A field experiment on integrating rural migrants in cities: Mapping the city of Quelimane

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- Rapid urbanisation in sub-Saharan Africa can cause both economic development and political change.
- The city of Quelimane in Mozambique has been experiencing large population growth in recent years, with approximately 440,000 inhabitants in 2021, compared to 390,000 in 2019 - a 13% increase in only two years.
- In collaboration with the municipality, this study built a map of the city's blocks and a map locating the recent rural migrants in the city as part of a larger project to promote urban and labour market integration.
- The maps built in this project will work as a broad organisational tool for administering the city, facilitating policy design for infrastructure, social programmes, and other vital tasks to address citizens' needs.

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Overview of research

The rapid urbanisation of sub-Saharan Africa will likely lead to economic development and political changes. Several new policy challenges arise as we observe an increasing inflow of people from rural environments to more developed urban settings.

Increased migration may provoke opposition from certain incumbent city residents. Migrants may push down existing workers' wages (Imbert et al., 2021), strain public services, or potentially increase unrest. How can local leaders integrate rural migrants into labour markets with minimal harm to existing residents?

Furthermore, how does rural-urban migration change the political incentives and behaviour of local leaders, existing residents, and migrants themselves? Authoritarian states may view dense cities as threats to their rule. Cities can lower the cost of collective action and may increase the demand for democracy (Glaeser and Steinberg, 2017; Wallace, 2014), especially in flawed democracies in which the ruling party consolidates influence in rural areas while cities become bastions of opposition.

At its first stage, this project built a map of the city blocks (previously nonexistent) and the location of rural migrants in Quelimane, Mozambique, as part of a larger project aiming to help the city government integrate rural migrants.

Geolocation and survey data were collected using a survey app *(survey CTO)* for around 2,000 rural migrants, 1,000 local residents, and the city's block leaders (slightly below 600 chiefs). The maps were later built in QGIS.

To map the city's blocks, we first identified their delimitations. As each block has its local leader, we requested their help (and permission) to run this mapping activity. Our field team then walked around each block with a tablet, collecting several geo-coordinates along its perimeter. This activity was conducted in collaboration with another IGC project led by Stefan Leeffers, “Preparing for Urban Floods in Mozambique: A Field Experiment on Risk Communication," which aims to increase flood risk awareness and preparedness of households in this coastal and vulnerable city.

Respondents answered survey questions on their migration patterns and reasons for migration, integration in the city, employment, housing, savings, and political views and participation. These maps and the detailed information obtained from the surveys will be used to design the larger project’s intervention: a job-matching platform for rural migrants to integrate into the city. The larger study intends to answer questions such as:

- Can rural migrants integrate into urban labour markets? At what cost?
- What are this programme's economic and social impacts on migrants and their still-rural relatives?
- What is the social impact of increasing labour supply for local residents? Do they welcome these newcomers?
- Are there political gains/benefits for local village and municipal leaders in promoting this programme?

Policy motivations

Sub-Saharan Africa is the world's fastest-urbanising region - a trend that will only continue in the coming decades. This urbanisation is likely to be a force towards economic development, breaking known poverty cycles around subsistence agriculture. However, urbanisation can also be destabilising, and the scale and speed of this migration present two main challenges. First, how can city leaders integrate rural migrants into the local labour market with minimal harm to existing residents? Second, how does this migration change the political incentives and behaviour of local leaders, existing residents, and migrants themselves? Ruling parties often oppose urbanisation for fear of weakening their rural base, which is easily manipulated in the face of poverty and limited political accountability.

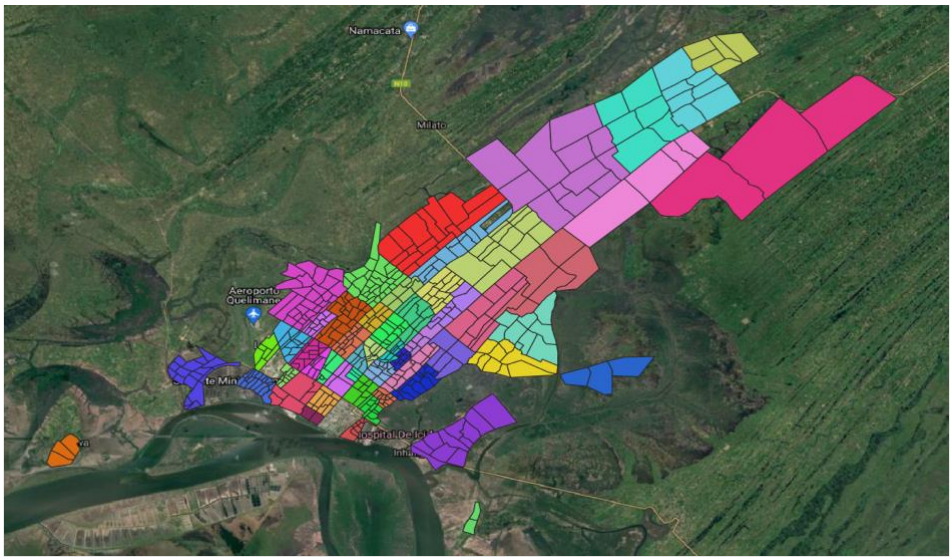
We intend to study these questions in Quelimane, Mozambique (approximately 400,000 inhabitants). As a first and crucial step in this project, we needed to map the city and identify the most important areas to target with the intervention. In particular, we created a map that delineates the blocks of the city which were previously nonexistent. Our broader project will use these blocks as sampling areas and randomisation units. This map can be helpful as a broad organisational tool for administering the city. Before our study, the city was only mapped by neighbourhoods, as is shown in the attachment.

Results: Urban and rural mapping with electronic devices

We went beyond the neighbourhood level by mapping the blocks within the neighbourhoods, collecting information and contacts on each local leader (appointed somewhat informally), and information on population density within each block. This mapping will facilitate communication between municipal and local leaders and administrative decisions at the municipal level, namely on

urban planning, distribution of public goods (such as schools or health centres) or where to target specific social programmes.

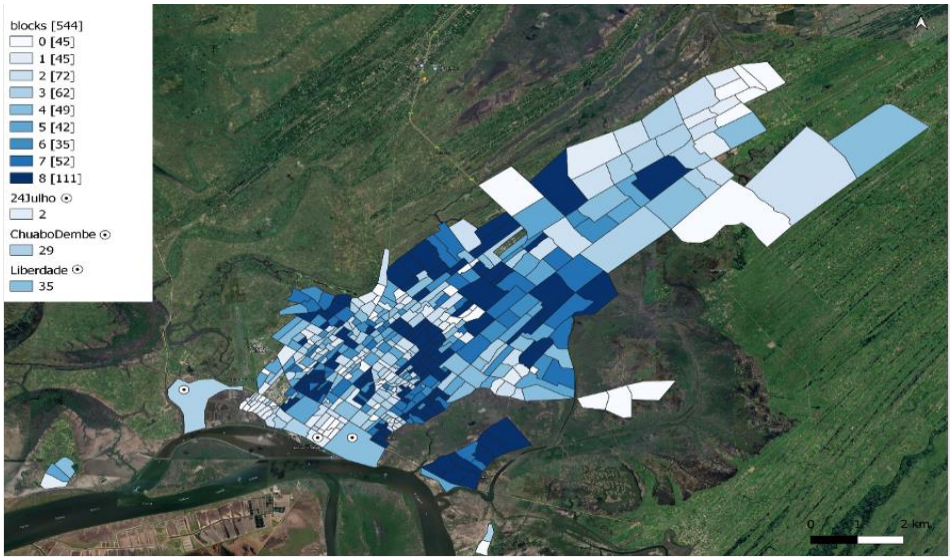
FIGURE 1: Map of Quelimane city blocks



We also created a second map that locates rural migrants living in the city. This map can be a powerful tool for understanding how this recently arrived population is distributed across the city, which will help design and implement public policies aimed at integration.

Additionally, we gathered existing data from the municipality, aiming to understand each area's characteristics, such as public service provision and the presence and quality of existing and planned infrastructure.

FIGURE 2: Map of Quelimane rural migrants



This project's outputs consist of important urban and administrative planning tools. The city of Quelimane has three main administrative divisions—stations, neighbourhoods, and blocks—and we delineated the latter's limitations, which were previously only defined informally. We also collected information on population density and distribution across the city. Not only that, but we could do so using an extremely cost-efficient and rapid method, as our main expense was field team salaries.

Typically, a proper topography system is used to set up maps. This project managed to map Quelimane's blocks and track local chiefs, migrants and long-term residents using a survey app. Despite its obvious challenges, as far as our knowledge goes, this is a novelty and a possible cost-efficient solution for city planning that could be especially relevant in the context of a developing country or city, where budgets and access to tools are oftentimes limited.

Our broader project aims at integrating rural migrants into the city. Initial analysis of baseline data has shown that rural migrants are mostly young men (62% of our sample, with an average age of 24 years old), single (60%) with no children (approximately 50%), relocating alone (77.5%) from other districts of Zambezia's province in search of a job (about 50%) or to study (about 22%). Education levels are usually low, with approximately 42% of the sample having no education or some primary education and 21% of the sample reporting having completed high school. Most of these migrants take low-pay jobs such as housekeepers/housewives (about one-third) or bike taxi drivers (slightly below 10%), and a striking 21% report being unemployed. On average, our sample reports earning slightly below MZN 600 per week (around GBP 7.62). Roughly 17% of the recently arrived migrants are students. Most of the surveyed migrants rent rooms (38%), living together in overcrowded, underserviced spaces. These rooms are usually located in the most peripheral areas of the city (see Figure 2), where houses are poorly constructed with low-quality building materials and are oftentimes located in vulnerable areas, dramatically more exposed to common climate adversities.

These initial activities helped set the basis for our project and ensure its success by strengthening the relationship between the research team and the city administration and improving the targeting of the interventions. From a research point of view, these maps can be key to project design and sampling, as we were able to gather a small sample of local residents and a large sample of recently arrived people. These maps were used for sampling in the main referred project, which concerns migrant integration, and the referred project regarding disaster risk management.[1]

[1] You can find the latest draft here.

Further research interventions

Improve job matching between residents and rural migrants and promote urban labour skills

We argue that local residents have job opportunities that are out of reach to rural migrants due to the lack of a proper mechanism to disseminate these opportunities. We plan to design a job-matching service to connect potential employers with programme recipients.

Promote savings and remittances

Since the introduction of MPESA in 2007 in Kenya, mobile money has dug its way across Africa, and in recent years, it has become widely widespread all over Mozambique. Mobile money allows transfers to rural areas at low costs, thus representing a sizeable decrease in migration costs (Batista and Vicente, 2019). We plan to distribute SIM cards to all migrants in our sample, along with information about and incentives to use mobile money. We aim to assess the impact on savings behaviour, household expenditures and remittances to and from rural areas.

Promote local and political integration

We argue that our programme is likely to improve the socio-economic conditions of migrants without harming existing residents, promoting favourable local integration. Our job matching programme will boost connections between local residents and migrants and help facilitate the allocation of job offers. This programme will also likely improve political accountability and raise awareness about the municipality's political initiatives, shifting political views towards the incumbent mayor, which will help implement the programme.

References

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