



# Informal settlements and access to data in the time of COVID: a case for sharing data for decision making

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Webinar Report



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The spread of COVID-19 in South Africa and other countries in the region has again brought to the fore the fact that very dense, under-serviced, mostly informal, settlements are not healthy places to live. They are also places where the spread of a disease is difficult to prevent or manage.

The kind of emergency response that was required to address the imminent spread of COVID-19 highlighted the widespread vulnerability of the poorest, compounded by highly unequal access to services and ongoing unhealthy living conditions.

Despite the existence of a great deal of data about formal and informal human settlements in the country, over the last few months during the epidemic when it has come down to directing the disaster response based on usable information, and then prioritizing the follow-up responses around addressing conditions in informal settlements, the challenge of identifying up-to-date data about informal and rural settlements that is coupled with data about the people living in such settlements has proven elusive.

This has highlighted the real need for institutional coordination and data sharing across state and non-state actors, many of whom have reasonably current data. This data, however, exists in pockets, is often protected, or is not available in sharable, geo-referenced formats.

This webinar reflected on the challenges of accessing data and information to aid a comprehensive understanding of informal settlements in time of crisis or disaster. It will also considered the value and relevance of the findings of the 'State of Land Information in South Africa' report.

**Moderators:**

- Mark Napier, Principal Researcher, CSIR
- Mike Powell, Independent consultant focusing on establishing effective intermediaries between technology developers and ICT users in the development sector

**Panelists:**

- Alize le Roux, Senior Researcher, CSIR
- Mirjam van Donk, Director, Isandla Institute
- Ahmed Vawda, Former Deputy Director General of Human Settlement Delivery Frameworks For the Republic of South Africa

**A complete recording of the webinar is available on YouTube: <https://youtu.be/7yalqkwQiqM>**

## Key Takeaways

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- COVID-19 disproportionately impacts the poor and marginalized living in precarious or poorly planned and dense settlements. In South Africa, this affects 20% of the population. Forecasts for 2030 are that 32% of the population will live in informal dwellings.
- In South Africa, a directive that forbids eviction (including tenants) provides for a first step in a long struggle to secure tenure and the right not to be evicted. That in turn establishes the sequence for settlement upgrading. Thus, a focus on data and knowledge for this immediate task is what is required by the collective of practitioners inside and outside of the state.
- Knowledge and data sets are a means to produce shared decisions in the collective best interests, and this exists institutionally within the South African government, but must be reasserted and be subject to open public scrutiny to function effectively.
- There is a need to construct a Theory of Change for upgrading informal settlements that sets the parameters for the data sets that allow for urgent and critical decision making.

## Webinar Summary

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### **1) OVER THE LAST COUPLE OF YEARS, BEFORE AND NOW DURING THE COVID LOCKDOWN, WHAT HAVE BEEN THE CHALLENGES IN ACCESSING QUALITY, COMPARATIVE DATA AND INFORMATION ABOUT INFORMAL SETTLEMENTS IN SOUTH AFRICA?**

- Informal settlements are constantly changing, yet the ability to capture these spaces, both in terms of spatial location and socioeconomic implications, are sometimes ineffective, outdated or too expensive, which leads to outdated data as well as an outdated understanding of the situation. Census data is static for 10 years, yet it remains one of the main accepted reference points for official data.
- The only way to capture the dynamic nature of informal settlements is through a combination of surveys, satellite imagery and auxiliary datasets and innovative automatic classification algorithms, which is expensive and requires unique skill sets.
- Government and municipalities often monitor small geographical areas, which leads to fragmented and sporadic datasets.
- Consistent measures that utilize the same techniques are needed to track informal spaces, yet there is no government custodian in South Africa that takes responsibility to do this on an annual basis, and there is no free or open source of informal data in South Africa that is reliable, accurate and accessible.

- There are primarily two types of data about informal settlements in South Africa. First, some data is open and free, but is not easily accessible, and is fragmented across municipalities and departments, and may not be reliable, comparable across years or is outdated. Second, some data is available for purchase that is very reliable, accurate, accessible, current and comparable across years.
- There is a great sensitivity related to data on informal settlements and how this may be used by citizens, CSOs and pressure groups, which is embedded in a deeper culture of distrust.
- Community-generated data initiatives, especially concerning settlement enumerations, often don't speak to the technical data requirements of the city and are too detailed or contextual, and are therefore often disregarded.

## **2) HOW HAS THIS IMPACTED ON THE INITIAL AND ONGOING RESPONSES TO THE PANDEMIC IN DENSE AND/ OR UNDER-SERVICED INFORMAL AND RURAL SETTLEMENTS?**

- Critical datasets were not initially in the hands of the right people, and old data was used to make decisions.
- Those who had newer sets of data were bound by sharing protocols and censorship. Procurement protocols and relationships with these data providers were not very effective, resulting in a lack of channelling of the private sector help that was offered. This was compounded by silo mentalities to data sourcing and a hesitancy to utilize the private sector help.
- Land invasions, in large part brought on by people being unable to pay rent to landlords, has resulted both in new settlements and expansion of existing settlements.
- Community entry and engagement processes were impeded, including planned enumerations, but also service level monitoring and maintenance.
- Covid-19 required a rapid and coordinated response to address factors contributing to vulnerability and risk and to reduce the spread of the epidemic. Key in this was the importance of safe and protective practices, such as washing hands, and systems/infrastructure that make this possible.
- At the national level, there was significant impetus to enable a coordinated response and particularly respond to basic service needs through the establishment of a national forum, led by National Upgrading Support Programme, but It lacked focus and a clear purpose.

## **3) WHAT TOOLS AND PLATFORMS HAVE PROVEN USEFUL IN DECISION SUPPORT, AND WHAT HAS NEEDED TO BE DEVELOPED IN ORDER TO COPE?**

- Asivikelane is a community based monitoring initiative focused on water, sanitation and waste removal in informal settlements, that has as its primary

purpose to reveal service faults and gaps and enable 'demand accountability' as well as strengthen relationships between municipalities and informal settlement communities. The initiative has had mixed success in enabling an operational response to service deficiencies reported, with better responses recorded in the non-metropolitan municipalities.

- The City of Cape Town supported a pilot initiative on community reporting on taps in informal settlements, specifically during COVID-19 (July/Aug – Oct). This has resulted in (some) improvements, but has also shown up significant disconnects between reporting and operational response, where various aspects of the two systems (city vs community) do not integrate well (e.g. numbering and geo-location of taps).
- These kinds of projects need investment not only in the technical and data systems, but also in the social infrastructure needed to monitor basic services, capture and interpret local reports, etc.
- The COVID-19 crisis has demonstrated a real hunger for open access data, and given the unique circumstances online access to resources was essential. Online platforms with open-access to maps, data and information and web-based dashboards proved very powerful as decision support systems. The data behind these was the biggest struggle.
- The crisis has seen the creation of data-lakes, which has evolved substantially in South Africa and globally.

#### **4) WHAT HAVE WE LEARNED ABOUT THE MANAGEMENT OF DATA AND INFORMATION AND WHAT MORE CAN BE DONE WITH DATA MANAGEMENT AND DATA SHARING TO SUPPORT DECISION MAKING AT A TIME OF CRISIS?**

- We have learned that systems in South Africa were not geared to respond to crisis. Data sourcing, storage and updating wasn't dynamic and didn't cater for being so dynamic. Those who had taken data and data management seriously and invested in it as a commodity were ahead of the curve.
- There is a lot of grey area around data custodianship and sharing protocols. The better data handling is managed and negotiated, the better these tools work. Monitoring fluid situations informal settlements is expensive, and there needs to be cost recovery processes in place,
- Mission critical datasets needs to be identified, and more needs to be done to ensure they are updated and current, which means we need to invest in them and they need to be open and accessible.
- Open data is the ideal, but there are challenges with and limits relating to personal information as well as proprietary issues.
- Data is not the be all and end all of evidence-based decision making; it's a key ingredient, but still open for interpretation, subject to bias and purpose matters.
- Accountability and transparency are key – reporting back to citizens and communities is important (not least to build trust), but is often a weak link in (urban) governance.

## Notable Quotes from the Panelists



**“IN DISASTER RELIEF, PEOPLE OFTEN TALK ABOUT ‘BUILDING BACK BETTER’. IN THIS CASE, WITH COVID-19, WE NEED TO LEARN FROM EVIDENCE AND DATA ABOUT VULNERABILITY OF COMMUNITIES IN INFORMAL SETTLEMENTS, AND TO MAKE BETTER DECISIONS FOR THE FUTURE.”**

**- MARK NAPIER, PRINCIPAL RESEARCHER, CSIR**



**“WHEN TALKING ABOUT THE MANAGEMENT OF DATA AND INFORMATION, THERE IS A NEED FOR TRUST BETWEEN THE DIFFERENT PARTIES INVOLVED, WHICH STARTS WITH ACCOUNTABILITY AND TRANSPARENCY AND PROVIDES A BASIS FOR GOOD OPERATIONAL COOPERATION BETWEEN THE AGENCIES AND STAKEHOLDERS.”**

**- MIKE POWELL, INDEPENDENT CONSULTANT**



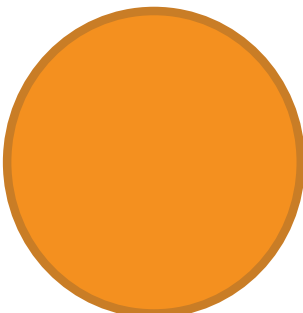
**“WE NEED TO DO MORE TO ENSURE THAT MISSION CRITICAL DATA SETS ARE UPDATED, THAT THEY ARE CURRENT, AND WE NEED TO INVEST IN THEM. WE NEED TO ENSURE THAT THEY ARE OPEN AND ACCESSIBLE FOR EVERYONE.”**

**- ALIZE LE ROUX, SENIOR RESEARCHER, CSIR**



**“WE DON’T HAVE THE LUXURY OF WAITING AND DEVELOPING THE PERFECT DATA SYSTEMS. THERE NEEDS TO BE SOME IMMEDIATE ACTION AND TRANSFORMATION ON THE GROUND, PARTICULARLY IN THE CONTEXT OF COVID-19 TO ADDRESS VULNERABILITIES AND RISKS.”**

**- MIRJAM VAN DONK, DIRECTOR, ISANDLA INSTITUTE**



**“SOUTH AFRICA IS COMMITTED TO REDISTRIBUTION, AND HAS ENSHRINED REQUIREMENTS OF THE STATE IN ITS CONSTITUTION. THE PRIVATE SECTOR, ON THE OTHER HAND, IS BEHOLDEN TO THE LOGIC OF THE MARKET AND BOUND BY ITS OWN RULES AND PROTOCOLS REGARDING INVESTMENT DECISIONS.”**

**- AHMEDI VAWDA, FORMER DEPUTY DIRECTOR GENERAL OF HUMAN SETTLEMENT DELIVERY FRAMEWORKS FOR THE REPUBLIC OF SOUTH AFRICA**



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