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- ➔ **The impact of socio-cultural attributes on residential satisfaction in Oroki Housing Estate, Osogbo, Nigeria**
- ➔ **Partnership and financial innovation: Reall and unlocking affordable housing markets in urban Africa and Asia**
- ➔ **Affordable housing finance for informal workers**
- ➔ **Coping with Covid? Housing and mortgage markets in the UK**
- ➔ **EU harmonisation of covered bonds**

Partnership and financial innovation: Reall and unlocking affordable housing markets in urban Africa and Asia

↳ By Andrew Jones, Lisa Stead and Lucy Livesley

1. Introduction

1.1. The global housing challenge

The escalating global housing crisis is one of humanity's greatest challenges. At least 1.2 billion people worldwide live in substandard housing, often lacking access to basic services and infrastructure. This is increasing rapidly in the context of accelerating urban population growth, especially in rapidly urbanizing Africa and Asia.¹ The World Bank estimates that 300 million new homes will be required by 2030 to bridge the global deficit, with the majority of this need concentrated in Sub-Saharan Africa, South Asia and Southeast Asia.² This will require a global investment of \$17 trillion to facilitate land acquisition and housing construction – representing a huge untapped market for the private sector.³

While the challenge is vast, the opportunity is enormous. Delivering quality, serviced, and genuinely affordable housing at scale in Africa and Asia has the potential to achieve transformative positive impacts on the lives of billions of people in the lower-end of the income pyramid, while driving economic growth, financial inclusion, urban resilience, and climate change mitigation. In the context of the Covid-19 pandemic and worldwide lockdowns and stay-at-home orders, the centrality of housing to sustainable development has never been more evident.⁴

Despite growing recognition of affordable housing in national and global policies, delivery at scale has been constrained to date by supply-side and demand-side challenges. These

include a lack of affordable urban land, weak regulatory environments, inflated construction costs, and limited finance for developers and homeowners. These systemic barriers suffocate enabling environments and restrict the mobilization of private investment and capital markets. An endemic lack of affordable long-term housing finance for low-income customers is particularly inhibiting, as it pushes quality housing out of reach for most of society.

New forms of partnership between public and private bodies are urgently required, to incentivize developers and financiers downmarket and produce new products with potential for scale. This article documents and evaluates case studies of three innovative new affordable housing partnerships in Sub-Saharan

Africa (Mozambique) and South Asia (India and Pakistan), all of which seek in different ways to unlock affordable, long-term mortgage finance for people on low incomes and in informal employment. These case studies all stem from the global network of Reall – a market innovator, impact investor, and thought leader in global affordable housing.⁵

1.2 Reall & housing finance

Supported by the UK government (FCDO) and Swedish government (Sida), Reall is an innovator and investor in affordable housing for people on low incomes in urban Africa and Asia. With over 30 years' experience in the sector, Reall catalyzes socio-economic development outcomes for the bottom 40% of the income pyramid through commercially viable

FIGURE 1 Reall's global network, with priority countries highlighted in red



¹ Global urbanization will add a projected 2.5 billion people to the world's urban population by 2050, with almost 90% of this growth concentrated in Asia and Africa. For more, see: United Nations Department of Economic and Social Affairs (UN DESA). *World Urbanization Prospects: The 2018 Revision*. United Nations. New York, 2019.

² World Bank. 'Housing for All by 2030'. Washington, 2016. Available at <https://www.worldbank.org/en/news/infographic/2016/05/13/housing-for-all-by-2030>

³ McKinsey Global Institute. *A blueprint for addressing the global affordable housing challenge*. Washington, 2014.

⁴ Sharif, Maimunah Mohd and Leilani Farha. *Housing is Both a Prevention & Cure for Covid-19*. UN-Habitat. Nairobi, 2020. Available at <https://unhabitat.org/housing-is-both-a-prevention-cure-for-covid-19>

⁵ For more on Reall, see Reall's innovative website. Available at <https://www.reall.net/>

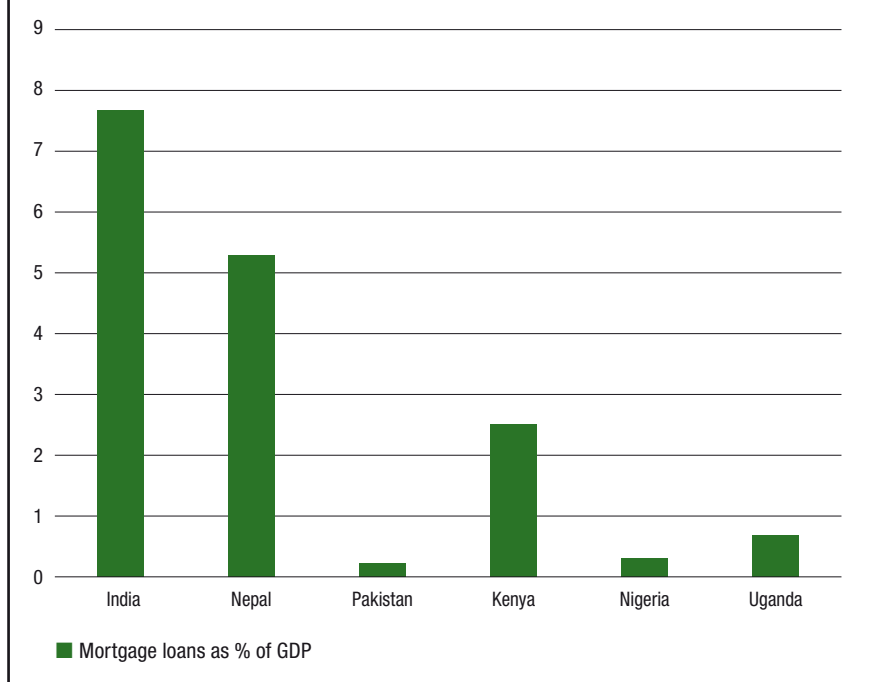
and climate-smart \$10,000 homes. Reall and its network of in-country partners specialize in affordable housing and end-user financing solutions, while also tackling systemic political, regulatory, and financial barriers through strategic brokering interventions. By evidencing the cross-cutting developmental impact of housing (contributing to arguably all 17 SDGs) and demonstrating the investable opportunity, Reall leverages private sector actors and resources to transform markets and accelerate delivery at scale. Reall currently operates in 14 countries and has identified six priority geographies where efforts will be concentrated in the coming years (India, Kenya, Nepal, Nigeria, Pakistan, and Uganda).⁶

Since 2000, Reall has invested over \$68 million in affordable housing development in Africa and Asia. This has housed over 100,000 people and created 80,000 new jobs, while facilitating affordable end-user finance solutions for over 17,000 households.⁷ These interventions have had transformative impact on the lives and opportunities of low-income occupants, while generating the necessary evidence, data, and understanding to enable wider replication, investment, and scaling up. Through working in partnership, sharing innovation and fostering take-up, Reall is committed to improving the lives of 100 million people in urban Africa and Asia by 2030.⁸

Reall and its network of partners engage in strategic interventions throughout the housing value chain. Of these, brokering new end-user financing products and solutions is paramount for resolving demand-side blockages and unlocking the potential of affordable housing markets in Africa and Asia.⁹ People on low incomes are erroneously perceived by commercial banks as high-risk for loans due to irregular employment patterns and cash flows and lack of property rights or collateral. This is exacerbated by a lack of evidence to prove to the contrary, creating an information asymmetry.¹⁰

Consequently, standard mortgage terms are characterized by large deposits, high interest rates and charges, inaccessible income thresholds and limited availability. People and families at the bottom of the income pyramid are pushed towards informal settlements and compelled to incrementally self-build housing

FIGURE 2 Mortgage loans as % GDP for Reall priority countries, based on most recently available data¹¹



using informal credit and micro-loans at exorbitant rates. New partnerships are needed that can overcome these systemic constraints and widen financial inclusion to the bottom of the pyramid and the informal sector.

1.3. Case studies

This article presents case studies of innovative Reall partnerships in three countries. The strengths and limitations of these partnerships are evaluated, and key learnings are identified to adapt and replicate elsewhere. In Mozambique, Reall's partner Casa Real (an affordable housing developer) harnessed relationships with the Beira Municipality to access land and co-develop an innovative mortgage product with Absa Bank Mozambique for their clients.

In Pakistan, Reall's housing developer partner Ansaar Management Company (AMC) negotiated a similarly ground-breaking agreement with the Housing Building Finance Company (HBFC) for its own low-income customers, paving the way for other developers and financiers. In India, Reall supports its partner Syntellect (an IT company based in Mumbai)

to roll-out a cutting-edge software platform for mortgage finance creditworthiness assessment. This platform assesses the long-term mortgage lending potential of people in informal employment, reducing risk for lenders and opening up a massive, previously excluded client segment.

All three case studies demonstrate that commercial banks can be influenced to move downmarket and recognize the commercial viability of lending to people on low incomes. To do so requires sustained efforts to build organizational credibility and investor confidence, underpinned by de-risking mechanisms and the delivery of a quality housing product or innovative technology. All three examples illuminate the necessity for innovative multi-stakeholder partnerships across the housing and finance sector, supported with amenable political and regulatory environments. Such partnerships must be fostered, scaled up and replicated globally to resolve the escalating urbanization challenge and unleash the developmental impact and economic potential of affordable housing.

⁶ As of September 2020, Reall operates in 10 countries in Africa (Angola, Burkina Faso, Ghana, Kenya, Malawi, Mozambique, Nigeria, South Africa, Tanzania, Zimbabwe) and 4 countries in Asia (India, Nepal, Pakistan, the Philippines).

⁷ For more on Reall's global impact and portfolio of investments, see Reall's innovative new Data Dashboard. Available at <https://www.reall.net/data-dashboard/global/>

⁸ For more on Reall's strategic vision, see Reall's recently launched 2020-25 Corporate Strategy. Available at <https://www.reall.net/corp-strat/>

⁹ For more on innovative end-user financing models in Reall's network, see: Jones, Andrew and Lisa Stead. 'Can people on low incomes access affordable housing loans in urban Africa and Asia? Examples of innovative housing finance models from Reall's global network'. *Environment & Urbanization*. 2020.

¹⁰ Badev, Anton et al., *Housing Finance Across Countries: New Data and Analysis*. Policy Research Working Paper. World Bank. Washington, 2014.

¹¹ Mortgage-to-GDP ratio statistics sourced from: The Housing Finance Information Network (HOFINET); The Centre for Affordable Housing Finance in Africa (CAHF); World Bank datasets.

2. Case study – Mozambique: Casa Real and Absa Bank Mozambique

2.1. Context

Mozambique is an extremely low-income country, with many cities hindered by endemic infrastructural challenges and urban sprawl. Housing affordability is severely constrained by high construction costs and inaccessible end-user finance.¹² Although most Mozambicans live on an income of less than \$100 a month, commercial bank mortgages typically specify a minimum loan amount of at least \$5,000 – well out of reach for the majority of people. These mortgage loans also tend to have restrictive terms and conditions, including large collateral expectations, high interest rates (at least 30%), and substantial deposits. Many families instead rely on savings and locally procured materials to incrementally self-build houses over time. This has implications for quality and sustainability, spreading informality and increasing future costs for retrofitting services in poorly planned settlements.

2.2. Casa Real and Beira Municipal Council

Into this challenging context, Casa Real was established in 2018 as an affordable housing social enterprise. Reall invested in Casa Real and provided pilot capital for their Inhamizua pilot project – a development of 10 quality, serviced affordable homes in Beira (Mozambique's second city). While Casa Real are early in their organizational growth, they have made significant progress through multi-dimensional partnerships with Beira's Municipal Council, the Dutch government, financial advisors, and Absa Bank Mozambique. Collectively, these partnerships fostered an amenable environment for the project to take off and enable a substantial initial move downmarket for commercial mortgage finance, with huge potential for future growth and impact.

The Mayor of the Beira Municipal Council (Daviz Simango) is a vocal advocate for low-income housing, who has worked with the Dutch government for several years and signed a memorandum of understanding (MoU) with Reall in 2015. The Municipal Council facilitated Casa Real's work from the outset by granting land development rights and connecting land with services. Most importantly, the Municipality permitted the sale of Casa Real houses with 'condominium' titles.

These arrangements enabled Casa Real to build additional houses through a significant reduction of legal minimum plot sizes for construction, from the official norm of 600m² (too large and expensive for viable affordable housing). Each homeowner secures the rights to use their property as they wish, including leveraging for finance collateral. The underlying quality of Casa Real's houses was emphatically demonstrated during the damaging impact of Cyclone Idai, which struck Beira in March 2019. In contrast to the wider city, the structures withstood the storm's impact extremely well with only minimal roofing damage.

2.3. Casa Real and Absa Mozambique: Partnership Development

The Government of the Netherlands has supported the development of Beira for several years, including investment in roads, infrastructure, and low-cost housing.¹³ One aspect of this support is the regular convening of investor conferences and networking events. Through these networks, Casa Real (working closely with Fount, an impact advisory firm) were facilitated to pitch their housing plans and open a dialogue with mainstream commercial banks and the Central Bank of Mozambique in 2018.

Association with the Dutch government and Reall enhanced Casa Real's credibility, and several banks were attracted by the proposition of opening new markets for long-term loans in a country with little history of

inclusionary mortgages. Casa Real's progression of construction work (on time and in budget) further strengthened their case and built investor momentum. While several banks expressed interest in entering the low-income housing space, Absa Mozambique (formerly Barclays) were the first to proceed to formal partnership. After patient advocacy and careful negotiation, Absa agreed to launch a new housing product in late 2019.

Absa's new mortgage product is developed for Casa Real customers with monthly incomes of 15,000 MZN (US\$210 in August 2020), which is generally affordable for households around the 50th percentile of the income pyramid in Beira. While Reall's ultimate objective is to lower income thresholds further and render quality housing genuinely affordable for the bottom of the pyramid, this represents a massive improvement on previous mortgage offers in Mozambique and an ideal entry point for testing the product and proving commercial viability.

Through this partnership, Absa Mozambique has moved significantly downmarket. Interest rates have fallen to the national 'prime rate' (18% as of August 2020) plus a small margin of 0.25%. Deposit conditions have been reduced to a minimum of 5% of the property selling price, increasing the loan-to-value ratio (LTV). As part of its agreement with Absa, Casa Real identifies customers, facilitates agreements with employers, assists in opening bank accounts, provides relevant documentation for the houses (such as real estate

FIGURE 3 Casa Real housing in Beira, Mozambique. © Reall, 2019



¹² Centre for Affordable Housing Finance in Africa (CAHF), 2019 Yearbook (10th Edition): Housing Finance in Africa. Johannesburg, 2019, pp.195-198.

¹³ MacauHub, 'Netherlands pay for road and social housing in Mozambique', 22 September 2015. Available at <https://macauhub.com.mo/2015/09/22/netherlands-pay-for-road-and-social-housing-in-mozambique/>

and municipality certificates), and transfers ownership of the houses to the bank prior to loan disbursement. Casa Real also bears all costs for valuing the houses, and Absa have innovated by agreeing a general valuation for each housing typology, rather than for individual homes. This saves up to \$200 annually per house and represents a significant cost saving in Beira.

2.4. Casa Real and Absa Mozambique: Alignment, Contribution, and Benefit

As is the case in many African and Asian geographies, in Mozambique it is typical for NGOs to receive grants to deliver social impact projects while commercial entities cater to the elite. Casa Real occupies a distinctive middle ground – operating as a commercial venture for the public good which engages with financial institutions in the language of enterprise and investment rather than charity. This has strengthened the alignment between Casa Real and Absa, and both organizations contribute specialist skills and a specific offer to benefit the wider partnership.

Casa Real has developed quality, affordable houses on time and within budget. While Casa Real provides housing at a cost of \$10,000 for lower-income clients, they have also developed homes at a cost of up to \$40,000 for lower-middle-income clients. This mixed-income approach increases flexibility and moves Casa Real closer to Absa's traditional market. Previously Absa Mozambique's lowest income customer was earning \$750 a month, and through partnership with Casa Real this has fallen to \$250 a month. This reflects the pragmatic reality of creating viable options for both parties in a difficult economic environment.

Until 2019, Absa Bank operated as Barclays Mozambique and was known primarily for serving high-income elites. Under the Absa banner, the bank's brand is associated more overtly with banking for the common citizen. Promoting this customer confidence is essential when offering new products to a target group previously excluded from formalized lending, and Absa Mozambique has tailored the product and accepted the risk of lending to a lower-income segment. Decision making and risk management is accordingly built into their system of client processing, with the need for legal documentation, income and credit checks, a deposit amount, and the potential for foreclosure.

Through this collaboration, each partner has progressed their respective business aims. Casa Real has secured a commercial banking partner to off-take their houses and release funds after the housing construction phase, unlocking capital to revolve faster and be reinvested into additional housing development. This enables Casa Real to scale up and deliver 300 units per year, opening up the Beira market. In return, Absa Mozambique gain access to an untapped market and position themselves as the prime mover at this level. While Absa's initial return on investment is lower for this segment compared to higher-income groups, the potential is significant for a suite of products tailored to lower-income groups and, in time, lucrative returns from increased efficiency and economies of scale.

2.5. Key lessons

The provision of lower-income commercial mortgages on affordable terms is genuinely revolutionary in Mozambique. Casa Real's work has significant potential for scale, both through the growth of the organization itself and by forging a path for other developers and lenders to enter the space. This case study illuminates several insights and lessons that can be engaged with and replicated elsewhere:

- **Commercial lenders and partner should be engaged with on their own terms** – presenting a credible long-term financial opportunity for investment in affordable housing, rather than solely articulating the case for social responsibility. The social enterprise space provides impact and tangible return.
- **The appropriate expertise should be involved and utilized** – for Casa Real, the introduction of financial expertise (Fount) into the project team added substantial value. This equipped Casa Real with the clout to engage at the senior level and speak in the language of banking and investment. This secured essential top-level buy-in.
- **Physical proof of concept is paramount** – in markets such as Mozambique, a lack of precedent for successful, entrepreneurial, market-oriented housing development breeds skepticism. Casa Real tangibly demonstrated credibility by building quality homes on time and at an affordable cost. In parallel, rigorous market research proved the customer demand and fostered lender confidence.

▪ **Connections, capital, and commitment are essential** – while Casa Real is a new enterprise, association with the Dutch Government and Reall established legitimacy and credibility. Long term commitment and vision are necessary to allow for partnerships to develop and respond to challenging environments.

▪ **Compromise and common ground are key** – Casa Real accepted the need for a mixed-income approach in Beira, to engage Absa Mozambique and drive their move downmarket. This is despite a goal to target the bottom 40% of the income pyramid.

▪ **Patient capital investment is vital** – low-income housing in untapped markets is often poorly understood or documented, and pilot projects are needed to test the market. Casa Real would have been unable to sustain construction and influence without consistent investment and capacity funding from Reall. Capital investment is essential to any successful affordable housing venture, especially during the early phases of work when insolvency is high risk. Organizations such as Reall are essential to incubate projects and take the first risk to demonstrate proof of concept.

3. Case study – Pakistan: Ansaar Management Company (AMC) and the House Building Finance Company (HBFC)

3.1. Context

In Pakistan, the affordable housing challenge is vast. The national housing deficit is estimated at 10 million units, rising by an additional 350,000 every year. Accelerating urbanization and population growth further stretch the demand. Unfortunately, a weak banking and finance sector has restricted the accessibility of housing finance to a tiny, high-income social elite. The current government has identified housing construction as an important vehicle for post-COVID economic stimulus and recovery. However, many bottlenecks remain to the delivery of affordable housing, including lack of access to finance and poor understanding of the target market by lenders.¹⁴

It is within this context that Reall's partner, the Ansaar Management Company (AMC) operates. A social enterprise headquartered in Lahore,

¹⁴ Khali, Ibrahim and Umar Nadeem, Optimizing the Naya Pakistan housing policy opportunity. Working Paper. Tabadlab, Islamabad, 2019. Available at <http://www.tabadlab.com/wp-content/uploads/2019/03/Tabadlab-Optimising-Naya-Pakistan-HousingPolicy-Opportunity.pdf>.

FIGURE 4 AMC Housing in Faisalabad, Pakistan. © Reall, 2019



AMC develops affordable housing within or close to large cities such as Faisalabad, Lahore, Multan, and Peshawar. AMC builds culturally sensitive houses in desirable communities for the bottom 40% of the population. With Reall's financial support, AMC have constructed over 700 homes and serviced plots with 4,000 more in the pipeline. This makes AMC one of the largest partners in Reall's global network.

3.2. AMC and HBFC: partnership development

As the financial and regulatory environment is so challenging in Pakistan, AMC depends on innovative partnerships to grow as a business and work towards scale. Most promisingly, AMC has nurtured a close relationship with the House Building Finance Company (HBFC), a semi-state-owned institution operating in the public interest. The AMC/HBFC partnership originated in 2012, through a non-binding agreement for HBFC to provide mortgages for a flagship AMC project. Unfortunately, the mortgages at the time did not materialize and Reall instead stepped up to finance the project.

This initial investment by Reall paved the way for further negotiations, eventually resulting in the launch of a new HBFC mortgage product. This product is targeted at low-income AMC customers with monthly incomes of at least 25,000 PKR (\$150 in August 2020). This represents a substantial move downmarket for HBFC, as all AMC occupants at this income level are in the bottom 40% of the income pyramid. The

HBFC mortgages are loaned at a fixed interest rate of 12% for a term of up to 20 years, with a deposit requirement of up to 25%. The mortgages are available to people in both formal and informal employment, although lending to informal clients remains challenging in practice.

The launch of a new low-income mortgage product is pioneering in Pakistan. While HBFC was originally established in the 1950s to facilitate mortgages for lower-income citizens, the institution deviated over time towards higher-income brackets due to risk perception and a lack of credible partners. It was only persuaded to move back down the income pyramid through AMC reducing risk to ensure lending security. AMC has done so primarily by building desirable homes in professionally planned communities with quality infrastructure. AMC also secures all necessary legal approvals and adheres to all official codes and standards. Individual house titles are withheld by AMC until the total amount is recovered, to act as a guarantee for the bank. Community development officers also ensure that the site is maintained and improved, which increases the value of the asset and reassures HBFC that returns will exceed sale value in the case of customer default.

3.3. AMC and HBFC: alignment, contribution, and benefit

The AMC/HBFC partnership and mortgage product has been developed over several years, requiring patience and professionalism from both parties. AMC conducts extensive

market research in every location where they have built houses, to ensure sites are in desirable areas with proximity to shops, schools, and employment. AMC also possesses robust capacity for sales and marketing, ensuring customer acceptability and uptake through a range of methods and channels.¹⁵ AMC checks customers for eligibility and assists in assembling their mortgage documentation. This is a vital support for people in the bottom 40% segment, who are typically cautious of dealing with mainstream banks and unfamiliar with formal lending processes and procedures. This also reduces processing times for HBFC and has contributed towards an impressive loan acceptance rate of 98% to date.

For their part, HBFC has invested capital and accepted the inherent risk of lending long-term mortgage finance to lower income groups. HBFC brings expertise in banking systems and credit scoring and has provided concessions with lenient loan terms. The loan approval process has become more efficient over time, and as more loans are processed the bank profits from economies of scale. While the financial returns are currently smaller than for higher-income segments, there is demonstrably huge potential to access a vast untapped market in Pakistan. The business model thus presents gains for both parties, while addressing the housing needs of vulnerable and marginalized groups.

3.4. AMC and HBFC: partnership challenges

External conditions are always a challenge to successful partnerships in low-income geographies. The volatile economic environment in Pakistan has led to increased mark-ups and interest rates which, together with job insecurity, has affected the payment behavior of customers. COVID-19 has also impacted on the ability of customers to repay, although HBFC has offered options for loan rescheduling and repayment deferment as a response to the pandemic.¹⁶ Regulatory bodies, rules and procedures are also restrictive and beyond the capacity of the partners to change, despite AMC being a member of the Pakistan Government's affordable housing task force. Furthermore, over 70% of employment in Pakistan is estimated to be in the informal sector.¹⁷ This informality is poorly understood and widely perceived as risky by lenders.

The AMC/HBFC mortgage product is accessible to people in informal employment, who

¹⁵ In a recent impact evaluation of AMC housing in Faisalabad by Reall, occupants responded that they could never acquire homes of similar quality or in such a desirable location at anywhere near the same price point.

¹⁶ For more on HBFC's response to COVID-19, see http://www.hbfc.com.pk/page/general_information/covid_19

¹⁷ International Labour Organization (ILO). 'Informal economy in Pakistan'. ILO, 2018. Available at <https://www.ilo.org/islamabad/areasofwork/informal-economy/lang--en/index.htm>

qualify for eligibility through certain conditions such as paying a large deposit, providing a signed affidavit stating their monthly income, and submitting recurring post-dated cheques. In practice HBFC still finds it challenging to accurately assess informal income flows and is unwilling to relax the eligibility conditions that could widen access for the informal sector. Consequently, most AMC customers making use of this mortgage facility are in documented, formal employment. More could be done to make this product more inclusive, such as refining income assessment methods, reducing processing costs, relaxing deposit conditions and documentation requirements. The product itself could also be tweaked to be more suitable for the informal sector, such as incorporating payment moratoriums and interest embargoes into the repayment period to account for volatility.

3.5. Key lessons

The AMC/HBFC partnership and mortgage product is still in early phases of development, with over 60 mortgages granted to date and more in the immediate pipeline. The initial performance of these loans has been excellent, with average repayment rates by end-users of 80 per cent in 30 days, 90 per cent in 60 days, and 99 per cent in 90 days. Successfully demonstrating the viability of this model is essential for incentivizing new lenders and developers into the affordable housing space in Pakistan. To further accelerate scaling up will require steps towards a more conducive enabling environment in Pakistan, such as streamlining regulatory processes and implementing banking reforms.¹⁸

The development of this partnership, and launch of a new mortgage product, illuminates lessons for similar initiatives elsewhere:

- **Successful partnerships are underpinned by patient relationship management and networking** – the partnership developed over several years, against a backdrop of shifting priorities and management changes within HBFC. AMC fostered strong connections at the branch, regional, and national level, all of which proved vital to resolving challenges as they arose.
- **A quality product must always be delivered** – AMC smoothed the downmarket move for HBFC by delivering a tangible, desirable, quality affordable housing product.

This product is grounded in AMC's nuanced understanding of the target market, providing a ready-made customer base through marketing outreach.

- **Risk mitigation must be effective and convincing** – risk management is paramount for convincing banks to widen access, and AMC de-risked lending extensively by providing land certificates, securing all necessary legal approvals, and building desirable homes that adhere to quality standards and signoff procedures.
- **The investable proposition must be publicized and recognized** – HBFC demonstrated a will to relax standard conditions and risk capital in an untapped segment, recognizing the potential to expand their share of an untapped market.
- **Patient capital investment is essential** – the AMC/HBFC partnership could not have been facilitated without Reall front-financing AMC's initial development costs. This was crucial for demonstrating proof of concept and leveraging bank engagement. Reall undertakes similar investments throughout its portfolio, investing patient capital to demonstrate the commercial viability of

affordable urban housing for people on low incomes and catalyze markets.

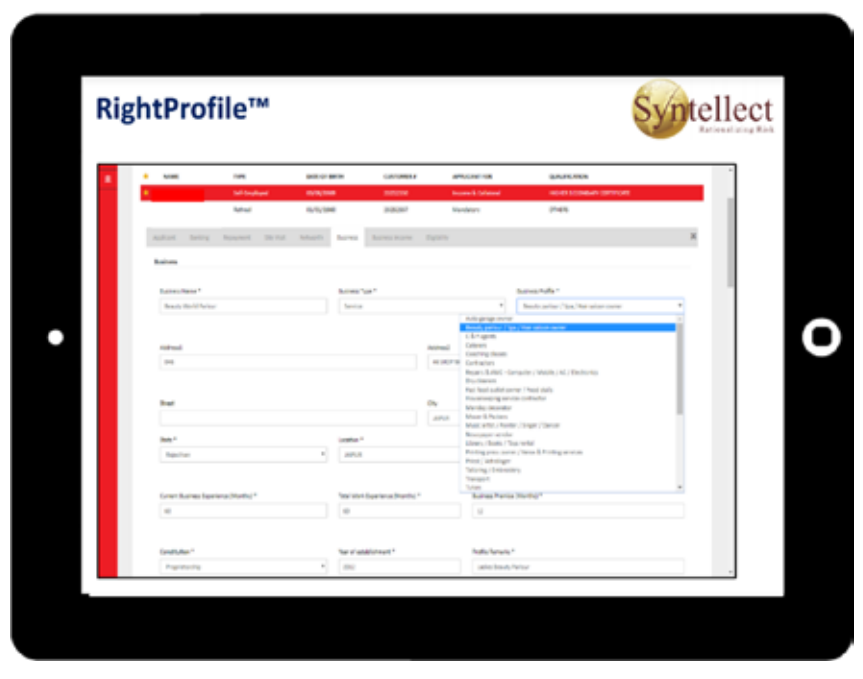
4. Case study – India: Reall and Syntellect

4.1. Context

The high prevalence of informal employment in Africa and Asia is a formidable barrier to deepening housing finance. Informal earnings are often irregular and unpredictable, and workers are more susceptible to short-term shocks due to their lower incomes, lack of social protection, and limited savings. People in informal employment do not have access to formal credit and loans, as financial institutions lack adequate documentation and information on them and consider them risky repayors.¹⁹ To resolve this challenge, commercial banks and lenders must recognize the reality of the informal sector and adapt their formal processes to serve a more 'typical' customer. This will require significant innovation and unorthodox thinking, to disrupt the market and overturn conventions.

Recognizing these constraints, Reall has recently partnered and invested in Syntellect, an Indian software developer based in Mumbai.

FIGURE 5 RightProfile software platform, sample user interface. © Syntellect, 2020



¹⁸ In 2019, the State Bank of Pakistan (SBP) called for the introduction of innovative housing finance products that can cater to all income sectors. These include fixed-rate mortgages, step-up payment options, interest-only period products, and discounted rates for borrowers through arrangements with other entities.

¹⁹ Becker, Kristina. Fact Finding Study: The Informal Economy. Sida. Stockholm, 2004; Medina, Leandro et al. *The Informal Economy in Sub-Saharan Africa: Size and Determinants*. Working Paper. IMF. 2017.

Syntellect has developed cutting-edge technology for the credit assessment of unbanked and informally employed individuals in India for formal, long-term mortgage finance. This software (called RightProfile) is a unique customer profiler specifically catered to the unbanked, new to banking, and new to credit customer segment – with a focus on the informal micro-entrepreneur. RightProfile addresses a substantial gap in the market, applying an exhaustive bank of technologies to analyze loan applications, reduce processing costs, and input into larger financial services architecture.²⁰

4.2. Reall and Syntellect: partnership development

Reall's partnership with Syntellect stems from a search for solutions to efficiently understand the risk profile of low-income and informally employed individuals and households. Reall's in-country partners have generated substantive information on the income, demographic, and repayment habits of Reall's target market at the bottom 40% of the pyramid. However, more data is required to triangulate Reall's evidence base and resolve systemic information asymmetries.

Syntellect's RightProfile software is a credible, tested solution with the potential to revolutionize the low-income housing finance industry. The Syntellect team has developed RightProfile over several years to collect targeted data points on potential customers – including demographics, income, expenditure, and informal business performance. RightProfile then analyzes these data points through machine learning, artificial intelligence, and stochastic modelling to produce detailed customer profile reports. These reports empower lenders to accurately assess excluded groups and tailor underwriting to specific customers. RightProfile is specifically designed for long-term mortgage finance lending, which represents a different risk profile to short-term microfinance.

Through partnership with Reall, Syntellect's software will be introduced into Reall's global affordable housing network. This will initially focus on rolling-out RightProfile in Reall's three priority Asian countries (India, Pakistan, and Nepal).²¹ The system will be trialed by in-country housing developer partners, providing a bridge to the financial sector and encouraging buy-in and participation by affiliated lenders. Syntellect will provide extensive training

and capacity building, to tailor RightProfile to specific contexts and ensure the software is understood and used effectively. While initial focus is in Asia, Reall and Syntellect share a long-term vision to adapt to Sub-Saharan Africa where the need is vast, and the potential market opportunity is enormous.

4.3. Reall and Syntellect: alignment, contribution, and benefit

Reall and Syntellect bring complementary skills, knowledge, and resources to their deepening partnership. Reall invests capital to support Syntellect's growth as a business and accelerate the integration of RightProfile's credit-scoring platform within the operations of selected lenders and developers. Reall also facilitates Syntellect with access to its wider transnational network of partners and collaborators, who possess a ready-made customer base and deep contextual knowledge of specific environments. Reall's status as a thought leader in the global affordable housing space ensures that it is best equipped to strategically steer Syntellect's business development and leverage buy-in from influential stakeholders.

Syntellect's team also possess extensive knowledge of the affordable housing finance sector. Senior Syntellect staff are regularly consulted by lenders and stakeholders for specialist expertise relating to mortgage finance products, policies, processes, and training.²² Syntellect have patiently developed the technology that underpins RightProfile for several years, and have already vetted over 20,000 informal sector clients for mortgage finance from the Housing Development Finance Corporation (HDFC) in Mumbai.²³ Of these, 14,000 clients were approved for loans – with early data indicating these loans are performing better than sector norms for delinquency rates. Furthermore, the lender's turnaround time for loan sanctioning was reduced by at least 40% due to Syntellect's digitization. This represents a significant increase in efficiency and cost optimization.

Once RightProfile's proof of concept has been further demonstrated, the software's potential for scaling up and replicating in additional countries can be realized. With Reall's guidance and investment, Syntellect will eventually adapt and export the technology to Sub-Saharan Africa where no proven alternative exists. With end-user finance unlocked for the unbanked

and informally employed, Reall and Syntellect aim to unleash the untapped affordable housing market as a highly impactful commercial proposition for lenders, developers, investors, and governments.

5. Conclusion

This article has documented and evaluated exciting partnerships throughout Reall's transnational affordable housing network. These case studies highlight a pressing need for financial innovation and new types of collaboration in urban Africa and Asia, to overcome the systemic barriers that have historically prevented the flow of affordable, long-term housing finance to most of society. In a global context of rapid urbanization and damaging socio-economic impacts of COVID-19, identifying and promoting new solutions is more urgent than ever.

Persuading commercial banks and mainstream lenders to move downmarket and extend long-term lending to lower-income segments and the informal sector is challenging. However, Reall-supported partnerships in Mozambique (Casa Real and Absa Mozambique) and Pakistan (AMC and HBFC) prove that breakthroughs are possible with sustained effort to develop organizational credibility and long-term investor confidence and commitment. In the case of Casa Real and AMC, these efforts were underpinned by the delivery of an exceptional product (quality, affordable homes) and extensive risk management and reduction. Furthermore, the ongoing development of Syntellect's RightProfile platform (under Reall's oversight) illustrates the potentially transformative impact of technological innovation on traditional mortgage underwriting and customer assessment processes.

Ultimately, the lower-income and informally employed market has vast potential for penetration and expansion of affordable, long-term housing finance. While commercial banks and institutions are essential to realizing this potential, the financial sector in Africa and Asia has largely failed to fulfil their obligations to most people. It is only through committed partnerships, innovative new financial products, and exciting new disruptive technologies – as relentlessly pursued by Reall – that established attitudes and conventions will be overturned

²⁰ For more, see Syntellect's official website. Available at <http://www.syntellect.co.in/>

²¹ Syntellect's research indicates that there are currently 190 million unbanked customers in India and 100 million unbanked customers in Pakistan.

²² For more on Syntellect's CEO (Sumedha Naik), see: Business World. 'For the Entrepreneurs'. New Delhi, 2019. Available at <http://www.businessworld.in/article/For-The-Entrepreneurs/20-02-2019-167384/>

²³ HDFC was founded in 1977 as the first specialized mortgage company in India and is a major housing finance provider in the country. For more, see <https://www.hdfc.com/>

and systemic barriers resolved. This is a unique opportunity to drive systemic change, mobilize private investment, and catalyze markets to unlock access to housing finance and affordable housing assets for millions of people living on low incomes.

Bibliography

Badev, Anton et al. *Housing Finance Across Countries: New Data and Analysis*. Policy Research Working Paper. World Bank. Washington, 2014.

Bah, El-hadj et al. *Housing Market Dynamics in Africa*. Palgrave Macmillan. London, 2018.

Becker, Kristina. *Fact Finding Study: The Informal Economy*. Sida. Stockholm, 2004.

Business World. 'For the Entrepreneurs'. New Delhi, 2019. Available at <http://www.businessworld.in/article/For-The-Entrepreneurs/20-02-2019-167384/>

Centre for Affordable Housing Finance in Africa (CAHF). *2019 Yearbook (10th Edition)*:

Housing Finance in Africa. CAHF. Johannesburg, 2019.

International Labour Organization (ILO). 'Informal economy in Pakistan'. ILO, 2018. Available at <https://www.ilo.org/islamabad/areasofwork/informal-economy/lang--en/index.htm>

Khali, Ibrahim and Umar Nadeem. *Optimizing the Naya Pakistan housing policy opportunity*. Working Paper. Tabadlab. Islamabad, 2019. Available at <http://www.tabadlab.com/wp-content/uploads/2019/03/Tabadlab-Optimising-Naya-Pakistan-HousingPolicy-Opportunity.pdf>

Jones, Andrew and Lisa Stead. 'Can people on low incomes access affordable housing loans in urban Africa and Asia? Examples of innovative housing finance models from Reall's global network'. *Environment & Urbanization*. 2020. Available at <https://doi.org/10.1177/0956247819899557>

Jones, Andrew. 'Housing as Healthcare: COVID-19, Affordable Housing, and Urban

Resilience in Asia'. *URBANET*. 2020. Available at <https://www.urbanet.info/affordable-housing-as-healthcare/>

McKinsey Global Institute. *A blueprint for addressing the global affordable housing challenge*. McKinsey. Washington, 2014.

Medina, Leandro et al. *The Informal Economy in Sub-Saharan Africa: Size and Determinants*. Working Paper. IMF. 2017.

Sharif, Maimunah Mohd and Leilani Farha. *Housing is Both a Prevention & Cure for COVID-19*. UN-Habitat. Nairobi, 2020. Available at <https://unhabitat.org/housing-is-both-a-prevention-cure-for-covid-19>

United Nations Department of Economic and Social Affairs (UN DESA). *World Urbanization Prospects: The 2018 Revision*. United Nations. New York, 2019.

World Bank. 'Housing for All by 2030'. Washington, 2016. Available at <https://www.worldbank.org/en/news/infographic/2016/05/13/housing-for-all-by-2030>