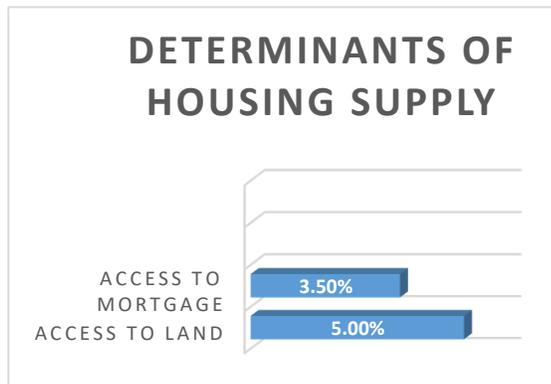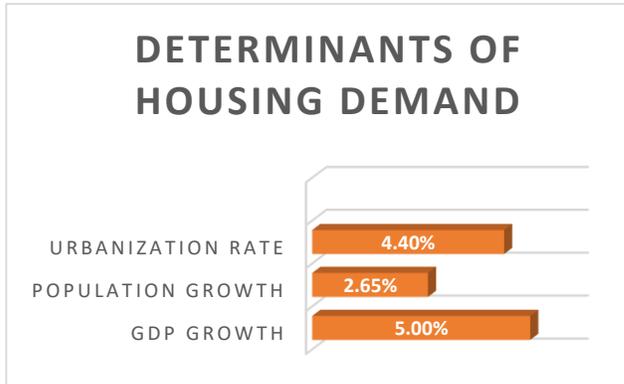**1. Investment Partnership for Providing Low-Cost Housing**

Housing demand in Nairobi far outstrips supply. Housing deficit in the residential real estate is approximately at 1.9 million units and growing at 200,000 units annually. In Nairobi, the demand for housing has reached 80,000 units per year. Growth in the county's GPD, rapid population growth and high urbanization rate impact pressure on the demand for decent housing units.

Figure 1: Demand and Supply of Housing Units

DETERMINANTS OF HOUSING DEMAND

URBANIZATION RATE	4.40%
POPULATION GROWTH	2.65%
GDP GROWTH	5.00%

DETERMINANTS OF HOUSING SUPPLY

ACCESS TO MORTGAGE	3.50%
ACCESS TO LAND	5.00%

The problem

Availability of affordable and social housing options in Nairobi Metropolis are few despite the growing urban population. An estimate of 60% of Nairobi residents, 2.5 million people, live in slums, with over 200 settlements on 6% of city land. Tenants in this region spend 33.1% of their income on rent, and the figure increases to 40.8% in Nairobi County. The government and private developers have struggled to keep pace with the demand for low-cost dwelling by the middle income earners. Availability of development land within Nairobi is low resulting to relatively high prices most especially in the city's suburbs. Land owners in Nairobi Satellite towns such as Ruaka, Rongai, Kitengera, Ruiru, and Kikuyu where land is fairly available and owners are poor thus lack proper financial muscle for real estate development.

Structural and institutional policies hindering housing development

- Extended project time frames of commercial housing development,
- The Banking Amendment Act 2015, and
- More stringent borrowing terms by banks limiting credit supply to these land owners.

In Nairobi satellite towns, an estimate of 28% of the potential development land consist of owner-occupied developments and low density commercial units. Barriers to housing development by low income earners include:

- High development costs owing to the high cost of construction materials which constitute to 70% of the total development cost.
- Interest rates on conventional loans are high, on average of 15.8%.
- Conversion of marginal land into farm land by the poor.

**2. Solution: Low-Cost Housing Development Investment Partnership**

This investment partnership provides for the development of housing project for:

- 10,000 low-cost housing units in high density areas.
- 5,000 low-cost housing units in low density area.

The markets will be reached by establishing a framework through which:

- Poor urban land owners in the five satellite towns will provide land for development
- Investment Partner will avail funds for developing commercial housing units in the land in two years
- 10-year revenue sharing plan, after which the land owner will assume total ownership of the entire property

3. Investment Cycle
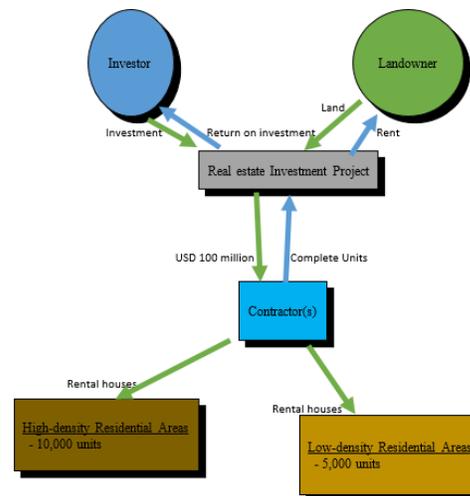
a portion of the rent received per month for a period of 10 years, after which the land owners will assume total ownership of the property.

Investment Criteria and terms

- Total housing units: 15,000 units
- Annual revenue: Average USD 22.5 million
- Project investment period: 2 years
- Total investment amount: USD 100 million
- Disbursement: 50% in year 1 and 50% in year 2
- Return on Investment: From the 3rd year onwards, monthly payback of 75% of the USD 1.875 million to the investor.
- Minimum investment recoup period: 10 years.

4. Investment Project Implementation

Development of the low-cost housing units will be effected in two years. Urban land owners within the 5 identified satellite towns will provide 835, 0.125 acre plots, 500 in high-density area and 335 in low-density areas. A contractual agreement binding to all parties will be signed allowing the development of the land in question by the investor. The investor will fund the entire project cost with direct payments to the contractors in two annual phases of 50% each. Upon completion of the project in year three, standardized rates to be charged on the house units will be determined based on reasonable market price that will ensure achievement of the intended outcomes. The pricing strategy will take into account the level of disposable income for the middle-income earners in these regions, intended capital gain by the land owners, as well as the return on investment to the investor. By the terms of contract, the investor collects

Fund Flows to investor with 75% annual gross return and 25% annual rate of return on land

Legend: Fund flows to investors (USD Million) ■ Fund flows to land owners (USD Mill
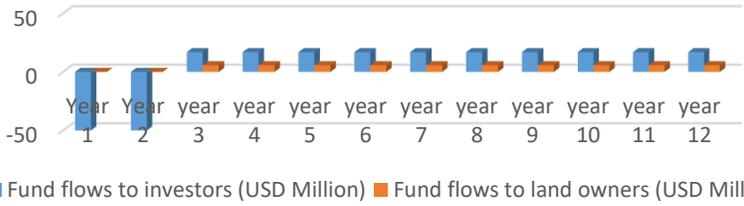
5. Fund profile

Asset class	Real estate development
Time horizon	2 years implementation period, 10 years investment recoup period
Target geography	Kenya: Nairobi satellite towns (Ruaka, Rongai, Kitengera, Ruiru and Kikuyu)
Target investment pool	Private investor fund and local
Target portfolio	15,000 low-cost housing units
Fund size	KSH. 10,000 million (USD 100 million)
Fees and incentives	KSH. 12,500 per unit (USD 125) per month
Expected returns	ROI: 6.875% p.a. Gross return on land: USD 5.7 million p.a.

6. Returns and Cash flows

The following assumption are made in estimating returns and cash flows for the project:

- Building cost structure: Direct construction costs consist of 75% of the total funding. Indirect costs (real estate taxes, permits, legal fees, insurance, development fees and consulting fees) consist of 20% of the total funding.
- No initial land acquisition payments are made.
- Housing prices/rent ratios are determined by the project's net operating income, cap rate and the amortization period (10 years).
- Pre-construction costs, warranty, and financing and interest expenses do not exceed 5% of the total funding.

7. Social Impacts

The anticipated benefits of this investment include:

- Provision of quality and affordable housing for the middle income group.
- Adequate utilization of land in the satellite towns to accommodate more housing units per plot.
- Enhanced controlled development.
- Higher earnings for the land owners.

Impact metrics	Outcomes
New flats constructed	610
Housing units added	15,000
Affected population	35,000 people (on average)
Percentage of income spent on rent	22.98% (decrease by 10.1%)

8. Risk Factors

Type	Risk	Mitigation
Development	Insufficient project returns	The developer will provide appropriate project reviews prior to the investment engagement. A realistic evaluation of the developer's abilities, identification of
	Project type and location	efficient external suppliers, and comprehensive feasibility analysis of the project will follow to determine the ability of the project to generate expected returns. Construction design and proximity of the development site to key infrastructures will be taken into account in the planning stage to influence the relevance of the project. Analysis of job growth, population and demographics of the target localities will help determine the soundness of the project.
	Occupancy risks	A diverse tenant mix will be established to mitigate occupancy risk and ensure the flats are occupied in most times independently of what happens to any single tenant. This will be achieved through a policy where each tenant occupies less than 20% of the leasable area.
Time and Cost	Market uncertainty	The developer will ensure timely commencement of marketing to understand the dynamics and market forces.
	Cost control	Proper timing in project conception and implementation will help reduce cost factor variations and improve the reliability of cost estimates.
Financing	Financing conditions	Project will embrace forward funding option by encouraging the investor to avail funds during the development process.
	Interest rates	The condition for project funding will include review of the financial commitment upon project completion based on a final feasibility analysis

9. Scalability

This project will provide adequate and relevant information on the much overlooked field of joint property ventures in the current volatile real estate market. It will provide the necessary information regarding possibility of risk sharing, efficient and safe investment avenue through which both parties, the landowner and the investor benefit, and the long-term value to the land owner is immense.

The project will impact on the land owners in the other 35 sub-markets in Nairobi metropolis who would otherwise not be in a position to develop their land, to be interested in joint venture agreements. This would lead to possibility of a second phase, commencing in year 3, thus addressing the problem of housing deficit and land scarcity co-currently.

The third face would then focus on the major urban centers in the country such as Nakuru, Mombasa, Eldoret, Kisumu and Nyeri. A total of 200,000 decent and affordable housing units per year would be targeted for both middle and low-income groups.

References

Cytonn Real Estate Market Review-2016. https://www.cytonn.com/download/Cytonn-Real-Estate-Sector-Review-2016.

Cytonn Real Estate. Nairobi Metropolitan Residential report 2017. https://www.cytonn.com/uploads/downloads/residential-research-report-vf.

Government of Kenya (2007), Housing Sector Incentives and Market Re – Engineering Measures, Ministry of Housing

Prytz, J. and Borjesson, H. (2008). Joint Ventures: A development in the Real Estate Markets. *International Law Office,* 2(1), 123-134.

World Bank (2016). Republic of Kenya: Kenya Urbanization Review.