Understanding the dynamics of unplanned settlements in Kigali, Rwanda

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THE CONTEXT

The city of Kigali has been growing rapidly in recent years. With an estimated annual growth rate of 4–7%,[1] half of Rwanda's urban population now resides in the city.

Infrastructure and housing development have struggled to keep pace with the city's rate of growth, and 'unplanned settlements' have formed to fill the gap.

According to official statistics, 79% of Kigali's households live in unplanned areas.[2] To date, information on these residents has been limited.

THE STUDY

To address this gap, Laterite completed a multi-dimensional field survey of 1,594 households in Kigali's unplanned settlements in close collaboration with the City of Kigali, and with funding from the IGC.[3] Data was collected using a combination of face-to-face and SMS interviews between December 2017 and March 2018.

The project aimed to overcome the knowledge gap on the socio-economic situation of residents in unplanned settlements and to inform future policy decisions. This brief outlines the key findings of this research, and the implications of these findings for urban policy in Kigali.

IN BRIEF

High commuting costs strongly limit employment opportunities for the households living in unplanned areas, who tend to have low incomes and live close to their workplace.

The approach to redevelopment should be gradual and holistic, and bring jobs and transport to low-income residents.

Providing affordable commuting options would help connect low-income residents with more employment opportunities.

Improving residents' human capital is a critical way to increase incomes.

Most residents of unplanned settlements are internal migrants seeking employment

About 65% of adult residents in unplanned settlements were born outside of the Kigali province, but within Rwanda. The proportion of migrants in unplanned areas of the city is higher than in older, well-established neighbourhoods. The most recent migrants, who moved to the city in the past five years, account for about 15% of the population of unplanned settlements. 61% of recent adult migrants are female.

Migrants are more likely to be tenants rather than owners and live in smaller homes. Though when they first arrive migrants change house more often than non-migrants, the housing situation of migrants in Kigali stabilizes over time.

About 63% of recent migrants identified seeking business or paid employment opportunities as a main reason for their relocation. Unemployment levels in unplanned settlements are similar to the rest of Kigali at about 18%, with an estimated 40% of heads-of-household working in the informal sector.

There are frequent transitions in and out of work

While aggregate unemployment estimates remained stable in follow-up surveys, the study showed frequent movements in and out of the job market at the individual level. Very few heads-of-household remained unemployed throughout the survey period; however, about one quarter transitioned in or out of a job, highlighting job vulnerability. Underemployment also affected 36% of working heads-of-household in unplanned settlements. A head-of-household is considered underemployed when they work less than 35 hours per week.

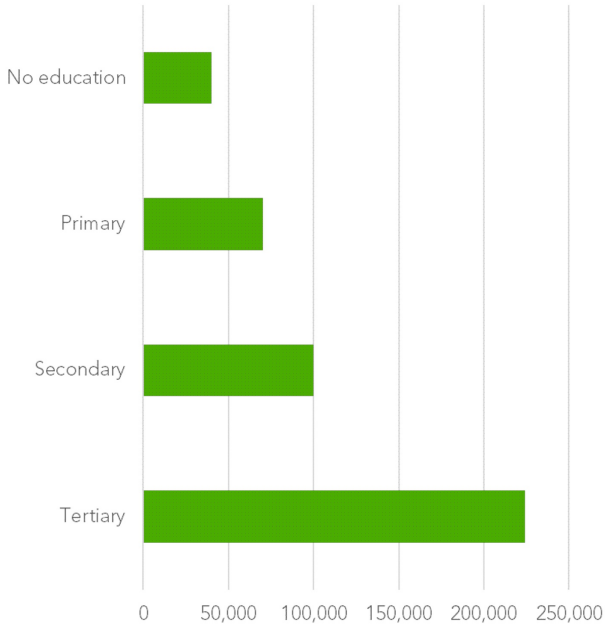
Women, people with lower education levels (no education to primary school education), adults younger than 24 or older than 50, recent migrants, and those living more than two kilometres from the central business district are more likely to be unemployed.

Residents have low incomes and rent affordability is a concern

Median incomes of household heads from employment are approximately 80,000 Rwandan Francs (RWF), or USD 89, in unplanned areas of Kigali. Higher education achievements are associated with a significantly higher median income (Figure 1).

The study found that on average, heads-of-household in Kigali's unplanned settlements have higher levels of education compared to the national average in all grades except tertiary education: 11% of heads-of-household reported completing tertiary education, compared to the national average of 15% in urban areas.[4]

Figure 1 - Median monthly income by education level



Around 31% of households are female headed. The median female head-of-household living in an unplanned area earns RWF 40,000 (USD 44) per month from employment, compared to RWF 100,000 (USD 111) for men. The income drop for female heads-of-household is driven in particular by being divorced or widowed.

Households in unplanned areas are evenly split between tenants and owner-occupants. Tenants are more likely to be migrants and live in smaller dwelling units. The median rent in unplanned settlements is RWF 27,000 (USD 30) per month, which is consistent with official sources (the median rent is RWF 20,000),[5] and corresponds to one third of the median wage from employment. Access to housing finance appears to be a major constraint for homeowners or prospective homeowners. Savings, rather than credit, are reported to be the most common source of finance.

Access to primary services is widespread, but the quality of housing is variable

Eighty-seven percent of households in unplanned settlements have access to non-contaminated water sources, but only 56% reported access to a piped water connection either in their house or compound. Similarly, access to improved sanitation is near universal in unplanned settlements, but almost 65% of households use pit latrines as a means of waste disposal.

Compound living is the most common housing arrangement, with an estimated 68% of households living in enclosed areas. Low-quality walling materials tend to be combined with high-quality rooves and floors.

High commuting costs limit employment opportunities for low-income households

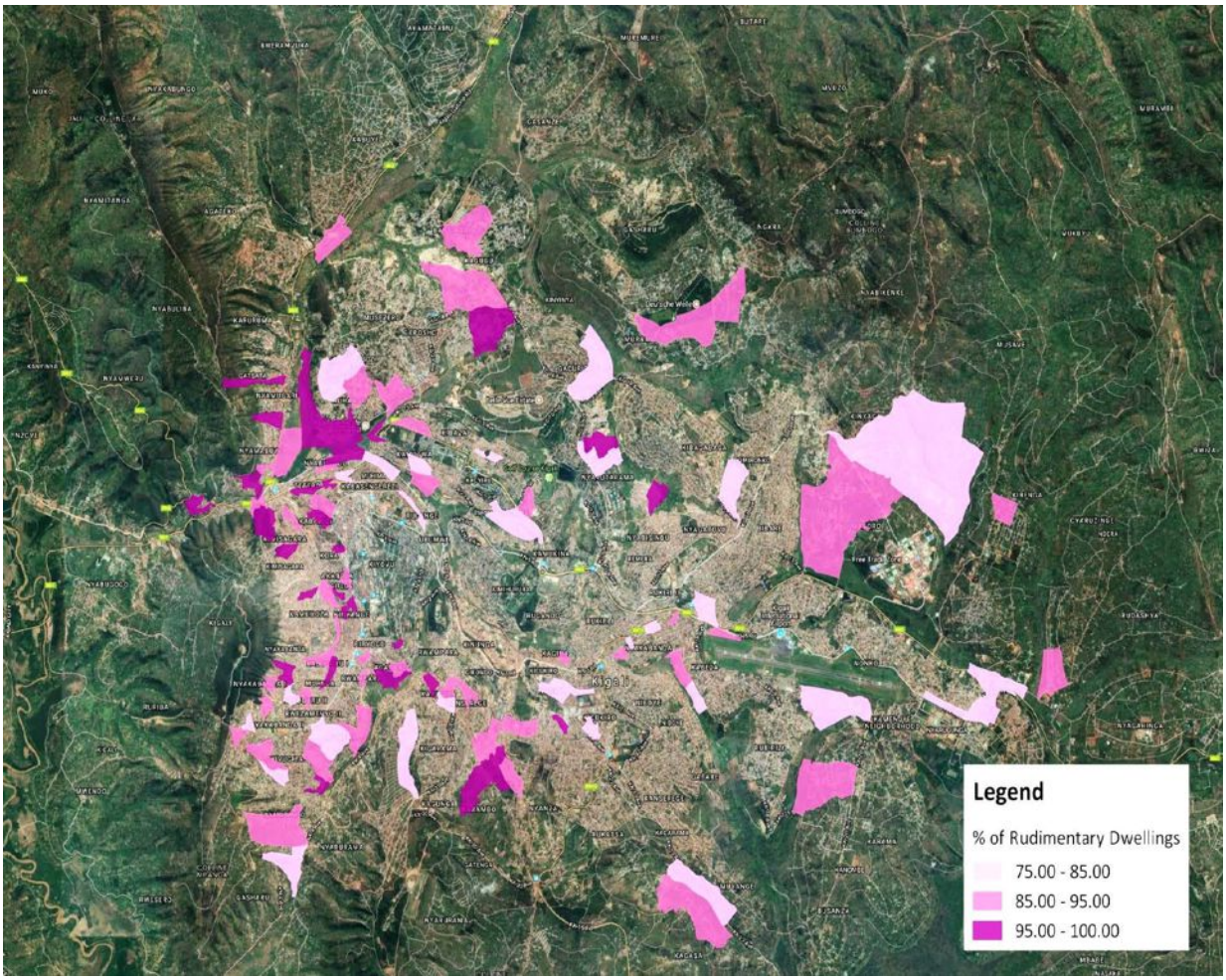
Over 70% of heads-of-household live within two kilometers of their workplace (straight-line distance). There is a strong link between where people live and the industry in which they work, suggesting that different parts of the city specialise in different sectors of economic activity. This is particularly true for traders, who are more likely to live and work close to the city centre.

Evidence suggests that transportation costs are a binding constraint on employment opportunities for low-income households. Over half of working heads-of-household commute by foot. A median head-of-household that walks to work makes RWF 50,000 per month and spends half of it on rent. Taking a job outside walking distance would mean an additional RWF 11,000 each month on transport expenses (~20% of their income; based on 22 working days and median bus costs of RWF 500 per day). Rent and transport would therefore consume over 70% of their monthly wages, leaving the entire household in a vulnerable situation.

Commuting time for these residents is also hampered by poor infrastructure and infrequent bus services. Bus waiting times are longer in areas further away from the city centre (~10-30 minutes), or in isolated areas with limited access to main roads.

Mapping based on satellite imagery shows that unplanned settlements are uniformly distributed across the city (Figure 2). This is linked to the findings that people tend to live close to where they work, and that employment opportunities are spread across the city. Increasingly, new home owners have been driven from the city centre due to housing affordability and the lack of land.

Figure 2 - Location of unplanned settlements in Kigali



Policy implications

Ensure that plans for redevelopment include strategies to attract jobs and improve transport

Securing high-quality affordable housing is a key policy priority for the City of Kigali. A gradual and integrated approach to redevelopment focused on attracting economic activities and improving public transport has a better chance of improving living conditions than rapid development. In the absence of new employment opportunities nearby, redevelopment plans are likely to increase living costs and push out existing low-income residents.

Consider ways to make commuting more affordable

Providing affordable commuting options together with affordable housing will go a long way to improve worker mobility and prevent areas of high unemployment at the city's periphery. Lower wage workers cannot afford to commute long distances, and because of that are likely to be constrained in their job search. The cost and waiting times of commuting could be improved by changing the bus fare structure, or by introducing smaller mini-buses in peri-urban areas.

Build the human capital of those living in unplanned settlements

Improving the skills and education levels of residents in unplanned settlements should be a priority. Skill development and education have a strong impact on income. Low-income residents of unplanned settlements are therefore likely to benefit from city-wide initiatives to develop human capital.

REFERENCES

[1] World Bank. (2017). Rwanda Economic Update – Rethinking Urbanization in Rwanda: from Demographic Transition to Economic Transformation. Working Paper 122107. Washington D.C., USA. World Bank Group.

[2] Ministry of Infrastructure. (2015). National Informal Settlement Upgrading Strategy. Kigali, Rwanda.

[3] Hitayezu, P., Rajashekar, A., & Stoelinga, D. (2019). The dynamics of unplanned settlements in the city of Kigali. C-38312-RWA-1. Kigali, Rwanda.

[4] National Institute of Statistics of Rwanda (NISR). (2017). Labour Force Survey. Kigali, Rwanda.

[5] National Institute of Statistics of Rwanda (NISR). (2014). Integrated Household Living Conditions Survey 4 (EICV 4). Kigali, Rwanda.

METHODOLOGICAL NOTE

The data presented in this report is based on a sample of 1,594 households living in unplanned settlements. Households were randomly selected in identified unplanned areas of the city. Eligibility criteria included owning a mobile phone and having used this phone in the past two weeks. SMS surveys were conducted over a three-month period from January – March 2018 and yielded response rates of over 50%. This high response rate was achieved through a mix of training, reminders, incentives and the deployment of an initial face-to-face survey.

Unplanned areas were identified with satellite images, used to classify buildings according to various parameters including roof colour, building height, and neighbourhood density. A stratified random sampling technique was used to select villages from the list of those with a high proportion of rudimentary dwellings. Households were sampled after collecting comprehensive lists from village leaders (umudugudu leaders) in all sampled villages.

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