

# NOT THE FULL PICTURE: Rethinking innovation measurement in South Africa

A key challenge for researchers and policymakers in South Africa is to find suitable ways to capture and measure innovation activities, including in the informal sector. A policy [seminar](#) held in Sweetwaters, a semi-rural area in KwaZulu-Natal on 27 March 2019, highlighted the complexity of responding to this challenge. *Dr Il-haam Petersen* reports.

The [2019 White Paper on Science, Technology and Innovation \(STI\)](#) places renewed emphasis on promoting innovation for, by and with marginalised groups, to enable inclusive development.

Critically, it prioritises the needs of those who have been traditionally marginalised from the formal national system of innovation, the formal economy and the decision-making processes.

At the Sweetwaters seminar, delegates discussed the suitability of traditional approaches and methods for understanding, measuring and promoting innovation that enables inclusiveness and transformative change.

## It starts with policy

Nonhlanhla Mkhize, who directs the Innovation for Inclusive Development unit at the Department of Science and Innovation (DSI), said that reviews of STI policy in South Africa raised concerns about whether policy was geared towards making a desired impact, considering the key developmental concerns in the country.

Mkhize pointed to important ways in which the new White Paper on STI aims to address this concern, such as promoting innovative service delivery and grassroots innovation.

One of the challenges is to find ways to assess progress towards enabling access to, and participation in, the system of innovation.

Addressing complex social challenges, including inequalities in access to basic services and high levels of unemployment, requires change that is transformative and systemic.

Prof Alejandra Boni of the Polytechnic University of Valencia in Spain described an emerging approach to transformative innovation policy, which promotes a formative monitoring and evaluation framework that places greater emphasis on the participation of a wider range of stakeholders, particularly the intended beneficiaries of STI interventions, from the start.

Such a framework foregrounds process, reflexivity, learning, participation and “fine-grained contextual narratives”, she said.

Boni is a member of an international consortium, the Transformative Innovation Policy Consortium, which is led by the University of Sussex in the United Kingdom in collaboration with other partners including the DSI and universities in South Africa.

In response to the need for new and more appropriate sets of innovation indicators and measures, the HSRC’s [Centre for Science, Technology and Innovation Indicators](#) (CeSTII) is working with the DSI to develop indicators and measures that are appropriate in a South African context, incorporating human development and economic growth, said Dr Glenda Kruss, the head of CeSTII.

These will complement the current key indicators that are based on global standardised measures by the Organisation for Economic Co-operation and Development, which focus on measuring South Africa’s research and development investment and innovation in the formal sector.

A key purpose of this work is to develop a network of researchers and practitioners to contribute towards



Researchers interviewing a shopkeeper at Sweetwaters as part of CeSTII's baseline survey of innovation in the informal sector  
**Photo:** Antonio Erasmus

building a sound evidence base, said Kruss.

### New measures and indicators

One of CeSTII's new projects focuses on understanding and measuring innovation in the informal sector, particularly how we can promote innovation that facilitates learning and upgrading by informal businesses. CeSTII is currently conducting a baseline survey on innovation in the informal sector in Sweetwaters.

Producing indicators on the formal sector alone misses a lot, said Dr Nazeem Mustapha who leads the project.

Reflecting on his experience in researching economic activities in townships, Anthony Muteti of the Sustainable Livelihoods Foundation explained that businesses unique to townships such as 'spaza shops' and 'shisanyamas' – a township word meaning to braai or cook meat over an open fire – reflect the history of townships, are part of the social fabric, and contribute to the livelihoods of millions in South Africa.

The foundation, through several years of experience in studying townships across the country, has pioneered the 'small area census' approach, a mixed-methods participatory methodology for producing comprehensive and robust data on business activities in township areas.

The research is conducted in a small and defined geographical area and in collaboration with the community, but it is not low-tech or lacking in rigour.

Muteti explained how the foundation's research has changed over the years, moving from fieldworkers carrying loads of paper questionnaires and pens, to collecting data through tablet technology and GPS devices. This digitalised data collection improves accuracy and allows for innovative spatial mapping that can be combined with the survey and qualitative data to show the complexity and dynamism of township economies.

Informal businesses play a significant role in socio-economic development in South Africa. Mhlengi Ngubane,

of the KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs, explained that since 2010, the attitude of local government towards the informal sector has changed and local municipalities have begun to introduce initiatives such as an informal economy chamber and e-licensing to help "graduate businesses to become formal".

At this stage, the initiatives are experimental and will need to be evaluated.

"It is not easy to measure innovation in the formal sector, and it is even more difficult in the informal sector," Mustapha said.

CeSTII has collaborated with the Sustainable Livelihoods Foundation in experimenting with digital storytelling as a novel method in the measurement space. The aim is to build a database of innovative informal businesses all over the country and record some of their stories.

### KEY QUESTIONS FOR THE FUTURE OF INNOVATION MEASUREMENT

How suitable are our research tools, measures and indicators for promoting innovation that is inclusive and transformative?

How can we develop innovation indicators and measures that are appropriate for addressing key social challenges, are inclusive, and are grounded in the lived realities of South Africans?

How do we capture and measure innovation in such a complex and dynamic local setting?

#### Links to the YouTube videos of the seminar:

[Participatory innovation CESTII](#)  
[New digital technologies](#)

**Author:** Dr Il-haam Petersen is a senior research specialist at the HSRC's CeSTII and leader of a National Research Foundation-funded project investigating the capabilities of universities and science councils to generate useful knowledge and the capabilities in communities to use formal knowledge to improve their living conditions.

[jpetersen@hsrc.ac.za](mailto:jpetersen@hsrc.ac.za)