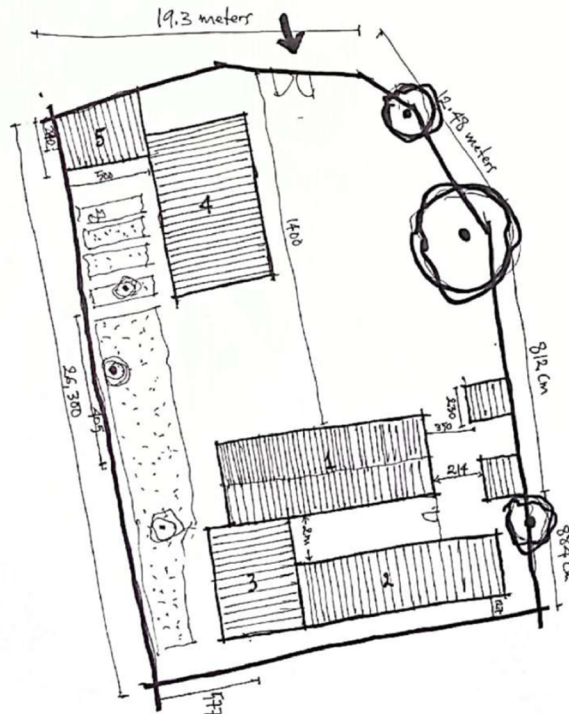
BACKYARD LANDLORD URBAN



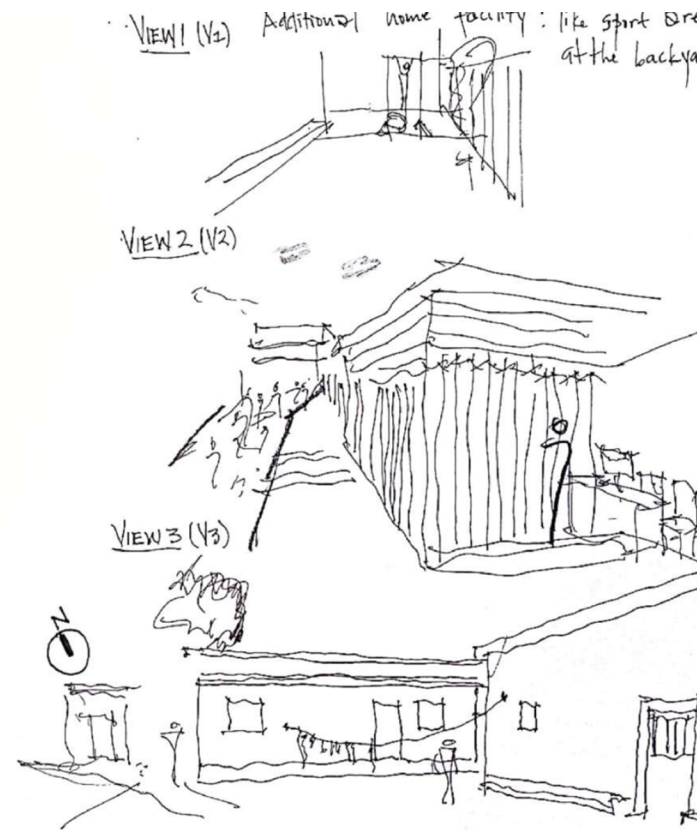
Informal House



Mud Brick Shelter



- 1: Main House (plot owner) 2: House 2 For rent 5: Shop
3: House 3 For rent 4: House 4 For rent



of the entry Court
there is enough space to do
different activities.

Submarket 02 consists of housing located in dense urban settlements on plots with limited direct access to public transportation and infrastructure networks. In most cases, rudimentary housing is self-financed by owners and built by local masons with a combination of improvised and recycled materials. This Submarket is characterized by its higher densities, due in large part to the own-to-rent profile of its landowners. In other words, many property owners use their plots to generate income from tenants. These so-called “backyard landlords” construct basic structures alongside their primary residences to accommodate rental households. In a survey of 566 households in Gitega Sector conducted by the City of Kigali and SDC/Skat PROECCO, 423 were tenant households (74.7%) and 68.9% of landowners reportedly receiving steady income from 1 or more tenants.

As with submarket 01, the homes supplied in this Submarket are considered unplanned, substandard and/or informal. As a result of important gaps in the value chain (infrastructure, building and regulations), most plots and structures are ineligible for permitting. Consequently, their efforts as suppliers are undermined by a land use framework that disallows this type of housing.

While it is clear that landowners benefit from a neighbourhood's informality (overcrowding goes largely unregulated), so too do tenants who establish unlicensed commercial activity.

Study includes dimensioned drawings (see above) of 72 of the 186 plots surveyed (home to 2,533 individuals in 566 households). Drawings done in collaboration with students from the University of Rwanda School of Architecture.

USED BUILDING MATERIAL RESALE COOPERATIVE

Nyarugenge District



The cooperative specializes in reselling used building materials (brought directly to the shop or collected from demolition sites across Kigali) to homeowners and renters looking to construct or make improvements to their homes.

With the ongoing construction boom in Kigali, the cooperative has many opportunities to purchase building materials from demolition sites across the city.

Unlike other building material sellers in Rwanda, the cooperative's business is completely impervious to border closures and import delays, however it is limited by the available capital on hand to buy and stock new product and client purchasing power.

CLIENTS

Homeowners in dense urban settlements at the centre of the city where security calls for more durable materials. The Cooperative also supplies many sites in Secondary Cities requesting specific products since they collect materials from high-end demolition sites in Kigali where those materials may be available.

PRODUCTS (top 5 best sellers)

- Iron sheets at FRW 5,000 (85% market price)
- Metallic doors FRW 60,000 (120% market price)
- Wooden doors FRW 40,000 (80% market price)
- Metallic windows FRW 15,000 – 18,000 (100% market price)
- Iron bar FRW 7,500 (85% market price)

PRODUCT DELIVERY METHODS

- No transport offered. Clients must retrieve goods from warehouse themselves.

FINANCIAL FACILATION OFFERED TO BUYERS

- Discount may be negotiated for clients who purchase large volumes of building materials. However, there is no formal system of discounts or rebates. The cooperative does not have any formal links to banks, saving cooperatives or SACCOs so clients are expected to pay in full at time of purchase. The cooperative reports that 80% of clients pay in cash, with the remaining 20% paying via Mobile Money.

Key Takeaways

- The business has room for growth if additional capital were available to purchase more materials.
- Business is vulnerable to lockdowns and any other measures that stall construction activity but overall the cooperative has greatly benefited from Rwanda's construction boom.
- Business financed by private loan taken by cooperative. Long-term scaling-up would require additional capital and additional supply-demand stability.
- The Cooperative's activities indirectly support the proliferation of informal construction.
- The cooperative's profit margins are high, but at the expense of a population with few financial means.

Opportunities

- In many cases, the Cooperative serves as the primary contact/interface between backyard landlords and the construction industry. With some external support the Cooperative could bundle its materials with instruction manuals and sample designs to assist in formalizing these constructions. Loan products could eventually be associated with these construction bundles (e.g., pit latrine bundle, outdoor kitchen bundle, etc.)
- If cooperative could access financing or partner with an MFI, they could provide loans to clients

RENTAL HOUSING COOPERATIVE

Nyarugenge and Gasabo Districts, Kigali



The Housing Cooperative is located in proximity of the University of Rwanda's Kigali city. For nearly 10 years, the cooperative has steadily acquired small properties, which are renovated and available for rental.

The cooperative currently owns and manages properties in Agatare and Biryogo. The neighbourhood is popular and the roads have recently been upgraded with World Bank financing and so all units are occupied, providing an annual return of nearly 3 million FRW. The cooperative estimates that it will take them more than 10 years to repay their debts, which are in the form of personal and private loans. There are no mortgages on any of the properties. They wish to expand their business, but lack the capital to develop other properties that they own.

CLIENTS

The Cooperative developed housing for two main audiences, single persons and small businesses catering to the former Biryogo Market, both earning between 200,000 - 500,000 FRW per month. The cooperative held advisories and meetings with their members in order to analyse the market and select beneficiaries for their rental property business. The Cooperative does not do any advertising or marketing, all rentals are done via word of mouth in this close-knit community.

PRODUCTS

Given their specific target audience, the cooperative offers two rental typologies: small 2-bedroom standalone houses for 100,000 FRW/month or commercial spaces/storage rooms in proximity of the market (since the renovation of the market area, rental prices have gone from 80,000 - 100,000 FRW per month down to 30,000 FRW)

RENTAL AGREEMENTS

All renters have month-to-month contracts and must pre-pay at the beginning of each month via wire transfer

BUSINESS MODEL

To date, the cooperative has purchased existing properties and converted them for rental. However, they have recently purchased a large tract of land in Kinyinya where they wish to build and sell homes.

Key Takeaways

- The Cooperative is pleased with new Kigali City Master Plan 2050's focus on multi-family units as it favours their rental business model and provides a supportive regulatory framework for expansion
- Hikes in property and business taxes are quite burdensome for small enterprises like theirs, especially for their commercial properties where rental income has dropped due to the closure of the local market
- Demand is high for rental commercial and housing properties and the Cooperative maintains full-occupancy year-round
- The Cooperative has not seen any development models or financing options that would allow them to scale-up their operations given their current cash flow situation

Opportunities

- Provide administrative and business planning and development support to these small rental management organizations
- Provide construction finance loans for housing coops providing rental housing for low-income earners or rebates on permitting costs.
- Provide access to construction engineers and certified masons to provide low-cost construction support
- Support measures for micro-developers catering to the lower-end of the income pyramid, in terms of lower statutory fees, access to specialist skills

CASE STUDY

KIGALI CITY MASTER PLAN



Informal House



Mud Brick Shelter

KIGALI CITY REVISED MASTER PLAN 2050

Analysis of conformity with zoning designation



Inaugurated in September 2020, the revised Kigali City Master Plan 2050 introduces a more equitable, flexible, and incremental approach to city development, following UN-HABITAT principles and supporting the achievement of UN Global Goals for Sustainable Development. The Plan aims at being more inclusive by facilitating a higher degree of social and economic inclusion, favouring small and large investors and facilitating the creation of a large variety of affordable housing solutions, thereby supporting the growth of a healthy and well-balanced community.

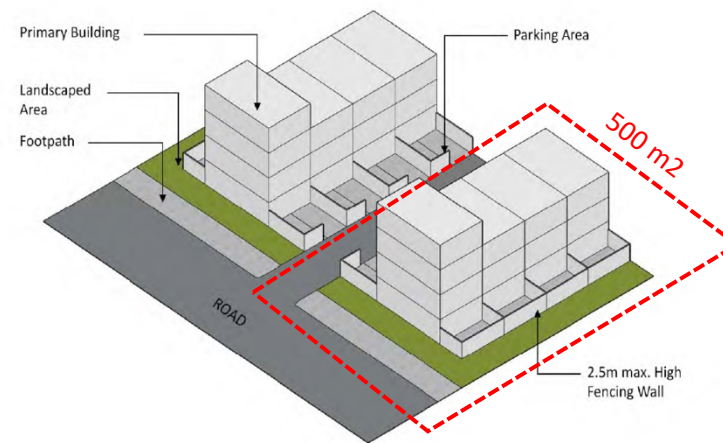
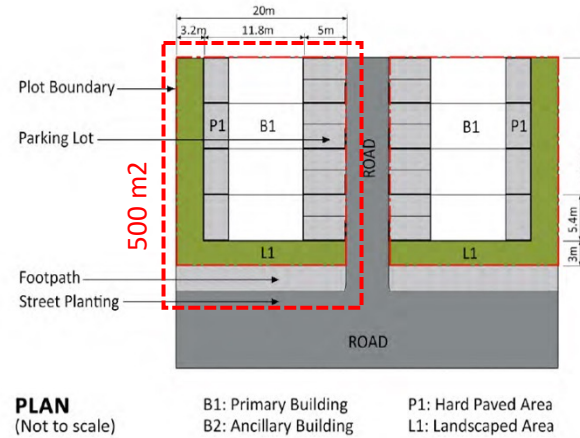


Fig 1. Medium Density Residential Improvement Zone (R2)

KEY OBJECTIVES

Among the specific objectives of the 2050 plan are:

- the promotion of upgrading and redevelopment in high land value areas;
- Implementation of sites and services approaches to accommodate low-income earners;
- Promotion of land consolidation and land pooling.

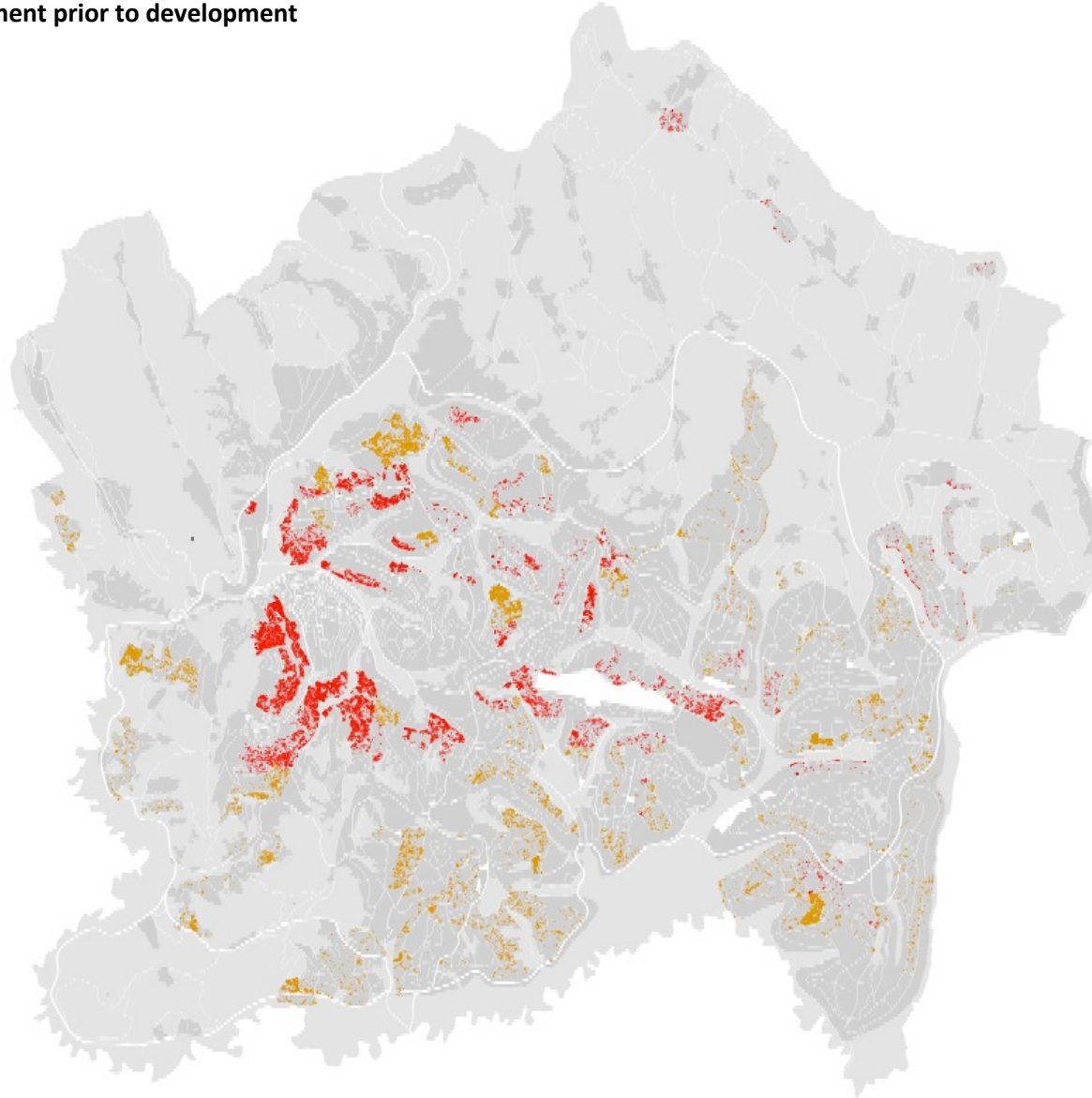
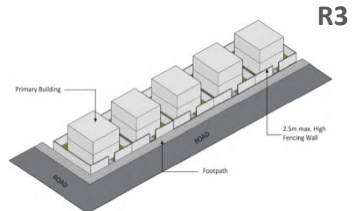
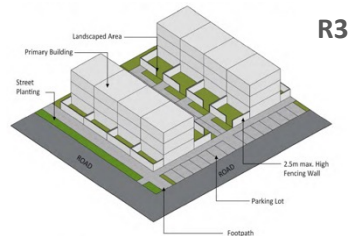
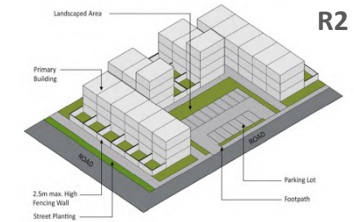
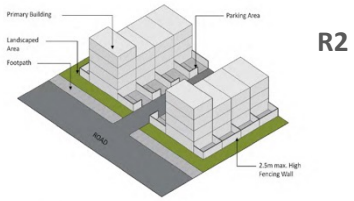
It follows that the Zoning Regulations include a designation for a **Medium Density Residential Improvement Zone (R2)** specifically designed for the upgrading of unplanned settlements and/or redevelopment of urban renewal areas. In total the 2050 Master Plan has dedicated **31.7 km²** for R2 and provided schematic volumetric guidelines for development that promote densification (see Fig. 1). The 2050 Plan also identifies SDC/Skat PROECCO's 10-in-1 Demonstration House (see Case Study 02A) as the model for R2 developments. Plan 2050 also includes provisions for **61.9 km²** of **Medium Density Residential - Expansion Zone (R3)** to allow for intensification and redevelopment of peri-urban and green field areas for the development of affordable housing.

OPPORTUNITIES

The development directives and typologies for R2 and R3 have the potential to radically transform Submarket 02 by facilitating formal mixed-use incremental residential development in some of the more dense pockets of the city, home to more than 70% of the urban population.

Map of Kigali plots requiring readjustment prior to development

- Plots zoned R2 below 500m²
- Plots zoned R3 below 500m²



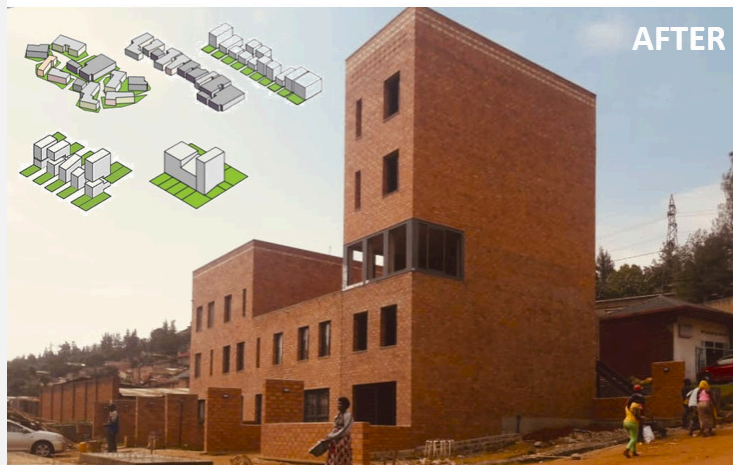
Key Takeaway

With limited developable land available (only 50% of Kigali is buildable and 35% is already occupied), densification remains a key tool for sustainable urban development. Although the new Master Plan Zoning Guidelines are intended to accompany this development process, a study of Zoning regulations and plot sizes reveals that **40,233 plots** (21,632 in R2 and 18,601 in R3) are beneath the minimum threshold required to implement the recommended typologies. Therefore, significant exercises in land readjustment will need to be conducted in order to put the plan into full effect. Although these plots represent only 10.85 km², or 11.6% of the total area allocated to R2 and R3, at densities above 80 DU/Ha, this would have an impact on more than 100,000 households.

Opportunity

- Financial support to low-income landowners in paying for new ID cards and land titles to begin the land readjustment process
- Free access to legal council for understanding the Condominium Law and how to consolidate plots
- Free access to design advice and pre-approved housing schemes for planning new multi-family structure
- Services could be offered pro-bono or financed by AfR. To be delivered to audience via voucher.

Skat Consulting, SDC PROECCO and City of Kigali
Participatory upgrading in unplanned settlement



In 2017, Skat Consulting (via the Swiss Cooperation's job creation and construction industry transformation program) partnered with the City of Kigali to consolidate 3 plots and construct a storied multifamily building.

PROJECT OBJECTIVE

Demonstrate mechanism for consolidating individual parcels for the construction of a multi-family code-compliant building in an informal settlement.

METHODOLOGY

The City of Kigali consolidated 3 parcels into a 600 m² plot adjacent to a primary access road in Kimisagara Sector, Nyarugenge District. Prior to demolition, plots were evaluated by members of the Institute of Real Property Valuers (IRPV) to determine the value of their land and structures. Owners were given the equivalent cash value of their properties in dwelling units in the new building.

TECHNOLOGY

Skat Consulting used Made in Rwanda environment-friendly ceramic bricks and blocks to build a RCC-reinforced rowlock bond cavity wall load bearing structure with a construction cost between 250-270 USD per m², more 30% cheaper than the common cement block and traditional brick walling systems.

RESULT

- Before transformation : 3 owner-occupied parcels with 5 households in improved mud brick houses
- After transformation : 10 dwelling units (built in 2 phases) of 16, 33, 48 and 66m².

Previous landowners reclaimed 4 buildings in the unit. The other units were given to adjacent landowners to facilitate the densification and land consolidation process.

Key Takeaways

Submarket 02 is instrumental in providing tens of thousands of rental units to the market for lower-income households every year. The Skat/SDC/CoK upgrading project served as a first example for how to bring such a neighborhood into compliance with regulations (Master Plan and Building Code) in a cost-effective manner. Lessons learned included:

- Property owners reported higher monthly utility costs as a result of formal water and electricity connections;
- Own-to-rent remains dominant model of backyard landlords: property owners preferred to move to another informal house and rent upgraded units at a higher monthly rate to tenants from outside the neighborhood (see below table)

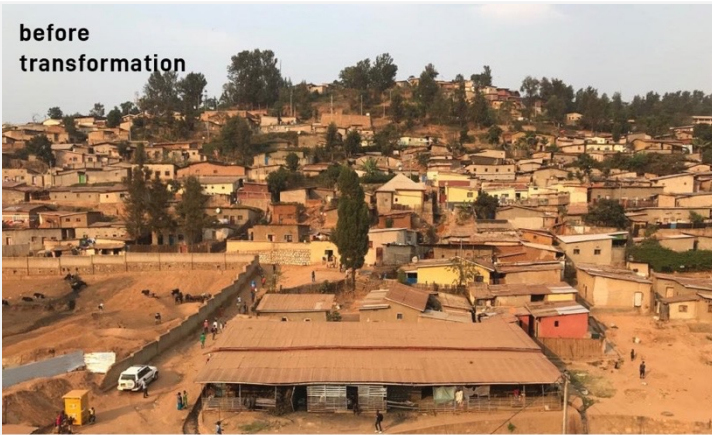
Comparison of monthly rental costs per dwelling unit

Typology	m ²	Existing (shared facilities)	Demonstration Bldg (self-contained)
Micro Studio	10	5,000	
Studio	16	15,000 – 20,000	60,000
1-bed	30	20,000 – 50,000	
2-bed	33		80,000 – 90,000
3-bed	33-45	60,000 - 100,000	
3-bed	50-70	100,000 – 150,000	
3-bed	66		150,000

CASE STUDY

INFORMAL SETTLEMENT UPGRADING

before
transformation



during
transformation



after
transformation

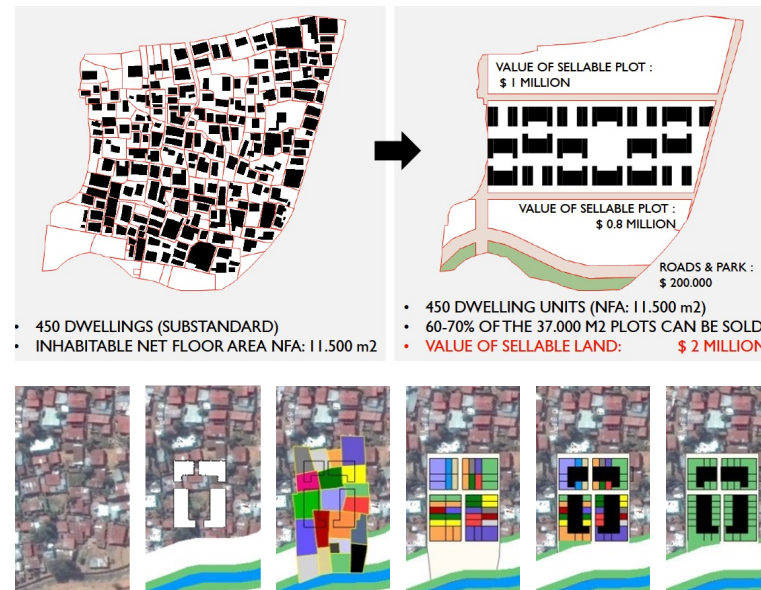


PROJECT OBJECTIVE

Transform an existing unplanned settlement using the techniques pioneered in the CoK and SDC/Skat PROECCO demonstration house.

METHODOLOGY

Through participatory meetings, the residents shall reach a consensus on the replotting of their parcels and distribution of units in new multifamily buildings. The replotting shall facilitate the densification of the neighbourhood as per the Master Plan, which shall, in turn, create available land that can be sold to finance the cost of upgrading (see diagrams below).



Key Takeaways

- Land consolidation facilitates the implementation of large-scale infrastructure upgrades and eliminates the need for costly and disruptive expropriation exercises
- Coordination between property owners and tenants requires professional experience in mediation, negotiation and consensus building
- Rental tenure is insecure and imposing rent control restrictions on landowners may be difficult, hamper market development and/or disrupt the participatory planning process >> risk of gentrification is elevated unless measures are put in place to ensure that single-room occupancy (SRO) accommodations remain available at the same cost (i.e., extra units to be owned/managed/maintained by an entity catering to extremely low-income households)
- The legal fees related to land consolidation are costly as are up-front fees for metering (water/electricity)

Opportunities for AfR

- This land readjustment model could be paired with innovative water/sanitation solutions that reduce installation and operational costs
- Business support could be provided to a new entity responsible for managing low-income rental housing
- Vouchers could be designed and given to households to cover land titling and registration fees



A reduced Submarket 02 value chain increases efficiency to maximize profits arising from informality.



Land acquisition Land in Submarket 02 is a precious commodity for two reasons: 1/ close to the city center and job opportunities 2/ land serves as mechanism for generating income through unregulated rentals. Parcels are small with frequent plot readjustments and subdivisions due to infrastructure improvements (GoR drainage, electricity projects) or dividing property among family members. Land cannot currently be sold at a high price (because not serviced and not accessible so it can't be permitted) but it does provide the owner with opportunities for earning steady rental income.



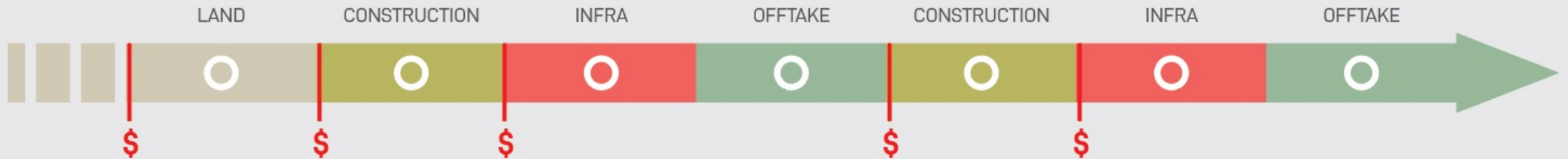
Construction Homes in this submarket mostly adopt rudimentary construction techniques for the erection of single story shelters. They are mostly built piecemeal through own-labour or with assistance from a neighbourhood mason. Materials are acquired in small quantities, typically via resellers. The informal nature of the structure is not the biggest construction risk, however. Submarket 02 is frequently in high-risk zones, where flooding and landslides can wreak havoc on foundation-less mud brick homes.



Infrastructure Informal connections to infrastructure networks are common (splicing electrical cables) and direct access to tapped water on plots is not frequent. Managing waste is the most common problem as there is no central sewerage system so landowners resort to pit latrines (with and without toilet apparatuses) on small overcrowded plots. When pit latrines fill up, they can be emptied or covered with a cement slab for the construction of another rental room.



Offtake EICV 5 reports that more than half of the households in this Submarket are renters. With little to no disposable income, it follows that landowners in this submarket make investments in building additional/rooms or structures because the demand is high and offtake is guaranteed. With no formal agreements in most cases, renters are subject to easy and frequent forced evictions.



Submarket 02's value chain is structured to capitalize on a strong rental market, driven by high demand and with expenditures aimed at facilitating offtake.



Land acquisition Land is typically acquired by homeowners via direct purchase (using savings or family loans) or is inherited.



Construction Not unlike Submarket 01, cash payments are the most common financing method for improving the home and/or adding new structures and facilities.

For plot owners who rent, financing upgrades/additions is far easier to budget as payments/deposits for materials can be made with rental income. Improvements to the house/room have a direct correlation to rental prices (a room with cement floor commands 2-3 times more per month than a room with a mud floor).

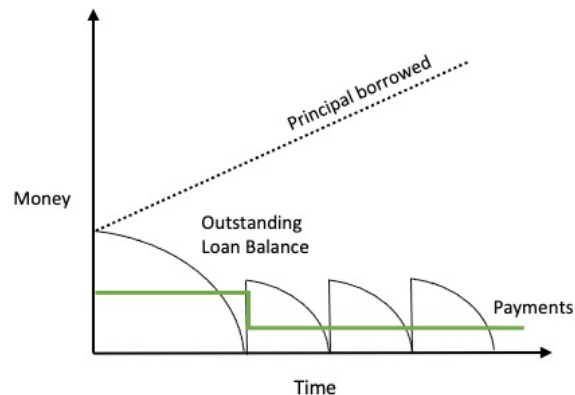


Infrastructure Most households have some form of connection (either formal or improvised) to a utility (with the exception of waste treatment which doesn't exist). Water consumption is expensive and is closely monitored by property owners, especially those who have tenants.

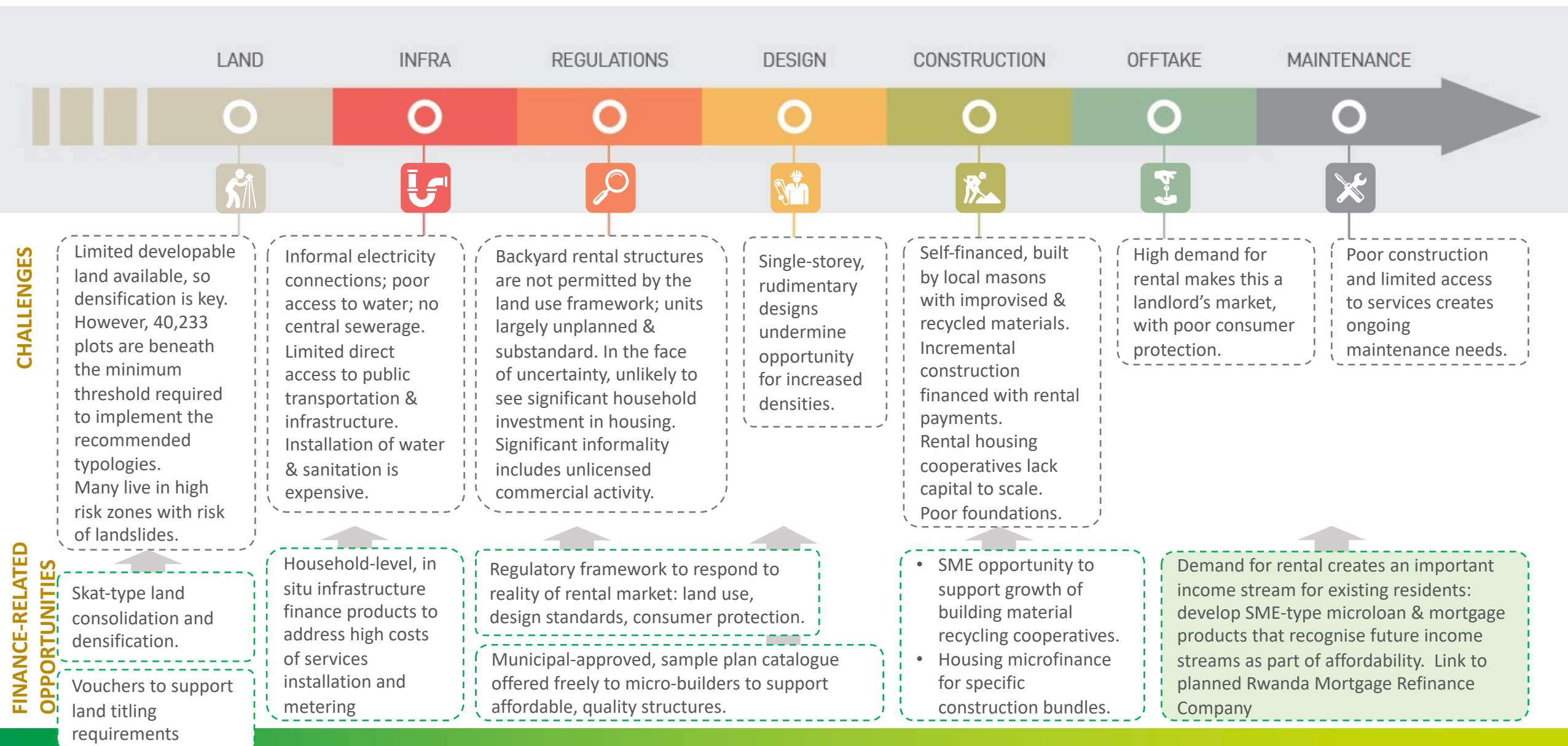
The same phenomenon observed with flooring upgrades are observed with infrastructure: as expected rental units with access to pit latrines with cement slabs rent for more than those without.



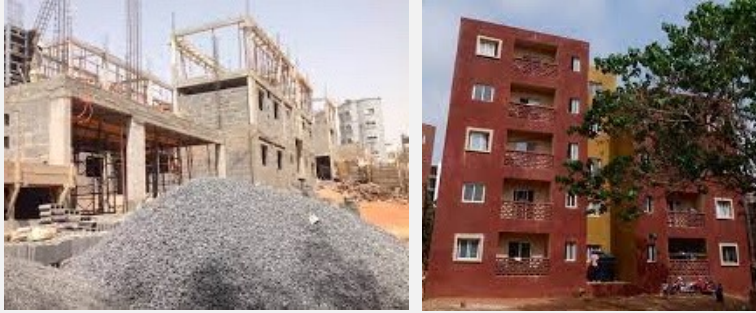
Offtake With little to no oversight from local authorities, landowners can increase the number of households on their plot with relative ease, generating additional household income. Attracting new tenants does not require services from a broker, it is done largely via word of mouth. Few property owners provide rental contracts, which means that tenure security is challenging for renters. Nevertheless the Gitega survey showed a low turnover among household renters, as opposed to young bachelors who tend to rotate in/out of this housing quite often.



Sample home construction financing scheme for borrowers (courtesy Rapid Urbanism)



CASAORASCOM



Over the last two decades, Senegal's urban population has doubled with Dakar driving urban growth. This urban growth has been accompanied by urban infrastructure and service delivery challenges. The Cité Baraka project, is an **informal settlement upgrading initiative** that is providing housing to 210 families (1600) residents living in Baraka, located in the capital of Dakar, drawing on land values to support housing construction costs.

The project officially started in March 2018 with the **construction of the first six** buildings. The project is driven by German based YOU Stiftung, and is supported by Orascom Group (technical and financial partner) and its subsidiary Casa Orascom. Various other donors and stakeholders assist in different capacities.

The project has been supported by the Senegalese government, with the Ministry of Urban Renewal and Living Environment monitoring the project.

Main components of Slum Upgrading Initiative

- Apartments range from **studio units (m²), 1 bedroom (38 m²), 2 bedrooms (49 m²) to 3 bedrooms (57 m²).**
- Residents pay community fees of **between 15-40 Euros** for 15 years after which title is transferred.
- **Phase 1 (Slum upgrading)** comprises 210 free homes with average unit sizes of 43m² and a net construction cost of \$350 /m².
- Phase 2 comprises **200 market housing units and 3000 sqm.** Unit sizes range from 44m² to 98m². Construction costs ranging from US\$650 to \$US 700/m².

Baraka Slum Redevelopment Model

- **15000m²** of land transferred to SOREBA (non-profit project company)
- **2/3 of land for redevelopment for previous dwellers** (1,600 people, 210 housing units in 11 mid-rise buildings).
- **1/3 land for 200 market units.** Developer builds market units only after delivering units to previous slum dwellers.
- **Donor Funding** to help finance housing, education facilities and forty-seven stores, businesses, and workshops were all made a reality. Benefitted from donor funding
- A **blockchain based payment management solution**, to allow for traceable community fees and rental payments
- A residents application will tie in **security, Identification and payments.**

Key Takeaways

- A **land-readjustment scheme** so the land paid for the units.
- A **sensitisation campaign** was run in order to inform the slum inhabitants and to raise awareness regarding the ways of life that will change.
- **Construction Financing** is required to drive economies of scale
- A **training program** for 215 craftsmen, semi-skilled workers and service providers of Baraka to enhance their capacities in strategic management and marketing).

Opportunities for Rwanda

- To explore the **applicability of land based financing mechanisms** such as cross-subsidies from commercial development.
- **Developing construction finance products** with favourable terms targeted towards large scale developers and small scale contractors.

Casa Orascom (2021).. <https://www.hdb.gov.sg/http://www.casaorascom.com/home.htm>

Casa Orascom (2019).AUHF Conference 2019.
http://www.auhf.co.za/wordpress/assets/2019/11/Shah_HOW-LOW-CAN-WE-GO-WITH-AFFORDABLE-HOUSING_am.pdf

ESTIMATED NUMBER
OF HOUSEHOLDS

87,000

% OF TOTAL HOUSEHOLDS



3%

% OF URBAN HOUSEHOLDS



17%

DOMINANT DWELLING TYPE



Bungalow

MEDIAN MONTHLY
HOUSEHOLD INCOME

~ RWF 252,000

03 HOUSEHOLD LANDLORD | URBAN

Mostly code-compliant homes built by property owners for sale or rental

SUBMARKET 03: HOUSEHOLD LANDLORD

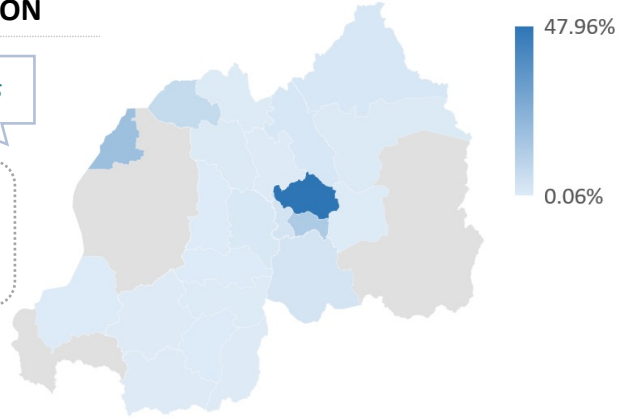
HOUSEHOLD HOUSING CONDITIONS

87,700 HOUSEHOLDS (3% of all households)

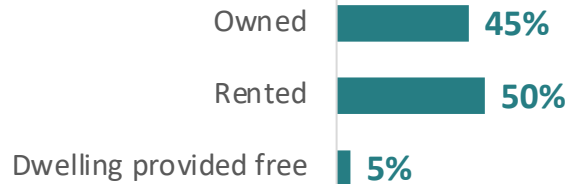
LOCATION

Urban areas

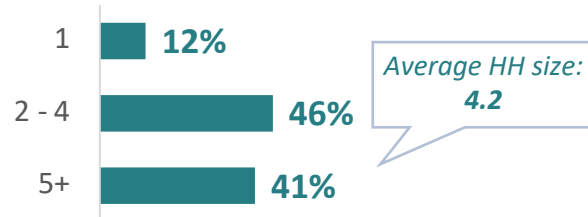
This submarket represents 17% of urban households



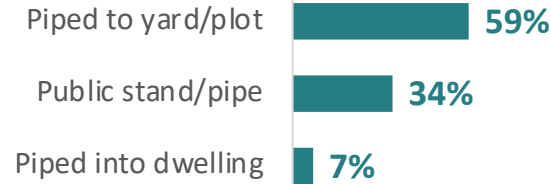
OCCUPANCY STATUS



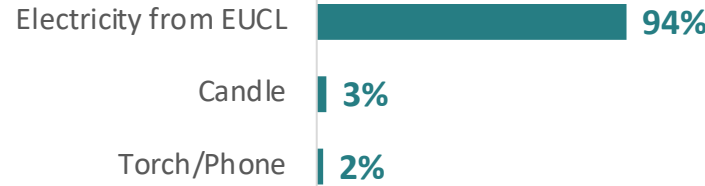
HOUSEHOLD SIZE



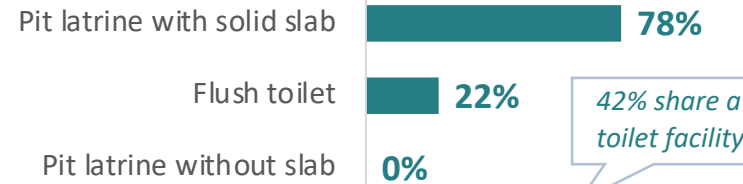
MAIN SOURCE OF WATER



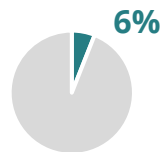
MAIN SOURCE OF LIGHTING



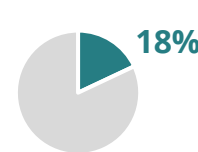
TOILET FACILITY



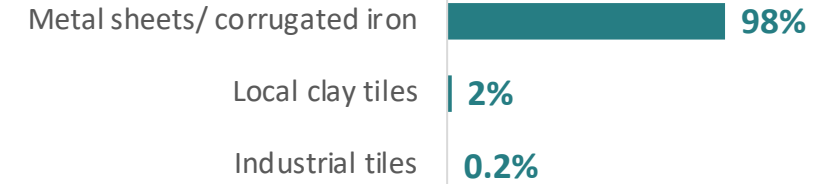
LIVE IN OVER CROWDED CONDITIONS*



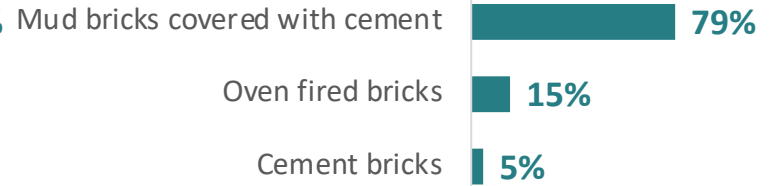
MULTIPLE HOUSEHOLDS IN DWELLING



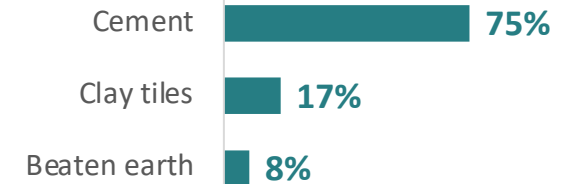
MAIN MATERIALS OF ROOF (TOP 3)



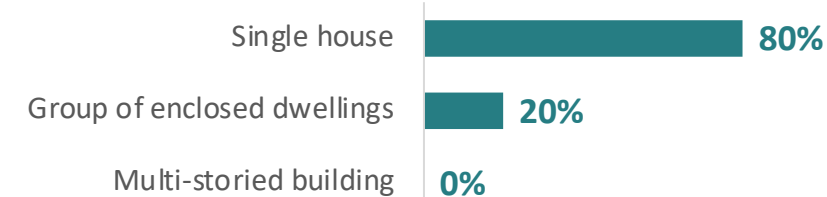
MAIN MATERIALS OF WALLS (TOP 3)



MAIN MATERIALS OF FLOOR (TOP 3)



HOUSING TYPE

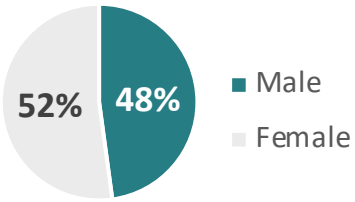


SUBMARKET 03: HOUSEHOLD LANDLORD

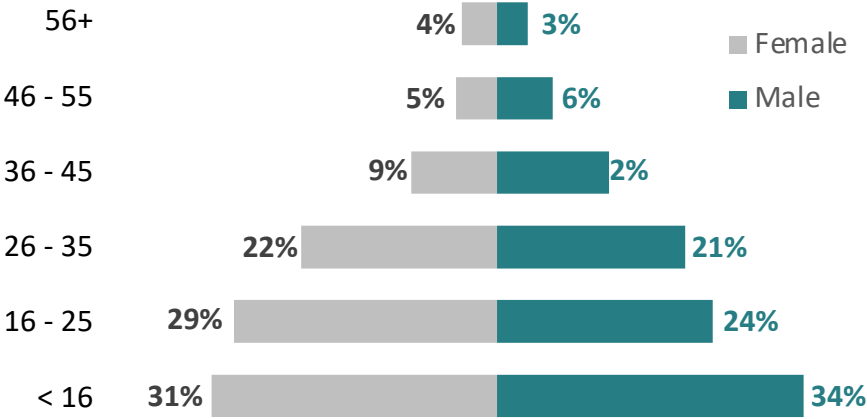
PEOPLE

1.53 MILLION PEOPLE
(13% of the total population)

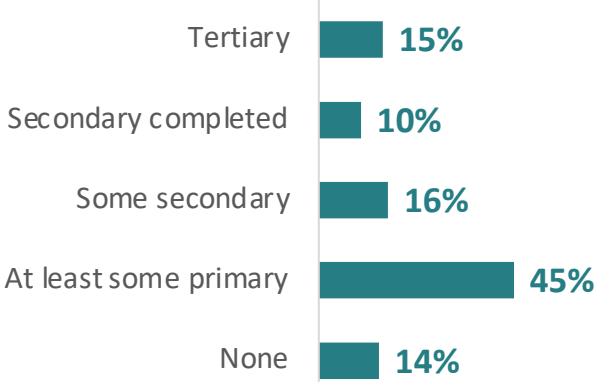
GENDER



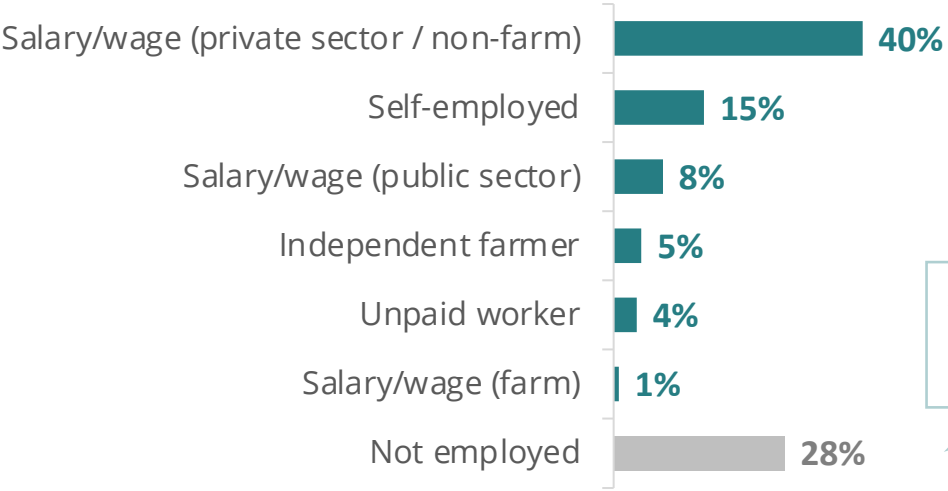
AGE GROUP



HIGHEST LEVEL OF EDUCATION
(ADULTS 16+)



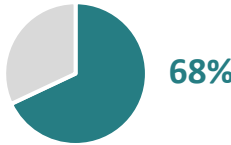
INCOME SOURCES (ADULTS 16+)



64% of salary or wage earners are permanently employed

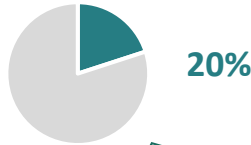
42% of self-employed are registered (RRA/RDB) business owners

% of HHs with at least one formally employed person or registered business owner*



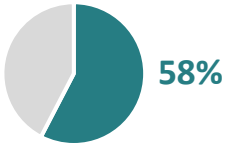
INCOME SOURCES (HOUSEHOLDS)

PERCENTAGE OF HOUSEHOLDS THAT RECEIVED AN INCOME FROM PROPERTY RENT IN THE PAST 12 MONTHS

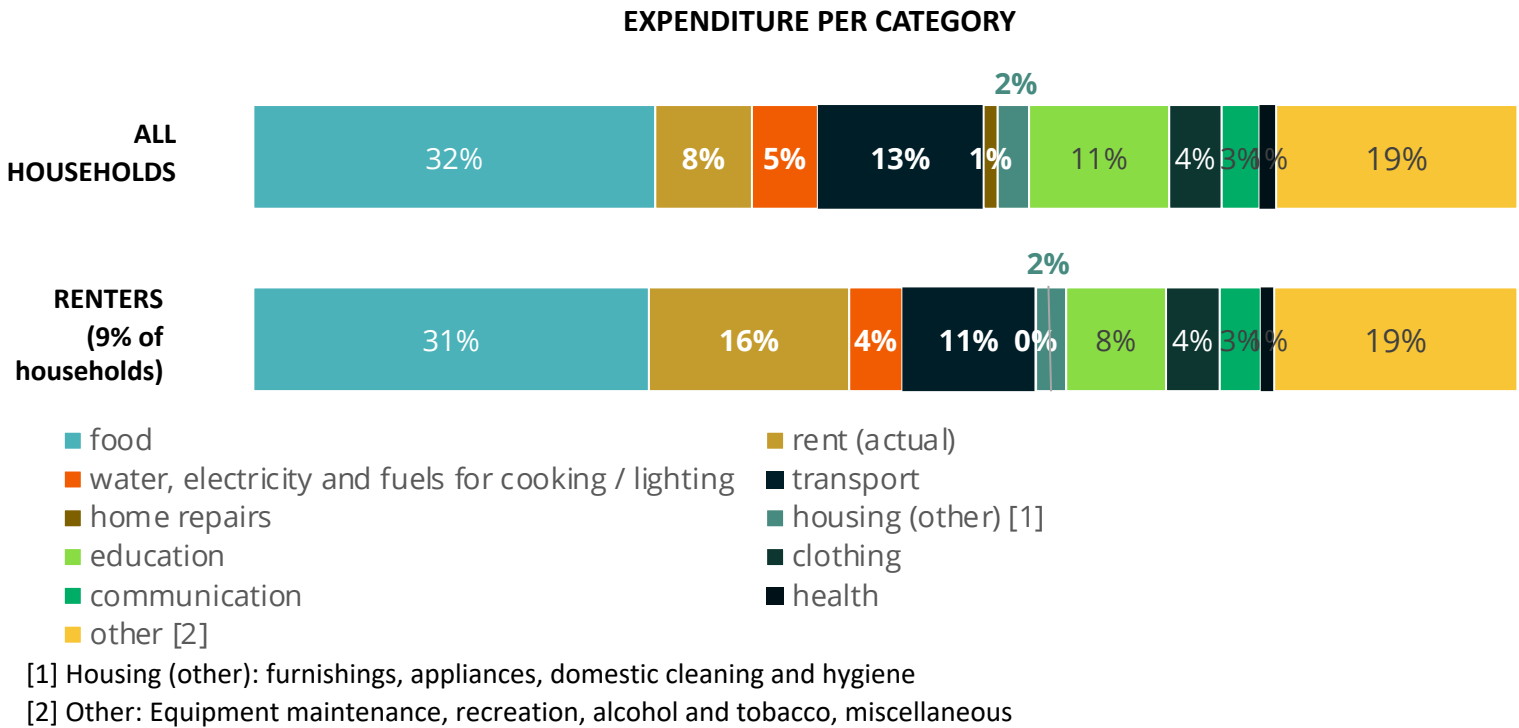


34% of owner households received an income from rent

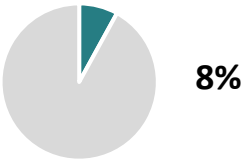
PERCENTAGE OF HOUSEHOLDS THAT RECEIVED A REMITTANCE IN THE PAST 12 MONTHS



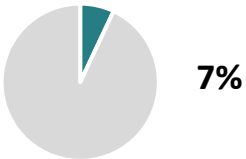
Source: EICV 5. * Financial institutions typically require applicants to be formally employed or a registered business owner in order to be granted a loan.



Percentage of households who spend 30% or more of their income on rent



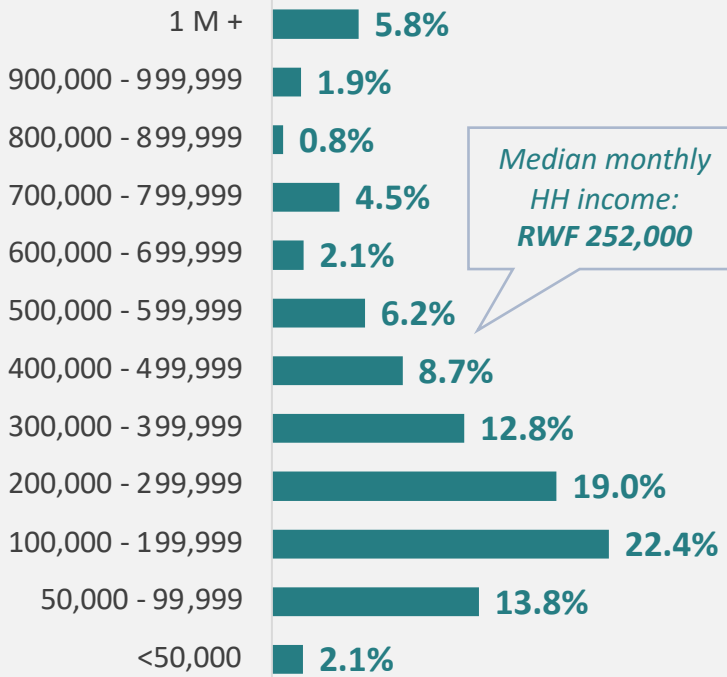
Percentage of all households who spend 45% or more of their income on housing and transport*



MEDIAN % SPENT ON HOUSING AND TRANSPORT*

23%

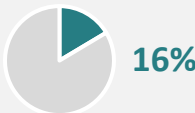
ESTIMATED MONTHLY HOUSEHOLD INCOME** (RWF)



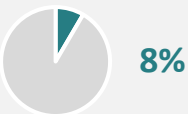
Affordability calculations will assume that households are able to spend the average rent percentage of expenditure on monthly loan repayments

16%

% of HHs that could afford an unsecured RWF 1 million loan (12 months, 20% interest)



% of HHs that could afford an RWF 12.5 million affordable mortgage loan (20 years, 11% interest)



Source: EICV 5.
*Includes rent, maintenance, water, electricity, and transport costs
**Income has been estimated using expenditure data. Amounts have been inflated from 2017 to 2021.

SUBMARKET 03: HOUSEHOLD LANDLORD

TYPICAL USER PROFILES

JEAN MARIE VIANNEY - CONSUMER



GENDER: Male
AGE: 29
OCCUPATION: Economist
HOUSEHOLD INCOME: 1,200,000 FRW /month
LOCATION: Gisozi

BACKGROUND

Jean Marie Vianney is newly married and is in his sixth year as a economist at the MasterCard Foundation. He lives in Gisozi, where he and his wife rent a 3-bedroom house, while saving to purchase something of their own. The couple’s HH income could easily finance a home in Submarket 05, but they have struggled to find an appropriate mortgage product. Combined HH income: 1,200,000 FRW / Rental spending: 300,000 FRW / Budget for new home: 55,000,000 FRW


CHALLENGES

- Although affordable in terms of rent and built to code, the plan was done by the mason and so the layout of the rooms is poor and the house is uncomfortable to live in, hence his search for properties in Submarket 05 and 06
- Landlord raised the rent during the pandemic
- Struggled to access a mortgage due to the contract nature of his and his wife’s employment

OPPORTUNITIES / POTENTIAL SOLUTIONS

- Jean Marie Vianney has a plot that he purchased when he was still a bachelor that can be used as part of a down-payment to a bank
- Jean Marie Vianney is in the market enablement zone: mortgage design could be revised to accommodate contract employees, through a rent-to-buy arrangement

PAUL - CONSUMER



GENDER: Male
AGE: 26
OCCUPATION: Customer service representative
INCOME: 300,000 FRW /month
LOCATION: Gisozi

BACKGROUND

Paul is single and works as a customer service representative for Airtel. He shares a modest 3-bedroom home with another bachelor that is located in a modernizing neighborhood in Gisozi. His share of the rent is 110,000 FRW/month. The home has a connection to water and electricity, but there is no water heater and it does not have direct access to roads, which is an inconvenience to Paul.

CHALLENGES

- Despite having enough money for a down-payment, Paul would not be able to afford mortgage repayments for even the cheapest newly built house, given the high interest rates
- Does not find new formal properties on the market that can meet his 15 million FRW budget and that are within a 20km radius of his place of employment in Kigali City Center

OPPORTUNITIES / POTENTIAL SOLUTIONS

- Paul has 3m FRW in savings and a small plot to sell
- With a steady job, Paul has access to a personal loan through his bank.
- Paul is in the market development zone for a mortgage lending product which would recognize his additional income sources. With a deposit from his savings and the sale of his plot, he might afford a 15m FRW home.

VINCENT - SUPPLIER



GENDER: Male
AGE: 62
OCCUPATION: Retired, landlord
INCOME: 3,200,000 FRW /month
LOCATION: Kacyiru

BACKGROUND

Vincent is a retired agronomist who lives with his wife and youngest son in a villa in Kacyiru. Vincent and his wife own 8 parcels (400 – 800 sqm) of land in Gisozi, Kabeza & Kimironko. Vincent works closely with his cousin (a master mason from Muhanga) to renovate and/or build structures on these plots and rent them out to young professionals or small families. Vincent does not list these properties with a rental agency. He is able to get tenants via word of mouth. Household monthly income: pension? / Monthly income from rent: 3,200,000 FRW

CHALLENGES

- Property taxes are rising
- Some of Vincent’s plots are in areas that require densification as per the master plan. This is not financially advantageous for Vincent so he has stopped making upgrades on some properties, lest he have challenges from the authorities who will wish him to comply with new regulations
- Vincent lists the properties in the names of his wife and kids to avoid detection from RRA

OPPORTUNITIES / POTENTIAL SOLUTIONS

- With a steady rental income, Vincent does not need a loan to finance the upgrades, however with capital & incentives to encourage densification, he could assist his children in growing his development & landlord business further, perhaps passing it on to his son.
- Digitised payments to create a visible track record of business activity and enable access to finance



An 2021 aerial view of Kigali's Gisozi Sector depicts a popular neighbourhood where single-family homes (new, renovated and/or used) are highly solicited by single professionals and young couples.

Submarket 03 is the most diverse of the 6 submarkets. New homes in this submarket consist primarily of single-family homes built in central neighbourhoods delivered as urban infill along spinal roads in formerly unplanned neighbourhoods. This development pattern contributes to highly mixed neighbourhoods, where pockets of informality persist on plots without direct road access. These neighbourhoods are popular with young families as the housing stock is largely older-generation single-family homes rented out at an affordable price, hence the 50% rental households reported in EICV5.

Submarket 03 includes heterogeneous housing clusters where individual property owners build and renovate in accordance with their means and self-interest. In that manner, this Submarket is just the next step up from unplanned settlements when it comes to understanding the motivations behind its growth and development. Although this model of housing delivery fails to achieve economies of scale, it remains immensely popular because it creates income-earning opportunities for entrepreneurial landlords.

Although the demand side data audit may hint at some overlap between Submarkets 02 and 03, the value chain analysis argues in favour of making a clear distinction between the two. Not only are the majority of the homes in Submarket 03 constructed with formal materials with mostly formal utility connections, new structures are permitted and largely follow city development guidelines.



MASTER MASON

Southern Province



An interview was conducted with a master mason who has been active in the construction of homes in Rwanda for nearly 20 years. He has established relationships with several local engineers, who, once the building is permitted, hand off the responsibility for construction and site management to him (via the homeowner). On average, the mason can build 3 – 4 homes per year, and often works on more than 1 site at a time.

Although he manages a crew of up to 35 masons, he has no formal contracts with these employees and does not have a formally registered company.

CURRENT PRODUCTS

The majority of the mason's work is in the construction of standalone Single Family Homes (3 – 4 BHK) in Rwanda's Southern Province. His homes typically fall between 8 – 10 million FRW and 20 – 30 million FRW. Although the homes do not qualify for subsidies offered through the Prime Minister's Instructions for affordable housing (density and size), the homes do fall within the cost bracket defined as affordable in Rwanda: below 35 million FRW.

SCOPE OF SERVICES OFFERED

- Recruitment of contracting team
- Building material procurement (construction mgmt)
- Site supervision (including stock management)
- Quality assurance

FINANCING

As is typical for master masons working in Submarket 03, he is paid for his services directly by the homeowner. He does not have capital to advance payments to day labourers or to make material purchases, so depends on cash disbursements from the property owner in order to carry on with his activities. Consequently, there are often building material supply shortages on site, materials may be of poor quality and/or work may be interrupted due to cash limitations. Unsurprisingly, he lists lack of construction financing (on both his and the client's side) as the primary hurdle to scaling up his business.

Key Takeaways

- The mason has no formal job description as he plays the role of contractor, construction manager and quality assurance supervisor on any given project
- Engineering plans are primarily to support the permitting process, amendments to the floor plans are often made on site as directed by the property owner and engineer. This type of "in-situ customization" requires him to remain flexible throughout the construction process, limiting his ability to establish a firm construction schedule or to make financial projections to grow and/or formalize his business
- Despite the homes being considered formal by the authorities, the construction process is largely informal as he is not licensed and neither he, the site nor his workers are insured.
- Common perception is that this quasi-formal construction process eliminates high margins and guarantees affordability.

Opportunities

- Provide low-interest rate business loans to mason so that he may upgrade his construction tools and/or get access to training courses for certification
- Provide business development and accounting training to mason so that he formally registers his company
- Develop construction financing and insurance products that directly respond to the needs of small contractors
- Digitise the building material supply chain to assemble supply and create a financeable proposition.

INTERVIEW

HOUSING SUPPLIER PROFILE



Bungalow

GREAT STRENGTH CONSTRUCTION COMPANY

Formerly Vuba Bricks



Great Strength Construction Company is a Kigali-based contracting firm that has been in operation for 3.5 years, during which time they have successfully constructed over 25 affordable homes.

The company was started by a University of Rwanda graduate engineer (recipient of this year's Innovation Award). The business model consists of providing a maximum number of services along the supply chain from planning, design, building material production and construction.

CURRENT PRODUCTS

Great Strength owns three machines with which the company produces Interlocked Stabilized Earth Blocks for the construction of single-family homes at an average cost of 15 – 25 million FRW per home.

The company can either produce the building materials themselves on-site or rent out the machine to clients to produce the materials with Great Strength simply doing the construction.

SCOPE OF SERVICES OFFERED

- Design (house and/or housing development)
- Permitting
- Building Material Production
- Home Construction
- Quality assurance

FINANCING

The costs for purchasing the ISEB machines was 100% borne by the entrepreneur. Packaging services along the entire value chain (design through construction) allows Great Strength to better plan/budget for contingencies. It also allows them to offer small rebates to clients who build more than one house at a time. These rebates are offered during the negotiation process and do not follow any prescriptive formula. Although Great Strength's business model limits their financial exposure (no piecemeal budget), it does not make them completely impervious to client's budget constraints.

Key Takeaways

- Working all along the value chain allows Great Strength to offer an attractive and competitive home building package to clients. Rather than taking a margin on every link in the chain, one margin on the entire service is taken, which reduces the overall cost of housing.
- No official mechanism in place to ensure that the ISEB meets the standards (i.e., correct soil mix, etc., proper resistance), particularly in the case where the property owner self-produces the blocks

Opportunities

- Great Strength's business model is based on the owner's spirit of entrepreneurship and innovation. The owner would like to do more (i.e., self produce more building materials) but lacks financial backing.
- Opportunity to create innovation fund for local builders with a proven track record for delivering quality homes within the affordable range.
- Better construction loan conditions for the property owner would mean less risk for Great Strength Construction and would improve their delivery capacity.

INTERVIEW

HOUSING SUPPLIER PROFILE



Bungalow

MODERN BRICKS LIMITED



Modern Bricks Limited is a building material producer and home builder in business for nearly 3.5 years. To date the company has constructed 15 homes.

The company business model has three main revenue streams: 1/ production and sales of stabilized earth blocks, using a Hydraform machine; 2/ construction of homes for clients; and 3/micro-developer of affordable housing. Given the high demand for affordable housing units, the company CEO would like to expand his work as a developer (i.e., build more homes at a larger scale) but is constrained by limited financing and risk-management options.

CURRENT PRODUCTS / SERVICES

- Stabilized Earth Blocks (SEB)
- Construction services
- Single-family homes between 15 – 30 million FRW

SCOPE OF SERVICES OFFERED

- Design (house and/or housing development)
- Permitting
- Building Material Production
- Home Construction
- Quality assurance
- Sales

FINANCING

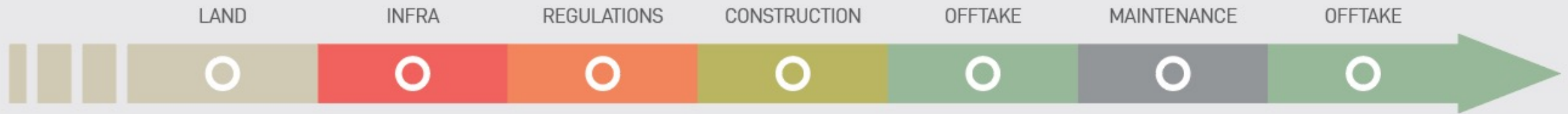
Modern Bricks Limited self-financed the purchase of machines for the production of SEBs using a combination of savings, personal loan and sale of other assets at a cost of 35 million FRW. In its role as micro-developer the company also make investments into the purchase of land for the construction of single-family homes that are put on the market between 15 and 30 million FRW. Despite providing homes in the cost bracket identified by National Policies as “affordable,” the company is not eligible for subsidies as it does not yet produce at scale. Modern Bricks assumes the responsibility for the offtake themselves, offering a small rebate to those buyers with the means to quickly finance the purchase of a home.

Key Takeaways

- Modern Bricks Limited is delivering affordable homes to the market, but at an incredibly limited scale, they also design-build
- The company’s design-build model is not unlike the backyard landlords with the exception that the process has been formalized and meets current building standards
- The technology does require close supervision to ensure building material mix meets the standard
- Financing aside, the business model is based on the single-family home typology, which is no longer the preferred building typology in either the new city Master Plans or the National Land Use Devt. Plan

Opportunities

- Provide financing for innovation and investments into construction technologies, possibility to adopt a similar approach as Enabel (former Belgian Technical Cooperation) who is supporting NIRDA in offering investment support in 4 building material value chains
- Work with Rwanda Standards Board and Rwanda Housing Authority to develop a building materials marketplace, where building materials can be fast-tracked through testing and approvals and sold in bulk to builders – important digitization opportunity
- Construction finance – debt and equity – to grow the capacity to deliver at a greater scale



Submarket 03 is a formal version of the owner-version seen in Submarkets 01 and 02, with rental income driving design, offtake and maintenance decisions.



Land acquisition Plots in these neighbourhoods are larger than in Submarket 02, a carry-over from the first cadastral maps and regulations that had higher minimum property sizes. Although there may be multiple houses on a plot, formal subdivisions are less frequent than in Submarket 02.



Regulations Homes in this submarket are predominantly code compliant (formal) at the outset, validated by a registered engineer and submitted to the District office for permitting. However, with limited inspection capacity, authorities may not notice improvisations made by entrepreneurial landlords during implementation. This is critical especially since the introduction of zoning regulations that favour densification challenge the preferred housing typology for this submarket: single-family residences.



Construction Home building in this Submarket is often an owner-led exercise, with the property owner serving as developer, construction manager and overseer working in partnership with a master mason or independent engineer.



Offtake Household landlords find potential renters through word of mouth but are largely supported by an extensive and competitive broker network. Costs are split between property owner and renter.



Infrastructure This submarket is serviced by proper water and electricity lines. Homes that do not have internal connections at least have access to piped water in the yard.



Maintenance No formal mechanism to do regular maintenance on properties. Owner does repairs as needed.



Although Submarket 03's value chain is largely code compliant, it is structured around rental agreements/income that may not always be formalized.



Land acquisition Land is typically acquired by homeowners via direct purchase (using savings or family loans) or is inherited.



Infrastructure Modest upgrades are made in the form of solar water heaters on some of the newer home constructions in this submarket.



Regulations Permitting costs are born by the homeowner (including technician fees). However, homes are usually based off of typical plans and so limited intervention by inspectors is done on site.

Construction The homeowner may chose to finance the construction through a personal loan or cash savings. Since the homeowner manages the site him/herself, building material purchases can be done at a later date and finishings can even be postponed in the event of a cash shortage. Floor plans can also be adjusted on site to allow for illegal multi-family units.

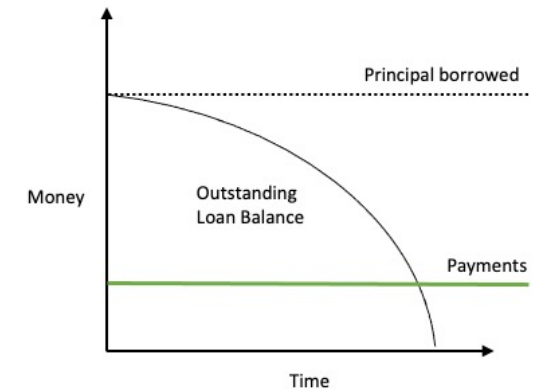
For plot owners who rent, financing upgrades/additions is far easier to budget as payments/deposits for materials can be made with rental income.



Offtake Brokers power the rental market for Submarket 03. Typical fees for their services are 3-5% for a sale and 1 months rent in the case of a rental. The fees are split between the property owner and the buyer/renter. There are rarely if any marketing expenses.



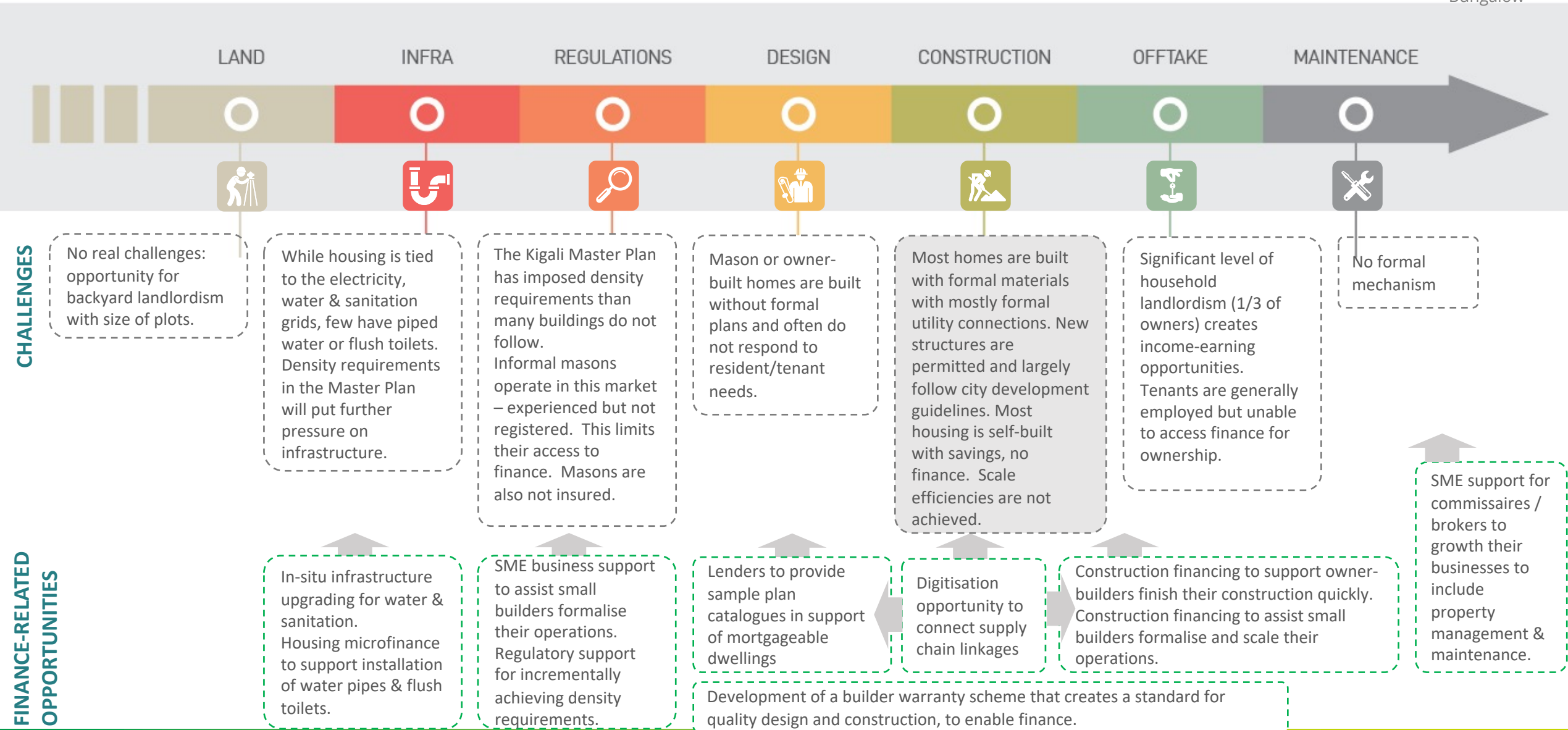
Maintenance As with construction, critical home upgrades are typically made with savings or small loans from family, friends or savings groups.



Typical Submarket 03 home construction financing scheme
(courtesy Rapid Urbanism)

SUMMARY OF CHALLENGES & OPPORTUNITIES

HOUSEHOLD LANDLORD - URBAN





iBuild Global sits at the nexus of demand and supply and creating a market place in which buyers and sellers of building materials and construction services find one another on a virtual platform. Presented as an app, the Kenyan offering allows households or small builders who wish to commission or undertake some form of building or home improvement work, a place to post their request for proposals. Through the app, the request is received by service providers, who then compete with one another in bidding for the work. The app aggregates a market for both buyer and seller, creating a competitive environment which then supports service providers in raising capital to further grow their businesses.

See www.ibuild.global

What Problems does iBUILD Solve?



Key Takeaways

- iBUILD is a mobile app that aims to formalise and improve the delivery of small-scale construction for low-income households
- The app acts as a mobile marketplace connecting housing sector players: households to builders, contractors and lenders; builders to one another, to material suppliers, and to lenders.
- Similar to Uber, iBUILD allows households to rate and review builders and service providers. This creates a track record that suppliers can then use to raise capital
- They also aim to support the certification and upskilling of informal builders

Opportunities for Rwanda

- The creation of a digital marketplace for affordable housing would be relevant across the six submarkets.
- The iBuild app also allows lenders to issue credit for housing and know it is used for that purpose.



South Africa's housing finance framework has historically targeted large-scale developers and greenfield developments. More recently, the activities of micro builders, owner-builders and backyard landlords have been recognised, and targeted mortgage and non-mortgage housing finance products have been developed to capitalise on this construction activity.

uMaStandi is a mortgage lender which offers mortgage finance, training and mentorship to qualifying entrepreneurs who wish to build income-producing rental accommodation. Entrepreneurs are assisted in identifying and appointing builders, submitting and getting plan approvals and ensuring the construction of their rental development on time and within budget.

iBuild Homeloans offers mortgage finance to homeowners to build rooms for rent in their backyard. Loans are disbursed in four construction phases: 1) Foundations 2) Walls 3) Roof, 4) Fixtures and Fittings and 5) Complete.

Main product features

uMaStandi www.umastandi.co.za

- Borrowers must own the property on which they wish to develop rental accommodation.
- uMaStandi works with the borrower to determine the appropriate design approach, financial feasibility and other factors
- Loan finances a minimum of 4-12 rooms with private or shared toilets and showers
- 15 year mortgage loan

iBuild Homeloans www.ibuildhomeloans.com

- Borrowers must earn a minimum joint income of R5500/month
- Loan amounts from R60 000, with monthly instalments starting at R1500 per month
- Loans paid in stages. Half of the loan is disbursed directly to the building material supplier, while the other half is disbursed to the borrower for labour and incidentals
- The fee for construction advice is built into the loan facility.

Lenders face three key challenges in their engagement with small scale landlords: affordability, quality and security. These lenders are managing these risks with relationship-based, market-specialist lending products that leverage borrowers' existing assets.

Key Takeaways

- Specialist lending reduces risk in working with these emerging businesses, bringing costs down
- Backyard landlordism leverages existing property for the construction of additional housing, creating also an income stream for the small scale landlord
- Finance approved on the basis of the financial feasibility of the rental development, and not existing borrower income.
- Disbursement in stages saves on financing costs while managing repayment risk

Opportunities for Rwanda

- To support the development of niche-market mortgage lenders that can target the particular borrowing requirements of household landlords
- To include this sort of mortgage lending among the targets of the pending Rwanda Mortgage Refinance Facility
- To work with local municipalities to create mechanisms that support quality building towards the development of mortgage dwellings

For a case study of seven micro builders in South Africa, see <https://housingfinanceafrica.org/documents/case-study-14-financing-micro-developments-of-residential-rental-stock-case-studies-of-seven-small-scale-landlords-in-cape-town/>

For a blog on microfinance for micro builders in South Africa, see <https://housingfinanceafrica.org/documents/innovations-in-backyard-rental-models-for-the-2020s/>



The low level of formal housing delivery in Zambia means that most middle-class households still build their housing themselves, incrementally. The lack of finance has meant that many homebuilding projects get stalled and remain incomplete when the homebuilder runs out of funds. Zambian Home Loans (ZHL) addresses this by offering an alternative to the conventional mortgage finance instrument: a building loan, which is converted to a mortgage once construction of the house has been completed.

ZHL is specialised mortgage institution owned by African Life Financial Services and Sofala Capital. It specialises in building loans which are paid out in tranches according to the various building stages, i.e. foundations, walls, roof, fixtures and fittings and the complete house. Once a stage has been completed, a tranche payment is made for the next construction stage. This financing structure guarantees that the final product will be delivered as per the agreement and the required quality standards, ultimately resulting in physical collateral to put against the building loan.

See www.zambianhomeloans.com

Main product features

Zambian Home Loans offers four mortgage products: construction loan, equity release, land purchase and USD loans. Borrowers must own their plot of land with a title in a family member's name. The must earn more than ZK6600 (360,000 FRW) per month, and be able to demonstrate a consistent monthly income. Loans can be up to 20 years at a variable rate tied to the national policy rate. The land finance loan has a slightly higher interest rate than the construction or equity release mortgages.

Zambian Home Loans has partnered with various building material supply companies, such as Builders Warehouse, Sunshare, MicMar, NDS Glass and Aluminium, Vaal Sanitaryware, Union Tiles and MAT Floors, and are able to secure bulk discounts. ZHL offers standard house plans for 1 to 4 bedroom houses. Borrowers can choose their own contractors, but ZHL does keep a list of those who have performed poorly in the past so they are not used again.

ZHL charges a once-off fee for these services which is built into the overall loan balance. All borrowers are required to take credit life insurance.

Key Takeaways

- Zambian Home Loans capitalises on the fact that its loan immediately lowers the loan-to-value ratio as the improvements it finances increase the value of the property.
- By disbursing the loan in tranches, ZHL is able to manage its own risk, while also reducing the financing costs for the borrower.
- Specialist lending means that ZHL comes to understand the home building process very well, and can assess risk with greater precision while offering useful advice and construction support to the borrower.
- ZHL's interest in the quality of the structure acts as a useful mechanism to support housing quality in an unregulated construction sector.

Opportunities for Rwanda

- Incremental home construction by middle-class borrowers is a common form of housing delivery. This product would be usefully received in Rwanda, and could be an initiative that one of the RMRC-participating banks could introduce.

ESTIMATED NUMBER
OF HOUSEHOLDS

1,000

% OF TOTAL HOUSEHOLDS



% OF URBAN HOUSEHOLDS



DOMINANT DWELLING TYPE



MEDIAN MONTHLY
HOUSEHOLD INCOME

~ RWF 188,000

04 EMPLOYER HOUSING | URBAN

Access to housing facilitated by the employer

URBAN BLUE COLLAR WORKERS

HOUSEHOLD HOUSING CONDITIONS

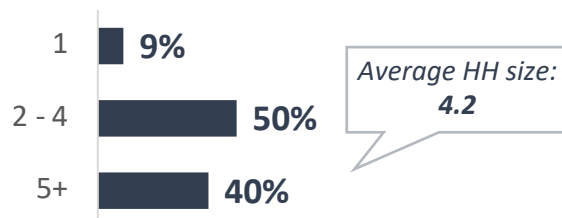
262,000 HOUSEHOLDS (10% of all households)

According to EICV 5, only about 966 households (0.2% of urban households) currently live in a dwelling provider by their employer. However, given new policies and national legislation in place to support the creation of Industrial Parks, this segment is likely to grow in the future. These industrial parks will likely employ those in elementary occupations, craft and trade related workers and plant and machine operators and assemblers. This group of workers has been profiled over the next few slides

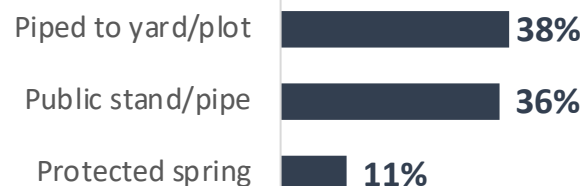
OCCUPANCY STATUS



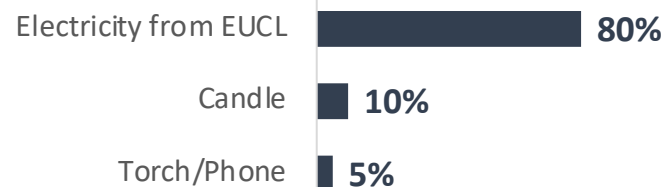
HOUSEHOLD SIZE



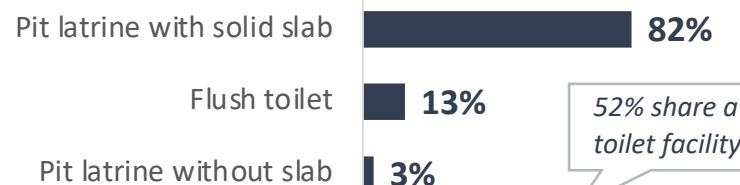
MAIN SOURCE OF WATER



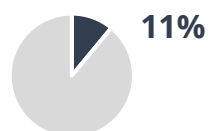
MAIN SOURCE OF LIGHTING



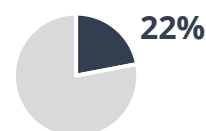
TOILET FACILITY



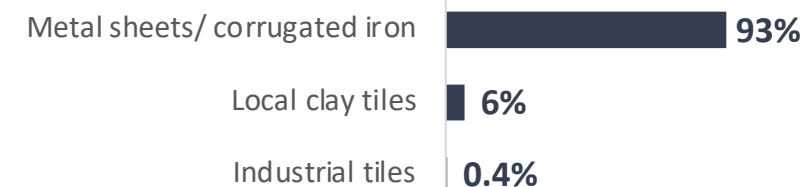
LIVE IN OVER CROWDED CONDITIONS*



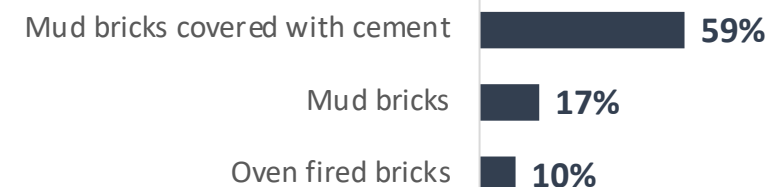
MULTIPLE HOUSEHOLDS IN DWELLING



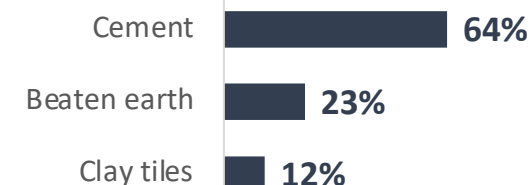
MAIN MATERIALS OF ROOF (TOP 3)



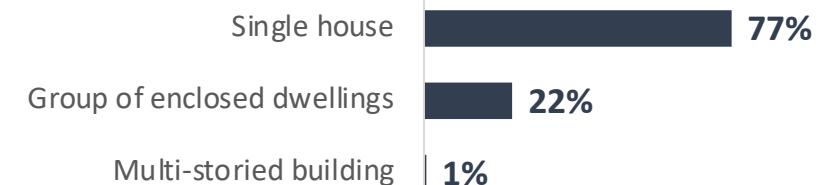
MAIN MATERIALS OF WALLS (TOP 3)



MAIN MATERIALS OF FLOOR (TOP 3)



HOUSING TYPE

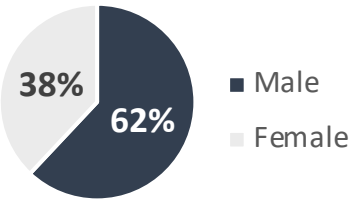


URBAN BLUE COLLAR WORKERS

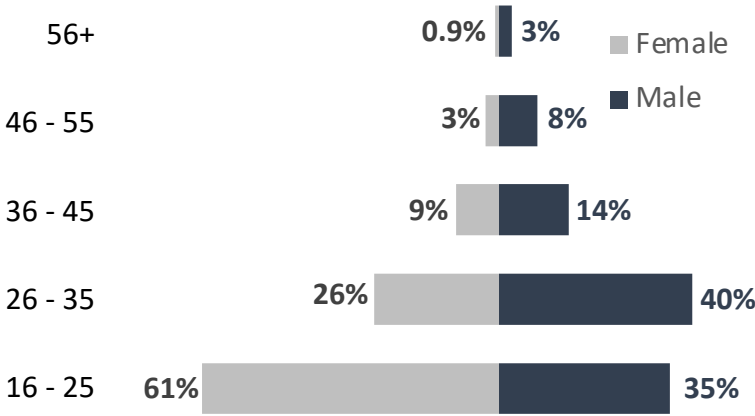
PEOPLE

334,000 Adults 16+
(5% of the total adult population)

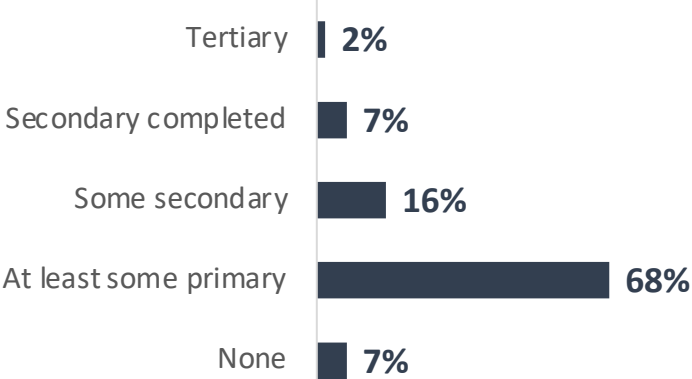
GENDER



AGE GROUP



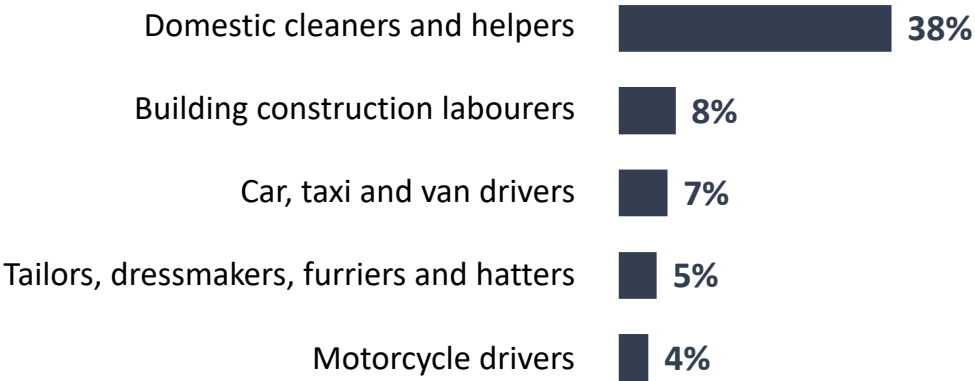
HIGHEST LEVEL OF EDUCATION
(ADULTS 16+)



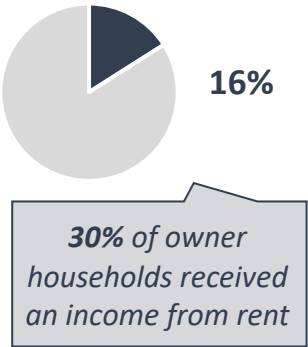
INCOME SOURCES (ADULTS 16+)

INCOME SOURCES (HOUSEHOLDS)

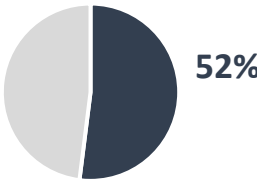
TOP 5 OCCUPATIONS



PERCENTAGE OF HOUSEHOLDS
THAT RECEIVED AN INCOME
FROM PROPERTY RENT IN THE
PAST 12 MONTHS



PERCENTAGE OF HOUSEHOLDS
THAT RECEIVED A REMITTANCE
IN THE PAST 12 MONTHS



SUBMARKET 04: EMPLOYER HOUSING

JANVIER - SUPPLIER



GENDER: Male
AGE: 54
OCCUPATION: Business
LOCATION: Gisozi

BACKGROUND

Janvier is an entrepreneur who has successfully nurtured several small businesses in his native Rwanda as well as in Mozambique and South Africa. In partnership with colleagues from Dubai, he plans to launch a plastics recycling business and has already negotiated with RDB to secure a plot in the Special Economic Zone (SEZ). As part of the land agreement, RDB and the City of Kigali have asked him to conform to the 2050 Land Use Master Plan by providing housing for employees across the valley in Ndera.

CHALLENGES

- Janvier’s Dubai-based partners are responsible for bringing the machinery and he will assume responsibility for building the warehouse. He does not have the financing to service and develop an additional property outside of the SEZ for 50 employees and their families, let alone rental housing that requires close management and maintenance.

OPPORTUNITIES

- GoR is currently reviewing their Affordable Housing subsidy policy to see if land could be added to the list. Contribution to job creation could be one of the conditions of eligibility.
- Digitised payments to create a visible track record of business activity and enable access to finance

TYPICAL USER PROFILES

PROVIDENCE - BENEFICIARY



GENDER: Female
AGE: 34
OCCUPATION:
INCOME: 75,000 FRW /month
LOCATION: Nyaruguru-Nyakizu

BACKGROUND

Providence is a married mother of 5, working and living in Nyaruguru-Nyakizu where she and her husband work on a tea plantation.
HH Monthly Income : 1,900,000 FRW

CHALLENGES

- Providence and her husband still have to purchase land and build the house from scratch, which is not something they have experience doing.

OPPORTUNITIES

- If a development offered affordable housing solutions, Providence could afford to purchase in a development

JOSÉPHINE - SUPPLIER



GENDER: Female
AGE: 49
OCCUPATION: Head of Furniture Cooperative
LOCATION: Muhima

BACKGROUND

Josephine is married with 4 grown children. Since 2002, she has managed a furniture cooperative with a small workshop and showroom in Muhima. The other members of the cooperative are artisans from the Districts who travel to Kigali to weave furniture and make traditional Rwandan craft products. Some cooperative members sleep in the workshop while others rent rooms in one of the neighbouring unplanned settlements where they may do other odd jobs for additional income. With the advent of the Kigali Master Plan 2050, the Cooperative must move its location to a Light Industrial Zone (L1). Josephine would like to use this opportunity to provide modest living quarters for members of the cooperative. Average salary of cooperative artisan: 200,000 FRW

CHALLENGES

- Josephine is comfortable with building sleeping quarters at the new warehouse, but does not have the capital upfront especially if the workshop will need to close temporarily to facilitate the transition.

OPPORTUNITIES

- The cooperative’s land in Muhima is centrally located and has a high value. That money could easily finance acquisition of a new plot and some site preparatory works
- Digitised payments to create a visible track record of business activity and enable access to finance

EMPLOYER HOUSING URBAN

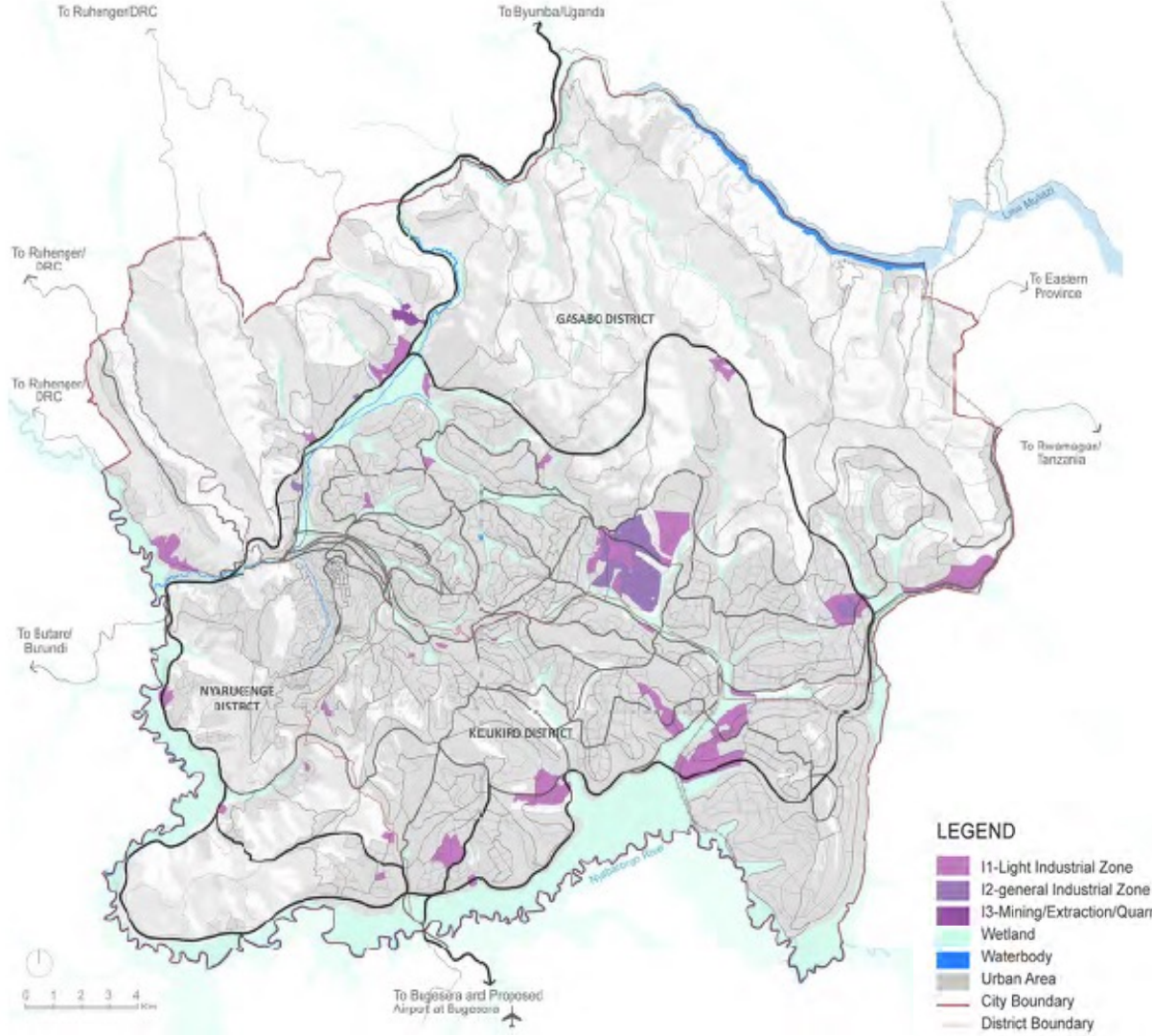


Housing Block

The Kigali City Master Plan 2050 has allocated 15.8 km² to industrial parks in 3 categories: light industrial, general and mining/quarrying. Together the 3 types should deliver more than 300,000 jobs by 2050.

Consequently, the plan proposes an **Integrated Industrial Park Model**, small industrial cities of sorts that can deliver a comprehensive live/work environment to improve quality of life and productivity.

Additional industrial parks are planned for the 6 Secondary Cities. In Muhanga District alone, 633 km² of industrial park by 2050 are being proposed (approval of Secondary City Master Plans are awaiting cabinet approval)



Submarket 04 may be the smallest of the 6 submarkets, but with new policies and national legislation in place to support the creation of Industrial Parks (e.g., National Land Use Development Plan), there is an opportunity for exponential and rapid growth. Not only could Submarket 04 drastically increase the number of rental housing units on the market, it could effectively formalize the demand from households currently being serviced by Submarket 02's informal supply chain.

Although the employer housing options on the market are few, they are sprinkled across the income pyramid (foreigners are provided with housing options via their employers) with the majority of offerings for low-income earners. Consequently, a review of the housing supply chain for Submarket 04 indicates similar trends observed in Submarkets 01 and 02: largely informal with gaps related to improper access to infrastructure, improvised construction and little to no maintenance.

Growing Submarket 04 will require important strengthening of the value chain in the planning, design and construction links as well as on the maintenance. To date, property management companies that handle hundreds of rental units for an often transient population (potential for high turnover among unskilled labour) are not active in the market. There exists the potential to share experiences, skills and/or market with the IDP Model Village program or with vocational schools that provide student housing, both of which have a strong presence in secondary cities.

VALUE CHAIN LINKAGES

EMPLOYER HOUSING - URBAN



Employee housing is currently unregulated and delivered informally, with a value chain focused solely on providing basic accommodation to transient workers.



Land acquisition No land purchase required. Employer housing for those at the lower end of the income pyramid is mostly located directly on the jobsite and is a temporary solution. For those at the higher end, housing is typically through the form of a cash subsidy for a rental property.

Banks like BK and BNR and/or some cooperatives have purchased land for employees/members to build family housing. However, construction on most sites has moved forward as employees prefer a different location or are still saving funds for construction.



Infrastructure Labour inspectors are tasked with verifying that workplaces provide their employees with access to basic infrastructure. For those living and working on work sites, these shared facilities service them even after hours. Temporary worksites (e.g., construction sites, etc.) are typically less compliant with these regulations.

For rental employer housing at the higher end of the income pyramid, the homes are fully serviced offerings from Submarkets 03, 05 or 06.



Construction Employee quarters on most industrial sites are rudimentary, built of wood, mudbricks, and possibly traditional bricks, similar to the housing observed in Submarkets 01 and 02.

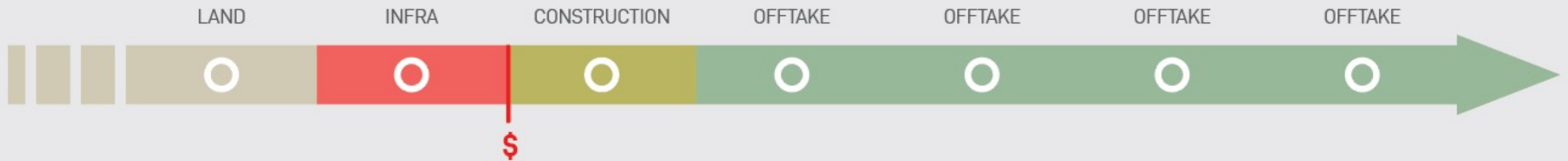
NOTE: Specific building standards or regulations for employee housing do not yet exist.



Offtake Given the seasonal nature of many low-income jobs in Rwanda, most employer housing is delivered as-is to a rotating group of employees. In some more stable sectors, employees may benefit from a more permanent shelter (to be shared) belonging to the owner near the work site.

FINANCIAL LINKAGES

EMPLOYER HOUSING - URBAN



The value chain for Submarket 04 is unique in that it capitalizes on existing assets to deliver housing that largely excludes expenditures and financial commitments



Land acquisition Land is owned by the employer or company.



Infrastructure For those formal businesses requiring approval from Rwanda Standards Board for licensing, access to basic infrastructure is guaranteed. In so much as labour inspectors can monitor work sites and ensure proper working conditions, employer housing provides access to basic services.



Construction This is the only link in the existing employer housing value chain that requires a financial output. Construction is typically paid for with business owner or company funds without the need for external cash inputs (e.g., personal loan) when provided at small scale.

For large companies/enterprises, financing construction of a rental housing estate is an unplanned expense and companies typically do not wish to become real estate managers alongside their core business.



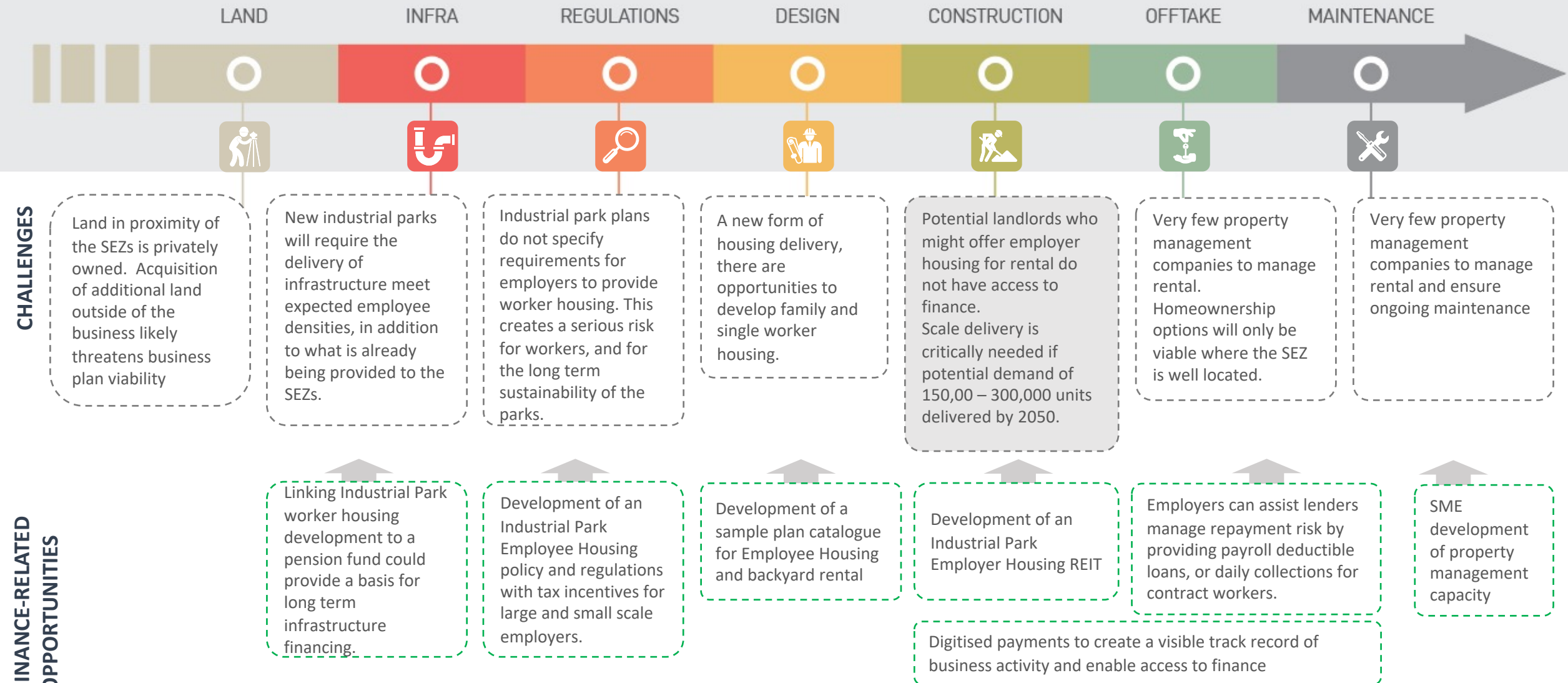
Offtake If properly planned for, providing rental or free-of-cost housing can be a lucrative proposition for a company, provided it is taken into account in the business planning and the company has the capacity to manage rotating tenants.

SUMMARY OF CHALLENGES & OPPORTUNITIES

EMPLOYER HOUSING



Housing Block





An estimated 55,7% (70,49 million people) of the total population in Indonesia are **informally employed**. Generally informal workers face challenges in **accessing credit / housing finance and affordable housing**. Similarly, financial institutions face challenges in how to effectively underwrite **informal incomes**.

Sarana Multigriya Financial (SMF) is a secondary mortgage company in Indonesia tasked with creating decent and affordable housing for all Indonesian people. Grab Holdings Inc. is a Singaporean multinational company (much like Uber) that has developed an **online mobile platform** that provides **ride hailing, food delivery and financial services**. **Grab Indonesia** contracts a significant number of informal self employed workers in Indonesia as drivers.

SMF in collaboration with Grab Indonesia launched a Housing Finance Scheme (SMF-Grab) targeting **Grab Indonesia's drivers partners**. **Non-bank financial institutions (NBFIs)** act as originators of the loans.

GRAB (2021). Housing and Development Board. <https://www.hdb.gov.sg/>

Housing Finance International (2020). Affordable Housing Finance for Informal workers. file:///Users/questaccount/Desktop/HFI-Autumn-2020_AHF-informal-workers_article.pdf

Selection Criteria for Driver Partners applying for housing finance

- **Minimum down payment** of 1%
- Fixed interest rate tenure (maximum of 15 years)
- **Maximum instalments** are 30% of driver's income
- **Minimum gross income** of IDR 8 million (US\$571)/month
- **Maximum house price** of IDR 350 Million (US\$25 000)
- Credit Process Cost is relatively affordable
- **Repayment method** is conducted by Grab Indonesia in the form of a **daily collection scheme**.

Indonesia Grab Driver Financing Scheme

- Grab Driver partner **makes an application** to Grab. Grab Indonesia does **initial screening of partners** and plays the role of collecting the driver's instalments twice a day.
- Grab Driving Partners who **obtain recommendation** from Grab Indonesia Partners then complete and submit housing finance application to the **NBFI**.
- **SMF, Grab Indonesia and the NBFI work together** to determine housing projects that drivers can choose from. Preference is given to less populated areas than the main urban city (Jakarta)
- Grab Indonesia gives monthly payments to the NBFI.
- The NBFI does a **financial analysis** of the developers' projects
- SMF provides **long term financing** to the NBFI and determines which NBFI can be an originator of the loans

Key Takeaways

- Government has been working to reduce house ownership backlog by implementing **subsidized mortgage programs for low income people**, reserved for first time homebuyers.
- To qualify, a Grab Indonesia driver partner must have been operating **for a year** and have a **minimum rating of 4**.
- **Daily collections** match borrower earning patterns
- Mortgage Scheme is protected by **several insurance products**. Life insurance for debtors, fire insurance for the housing units and credit insurance for the debtor.
- Ease of Credit Terms through **informal underwriting mechanisms** that involve Grab Indonesia initially screening applicants for eligibility

Opportunities for Rwanda

- The anticipated formation of **Rwanda Mortgage Refinance Company** provides an opportunity to explore alternative financing mechanisms for informally employed workers that increase collaboration between SACCOs/FIs, private and public sectors.
- Exploring mechanisms of leveraging **employer activity in support of worker housing**.
- **Building the capacity of SACCOs** to be involved in housing finance

Vietnam Industrial Parks, Employee Housing



Over the last 20 years, industrial zone development has played a key role in the Vietnam's economic growth. According to **Vietnam's Housing Law, Industrial Park workers** are eligible for social housing developed by a variety of actors that include the State, the investors of the commercial housing projects and Industrial Park infrastructure business operators.

It is estimated that only 28% of industrial zone workers are provided with stable accommodation, while the rest have to rent houses with poor sanitation and infrastructure. Among industrial workers, roughly 40% are between the ages of 15 and 29 and approximately 78%, or 1.75 million people, rent their dwellings.

Formal supply is only sufficient to respond to 10 percent of this rental housing demand. Current policies have not yet encouraged the private sector to invest in housing development for workers at industrial parks. To this end, the 2015 Housing Law seeks to Increase private sector provision of affordable rental housing through a capital subsidy program targeting industrial workers and low income urban residents.

See: Samad, Taimur et al (2015). *Vietnam - Affordable housing : a way forward (English)*. Washington, D.C. : World Bank Group.
<http://documents.worldbank.org/curated/en/240541467995097856/Vietnam-Affordable-housing-a-way-forward>

INTERNATIONAL EXAMPLE

EMPLOYER HOUSING IN INDUSTRIAL PARKS IN VIETNAM AND ETHIOPIA

Ethiopian Industrial Parks, Affordable Housing



Ethiopia is investing billions of dollars to open a total of 30 industrial parks by 2025 with the vision to become Africa's manufacturing hub. Since 2014, eight industrial parks have been launched. Ethiopia has one of the fastest growing urban populations in the world. A study on **industrial park workers and housing supply** found that, IP workers have largely resorted to **informal rental housing supply**, with limited access to basic services.

The Industrial Parks Development Corporation (IPDC) and Ethiopian Investment Commission (EIDC) has initiated **various mechanisms** to increase housing supply. In 2017, IPDC proposed **extending a credit facility, through microfinance loans**, to homeowners in Hawassa who had vacant land, to construct additional rooms. It is however argued that the **private financing scheme** did not work effectively due to burdensome ILO standards, lack of access to basic services and affordability challenges.

There have been studies to investigate **innovative income and financing models** aimed at improving the supply of social housing.

See: <https://www.mfw4a.org/sites/default/files/resources/ethiopia-options-for-expanding-affordable-housing-supply-for-industrial-park-workers-summary-note.pdf>

Key Takeaways

- **Industrial park development planning** should take worker accommodation into consideration.
- **Inadequate supply of affordable housing (rental and starter/first homes)** is identified as one of the main constraints of workforce recruitment and retention in the IPs.
- In most of the IPs, labour is predominantly **migrants from rural areas**, increasing the demand for local housing.
- **Unplanned and informal housing**, unsupported by infrastructure, is developing rapidly on the periphery of many of the cities hosting industrial parks..
- **Infrastructure planning** (including social infrastructure) is important to support employee housing development.
- Limited interest from the private sector as most of industrial park developers and enterprises do not view this as **viable proposition**.

Opportunities

- The **NLUDMP (2020-2050)** projects that “the total number of formal employees in districts which specialize in manufacturing will reach **1.4M employees**. **40%** of manufacturing employment, **560k**, will be in Industry Parks.”
- Employers can be required to direct/finance the delivery of housing for their workers as a condition of their tenure in the Industrial Park. An Industrial Park Housing Strategy can define the financing, taxation, supply, and other parameters.
- Demand for worker housing creates an important opportunity for the provision of rental housing and the development of rental management companies.

ESTIMATED NUMBER
OF HOUSEHOLDS

10,500

% OF TOTAL HOUSEHOLDS



% OF URBAN HOUSEHOLDS



DOMINANT DWELLING TYPE



MEDIAN MONTHLY
HOUSEHOLD INCOME

~ RWF 905,000

05

SMALL-SCALE DEVELOPER | URBAN
50 – 100 code-compliant dwelling units

06

LARGE-SCALE DEVELOPER | URBAN
100 or more code-compliant dwelling units

SUBMARKET 05 & 06: SMALL/LARGE DEVELOPER

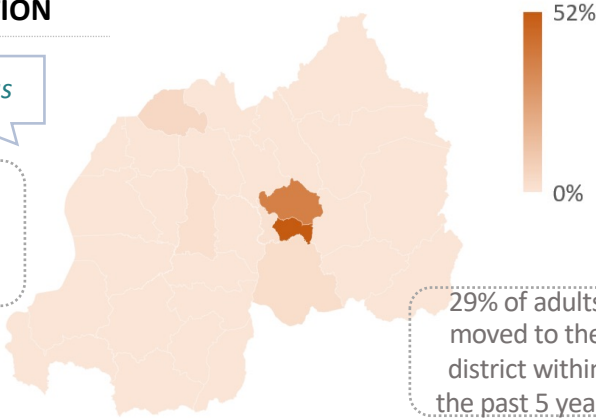
HOUSEHOLD HOUSING CONDITIONS

10,450 HOUSEHOLDS (0.39% of all households)

LOCATION

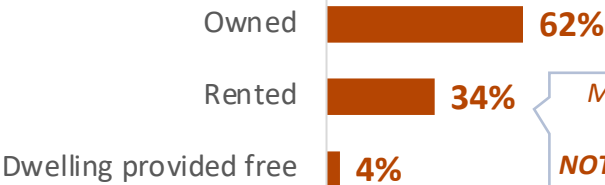
Urban areas

This submarket represents 2% of urban households



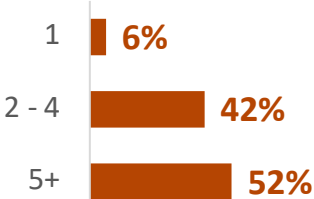
29% of adults moved to the district within the past 5 years

OCCUPANCY STATUS



Median rent pm: RWF 275,000
NOTE: Sample size of 16 responses

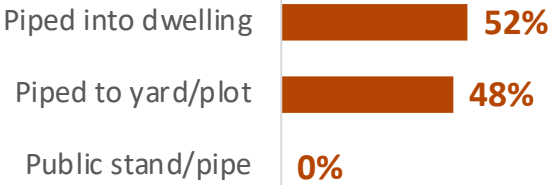
HOUSEHOLD SIZE



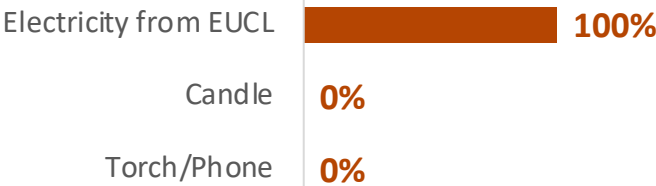
Average HH size: 4.8



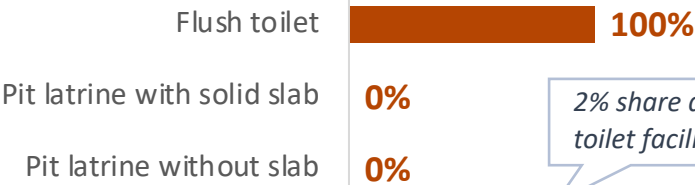
MAIN SOURCE OF WATER



MAIN SOURCE OF LIGHTING



TOILET FACILITY

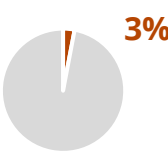


2% share a toilet facility

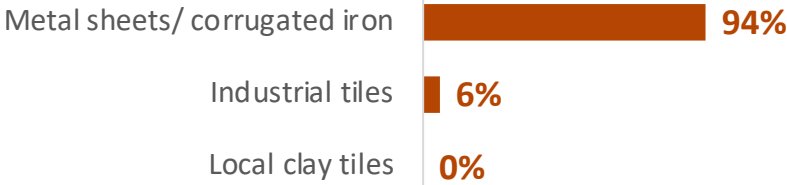
LIVE IN OVER CROWDED CONDITIONS*



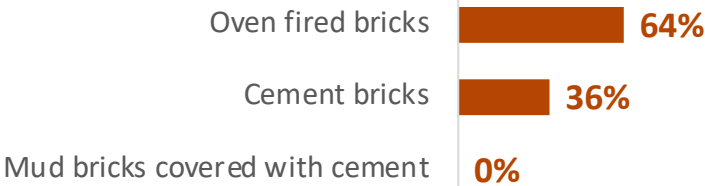
MULTIPLE HOUSEHOLDS IN DWELLING



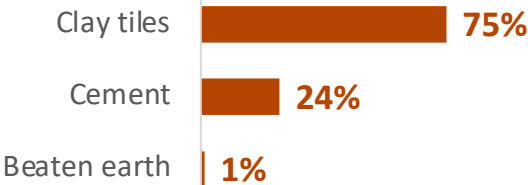
MAIN MATERIALS OF ROOF (TOP 3)



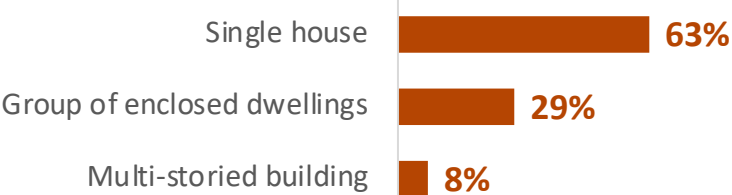
MAIN MATERIALS OF WALLS (TOP 3)



MAIN MATERIALS OF FLOOR (TOP 3)



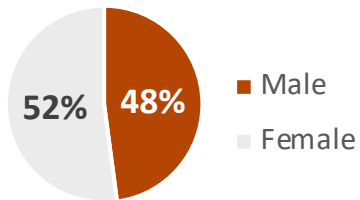
HOUSING TYPE



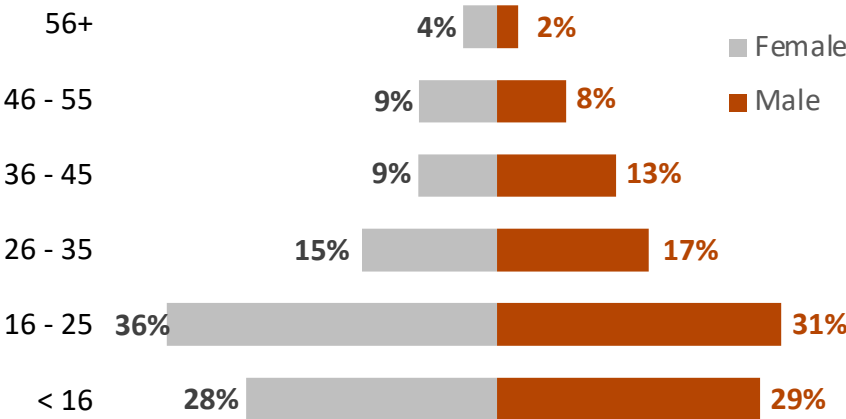
Source: EICV 5. Note* Over-crowding is defined as more than 3 people per sleeping room

64,100 PEOPLE
(0.54% of the total population)

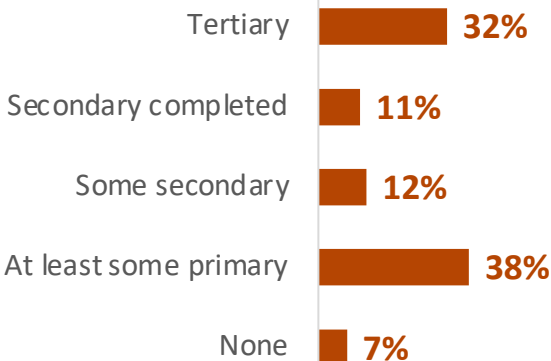
GENDER



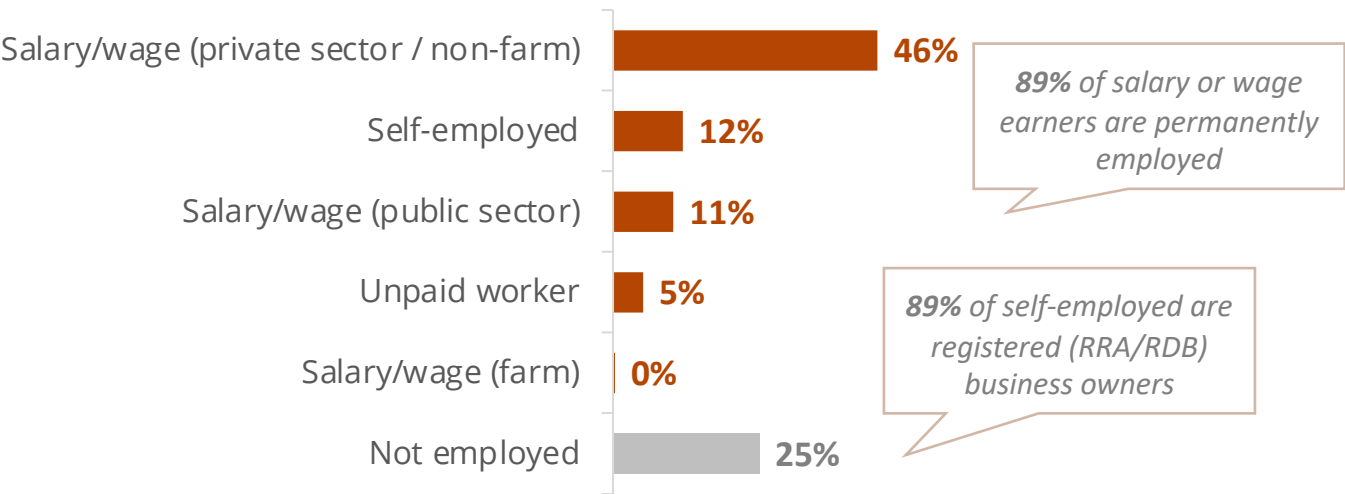
AGE GROUP



HIGHEST LEVEL OF EDUCATION
(ADULTS 16+)

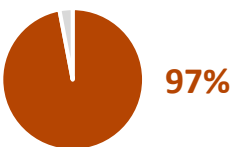


INCOME SOURCES (ADULTS 16+)

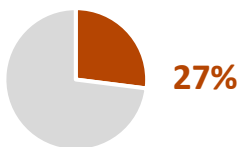


INCOME SOURCES (HOUSEHOLDS)

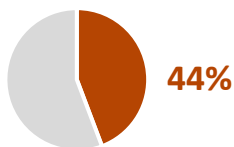
% of HHs with at least one formally employed person or registered business owner*



PERCENTAGE OF HOUSEHOLDS THAT RECEIVED AN INCOME FROM PROPERTY RENT IN THE PAST 12 MONTHS

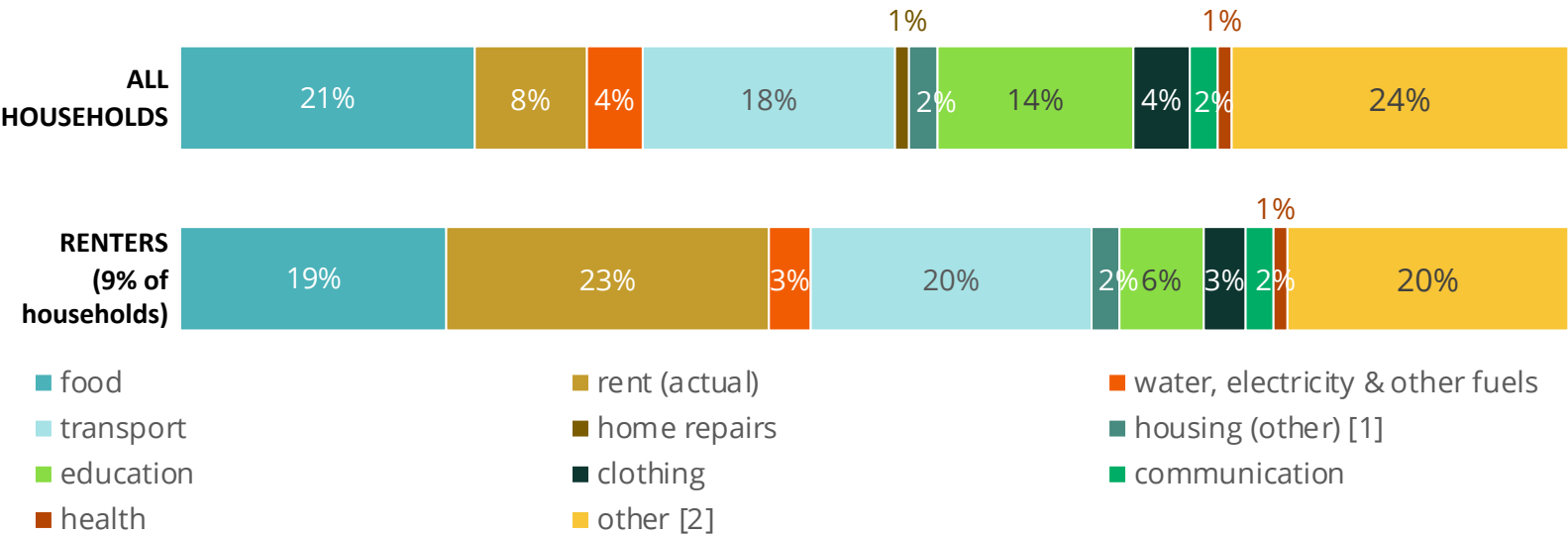


PERCENTAGE OF HOUSEHOLDS THAT RECEIVED A REMITTANCE IN THE PAST 12 MONTHS



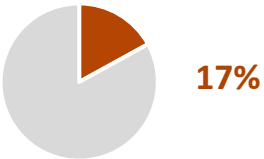
Source: EICV 5. * Financial institutions typically require applicants to be formally employed or a registered business owner in order to be granted a loan.

EXPENDITURE PER CATEGORY

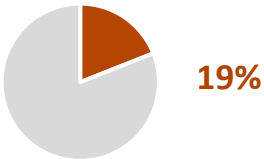


[1] Housing (other): furnishings, appliances, domestic cleaning and hygiene
[2] Other: Equipment maintenance, recreation, alcohol and tobacco, miscellaneous

Percentage of households who spend 30% or more of their income on rent



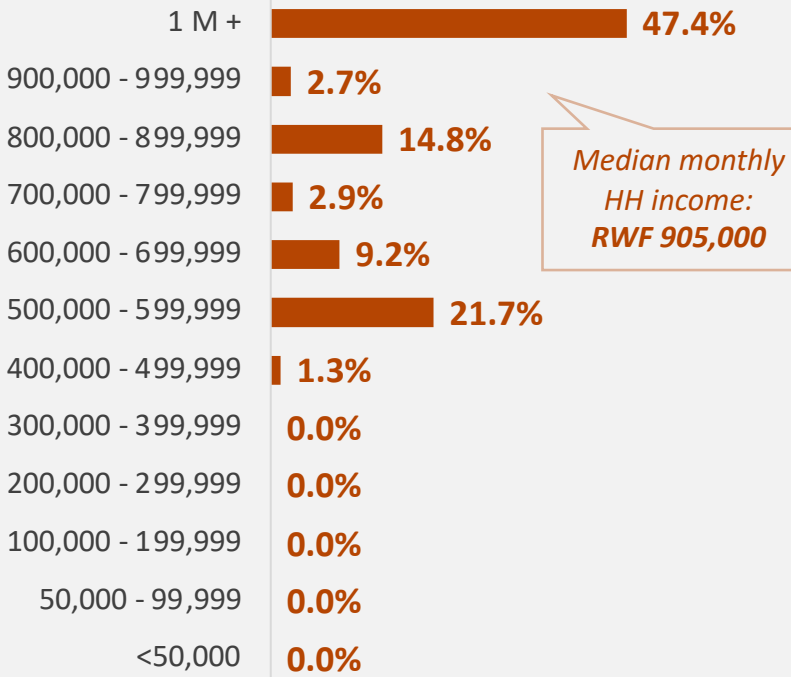
Percentage of all households who spend 45% or more of their income on housing and transport*



MEDIAN % SPENT ON HOUSING AND TRANSPORT*

29%

ESTIMATED MONTHLY HOUSEHOLD INCOME* (RWF)



Affordability calculations will assume that households are able to spend the average rent percentage of expenditure on monthly loan repayments

23%

% of HHs that could afford a RWF 12.5 million affordable mortgage loan (20 years, 11% interest)***

94%

% of HHs that could afford a RWF 12.5 million mortgage loan from Banque Populaire (20 years, 18% interest)***

62%

Source: EICV 5.
*Includes rent, maintenance, water, electricity, and transport costs
**Income has been estimated using expenditure data. Amounts have been inflated from 2017 to 2021.

SUBMARKET 05 & 06: SMALL AND LARGER-SCALE DEVELOPERS

TYPICAL USER PROFILES

VÉDASTE - CONSUMER



GENDER: Male
AGE: 53
OCCUPATION: Professional
HOUSEHOLD INCOME: RWF 3.5 M
LOCATION: Kigali

BACKGROUND

Védaste has worked for International Organization for Migration (IOM) for nearly 20 years and frequently travels. His daughter just got married and she and her husband want to buy a starter home, but they just can’t afford it through personal loans and mortgages with bad conditions. Védaste helps them finance the home through savings. He expects that they will live in the home for a few years until they graduate to something bigger. He will then use the house as a rental property for foreigners or other young couples just starting out.

CHALLENGES

- Since he paid through savings, he bought the cheapest home he could find in a planned estate, which has some irregularities (strange floor plan, irregular sized doors and cheap fixtures). He knows he will likely have to finance some upgrades at some point, but will worry about that later.
- Using his retirements savings to buy a house is not ideal.

OPPORTUNITIES

- Has a pension he could leverage using a pension-backed loan if such a product was available
- Could afford a mortgage from a formal financial institution

THADÉE – CONSUMER / SUPPLIER



GENDER: Male
AGE: 28
OCCUPATION: Marketing manager
HOUSEHOLD INCOME: RWF 1 M
LOCATION: Nyamata

BACKGROUND

Thadée is a young marketing manager. He is engaged to be married and wants to buy a home for him and his fiancée. He decides to buy a home from a small developer that was started but unfinished because the developer ran out of funds. The developer agrees to sell it to Thadée at a reduced price. Thadée then has to finance the rest of the construction before moving in with his new wife after the wedding.

He does this on the weekends and managed it himself using the personal loan he took out last year and by selling a small plot he had purchased when he was a young bachelor.

He is considering buying another unfinished house from the developer that he could later finish and then quickly resell the property.

CHALLENGES

No financing products for him to do this land deal that he wants to do.

OPPORTUNITIES

- Thadée is able to access formal finance from banks but the interest rates are high and diminish his margins

CAROLE - SUPPLIER



GENDER: Female
AGE: 59
OCCUPATION: Manager
LOCATION: Bugesera

BACKGROUND

Carole is a business woman, with a few different import companies based in and around Kigali that she manages with her husband, Alphonse. Together they own many hectares of land in the Satellite City of Bugesera. In 2006, when the pressure to develop the land or lose it got high, they decided to launch into the construction of small mini-housing estates developed incrementally. The floor and bathroom tiles are supplied by their import/export business.

They build a few homes every year using the money from their other assets (and business profits). In some years, they build many houses, in others a little bit less depending on the capital available. They prefer to avoid bank loans as they already have them for their other businesses. They sell directly to young families who come with their own financing. They will discount the homes if they buy quickly.

CHALLENGES

Although they manage cost and do some self-supply, it isn’t as cost-effective as it could be if they went faster. However, it allows them to avoid the bank and get cash for homes that are sold.

OPPORTUNITIES

- While Carol is trying to avoid bank loans, accessing formal finance could help her develop units at a faster rate
- Digitised payments to create a visible track record of business activity and enable access to finance



05

SMALL-SCALE DEVELOPER | URBAN

50 – 100 code-compliant dwelling units

SMALL-SCALE DEVELOPER URBAN



Submarket 05 is comprised of mid-range houses organized in clusters (3 - 8 houses) or estates (20 or more houses). This is a common model among local developers who have easy access to land and finance. It is likely that these developments do not include social amenities (club house, etc.) or anything that requires additional neighborhood design or long-term maintenance. The small-scale developer is typically in a hurry to secure a quick and high return to begin repayment on their construction loans. Consequently, scale and affordability remain key challenges in Submarket 05, further exacerbated by weak links in the value chain:

- high cost of capital and limited end-user finance (offtake)
- Building material supply shortages (construction)
- No formal homeowners associated to regulate cleanliness in compound (maintenance)

Submarket 05 is most commonly for-sale housing. Any rental units are likely sublets offered through an original buyer.

Although the estate concept would be eligible for a government subsidy and offtake support, local developers prefer to operate independently, using their personal connections at the bank to get short-term construction loans and do matchmaking between banks and potential buyers.

Most local developers consider this build-sell model to be profitable but it requires financial means from other sources to kickstart the project and cover any gaps or delays. It is high risk with a potential of equally high returns in under 5 yrs.

Small-scale developer solutions are typically standalone or twin houses that are fully self-contained (parking on plot), facilitating parcellation, registration and sales. Storied solutions are becoming more common but units most often remain standalone structures. Developer provides basic roads/enclosures, with upgrades and improvements financed by buyer.

INTERVIEW

HOUSING SUPPLIER PROFILE



DND DEVELOPERS

Triangle Real Estate Project



DND Developers is a Kigali-based local construction firm that has been in operation since 2015. They are a private family-owned company specializing in medium- and high-end residential housing in Nyarutarama, an in-demand neighborhood in Gasabo District.

Land for the development was purchased sequentially, with land for phases 2 and 3 acquired after completion of the previous phases. Today, the project boasts 50 completed units with another 25 or so in the pipeline.

CURRENT PRODUCTS

DND housing stock includes 2 and 3BHK apartments for between 75 and 80 million FRW. These units have been particularly appealing to foreigners who may be more familiar with apartment living and/or may sublet the unit to young couples. The development also targets young families by offering 3BHK townhouses and 4BHK villas for 110 to 160 million FRW respectively. They do not offer rental. Units are advertised online, during trade fairs and through word of mouth. They do not rely on brokers.

FINANCING

DND finances the project with a combination of savings and sale of assets to purchase the land and loans to finance infrastructure and construction. They currently do not have formal partnerships with banks to offer or facilitate end-user finance. Potential for financial incentives for early-birds/quick movers.

SUPPLY CHAIN

All materials are locally sourced with the exception of finishing materials, which are imported. DND has invested in a small production unit to produce certain building materials (financed through construction loan). DND is responsible for the design of all units and for construction supervision. Not unlike household landlords in Submarket 03, DND works with a master mason and day labourers to implement the project.

Key Takeaways

- A strategic partnership with a team capable of doing construction quality assurance has reaped benefits in terms of marketing and reputation
- The project triggered rise in neighbourhood property values >> cost of land increased from 10% of DU cost to 25% since Phase I started in 2015. This creates an affordability challenge as Phase II and III are more expensive so that the developer can maintain or increase his margin.
- DND is aware of the high demand for truly affordable units. They are currently studying the market and their business model to see if this would be feasible. In the meantime, they are able to find clients for their existing units.
- Big construction and end-user finance gaps severely constrain the local developer >> business model relies on clients with easy access to cash to honour their own financial engagements

Opportunities

- An offtake guarantee could incentivize the developer to move down market, as could access to affordable land in a central location.
- Land specifically zoned for affordable housing or a robust inclusionary zoning program could orient small local developers to deliver some units of affordable housing.

INTERVIEW

HOUSING SUPPLIER PROFILES



JOHN NSABIMANA (DUBAI)

Urukumbuzi Modern Village + others



John Dubai is a local business man turned developer with more than 20 years of experience in real estate. To date he has constructed and sold more than 500 dwelling units.

With single-family homes for sale starting at 20 million FRW, John Dubai has likely reached the furthest down-market of any local developer supplying in bulk. All construction is self-supervised with the help of local labor. In addition to construction, Dubai has dabbled in building material construction. His Urukumbuzi Housing Estate used the adjacent wetland for self-production of traditional fired bricks (no kiln) for use as walling material. Dubai is familiar with all of the government incentives but currently develops and finances projects himself on his own land.

VINCENT SEKIMONDO

GateHills I, GateHills II + others



Vincent Sekimondo is a local developer active in the Rwandan construction market for nearly two decades. His portfolio is comprised of more than 200 single-family homes (standalone and rowhouse) with an average selling price of 48 million FRW.

Delivery of the homes are done with teams of experienced local masons and their network of day labourers. The projects are owner-supervised and do not require the services of a formalized contracting firm or skills/materials/tools imported from abroad. By keeping the process and the inputs local, Sekimondo has been able to deliver housing on previously-acquired land at a rate averaging 10 DU per year for 20 years.

Key Takeaways

- Previous acquisition of land is a key component of the small-developer model >> limits financial risk to the construction phase, which can then be done incrementally if necessary due to self-construction, self-supervision model
- Formal rental is a risky prospect for local developers >> they consistently offer for-sale units in order to recoup their investments and/or begin loan repayment as quickly as possible
- Biggest lost opportunity relates to clients who do not have access to funding
- Small scale developers often try to leverage their personal relationships with banking institutions, to help their clients access funds >> this has limited success as banks are often inflexible and move slowly
- Uneasy relationships between Submarket 05 developers and brokers >> typically, the reputation of the developers is strong enough to drive offtake sales, but the broker introduces clients to these developments in order to force a deal
- Housing price contains 100% of the developer risk

Opportunities

- Develop a lease-purchase product to finance housing, small-scale developers could then secure their sale and clients could access cheaper housing

TUHF Holdings (PTY) Limited

Property Finance Solutions for property entrepreneurs



TUHF is a specialised commercial property financier based in South Africa, that drives inner city investment by providing access to finance for property entrepreneurs from all walks of life, to purchase, convert and/or refurbish buildings to provide affordable residential rental in South Africa's main inner cities.

Since inception in 2003, TUHF has financed 355 property entrepreneurs to deliver 43,911 units in 671 buildings, with an average growth of 13% per year.

TUHF has 5 branches operating across 128 suburbs in 8 metropolitan municipalities. TUHF primarily targets **property entrepreneurs/landlords** seeking to deliver affordable residential units for **rental** in South Africa's inner cities, **providing mortgage finance as an SME product.**

TUHF (2021). We See Opportunities Where Others See Decline. <https://www.tuhf.co.za/>

Rebelgroup (2019). Raising Capital to Regenerate Inner Cities: The Case of TUHF Holdings. Case study no 16. Centre for Affordable Housing Finance in Africa.

<https://housingfinanceafrica.org/documents/case-study-15-raising-capital-to-regenerate-inner-cities-the-case-of-tuhf-holdings-pty-limited/>

PRODUCTS

- **Property Finance** – a commercial mortgage loan facility, repayable over 15 years for the acquisition and development of affordable rental units. This includes a once off raising fee and no monthly service fees.
- **Equity Funding** (Inthuthuko Equity Fund) to support previously disadvantaged individuals who lack access to equity.
- **Bridging Finance** to cover short term loans (up to 6 months) to assist borrowers to cover short term expenses while acquiring property.
- **TUHF Programme for Property Entrepreneurship** supports existing TUHF Clients with increased knowledge of property development.

TUHF's Business Model Overview

- **Focuses** on projects that are in major city centres that are in urban decline. Specifically on properties that are close to schools, transport nodes and places of work.
- Only finances properties that are **economically sustainable**.
- TUHF adopts a **character based lending** approach
- TUHF provides **advice and technical support** throughout the property procurement, construction/renovation and management process.
- **58 percent** of TUHF's clients are previously disadvantaged individuals.

Key Takeaways

- The availability of **existing building stock** and **infrastructure** has supported TUHF's business model.
- Loan eligibility calculated as an SME-loan on future income streams arising as a result of rental activity.
- TUHF has transformed from a **not-for-profit entity to private and subsequently a public entity** in response to the evolving profile of its funders and growing funding needs.
- TUHF employs a **blended finance approach** by combining concessional, non-concessional and grant funding from a diversity of public and private institutions.
- South Africa's **financial and capital market** has played a key and enabling role for TUHF's sustainability.

Opportunities for Rwanda

- To support the **development of a policy and legal framework** that promotes rental housing including rent to own model.
- Specialist mortgage lending, focused on small scale landlordism, can leverage small scale developer activity.
- Through the Capital Markets Masterplan, to continue supporting the development of Rwanda's capital market. To explore the feasibility and applicability of REITS application to affordable housing

SUBMARKET 05: SMALL-SCALE DEVELOPER

NURCHA

Construction Finance & Programme Management



NURCHA was established as the National Urban Reconstruction and Housing Agency in 1995 as a joint venture between the Government of South African and the Soros Economic Development Fund. The initial focus of the agency was to provide bridging finance and construction support to small and medium sized contractors and developers.

NURCHA financed and supported the construction of government subsidised and affordable housing, infrastructure and community facilities. With a focus on building the capacity of the small-scale developer sector, NURCHA offered small construction loans through two intermediaries who assisted the contractors manage cashflow. NURCHA also provided support to local and provincial authorities in the housing delivery process, providing account administration, project and programme management services. In 2018, NURCHA was absorbed into the Human Settlements Development Bank.

INTERNATIONAL EXAMPLE

CONSTRUCTION QUALITY RISK MANAGEMENT TO SUPPORT LENDING IN SOUTH AFRICA

NATIONAL HOME BUILDERS REGISTRATION COUNCIL

Construction Finance & Programme Management



The NHBRC is a regulator established with the promulgation of the Housing Consumers Protection Measures Act (Act No. 95 of 1998) in 1998. Originally a self regulatory body established by the building industry, the NHBRC registers builders who then pay a fee per house built which goes into an indemnity fund. With this fund, the NHBRC offers all homebuyers a five-year guarantee against structural defects. See www.nhbrc.org.za

In terms of South African law, all builders must be registered with the NHBRC, and no lender will extend mortgage finance against a house that is build by an unregistered builder. If a claim is successfully lodged in terms of a structural defect, it becomes the responsibility of the builder to repair the house at their own cost. If they fail to do so, they are de-registered and the repair is commissioned by the NHBRC and paid for by the fund.

While the goals of the NHBRC are laudable, the implementation of the Warranty Scheme has been criticised and the efficiency of the institution has been challenged.

Key Takeaways

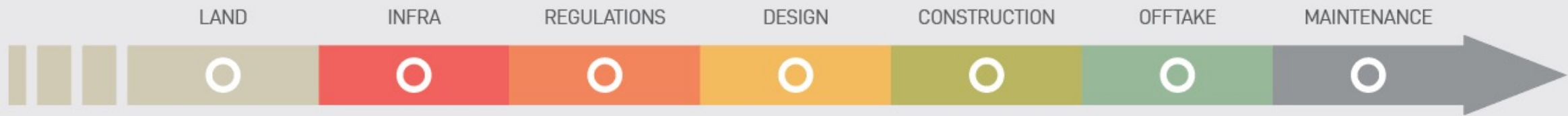
- Capacity constraints among the small-scale developer sector in South Africa was of serious concern to lenders in the mid-1990's, expressed in a reticence to provide construction lending for affordable housing.
- The small scale developer clients of NURCHA were unable to access loan finance from the commercial banks. This constrained their growth potential, which ultimately further undermined their ability to ever access loan finance. NURCHA therefore became a stepping stone, supporting developers in building their businesses while contributing their capacity towards affordable housing delivery.
- Mortgage lenders require certainty that construction quality will last the length of the mortgage. As South Africa's affordable housing sector was developing, lenders expressed concern that affordable houses might not be mortgageable. In creating an inspection mechanism and warranty scheme, the NHBRC addressed this risk so lenders could lend.
- Regulatory oversight and technical assistance supported the growth of the housing construction sector within the framework of quality standards.

Opportunities

- Construction finance explicitly targeted at small scale developers, providing also technical assistance
- Promote construction quality standards through an industry-owned warranty scheme

VALUE CHAIN LINKAGES

SMALL-SCALE DEVELOPER - URBAN



Small-scale developers have a value chain that most closely resembles that of the IDP model villages, where they serve as decision makers and implementers



Land acquisition Prior ownership of large parcels of land is the foundation of the small-scale developer business model. All that is required is to subdivide it into individual parcels by local authorities from the Land Center for titling.



Infrastructure Small-scale developer assumes the responsibility for servicing the newly subdivided plot, bringing water and electricity connections to each plot as well as filing requests with EUCL and WASAC for installation of individual counters and meters.



Regulations Application review, inspection and approvals for housing subdivisions are managed by the District One Stop Center. In the case of multi-family housing blocks, developer must comply with the Condominium Law, which requires the creation of a management company and processing of individual and unit title deeds.



Design Most small-scale developers minimize engineer and design costs by relying on popular housing typologies. For customers buying off-plan some developers offer customization.



Construction Small-scale developers do not hire contracting firms for building their homes. Rather, they retain the services of a master mason with whom they may have a longstanding relationship. Material deliveries are managed by the developer and the mason. If the developer has his own business, means and/or interest, he or she could self-supply a portion of their own materials.



Offtake Small-scale developers typically have a network with whom they can advertise their products, including the banks with whom they likely have a longstanding business relationship. To accelerate offtake, they can negotiate deals and give discounts to quick payers.



Maintenance Developments do not often include shared facilities, so homeowners are responsible for their own upkeep after purchase unless stated otherwise in the contract.

FINANCIAL LINKAGES

SMALL-SCALE DEVELOPER - URBAN



The value chain for Submarket 05 is unique in that it capitalizes on existing assets to deliver housing that largely excludes expenditures and financial commitments



Land acquisition Although the developer may not need to pay to acquire the land, he/she must finance the parcellation according to a plan approved by the District.



Infrastructure The upfront administrative costs associated with obtaining connection to the grid are one of the first and last activities to be financed by the developer. Small rebates are offered for solar heating packages but supply is low and cashing in rebates take time. Buyer can pursue this channel him/herself if interested.



Regulations Compliance with the Condominium Law is a costly exercise that likely requires legal council to manage for those building multi-family units. As Kigali and the Secondary Cities strive to comply with the higher density zoning regulations, this type of transaction will become more frequent.



Design With standard building drawings carried over from project to project, the design fees for this scale of project are minimal, related mostly to the cost of certifying drawings and applying for the construction permit.



Construction Small-scale developers report financing their constructions through bank loans (often facilitated by existing business accounts), the sale of personal assets (other lands), the sale of assets and/or profits from a side business.



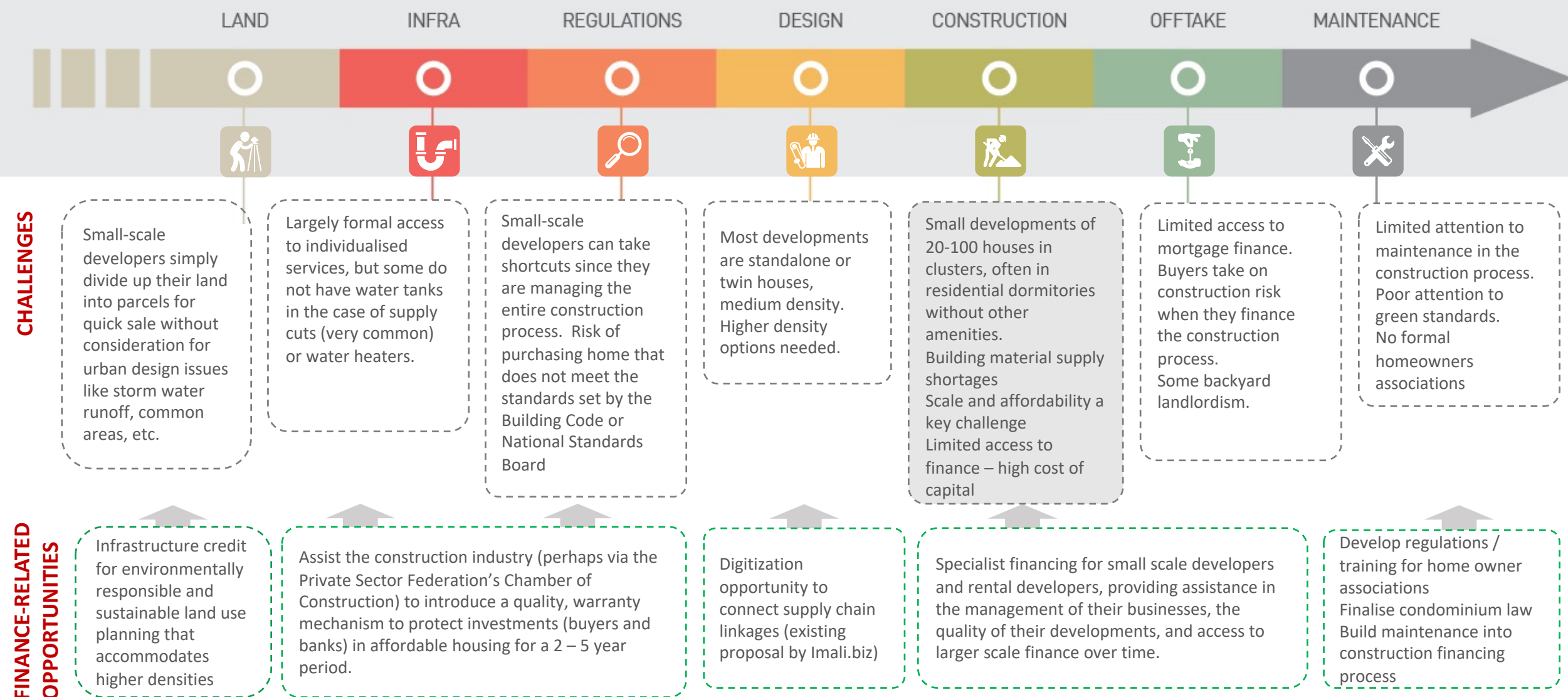
Offtake No expenses are required to support offtake. Word of mouth through existing networks suffice along with support from the banks offering mortgage products. The small-scale developer may also act as go-between between bank and potential buyer to help accelerate the transaction.



Maintenance No additional finance required on behalf of the developer.

SUMMARY OF CHALLENGES & OPPORTUNITIES

SMALL-SCALE DEVELOPER





06

LARGE-SCALE DEVELOPER | URBAN

100 or more code-compliant dwelling units



RUGARAMA PARK ESTATE

A GLIMPSE INTO THE FUTURE



Submarket 06 consists of higher-quality housing that remains unaffordable to most of Rwanda's population. Consequently this submarket attracts many foreigners and the African diaspora. A limited stock of high-end rental housing also appears in Submarket 06 that is highly attractive to foreign consultants and expatriates.

Submarket 06 is closely linked with National Housing, Land Use and Development policies aimed at facilitating the delivery of affordable housing to the market. Consequently, land and infrastructure packages has proven to be attractive elements of negotiation for developers looking to limit their exposure to risk along the value chain. However, current experiences have shown this to be the contrary, as fuzzy policy implantation plans frustrate housing delivery. Couple this with limited demand and supply-side financing and large-scale developers struggle to achieve their affordability targets.

To date, developers working in the Submarket 06 housing space have contributed hundreds of mostly high-end homes to the market, where offtake to wealthy clients can better compensate for risky and expensive manoeuvres resulting from weak value chain linkages.

Submarket 06 has the potential to offer the largest impact to the construction sector and local economy as it requires its very own supply chains to produce the inputs necessary for housing delivery. Opportunity for creative financing abound, provided the value chain is assessed in its entirety.



CASE STUDY

LAND ACQUISITION & DEVELOPMENT



NEXTGEN DEVELOPERS

Ubuntu Housing Project



NextGen Developers are building 500 dwelling units on 10 hectares of land located in proximity to Kigali's Special Economic Zone. The Government of Rwanda has identified Ubuntu Housing Project as a pilot project, eligible for partial land and infrastructure subsidies since it will deliver affordable dwelling units (selling price below 35 million FRW) to the market.

NextGen Developers is offering standalone and storied typologies using a patented technology that relies on local material input. After completion of earthworks for Phase I, the NextGen team successfully inaugurated a 3BHK prototype in March 2021. Delays in implementing the infrastructure subsidy have prompted the developers to study self-supplied infrastructure solutions for Phase I.

LAND

NextGen's financing model relies on a phased acquisition of the land. For Phase I, the team self-financed the acquisition of 4 of 10 hectares at a cost of 14,000. The land was purchased outright from private owners with the facilitation of the Rwanda Housing Authority. For subsequent phases, the NextGen team is proposing a land-swap agreement with neighbouring landowners to acquire an additional 6 Ha of land. In exchange for their land, property owners will be offered a unit within the new development. In this way, NextGen can avoid speculation on the price of adjacent land.

TYPOLGY PRICING

TYPOLGY	GROSS FLOOR AREA M ²	PRICE
4 BEDROOM DUPLEX	132	RWF 49,500,000
3 BEDROOM BUNGALOW	95	RWF 32,900,000
3 BEDROOM TOWNHOUSE	106	RWF 34,800,000
3 BEDROOM APARTMENT	90	RWF 26,500,000
2 BEDROOM APARTMENT	67	RWF 18,500,000
3 BEDROOM SEMI-DETACHED	84	RWF 25,500,000

Key Takeaways

- Land swap avoids costly and time-consuming expropriation exercises (min. 4-month notice period and 5% disturbance fee applied to land cost)
- Avoiding cash pay-outs to existing landowners lessens risk of duplicating unplanned settlements elsewhere
- Coordinated land acquisition and demolition reduces developers need to finance temporary housing
- Few contractors master earthworks for large-scale construction projects >> fixing mistakes comes at a premium since the units must be delivered at agreed price to qualify for subsidy

Opportunities

- Construction loan insurance packages for developers
- Local land authorities to be trained in communication with existing landowners
- Basic hilly terrain construction guidelines for firms implementing big construction project.



NEXTGEN DEVELOPERS
Ubuntu Housing Project



- Patented RCC concrete walling system licensed from South Africa for its speed (3 weeks per finished DU), cost and quality control. Unlimited production capacity, technology uses all local materials
>> **USD 400,000** upfront investment cost for customized formwork (self-financed)

REMOTE GROUP
Rugarama Park Estates / Masaka Fields



- Import of 1,250 tons of equipment for the production of lightweight autoclaved aerated concrete blocks (AAC) for the construction of 2,240 DU in 5 years (4 DU per day)
- >> Equipment purchase, transport and factory operationalization costs of **10 million USD** (local debt at 7.5 – 15%/ USD vs. FRW cash reserves)

Key Takeaways

- Successful marketing campaign introduced AAC blocks to Rwandan market through flagship projects
- Between financing building material production (10 mio) and construction (7 mio), developer could not absorb construction delays – projects halted
- Factory sold to local developer 13 months after commissioning (March 2021)

RECOBUILDERS
Kanombe Affordable Housing Project



- Self-production of fired bricks on site by a local Mobile Production team using a “septic-kiln” (underground masonry chamber to later be repurposed as septic tank for the project DUs)
>> **USD 25,000** upfront investment cost for underground kiln and production/storage hangars

Key Takeaways

- Up to 40% reduction on brick prices through self-production (no VAT, transport costs or margin on labor)
- Highly specialized production teams are still rare and can demand high wages and force site-shutdowns if unsatisfied with payment terms or working conditions
- No scale-up: technology for on-site production limited to max. 45 dwelling units (higher production volumes require min. USD 150K in standalone production facility (payback 2.4 yrs))

STRAWTEC
Gisozi Housing Development



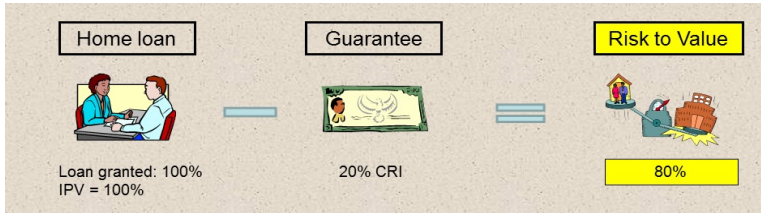
- Building material and construction company established in October 2015
- Housing prototype built in Kigali in 2017 and 2018
- Strawboard panels combined with light-gauge steel frame technology
- Despite aggressive marketing and a catalogue of affordable housing solutions, no large-scale housing project in pipeline

Key Takeaways

- Market penetration remains low due to diminished confidence after early supply shortages and unfamiliarity of strawboard products on the market
- Supply chain weakened by unstable supply of wheat and rice straw by local farmers / import substitutions are costly



Home Finance Guarantors Africa Reinsurance CRI Programme



The Home Finance Guarantors Africa Reinsurance Limited (HFGARe) was established in Mauritius and builds on the experience of South Africa's Home Loan Guarantee Company. HFGARe facilitates and provides access to housing finance for lower and middle income families in Africa.

HFGARe works with local registered and licensed insurance and reinsurance companies in participating countries who enter into agreements with local banks to provide collateral replacement indemnity for low to moderate income earners who do not have the deposit required by mortgage lenders. In this way, HFGARe facilitates 100% housing finance for first time home buyers purchasing ready-constructed houses, self-build, and developer finance. The lender pays premium (3% of CRI cover) for the service.

In Rwanda, HFGARe works with **Britam Insurance Company Rwanda Limited; BK General Insurance Company – Rwanda**

HFGARe (2021). <http://hfgare.com/who-we-are-what-we-do/>

HFGARe (2012). AUHF Conference Presentation. http://www.auhf.co.za/wordpress/assets/Day-2am_Matenge-Sebesho_1240_HFGARe-Presentation-Tanzania-27-September-2012-2.pdf

Overview of the Collateral Replacement Indemnity Product

- **CRI Product** – offered by I&M Bank Rwanda, KCB Rwanda and NCBA Rwanda. More than 300 loans have been processed for CRI cover.
- An **insurance product** replaces the down payment required for mortgage loans with a guarantee;
- The insurer **indemnifies** the lender against a portion of the loss suffered by the lender at a legal sale of the property (auction or voluntary sale) due to default;
- CRI covers loans for purchase of **new or existing homes and construction loans**;
- CRI enables the lender to offer a 100% mortgage loan to qualifying borrowers (maximum LTV ratio of 100%);
- CRI **covers/insures** the lender who pays the premium to the insurer;
- HFGARe provides **technical assistance** to lender staff who will be working with the CRI product; and
- The borrower, lender, insurer, reinsurer, and retrocessionaire share risk in the **agreement and the borrower** loses their home should they default.

Other Home Insurance Products in Rwanda

- BK General Insurance offers a **Fire and Allied Perils Cover** for personal homes (Residential)
- Britam Insurance Company Rwanda Limited provides a **home insurance** product that covers the individual's house and belongings against unexpected events (theft, damage, fire and other losses)

Key Takeaways

- The requirement for a deposit is a key constraint limiting access to mortgage finance, especially for first time homebuyers.
- The CRI product allows lenders to extend to a wider market of potential borrowers while still protecting the quality of their book.
- Insurance penetration in Rwanda is still low, at 1.7% as at end December 2020 (BNR, 2021).
- In December 2020, local insurers increased prices for non motor and non health coverage. The impact of COVID-19 on homeowners has impacted home and property owners when renewing premiums.
- **Fire insurance** on property is required by lenders while taking mortgage from banks, but retaining customers after the mortgage is difficult for insurance companies.

Opportunities

- Through the **Rwanda Mortgage Refinance Company**, lenders will be able to access capital for mortgage lending at a rate of 6%, enabling them to on-lend to eligible beneficiaries at 11% over twenty years, and with a 10% deposit. The CRI product will assist borrowers overcome the 10% deposit requirement.
- Participation in the CRI offering will allow local insurers and banks build their experience in the low-middle income market. A key opportunity is to track the performance of the CRI and the loans it supports, to better structure and define mortgage products in the future.



HOUSING & DEVELOPMENT BOARD



In the 1950s and early 60s, it is estimated that a quarter of a million Singaporeans lived in deteriorating and overcrowded slum conditions. In response, the **Singapore Housing and Development Board (HDB)** was tasked in 1960 to rapidly increase the supply of homes for the poor to rent.

In 1964, the government began to offer subsidised flats for sale. After independence in 1965, public housing and home ownership became key policy pillars in the ‘nation building project.’ After independence, the **Land Acquisition Act of 1966** enabled Government to acquire land at a low cost for the provision of public housing and infrastructural development.

Nowadays, Singapore is acclaimed to have one of the **highest home ownership rates**. 80 percent of the population (5,4 million people) live in government built (HDB) flats.

HDB (2021). Housing and Development Board. <https://www.hdb.gov.sg/>

Bryson (2019). A century of public housing: lessons from Singapore, where housing is a social, not financial asset. <https://theconversation.com/a-century-of-public-housing-lessons-from-singapore-where-housing-is-a-social-not-financial-asset-121141>

INTERNATIONAL EXAMPLE

PENSION-SUPPORTED PUBLIC HOUSING IN SINGAPORE

Main Components and Products

- **Central Provident Fund (CPF)** is a compulsory savings and pension plan for working citizens and permanent residents to fund retirement, healthcare and **housing needs**. Workers contribute monthly up to a fifth of wages while employers contribute 17 percent of wages.
- HDB builds a variety of **flats available on 99-year lease** to cater for different household sizes and budgets.
- Households can fund the purchase of HDB Flats with a **bank loan, HDB loan, with cash, or with funds drawn from the CPF**.
- **Several schemes and grants** to assist households at various stages of the housing ladder to purchase new flats (especially first time homebuyers) .

Singapore's Public Housing Model

- HDB Flats range from **2-room Flexi units** to larger **5-room units** and **executive flats**. **3-Gen units** cater to multi-generational families who live together.
- HDB's **public rental flats** are meant for **lower-income households** who have no other housing options or family support.
- **High-density public housing model** has been adopted in order to satisfy the housing demand.
- Minimum period of occupancy is **5 years**. After that, Public housing may then be traded on the **resale market** .
- Housing units integrated with **amenities** including clinics, community facilities such as parks and sports facilities, and retail.

Key Takeaways

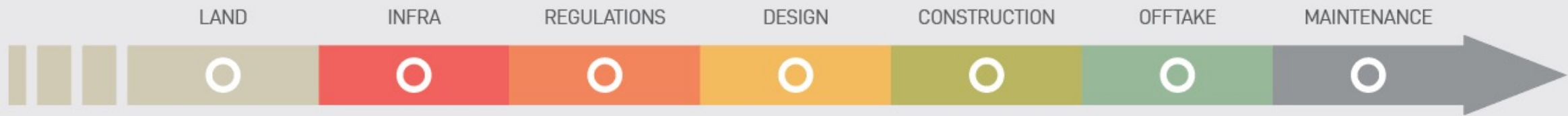
- In Singapore, **90% of the land** is now government-owned.
- Over the last 50 years, the public housing model has shifted from **large scale public housing programme** towards **more diversity and choice**.
- **CPF** originally started as a **pension scheme** in the 1950s and regulations were relaxed in the 60s to allow for **withdrawals for purchasing housing**.
- Residents pay management fees (adjusted for each flat type) for **maintenance and upkeep** of HDB estates common areas
- **Ethnic quota policy on public housing** to promote racial integration at the neighbourhood and block level.

Opportunities for Rwanda

- Exploring mechanisms of leveraging **Pension Funds like RSSB** in support of access to housing finance. In Singapore, a set of financial mechanisms have been built around the **CPF**.
- Strengthening the policy and regulatory framework on how to consolidate small parcels of land that allow for infrastructure improvements and housing development.
- By **encouraging/enabling housing construction**, there is an opportunity for greater employment creation and infrastructural development

VALUE CHAIN LINKAGES

LARGE-SCALE DEVELOPER - URBAN



The large-scale developers value chains carries heavy risks at the beginning and end of the value chain but if carried all the way through has the biggest reward



Land acquisition If not supplied by the government (who has large land reserves), the large-scale developer will need to amalgamate land from private owners (process can be supported by local authorities and RHA). The process may be lengthy, which is a risk to the developer if he/she has borrowed monies to finance this acquisition.



Infrastructure Can be delivered as a subsidy to the developer meeting policy conditions. In either case (affordable or 100% market rate), a phasing strategy should be put in place to manage cost and scheduling.



Regulations National policies for affordable housing exist but the implementation procedures for allocating subsidies (e.g., infrastructure, land) are still on the drawing board. Policies recognize the need for cross-subsidization and caps on unit size, construction cost and sale price, but the requirements may not yield a financially viable business model.



Design Innovation is perceived as an important tool in driving down construction costs. Initiatives are led by the developer but require approval from RHA and RSB.



Construction If proprietary technology is being used, developer manages the entire construction process including the training of site supervisors and trade supervisors, particularly as it relates to QA&QC.

Important to ensure siteworks and infrastructure installation are 100% complete to avoid early mobilization of costly experts and machinery on-site



Offtake In cases where land expropriation is necessary, existing landowners (some of whom may have no financial history) may be given right of first refusal for housing products they cannot necessarily afford. Mortgage products would need to be tailored to the means.



Maintenance Concept and design approval by local authorities and RHA likely require proof of a viable maintenance plan.

FINANCIAL LINKAGES

LARGE-SCALE DEVELOPER - URBAN



Subsidies are proposed to strengthen the value chain, but without clear implementation and financing guidelines, the developer maintains all of the risk



Land acquisition Even if land is “given” by the government, the developer still bears the cost and risk associated with earthworks, a particular challenge on steep terrain.



Infrastructure With no central sewerage system, developer shall shoulder the burden of putting in extensive WWTP facilities in the first phase of the project. Possibility to sell connections to neighbouring plots but landowners would likely require some facilitation. If 100% subsidized by government, scheduling must be clarified with developer before implementation.



Regulations The policy regulations for affordable housing are prescriptive and their economic viability remains untested on the market. Any large-scale developer delivering affordable housing is a pioneer who shoulders a maximum amount of risk. Construction loans do not recognize this risk-taking.



Design The cost of innovation are not eligible for finance from banks. So any innovative design and technology is the responsibility of the developer (e.g., licenses, equipment, etc.).



Construction After infrastructure, this is likely to be the developer’s largest expense if not financing land acquisition.

Short loan periods and high-interest rates for local capital make construction delays extremely risky.



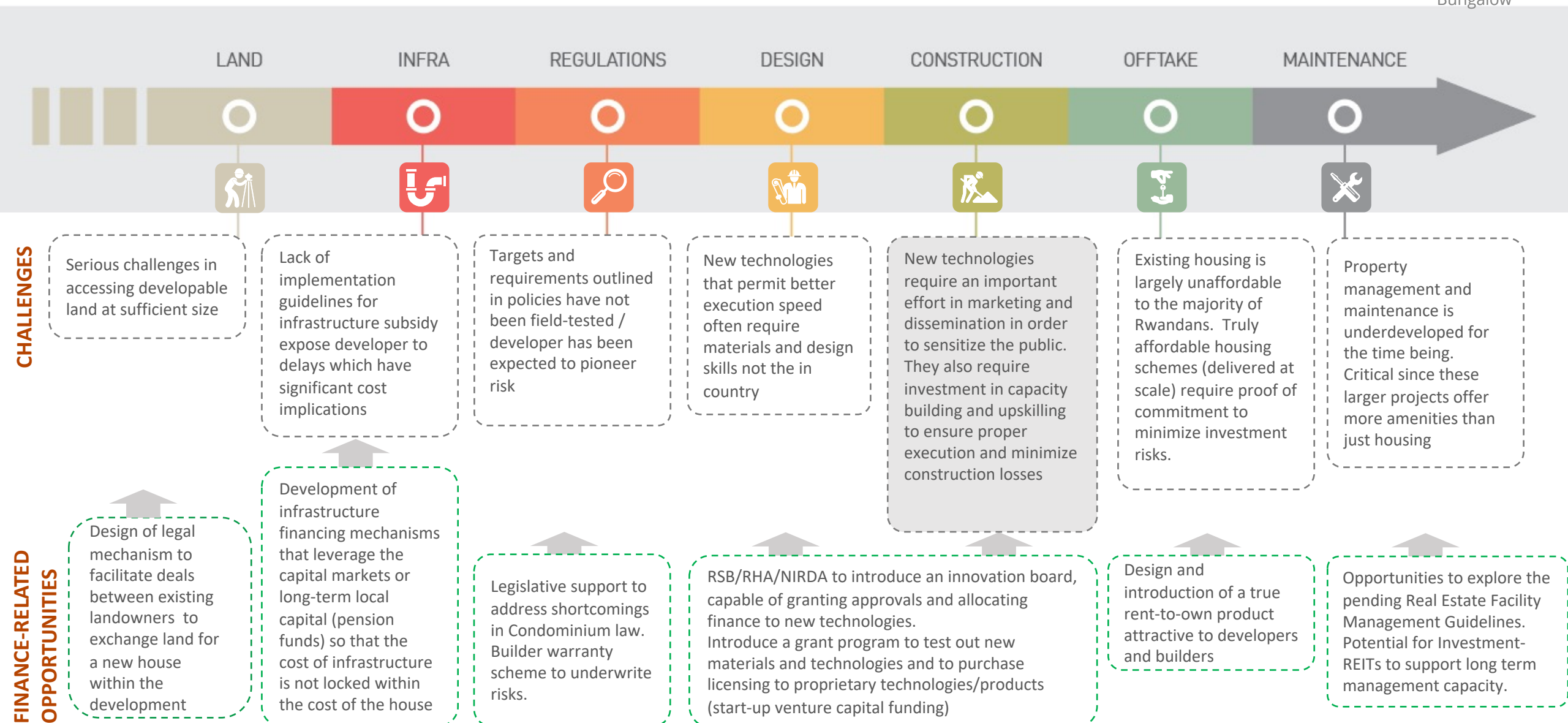
Offtake There is currently no model for developing (financing and building) rental housing at scale and there are no property management companies prepared for estate management for rental properties. Insufficient loan products on the market to guarantee buyers will qualify and be approved and no construction financing to make rental housing financially viable.



Maintenance Few maintenance companies specialized in estate management. Developer wants to recoup profit fast, likely to put short guarantees on houses.

SUMMARY OF CHALLENGES & OPPORTUNITIES

LARGE-SCALE DEVELOPER



Gaps in the value chain

The government of Rwanda’s IDP Model Village programme (submarket 00) exemplifies an efficient housing delivery model, with good engagement at each link of the housing delivery value chain. Outside of this success, however, key gaps exist in different links for each of the six submarkets. Addressing these is the key to enabling the affordable housing sector.



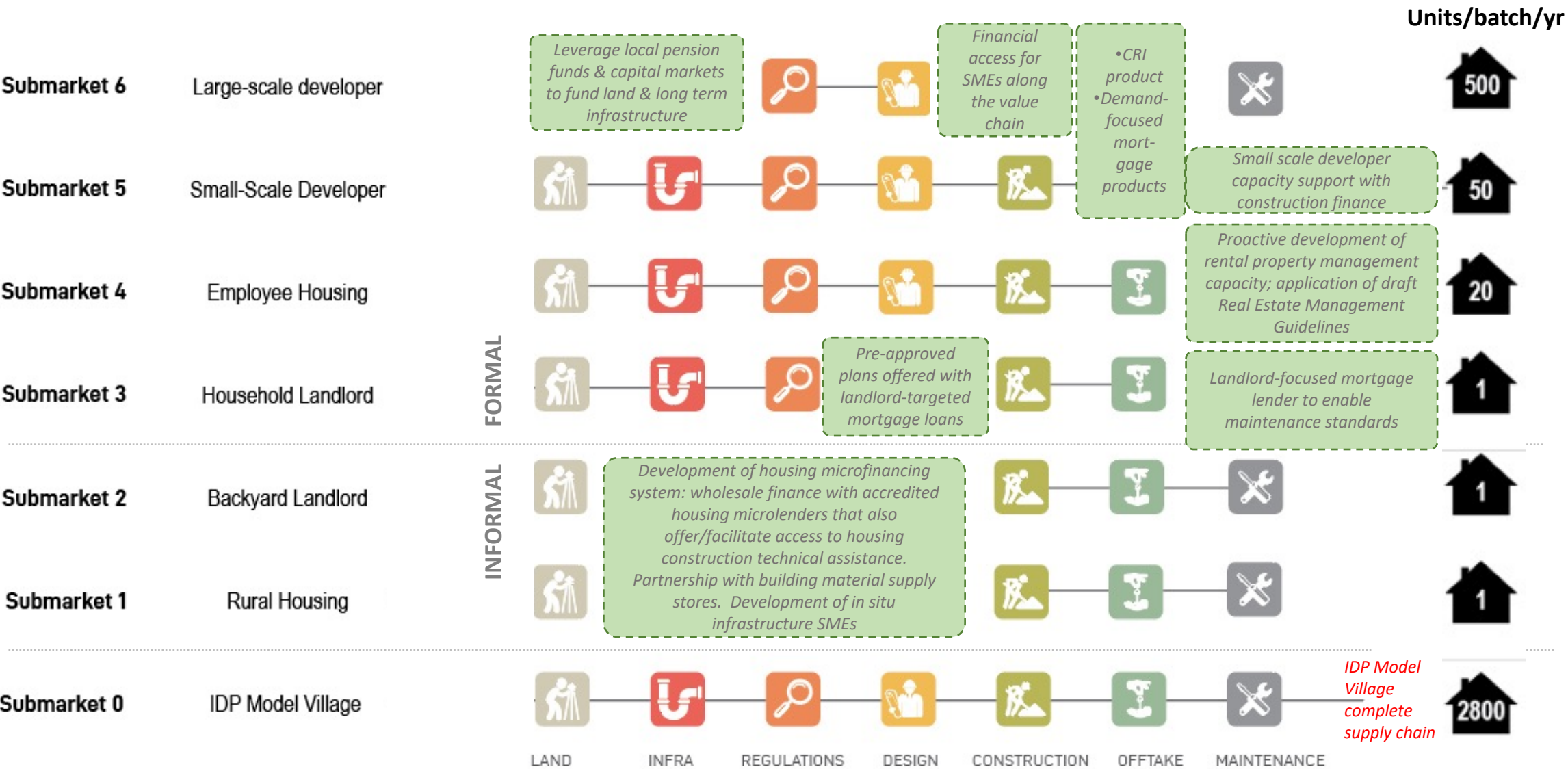
Gaps in the value chain

Key challenges in each housing submarket ultimately have an impact on the availability of finance – whether for the developer, contractor, or the end-user.



Gaps in the value chain: potential interventions

At the same time, the targeted delivery of finance can influence the shape and character of the value chain, and improve outcomes.



What can finance do to help the housing sector realise Rwanda's Vision 2050 intentions for affordable housing?

Although each Submarket has its finance particularities, the value chain studies reveal that all chains have challenges with construction and offtake financing

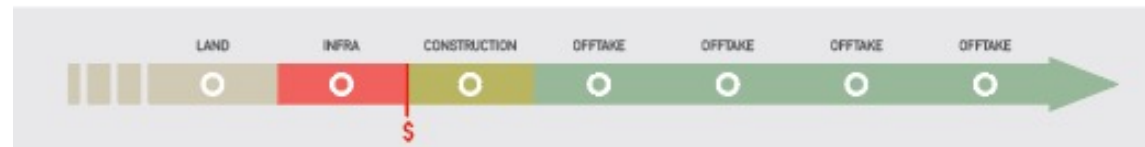
Submarket 6 Large-scale developer



Submarket 5 Small-Scale Developer



Submarket 4 Employee Housing



Submarket 3 Household Landlord



Submarket 2 Backyard Landlord



Submarket 1 Rural Housing



PRIMARY FINANCE LINKAGE GAPS

Rwanda's robust land registration and management system powers a micro-developer-friendly ecosystem that provides tens of thousands of informal housing units. Formalizing these units (bringing them into compliance with codes) requires finance to repair broken value chain links, especially as it relates to construction finance and end-user finance.

As the housing sector grows, so too do the opportunities for SME supplier businesses to multiply. Anywhere that the \$ appears in the value is an opportunity for business exchanges to be structured and financial products developed.

Minimizing the gaps between the \$ does not necessarily mean a healthier value chain, but it does reflect the presence of more financial products on the market.

What can finance do? By submarket

06: Large-scale developer: urban



Critical need for **construction finance** that shapes activity towards affordability and sustainability.

05: Small-scale developer: urban



Primary need for **end-user finance** to enhance buyer affordability for this housing type. **Construction finance** would also assist these developers scale.

04: Employee housing: urban



Potential for an **Industrial Park REIT** for employee housing? Develop an Employee Housing Strategy including financial structuring & taxation benefits
Explore **private sector application of the IDP Programme**

03: Household landlord: urban



Use technology to support supply-side linkages and create **digital marketplace**.
Construction finance to enable developer to scale.

02: Backyard landlord / unplanned settlement: urban



Digitised payments to create a visible track record of business activity and enable access to finance
Remittance-enabled sale of building materials / maintenance solutions

01: Homeowner / incremental: rural & peri-urban



SME financing for off-grid infrastructure provision
Remittance-enabled sale of building materials / maintenance solutions

Rwanda Mortgage Refinance Company to broaden the mortgage products it finances to target affordability

Information portal for first time home-buyers with sites, commissionaires/brokers, providing information on properties, financial products and other advice – tie into RMRC.

Extending the IDP programme to be delivered by the private sector as a hybrid, subsidy + finance intervention.

End user finance product design: mortgage & unsecured, for niche market groups – young professionals, households with remittance income, households with informal incomes, backyard and small scale landlords and micro builders.

Loan performance analytics to better define risk in support of targeted loan and insurance products

Streamline building material supply to prevent shortages and reduce construction costs – opportunity for digitisation

Wholesale finance apex fund to provide housing-specialist capital and construction TA to non-bank lenders & SACCOs offering:

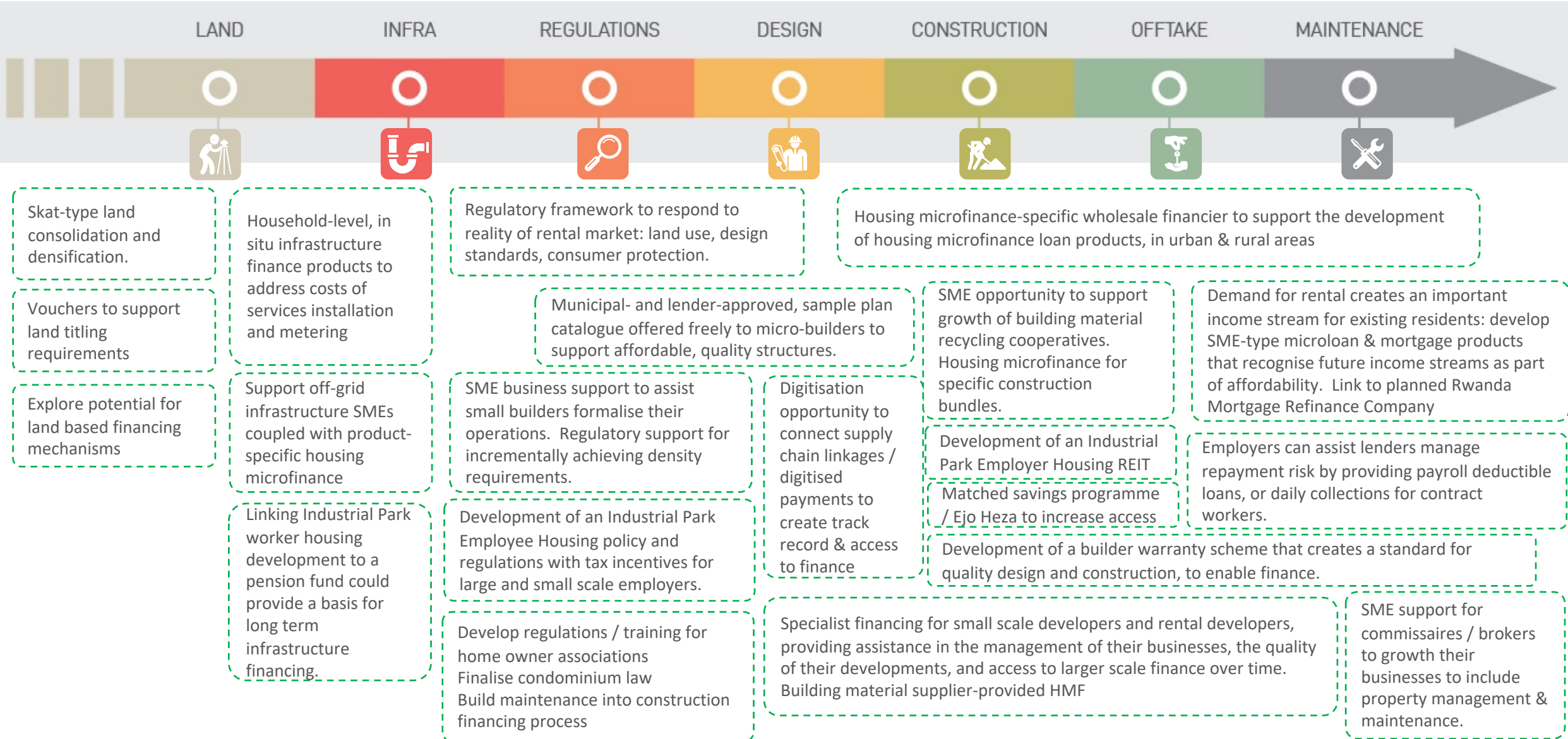
- Housing microfinance
- SME finance for housing-related businesses
- Unsecured construction finance for household landlords

Digitised payments to create a visible track record of business activity and enable access to finance

Sector coordination to explore finance intervention to overcome supply chain blockages and risks.

Comprehensive data collection and analysis to track affordable housing sector progress

What can finance do? By value chain links



Interviews

	Interviewee	Core Business	Interviewer
1	Development Bank of Rwanda(BRD)	Financial Institution	Fatou Dieye (w/Baba-Ali Mwango)
2	Ministry of Infrastructure (MININFRA)	Policy Maker	Fatou Dieye
3	City of Kigali	Regulator	Jean De Dieu Niyigena / Fatou Dieye
4	EarthEnable	Incremental Housing Supplier (rural)	Fatou Dieye
5	NextGen Developers	Developer (mid range)	Fatou Dieye
6	Imali.Biz	Real Estate Broker (med - high end)	Fatou Dieye
7	Vibe House Realtors	Real Estate Broker (med - high end)	Fatou Dieye
8	DND Triangle Developers	Developer (mid to high-end)	Fatou Dieye
9	Sekimondo	Developer (mid-range)	Fatou Dieye
10	John Dubai	Developer (low to mid-range)	Jean De Dieu Niyigena
11	Used Material Reseller	Building Materials (unplanned settlements)	Jean De Dieu Niyigena
12	Vuba Bricks	Builder (low- to mid-range)	Jean De Dieu Niyigena
13	Remote Group	Developer (low to mid-range)	Fatou Dieye
14	HydraForm/Modern Bricks	Builder (low- to mid-range)	Jean De Dieu Niyigena
15	Strawtec	Building Materials (high-end + GoR)	Jean De Dieu Niyigena
16	Master Mason	Builder (low- to mid-range)	Jean De Dieu Niyigena
17	AfriPrecast	Building Materials (mid/high-end + GoR)	Jean De Dieu Niyigena
18	Urwego	Financial Institution	Jean De Dieu Niyigena
19	SACCO Kora Ukire	Financial Institution	Jean De Dieu Niyigena
20	Bank of Kigali	Financial Institution	Jean De Dieu Niyigena
21	Bank Populaire du Rwanda	Financial Institution	Jean De Dieu Niyigena
22	Agatare Housing Cooperative	Rental Property Owner (unplanned settlement)	Jean De Dieu Niyigena
23	United Properties Group	Developer	Jean De Dieu Niyigena
24	Homart Group	Developer (includes high-end rental)	Jean De Dieu Niyigena / MRR
25	Rubare (to remain anonymous)	Household Landlord (mid-range)	Jean De Dieu Niyigena / MRR
26	Anonymous	Household Landlord (mid-range)	Jean De Dieu Niyigena / MRR
27	MobiSol	Off-grid solar panel supplier	Fatou Dieye
28	GA Collaborative	Rural Housing Study - 300 HH	Fatou Dieye
29	Rental housing Cooperative	Rental and Commercial Property Lending	Jean De Dieu Niyigena
30	Rwanda Social Security Board	Pension Fund	71point4

Focus Group Discussions

- First Time Homebuyers
- Brokers/Commissionaires

DOCUMENTS IN THE SERIES

The following documents are available as separate files:

1. Scoping Rwanda's Affordable Housing Demand & Supply: Full Report
2. Scoping Rwanda's Affordable Housing Demand & Supply: Executive Summary
3. Affordable Housing in Rwanda: Demand-side analysis
4. Affordable Housing in Rwanda: Housing Finance Access Frontiers
5. **Affordable Housing in Rwanda: Housing submarkets**
6. Affordable Housing in Rwanda: Sale and rent prices in Rwanda's housing market
7. A Review of the Data Landscape in Rwanda's Housing Ecosystem
8. Rwanda's affordable housing sector: overview of the institutions, policies and legislation that shape the sector