FROM POLICY TO PRACTICE:

EXPLORING THE VALUE OF COMMUNITY-GENERATED DATA IN THE UPGRADING OF INFORMAL SETTLEMENTS









INTRODUCTION

In 2012, after evaluating the successes and limitations of South Africa's democratic transition, the government adopted the National Development Plan 2030: Our future - make it work (NDP), which identified twelve strategic areas that would work together to dismantle centuries of spatial, social and economic inequality experienced by the vast majority of South Africans. Transformation of human settlements was, and still remains, a key feature of the NDP, with Chapter 8 recognising the value of the Upgrading of Informal Settlements Programme (UISP) and calling for the accelerated 'rapid assessment and appraisal of all informal settlements [emphasis added]' and for the building of 'dedicated capacity at a local level for informal settlement upgrading'.1

While the NDP acknowledges the implications of an uncertain social and environmental context on planning processes, and the transient nature of many informal settlement residents, these characteristics are not framed as unsurmountable obstacles that can justify the exclusion of any one particular community. Rather, the NDP articulates these traits as realities that must be addressed by developing 'foresight, resilience and versatility', by ensuring access to updated sources of information as well as 'continually revised knowledge'2, and by enabling an active citizenry through capacity-building and creating opportunities for public engagement and community participation in planning processes.3

What is present in policy, however, is often missing in practice. Experience suggests that opportunities for community participation are usually limited to sporadic public consultations, and that evidence-based planning relies primarily upon sources of 'official' data that neither reflect nor measure the quality of life for people living in a particular area, and are frequently imprecise and out-of-date. The absence of mechanisms for meaningful engagement, coupled with an inability to respond to community perspectives and concerns - whether intentional or unintentional - can lead to aggravated levels of tension within communities, which may, in turn, threaten the state's investment in bulk infrastructure as well as the success of upgrading strategies and programmes.4

That being said, there are examples of efforts by local non-governmental organisations (NGOs) to capacitate residents of informal settlements in various data collection processes, including resident-level surveys and community mapping exercises using Geographical Information System (GIS) software and open-data platforms. Capacitating people in these technologies not only resolves some of the challenges that arise when collecting data from a constantly evolving context, but can also provide a body of accurate and reliable evidence for planning purposes, and serve as a mechanism for facilitating meaningful participation on a continuous basis with community members.

This policy brief was developed in the context of the Informal Settlements Data Project, a partnership project between the Violence Prevention through Urban Upgrading (VPUU), the Community Organisation Resource Organisation (CORC) and Isandla Institute, with support from Comic Relief. It draws together lessons emerging from the project, and the broader practice of the partner organisations. The policy brief was written by Kelly Stone on behalf of Isandla Institute.

Cover image: Luvuyo Bangeni & Kholiswa Bhaybhile in Santini, Mfuleni. Courtesy: SA SDI Alliance

^{1.} National Planning Commission. (2012). National Development Plan 2030: Our future - make it work, p. 289.

^{2.} NDP, p. 289.

^{3.} NDP, p. 291.

^{4.} NDP, p. 289.

COMMUNITY-DRIVEN DATA AND THE WESTERN CAPE INFORMAL SETTLEMENT SUPPORT PROGRAMME (ISSP)

Recognising the unique challenges that rapid urbanisation and informality pose to the transformation of human settlements in the Western Cape, and the need to embed more innovative methods of collecting data at settlement level to respond to those challenges, the provincial Department of Human Settlements (WCDHS) developed the Informal Settlement Strategic Framework (ISSF) in 2016 to facilitate the transition of informal settlements into safe and sustainable neighbourhoods by enabling access to public infrastructure, finance, land tenure, economic opportunities, as well as incremental housing opportunities using an innovative, people-centred, and partner-based approach.⁵ To assist in the implementation of the ISSF, the WCDHS also established the Informal Settlement Support Programme (ISSP) which guides municipalities and provincial departments in their efforts to upgrade informal settlements. The ISSP is premised on a partnership-based approach and makes provision for NGOs to support the rollout of the ISSP, based on their organisational mandate, skills and area of expertise.

Informing the ISSF was a rapid appraisal of 106 informal settlements across the Western Cape. The appraisal was conducted by CORC with the help of its social partners FEDUP and ISN, on behalf of the provincial Department of Human Settlements. A key finding of the appraisal was the general tendency by municipalities to avoid using data sources that are not quantifiable, 'such as the need for a traffic light at pedestrian

crossings, the construction of a bridge to reduce the walking distance to school, skills training, neighbourhood watch patrols, etc.'6 as part of their planning process. This type of qualitative data was not taken into consideration, even though the manner in which people engaged with their physical environment was critical for identifying the gaps in service provision as well as gaining a deeper understanding of their quality of life. Accordingly, CORC's final report recommended that municipalities engage with the community in a way that extends beyond mere information-gathering, and rather relies on the experiences of residents to inform the focus of upgrading plans to ensure projects make 'make a tangible difference' to the lives of people who live in that particular community.7

The ISSP recognises the importance of datadriven approaches to informal settlement upgrading, and in particular the value of capacitating residents of informal settlement across the province in collecting various types of data, such as the demographic profile of individuals in their community (i.e. enumerations) and the location and functionality of municipal infrastructure (i.e. toilets, standpipes, street lights, etc.). The ISSP acknowledges that community-generated data provides communities with an opportunity for meaningful engagement with municipal officials in order to influence the planning, prioritisation and implementation of upgrading interventions in their communities.

Western Cape Government (September 2016). From Precarious Settlements to Dignified Communities: Western Cape Informal Settlement Strategic Framework, developed by Isandla Institute in partnership with PDG and Habitat for Humanity South Africa.

Available at: https://www.westerncape.gov.za/assets/departments/human-settlements/docs/issp/western_cape_issp_strategic_framework 2016.pdf

⁶ CORC: Close out report, p. 26.

⁷ CORC: Close out report, p. 31.

VALUE OF COMMUNITY-GENERATED DATA TO THE UPGRADING INFORMAL SETTI EMENTS

Experiences to date show that there are number of significant benefits to the collection and use of community-generated data for informal settlement upgrading.

a) Community-generated data brings people closer to the State.

One of the most valuable aspects of community-driven data processes is that it 'brings people closer to the State'. By developing a more comprehensive understanding of their community - which is supported by a valid body of evidence that reflects the experiences of how they live and interact in a particular space - residents become legitimate voices of authority about their living conditions and are better positioned to influence the decisions that are made with respect to planning. Having access to a body of evidence that validates community needs and concerns also enables people to challenge the rationale behind certain decisions that are made by the municipality in relation to upgrading,

such as their classification at Category A, B1, B2 and C settlements, or the quantity and location of municipal engineering services, or the types social and economic facilities, to ensure plans and projects respond to their specific needs. Furthermore, in generating sources of data that are of strategic value to the State, communities develop a greater understanding of the bureaucratic nature of local government and complex decision-making protocols and processes. Municipalities, in turn, also develop a deeper understanding of the challenges faced by community members. This mutual-learning between the State and its citizenry is one of the biggest value-adds of participatory planning processes, not only because enables communities to better understand the workings of local government, but also

Community Atlas

The recently developed **Community Atlas** is an open platform where collected data are directly accessible to relevant stakeholders involved in community development and urban upgrading. Consisting mainly of demographic reports, Community Atlas is based on official datasets, primarily the StatsSA Census data. Where possible, it is updated using current national and localised studies which are referenced to their open data sources.

The Community Atlas open data platform

is designed for multiple users, such as community stakeholders, government officials, NGOs and other interested parties. As a web-based data platform, Community Atlas enables users to zoom into their area or settlement of interest, defined by an administrative region for which official and current data have been aggregated into a series of printable reports. Users can further focus or contextualise their own area of interest by zooming in or out, accessing data across administrative frameworks at various scales.

because it strengthens the relationships between residents and officials by building trust, mutual understanding, and compassion.

b) Community-generated data offers information that is crosscutting in nature.

The cross-cutting nature of communitygenerated data - specifically in relation to depth of information collected during the enumeration process - holds value that extends beyond mere planning and upgrading, but can be used by municipalities for a variety of other purposes, including disaster management. By generating valid sources of data that offer a clear diagnosis of settlement conditions and a localised understanding of where and how services must be improved (which are situated within geo-referenced datapoints), data generated at a community level is of critical value to municipalities. This is especially valuable when it comes to demonstrating the level and type of need in a particular settlement, and then coordinating the delivery of such services with other departments and stakeholders. Furthermore, having access to a body of evidence that captures the demographic profile of the community at an individual-level, rather than a head-ofhousehold level, capacitates municipalities to satisfy their constitutional and statutory obligations to determine whether living conditions in a particular settlement meet the requirements for assistance under the UISP, and can also be used to ensure the effective utilisation of State resources.

c) Community-generated data elevates the capacities of ordinary citizens.

Investing in, and building the capacity of, ordinary citizens to generate information about

their community is vital. In instances where this has been done, community representatives see themselves as 'agents of change' in their communities, in that they can identify the issues that are important to them on a personal level - whether it be housing, water and sanitation, or access to education - and then use the technical capacity they have developed in using GIS-software and Open Data Kits, as well as the leadership skills they have acquired during leadership training, to engage in change-making processes for their communities. There is intrinsic value in equipping people with the knowledge and skills in how to operate different technologies and apply them to address some of the most complex issues facing informal settlements. For example, educating people on how to use GIS-software and open-source data platforms is not only being beneficial to community planning and upgrading; it can also address short-falls in municipal capacity for data collection on every informal settlement since there is a group of people who already have the requisite knowledge, skills and experience to perform the work effectively. Furthermore, because this type of data collection needs to be conducted on an annual basis, municipalities can use planning processes as an opportunity to employ local people on a short-term basis, which not only leverages the capacity of local people, but also increases their employability and income-generating capacity given the transferability of such skills to other sectors. In this regard, the benefit of communitygenerated data is two-fold; not only does it have the power to enhance conditions within the settlement, but it also has the ability to elevate the capacities of ordinary citizens, which can lead to greater levels of both personal and collective ownership of their communities.

RECOMMENDATIONS FOR OVERCOMING RESISTANCE TO COMMUNITY-GENERATED DATA

Despite the value of community-generated data to informal settlement upgrading and to the people who not only contribute to but also benefit from local data collection efforts, some municipalities maintain a certain level of resistance when it comes to integrating such data into settlement planning processes.

While it is important to mention that some municipalities are more receptive than others and that the strength of community-municipal relations vary greatly, this section offers a series of recommendations for overcoming resistance to community-generated data.

a) Educate municipal officials on community-generated data collection processes.

Some municipalities have expressed a certain level of mistrust for data that is generated by communities, which may be because they do not understand the methods that were used for data collection or analysis, or because community-generated data does not necessarily constitute as an 'official' source of data simply because it does not originate from the State. Therefore, in order to build trust and investment in the data that is generated by community members, municipal officials should be informed of the methods that are used to conduct resident-level enumerations, to generate reports about the demographic profile, and to produce digitised maps of the settlement, in order to cultivate a certain level of trust in the validity of the data. In settlements where there either is, or where

CheckIT

CheckIT gives the community a voice by enabling field reporting on the functional status of critical infrastructure, facilities and events. This ICT4D tool puts the power of local knowledge into the hands of communities and their municipal partners, fostering practical conversations targeted towards people's quality of life.

In many settlements, municipal administrations may record basic service levels as equal to the number of installed facilities (such as taps and toilets); but in practice, the functional status and location of those facilities is often an unknown factor. Low-functional service

levels of public infrastructure may lead to a severe scarcity of resources which can trigger safety issues relating to health and violence.

CheckIT is a flexible, event-based mobile inspection tool designed to improve the delivery of essential services. This ICT4D monitoring tool aims to facilitate and standardise the process of reporting on the status of basic services. By replacing the paper-based system with this mobile technology, higher quality, more accurate and different varieties of data can now be generated and collected by trained community fieldworkers.

there appears to be, some level of mistrust by the municipality of community members, integrating officials into data collection processes in order to increase their trust in, and acceptance of, the community-generated data is recommended.

b) Engage. Engage. Engage.

Contentious relations between municipal officials and community residents are one of the key drivers behind the consistent lack of progress towards the transformation of informal settlements, specifically as it relates to the provision of basic services. The importance of facilitating continuous engagements between the community and municipal officials at all levels of planning is stressed as a process which should work both ways and be initiated by both parties. While locally generated data has the potential to 'bring people closer to the State', the State, in turn, should draw 'closer to the people' by engaging with the findings of their data and developing upgrading projects that respond to their specific concerns. The process of engagement should involve followup conversations with the community on the implications of their data on upgrading priorities and municipal budgeting processes to demonstrate the tangible impact of their data collection efforts.

When municipalities do not take the time to meaningfully engage with members of the community and to develop a deep understanding of their experiences and concerns, upgrading projects are unlikely to succeed (and may threaten the State's investment) given that communities will feel no sense of ownership where they have been effectively isolated from the decision-making processes that are intended to benefit them. Similarly, when communities do not take the time to understand local government

processes or to identify opportunities for constructive engagement with municipal officials, the results of their data collection efforts may not achieve their intended impact on the decision-making processes affecting their community. Engagements must therefore work both ways in order to develop more productive working relationships between municipalities and residents of informal settlements.

c) Take measures to democratise the data.

Although community-generated data falls under technical ownership of the community, additional measures should be taken to 'democratise the data' so that it is accessible and meaningful to all members of the community, rather than to those who are involved in data collection processes or are familiar with the subject matter at hand. In this regard, data collection results should be translated into local languages and conveyed in a manner that is easily understood by people with varying levels of literacy and education so the information can be relevant and useful for everyone in the community.

CONCLUSION

While various policies have provided guidance on how to navigate the complexity of upgrading informal settlements in South Africa, real transformation happens in communities and with the catalyst of innovative action. This policy brief highlighted the importance of the collection, use and management of data for informal settlement upgrading through approaches elevate the capacity of local South Africans to become agents of change and transform their communities.

ABOUT THE PARTNERS AND THEIR WORK ON INFORMAL SETTLEMENTS AND DATA

The Community Organisation Resource Centre (CORC) aims to support networks of informal settlements in mobilising around issues relating to land, evictions, basic services, upgrading (incremental and otherwise), and citizenship. CORC supports two grassroots social movements who play a critical role in mobilizing communities on the ground. These are the Federation of the Urban and Rural Poor (FEDUP) and the Informal Settlements Network (ISN). Through these social movements, CORC provides technical training and facilitation support to communities in the use of CIS software to develop settlement profiles, and in the application of Open Data Kits to conduct enumerations of individual households in selected settlements across the Western Cape. CORC also provides support to communities for community based planning, participatory design and implementation of upgrading projects as identified and prioritised by the communities themselves. Beyond building the capacity of local people to operate and understand the value of innovative technology, the technical guidance and support provided by CORC to local communities has culminated in the creation of a more nuanced body of evidence that captures the quantity, functionality and location of existing services (i.e. taps, toilets, septic tanks, high-mast lighting), but also provides a more accurate depiction of demographics within the community, as well as information about the status of people in the household, (i.e. owners, tenants, residents). This information is then fed back to CORC, who is then responsible for conducting an analysis of the data and sharing the preliminary findings with the community for verification before finalising the results and capturing them in a report. The report is then given to the community and used to engage in strategic discussions with municipal officials and other relevant role-players, as they decide as a collective. CORC then provides social facilitation to enable productive conversations between communities and municipalities, and to act as a support should conflicts or misunderstandings arise.

See: www.sasdialliance.org.za/about/corc

The Violence Prevention through Urban Upgrading (VPUU) is a development organisation that aims to strengthen the capacity of people to create integrated, safe, and more sustainable communities. Although VPUU's approach is similar to that of CORC insofar as it capacitates local field-workers in using innovate technologies like GIS-software to develop community maps and Open Data Kits to conduct enumerations on a resident rather than household level; VPUU has also developed Community Registers which store personal information about individuals in the community which can be used for various purposes, such as facilitating access to land tenure and eligibility for certain grants, as well as offering the municipality a reliable source of data which can then inform the basis of the types, quantities and locations of services in the community. VPUU also provides training skills to a core group of leaders within the community in community development, communication, conflict resolution, financial management, as well as participatory planning skills, and capacitates them in how to engage and provide input into the spatial plans and upgrading projects intended for their communities. VPUU has developed two data platforms on informal settlements: CheckIT and Community Atlas. See: www.vpuu.org.za

Isandla Institute acts as a public interest think tank, seeking to promote, and contribute to, systems and practices of urban governance that are just, equitable, inclusive, sustainable and democratic. Central to Isandla Institute's work is the notion of urban citizenship, for current and future generations. Urban citizenship is about the realisation of material outcomes necessary for dignity, well-being and inclusion; the recognition of political voice and agency; and, a responsibility or duty to act with respect towards the urban collective. Isandla Institute engages in policy research, knowledge sharing and dialogue facilitation, institutional support, advocacy and network politics to support urban development and transformation.

See: www.isandla.org.za





