



Centre for Affordable  
Housing Finance  
in Africa

# Kenya's Affordable Housing Program

## **Unlocking delivery of housing in Kenya: the need for construction finance**

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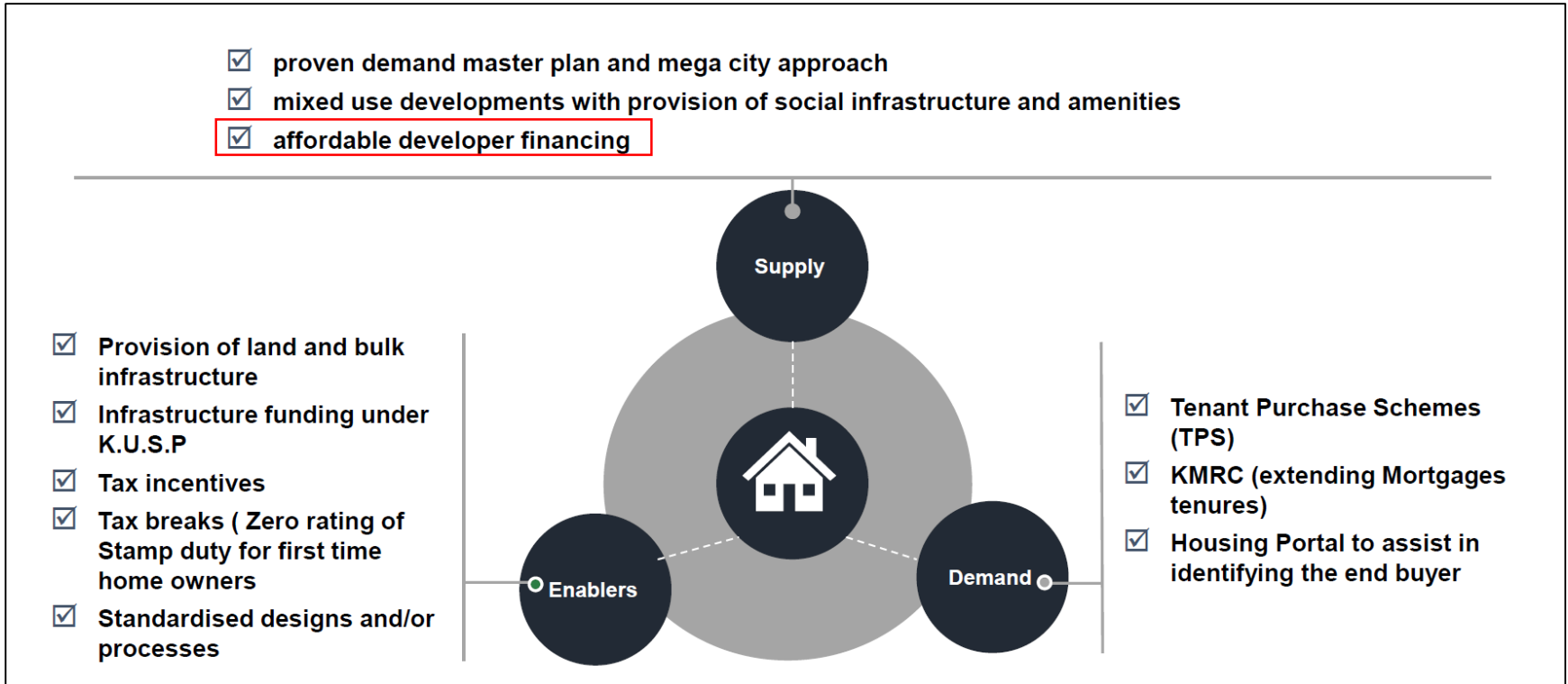
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All figures in KES. Conversion rate is KES 100: \$1

# 1.0 AHP key interventions

The AHP interventions are intended to stimulate both supply and demand.



Source: Page 7, AHP Delivery Framework Presentation, Nov 2018.

# 1.0 AHP framework for supply

Developer provided with **offtake agreement: price of KES 50,000 psm**



Developer contributes land, designs, builds and finances units



Government provides offtake **on completion**  
90% on verification, 10% after defects liability

**CAHF Paper reviews viability for local developers to participate**



# 2.0 Small vs Large Developers

Developer Size	Product	Construction Methodology	Volume	Capital injection	Ave const cost psm	Ave sale price psm	Examples local developer
Small	Bungalow (1 storey)	Buys materials and hires labour on a daily basis, acts as developer and contractor	< 50 units pa	Limited capital from developer, projects funded largely by purchaser instalments	KES 20,000	KES 35,000	Mahiga Banda Sierra
Large	Apartments (4 stories +)	Employs a contractor for delivery of project	>100 units pa	Raises significant equity and debt in addition to purchaser instalments	KES 31,500	KES 65,000	Karibu Suraya Greenspan Unity Riruta Chigwell Natureville

# 2.1 Small vs Large Developers costs

Description	Factor	KES psm	Explanation
Base construction cost for Small Developers		<b>KES 20,000</b>	Input resulting in average sale price psm of KES 35,000
Structure	25%	KES 25,000	Additional steel etc for building high rise versus single storey: structural frame, stairs, intermediate floor slabs
Labour	5%	KES 26,250	Pay all regulatory dues on labour (NSSF, NHIF, PAYE)
Margin	20%	KES 31,500	Add profit margin for contractor
		<b>KES 31,500</b>	Resulting cost per buildable sqm from contractor to large developer
Area adjustment	15%	KES 36,225	Circulation space of apartments (corridors, staircases) is an additional cost factored onto sellable space.
VAT	16%	KES 42,021	16% VAT is an additional tax on final contractor price
Corresponding construction cost for Large Developers		<b>KES 42,021</b>	Input resulting average sale price psm of KES 65,000

**VAT on construction is a big barrier to affordability**



## 3.0 Pilot Project

Unit Typology	2 Bedroom apartments, 40 sqm net
Land	Well located, serviced to boundary, KES 20 m per acre
Gross to Net	1.15, Total built 6,900 sqm
Density	Ground plus 3 stories, FAR 1.7
Onsite infrastructure	KES 6 million per acre
Construction	KES 31,500 psm before VAT
Soft costs	12% of hard construction and infrastructure costs
Debt to Equity	Debt funds 60% of hard construction cost only
Timeframe	Month 1-3: Land contribution, finalize designs Month 4-6: Approvals, arrange financing Month 7-24: Construction over 18 months Months 27: First offtake payment of 90% Month 39: Final offtake payment of 10%
Required return	Developer IRR of 25%

# 3.1 Pilot Project Financials

## Key Conclusions

<u>Project Costs</u>	<u>150 units</u>	<u>1 unit</u>	<u>1 sqm</u>	
Land value	20,000,000	133,333	3,333	6%
Infrastructure cost	6,000,000	40,000	1,000	2%
Construction @ KES 31,500 psm	217,350,000	1,449,000	36,225	68%
VAT on Infra + Construction	35,736,000	238,240	5,956	11%
<b>Total Hard Costs</b>	<b>259,086,000</b>	<b>1,727,240</b>	<b>43,181</b>	<b>81%</b>
Soft Costs (Prof / Mkg/ Appr)	26,802,000	178,680	4,467	8%
Interest on debt @ 15%	13,757,466	91,716	2,293	4%
<b>Total Project Cost</b>	<b>319,645,466</b>	<b>2,130,970</b>	<b>53,274</b>	100%
<u>Financed by</u>				
Debt	155,451,600	1,036,344	25,909	49%
Equity:				
Land	20,000,000	133,333	3,333	6%
Soft Costs	26,802,000	178,680	4,467	8%
Hard Costs (40% of total)	103,634,400	690,896	17,272	32%
Interest during construction	13,757,466	91,716	2,293	4%
<b>Total Equity</b>	<b>164,193,866</b>	<b>1,094,626</b>	<b>27,366</b>	<b>51%</b>
<b>Total Sources</b>	<b>319,645,466</b>	<b>2,130,970</b>	<b>53,274</b>	100%
<b>Offtake price offered by AHP</b>	<b>300,000,000</b>	<b>2,000,000</b>	<b>50,000</b>	

← Land & Infrastructure not prohibitive due to density

← **Construction cost continues to be most limiting factor. VAT on construction is a big barrier.**

← Delivery cost without contingency, close to offtake price

← Debt finance difficult to access and expensive despite offtake

← **Developer to raise significant equity**

← Offtake price not viable for developer risk undertaken, particularly bearing T Bond Rate





## 4.0 Recommendations

- **Construction Finance**





- Milestone payments within the offtake agreement
- Setting up a separate construction financing
- Increase debt: equity proportions

- **Improve viability for developers**

- Zero rated VAT, Offtake price, construction finance rate



## 4.1 Offtake price and equity required sensitivities

Scenario	VAT	Interest Rate	Debt: Equity	Equity required KES, per 2 BR unit	Viabale offtake price KES, psm
1, Current	16%	15%	50:50	 1,155,770	 65,000
2	0%	15%	50:50	1,039,390	57,500
3	0%	9%	50:50	986,679	56,000
4, Proposed	0%	9%	60:40	 715,235	 55,000

# 4.2 The rationale for concessions to developers

<u>Project Costs</u>	<u>Scenario 1</u> <u>Per Unit</u>	<u>Scenario 4</u> <u>Per Unit</u>	<u>Key Changes</u> <u>Sc 4 - Sc 1</u>	<u>% saving</u>	<u>Key Conclusions</u>
Land value	133,333	133,333			
Infrastructure cost	40,000	40,000			
Construction @ KES 31,500 psm	1,449,000	1,449,000			
VAT on Infra + Construction	238,240		-238,240		
<b>Total Hard Costs</b>	<b>1,727,240</b>	<b>1,489,000</b>	<b>-238,240</b>	<b>-14%</b>	← Zero Rated VAT reduces cost by 14%
<b>Soft Costs (Prof / Mkg/ Appr)</b>	<b>178,680</b>	<b>178,680</b>			
Interest on debt @ 9%	91,716	105,421	13,705	15%	← Interest cost increases but higher debt amount
<b>Total Project Cost</b>	<b>2,130,970</b>	<b>1,906,435</b>	<b>-224,535</b>	<b>-11%</b>	← Total subsidy: KES 224k
<u>Financed by</u>					
Debt	1,036,344	1,191,200	154,856	15%	
Total Equity	1,094,626	715,235	-379,391	-35%	
<b>Total Sources</b>	<b>2,130,970</b>	<b>1,906,435</b>	<b>-224,535</b>	<b>-11%</b>	
	-	-			
<b>Required offtake price</b>	<b>2,600,000</b>	<b>2,200,000</b>	<b>-400,000</b>	<b>-15%</b>	← Reduction in house price: KES 400k.

# 4.3 Subsidy multiplier

Subsidy to developer (zero VAT, lower debt cost)	-KES 224,535	
		Subsidy multiplier
Reduction in house price	KES 400,000	<b>1.78</b>
Reduction in TPS subsidy	KES 521,831	<b>2.32</b>

## 4.4 Key Conclusions

- Kenya has a class of credible local developers
  - Eager to participate in delivery of affordable housing
  - Have access to land
- Volume of finance to build houses is very high, even for 150 unit project need approximately KES 160m of developer equity
  - Providing construction finance through milestone payments or via a separate financing vehicle will unlock delivery
- Currently offered offtake price of KES 50,000 psm is not viable
  - Without concessions, require offtake price of KES 65,000psm
  - With concessions (Zero rated VAT and 9% construction financing), require offtake price of KES 55,000 psm
- Construction risk can be managed well with proper risk mitigation framework and project governance
- Supply subsidy described has a 2.3 times positive multiplier

## 5.0 Reinvestment Fund: [www.reinvestment.com](http://www.reinvestment.com)

- Founded in 1985, non-profit lending agency
  - **Community Reinvestment Act**
  - Focused on reviving distressed neighbourhoods
  - Intermediary between banks & developers for private capital
  - Intermediary between state governments & developers for tax credits
- Fund raised own capital
  - Impact bonds issued in \$1,000 denominations,
  - **880 investors, \$2 billion in capital, AA-S&P Rating**
- Product range:
  - Housing, schools, supermarkets, commercial, renewable energy

### The Fund's success is based on:

- Strong market knowledge and local networks, GIS Mapping platform, **[www.policymap.com](http://www.policymap.com)**
- Skilled workforce and investment oversight
- Risk alignment (on book lending)
- Strong commercial discipline: 90 days deal closing, 5 days drawdown

# 5.1 Risk Management

Risk Area	Avoid / Mitigate / Manage Measure
<b>Product</b>	Consultant vetting and contract documents, Consultant Professional Indemnity, Decennial (Inherent Defects) Insurance, Independent time, quality and cost monitoring
<b>Construction Delivery</b>	Independent developer vetting, performance bond and monitor retention amounts Technical interrogation of the procurement documentation Manage ground risks with a separate ground work contract Independent program monitoring by aligned construction professionals Independent Certification of Milestone payments Contractors insurances assigned to financier
<b>Market</b>	Offtake agreement based on proven end user market acceptance of product Offtake payment credibility proven and accepted by supply chain Allow access to savings from middle to higher income population to invest in housing (eg. Accessing partial pension contributions)
<b>Payment Default</b>	Drawdown Conditions Precedent include, construction permits, progress and equity first Build in similar milestones for balance debt funding relative to developer Cash Equity Overall risk lower as limit debt to 60% of project cost which equates to 55% of sale price
<b>Dispute and Litigation</b>	Strong and simple contracts with intelligent Alternative Dispute Resolution Adjudication in 40 days as first course of dispute resolution and prescribed adjudicator
<b>Project Management</b>	Upfront due diligence of whole project delivery team Invest in capacity building to ensure systems are in place, Regular independent monitoring
<b>Developer insolvency</b>	Liquid asset rich security, Bond coverage Step in provisions to realise completion

Project Governance

# Recurrent issues in Kenya to be avoided...





# Design issues to get right in high rise...

