African Union for Housing Finance

THE MOCK SHARKROOM
Summary of investment proposals

The third edition of the Sharkroom took place in Windhoek, Namibia at the 39th Annual AUHF Conference and AGM on November 1st 2023. A total of 7 participants took part, from 6 different countries. Of the 7 participants, 3 were returning presenters from the first two Sharkrooms who came back with improved presentations having received constructive feedback from the panel.

The panel of investors, with decades of international experience in housing investment among them, constituted Maureen Katuvesirauina of the International Finance Corporation; Debra Erb of the United States International Development Finance Corporation; and Olajumoke Akinwunmi of Alithiea Capital. The panel provided the presenters with constructive investment-oriented feedback to help equip the presenters and all in the audience with the necessary tools to position themselves in a manner attractive to investors.

Mfundo Mabaso, AUHF Board Secretary and Chair of the AUHF's Investments Support Committee, facilitates the Sharkroom session on Day 2 of the Conference in Windhoek, Namibia.

Since its formation in 1984, the AUHF has evolved into a member-based, industry association of mortgage banks, building societies, housing corporations, Development Finance Institutions and other organisations involved in the mobilisation of funds for shelter and housing on the African continent. As an industry body, the AUHF promotes the development of effective housing markets and the delivery of affordable housing across Africa, working in the interests of its members and the industry as a whole. For more details about the AUHF, email Thandiwe Dhlamini: thandiwe@housingfinanceafrica.org

Affordable housing investment summary
Bitprop – Cape Town, South Africa.

Bitprop is a development company that partners homeowners to build rental units on the homeowners' properties. The two parties This ultimately enables financial independence for the homeowners to turn them into property entrepreneurs. Email Dylan Walls: dylan.walls@bitprop.com

www.bitprop.com/

The Bitprop model

Bitprop enables financial independence by partnering with low-income homeowner-entrepreneurs to turn their properties into sustainable micro-businesses. The homeowner provides the land, and Bitprop provides the investment and operating model to develop rent-generating apartments behind the homeowner's house. Bitprop's in-house architects design, and the township contractor partners build flats on the homeowner's property. For 10 years thereafter, Bitprop is in partnership with the homeowner to manage the property and share the rental income.

Bitprop provides rental management services such as rent collection, tenant sourcing, lease management and maintenance. The homeowner receives 15% gross rent collected, and Bitprop uses the rest to cover maintenance, insurance and capital repayment. Over 10 years, the rent collected covers construction and provides a return to investors, currently at 15.4% per annum. In this way, Bitprop provides a sustainable mechanism to invest capital into the informal township market in a way that conserves capital, incentivises investment and provides immense impact at the same time.

The Ask:

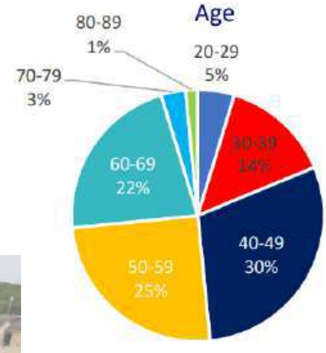
The first fund of US$5 million is closed and has facilitated the construction of 500 rental units. Bitprop is currently fundraising for the next fund which will facilitate the development of the next 1000 rental units during 2024 and 2025. They are seeking US$15 million for this fund across all investors.

Bitprop aims to attract private and institutional funding in a large scale, sustainable way to invest in the township market and help township property owners unlock the value of the property asset they already own. This approach, targeting both investors and homeowners, aims to provide a way for formal capital to truly develop informal markets in a sustainable, replicable way.

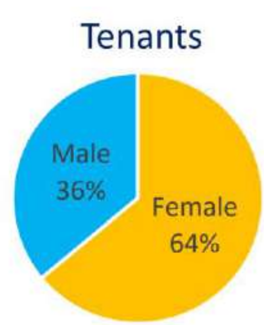
Average rent level
R3450

61% female homeowners

Homeowner Age



Tenants



64 homeowners | 388 units | October 2023

An image of a typical backyard rental property by Bitprop showing the different aspects of the property. Source: Bitprop

Affordable housing investment summary

Hexpressions, India

Hexpressions is an organisation with an innovative service product providing fast, modular and sustainable homes with a new piece of construction material known Composite Paper Honeycomb Panel. The homes can be constructed to meet a wide range of income groups by fashioning them to different specifications that are affordable to the households they are intended for. Email Abhimanyu Singh: info.hexpressions@gmail.com

http://hexpressions.org/

Hexpressions: Seeking US$500 000 for product testing, certifications and marketing ahead of expanding to Africa.

The Composite Paper Honeycomb Panel has two components - an inner core (paper honeycomb made with recycled paper) and an outer face material (any local materials like cement board, wood, stone etc.). This new material can replace traditional construction materials and reduce the built environment's carbon footprint on the planet. The project largely focuses on environmental issues (paper waste) and societal issues (housing affordability & social integration) addressing the housing affordability crisis and social exclusion.

Panel size: 8/10/12 x4

Panel price: US$54-118 per sqm

Panel thickness: 30-150mm

Key aspects

The project primarily aims to support underserved communities with permanent housing solutions. The solution empowers people by equipping them with the required training and skills development to build homes and live dignified lives. The central component to the project is the Composite Paper Honeycomb Panel, a new construction materials product that replaces non-eco-friendly materials like wood, PUF, Rock Wool Mineral wool, and EPS in their respective applications while preserving the key virtues of their usage in the concerned applications.

Composite Paper Honeycomb Panel is an eco-friendly, versatile, flexible and lightweight material that is compatible with other materials and has a good strength-to-weight ratio. It combines well with plywood, steel, plastic, fibre-reinforced plastic (FRP) and many other materials to form some of the strongest composite panels for its weight and dimensions. As a product made from recycled paper and eco-friendly glue, it is a boon to the earth as a 100% bio-degradable, non-polluting, eco-friendly material. Large-scale usage of paper honeycombs can drastically boost the aim of preserving nature.

The pictures and drawings above are examples of what a typical unit constructed with Composite Paper Honeycomb panels looks like. Source: Hexpressions.

Affordable housing investment summary

CITRA – CentralBlue housing project. Cape Town, South Africa

Citra is an affordable housing player in the South African market. Fundamentally, Citra seeks to develop sustainable, affordable neighbourhoods which are enabled through the green Citra Building Technology and a careful design from an urban scale down to the small details of a single unit. Email Joel Baur: joel@citra.co.za

https://citra.co.za/project/centralblue/

CentralBlue development: Seeking US$35.8 million to complete the development of 3000 res units, a school, retail, light industrial and business by 2030.

The Citra Building Technology reduces the building envelope to the minimum. A Citra panel of only 140mm thickness provides 5 times better thermal insulation value than a conventional 280mm cavity wall. The Citra building system has a 1h fire rating, is rated for heavy duty fixings and can withstand storms up to 200km/h. At the same time, the Citra Building Technology reduces carbon emissions by 50%. Citra aims at reducing construction time by up to 75% and construction costs by up to 20%.

The Citra system has high thermal resistance, with an R-value of 2.2 m²K/W – which is over five times more efficient than a standard South African cavity wall. This makes Citra homes cool in the summer and warmer in winter.

The projected revenue from the development is US$213.6 million. The target market is R15,000 - R30,000 household income / month.

Houses under construction at Central Blue. Source: Citra

Completed units at Central Blue. Source: Citra

At CentralBlue Neighbourhood, Citra will have 3 000 residential units; Retail at 12,000 m2 GLA; Light Industrial at 40,000 m2 GLA; and Business at 8,000 m2 GLA; a 2 500-pupil school;

Capital Structure

Summary		
Citra Equity	R 280,000,000	29.5%
Required Funding	R 670,000,000	70.5%
Total Investment	**R 950,000,000**	**100.0%**

Land Cost	R 120,000,000	12.6%
Professional fees	R 48,000,000	5.1%
Other development cost	R 70,000,000	7.4%
Bulk service connection	R 5,000,000	0.5%
VAT	R 37,000,000	3.9%
Total Equity	**R 280,000,000**	**29.5%**

Construction cost and improvement	R 584,000,000	61.5%
VAT	R 86,000,000	9.1%
Required Funding	**R 670,000,000**	**70.5%**

Timeline

2018	Start Infrastructure
2020	Start Topstructure
2023	200 Units Built and Sold
2024	100 Units for Sale 132 Green Rental Units
2025 – 2030	**Proposed: 1,000 Green Affordable Rental Apartments**

Affordable housing investment summary
Ellis Investments Limited, Namibia (countrywide)

Ellis Investments Limited is an MSME that was established 2013. The company is registered with the Business and Intellectual Property Association (BIPA), the Ministry of Finance (MoF) and the Social Security Commission (SSC). They are in the business of house construction and renovations in the lower end of Namibia's housing market with over 50 houses constructed or renovated nationwide.

Email Ellis Tjiueza at: ellistjiueza@gmail.com

Ellis Investments Limited seeking US$50 000 for the construction of Ultra Low-cost housing in Namibia.

Ellis Investments Limited is looking to build houses for ultra low-income households that are traditionally not catered for by the conventional market and cannot access traditional home loans. The developments will combat the housing issues that have led to the proliferation of informal settlements and unproclaimed villages.

Key aspects

The ultra low-cost model requires the household to already have ownership of the land, specifically a serviced site with water, sewer and electricity in place. The household must show that they have an income either in the form of formal employment, demonstrating an alternative source of income or even self-employment. They should also be a first-time home buyer in order to be eligible. Once approved, Ellis Investments constructs the top structure and upon completion the household makes payments over a 48-month period to cover the cost of the constructed unit. For example, a unit built for N$80 000 would require the household to make monthly repayments of N$1 600 over a period of 48 months/ 4 years.

There are two main house typologies that will be constructed through this project, both are stand-alone units, but one is a 40 sqm single bedroom and the other is a 46 sqm two-bedroom unit.

The construction specifications

The superstructures would have a 220mm thick external wall and 110mm thick internal walls. The roofing is supported by 114/38 SA pine trusses with a roof covering of galvanized metal sheets. The window frames are aluminium while the doors are semi-solid. The flooring is mainly tiles or concrete floors with smooth finishes. The yards are demarcated by a 1.2m perimeter mesh fence with standard entrance gates.

Above are the different typologies of building plans and rendered image of a standard Ellis Investments Ultra-low-cost home.

Project proposal summary:
ECHALE INTERNATIONAL, Sub-Saharan Africa

AFRICAN UNION FOR HOUSING FINANCE

ÉCHALE -INTERNATIONAL-

ECHALE International is a housing development franchise that seeks to address a gap in the market for high-quality single-family homes that are affordable to the growing middle class in Africa. They have a 25-year track record of operations in Mexico and are currently raising funds to scale to Africa. They are seeking an investment of $350 000 to unlock their potential for exponential growth in the African market, starting with Uganda.

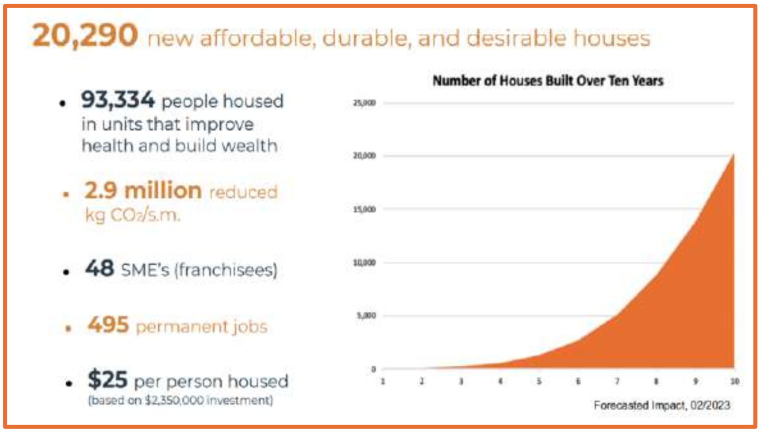
Email Julie McBride: Julie@echaleinternational.com; www.echale.mx

Seeking US$350 000 to scale ECHALE to Uganda and a further US$1.65 million to grow in the Ugandan market over a 10-year period

Conventional housing developers struggle to meet the needs of middle and lower-middle income houselholds without negatively impacting their businesses. ECHALE seeks to combat this by delivering single family homes that meet middle-income households' requirements for affordability, durability, desirability, and sustainability. ECHALE also provides developers with a methodology, tools, and support through franchising for delivering these homes at scale and profitably.

ECHALE Community in Mexico. Source: ECHALE

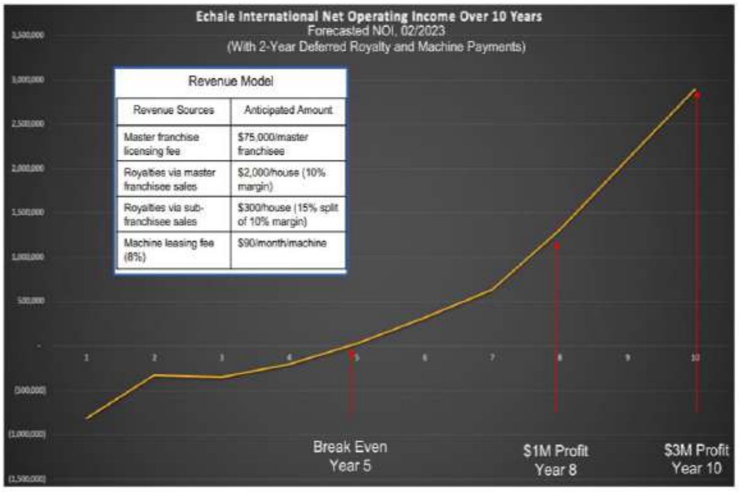
Projected 10-year impact



The ECHALE franchise package for developers includes:

- Ecoblock machine that enables local production of low-carbon, energy efficient Compressed Earth Blocks with high compression strength (1250 psi)
- Standards and procedures for efficient Ecoblock production, house construction, community development, and business management
- Training and continuous support for franchisees and their employees
- Technology platform that drives efficiency and quality
- Portfolio of customisable house designs and construction blueprints
- Research and development that supports growth

Projected 10-year impact



Project proposal summary:
PAL Homes SPV, Zimbabwe

PAL Homes SPV is a project that seeks to provide affordable houisng through the use of 3D Construction Printing (3DCP) technology. The fast and acurate delivery of the technology has to the potential to help scale up affordable housing construction, thus contributing to addressing the housing backlog in Africa with Zimbabwe being the starting point. The SPV is seeking a USD$1.8 million cap-raise for the procurement of two 3DCP printers and OPEX.

Email Leonard Muyambo: muyamboleonard@gmail.com

PAL Homes SPV seeking a US$1.8 million investment of which 60% would be debt and 40% equity.

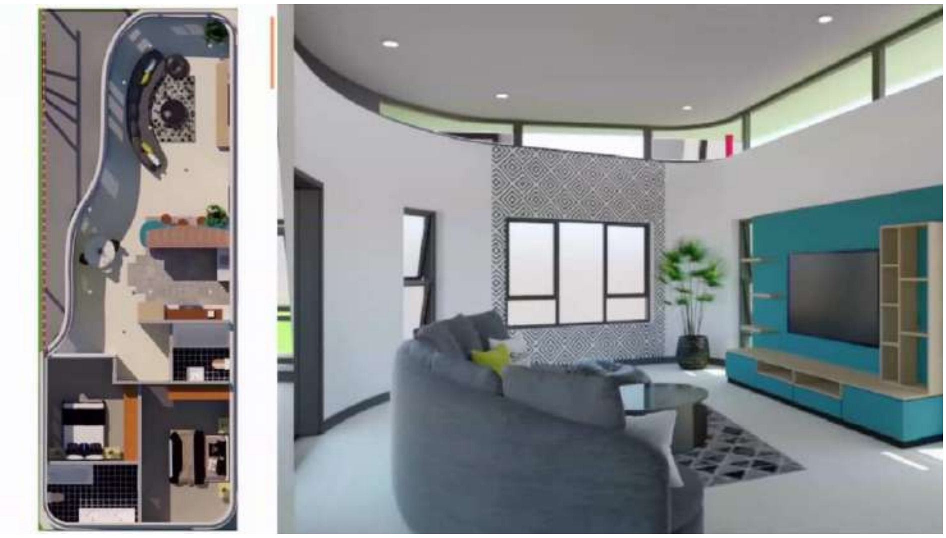
Tivane Investments Group, also known as PowerAfrika Labs, is a Zimbabwe-registered infrastructure projects preparation company that focuses on building sustainable, smart, inclusive, and climate-resilient infrastructure. Tivane is currently building accessible housing for persons with disabilities and older adults under the PAL Homes program, with funding from the Infrastructure Development Bank of Zimbabwe. Tivane also owns 72% of PASIE, a sustainable furniture manufacturing company that received seed capital from POTRAZ.

The market

The Zimbabwean housing backlog is ever expanding, currently standing at 2 million units. The country is also largely characterised by an informal working population that is unbanked and there a major reliance on diaspora remittances for consumption and construction finance. However, there is a growing Affordable Housing finance market in the country with institutional investors such as Shelter Afrique, Reall, Old Mutual CABS, IDBZ, FBC and more coming in, in the past 5 years.

Key aspects

1. Two x 3D Construction printers are a key resource in PAL's construction printing of affordable homes. The printers are to be procured from CyBe a Dutch based 3DCP manufacturer. PAL Homes hosted a roadshow in May 2022 with COBOD being the technical partner and in 2023 visited the CyBe 3DCP factory.
2. Design is a key element in the success of 3DCP printing of affordable homes as design will inform the printing process. PAL Homes will use their in-house leading sustainable design studio, PowerAfrika.
3. Materials make up more than 70% of the BOQ costings. With the primary material being either DMM or concrete mix PAL Homes is establishing offtake agreements with local leading infrastructure inputs manufacturers.
4. Affordable housing goes beyond the construction of homes, it also requires supporting infrastructure which PAL Homes delivers. This includes water and Infrastructure, energy, waste management and social infrastructure.



Designs of the PAL 3D printed affordable house
Total area of 120 sqm
It comes iwth organic furniture and fittings that blend well with the curvy house profile. Source: PAL Homes

Affordable housing investment summary
Susan Save Lives, Nairobi, Kenya

Susan Save Lives Community Based Organization

Susan Save Lives CBO was founded by Susan Ambiyo – who was born and brought up in Mukuru slums – Nairobi. The Community Based Organisation was particularly founded to deal with the housing needs faced at the Mukuru slums in Nairobi and all the social ills that come with it.

Email Francis Keya at: fkevogo@gmail.com

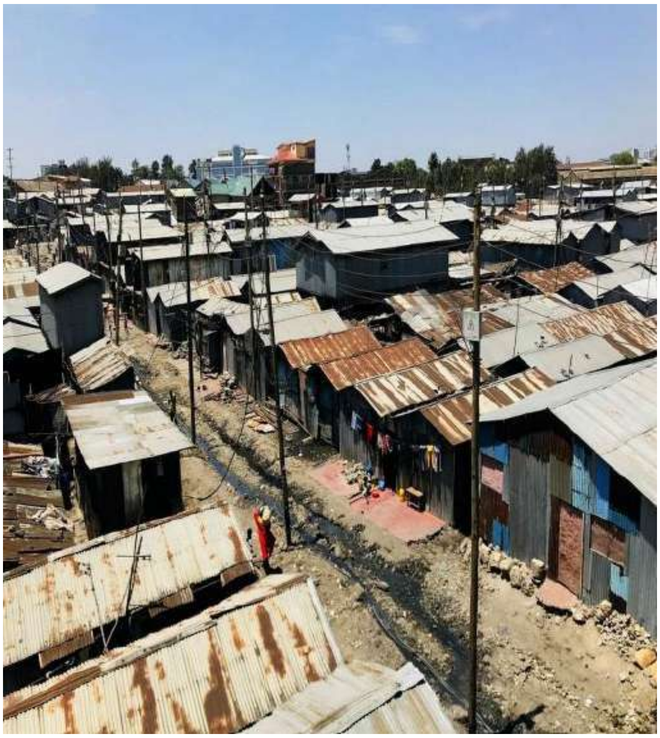
Mukuru Slums Housing Project seeking $400 000 to upgrade the housing units and infrastructure in Mukuru, Nairobi.

The Mukuru slums are low - income informal settlements that consist of 30 villages including Kwa Njenga, Kwa Reuben, Sinai, Paradise, Jamaica, Kingstone, Mariguini, Fuata Nyayo and Kayaba among many others. It has a population of over 700,000 people living under 650 acres of land.

Residents of the Mukuru slums live in poorly constructed shacks made from cardboard or plastic materials and/or old corrugated iron sheets. The shacks are often very small in size and can barely accommodate a standard household making the living conditions quite crammed. The slums have no running water and there is very poor sanitation making the settlements an ideal breeding ground for diseases. There are limited social amenities and limited public space for social interaction. Other social ills such as crime are quite prevalent too. There is therefore a dire need for the holistic improvement of the slum area and that is where the Mukuru Slums Project comes in.

Key aspects

The envisaged informal settlement upgrading project seeks to form a community housing selection committee, undertake socio-economic surveys to understand the community better, draw up Settlement, Local, Physical and Land Use Development Plans along with approved County of Nairobi development Plans, tenure documents of beneficiaries, Letters of Allotment, leases and titles. The project is also looking to develop a Land Information System (LIS) platform of the informal settlements and develop cadastral survey maps with clear wayleaves and detailed topographical surveys for engineering designs.



Images of the Mukuru slums showing the shacks dwellings and hazardous open spaces. Source: Susan Save Lives