



Global Alliance

Africa

Place-Based Innovation in South Africa:

Regional Innovation Audit



Connecting for Positive Change

ktn-uk.org/programme/africa



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About KTN and the Global Alliance Africa Programme

KTN, the UK’s innovation network, exists to connect innovators with new partners and new opportunities beyond their existing thinking – accelerating ambitious ideas into real-world solutions.

KTN’s Global Alliance Africa is a six-year programme designed to drive networking activities that can help foster long-lasting, strategic partnerships between Nigeria, Kenya and South Africa, the UK and across sub-Saharan Africa. In doing so, it aims to accelerate innovations that promote economic growth and job creation.



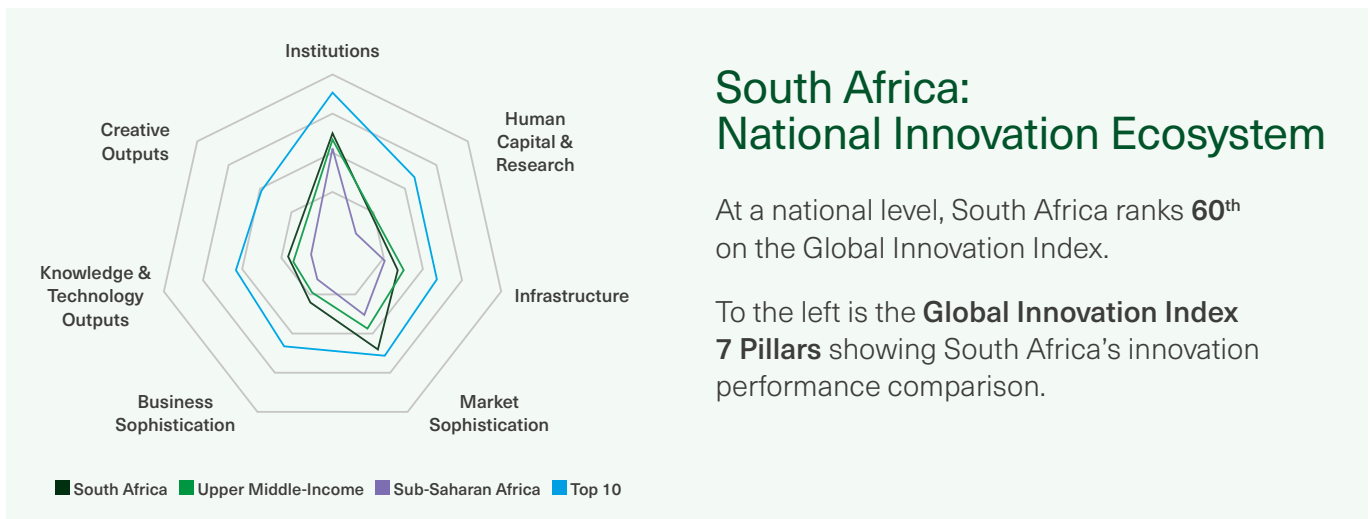
Objectives and Methodology

The programme has carried out comprehensive studies and advisory consultations to identify challenges faced by the innovation ecosystems and their impact across stakeholder groups. The insights gained have shaped five programme-level interventions, one of which is focused on Place-Based Innovation to strengthen capacity and resilience of local innovation ecosystems.

Gauteng province was selected as the region to pilot the Place-Based Innovation activities. KTN commissioned a study, which included reviews of secondary sources and existing innovation support and in-depth dialogue interviews with participants in the ecosystem, to gather data from ecosystem stakeholders.

KTN explored the following considerations:

- 1 The challenges and impact on Gauteng’s innovation ecosystem of place-based intervention
- 2 How the findings and recommendations can be effectively used to strengthen Gauteng’s innovation response



South Africa: National Innovation Ecosystem

At a national level, South Africa ranks 60th on the Global Innovation Index.

To the left is the **Global Innovation Index 7 Pillars** showing South Africa’s innovation performance comparison.

National Innovation Ecosystem

Gauteng

Gauteng is the country's most populous province, despite being geographically the smallest province and, while it is the country's economic hub, unemployment, poverty, and inequality remain persistently high. There are also large flows of migrants into the province seeking work and study opportunities.

Key Facts

Population

15.2m

70% in 152 townships



Unemployment & Poverty Index

30% Unemployed
20.5% living below lower bound food poverty line



Local Government

3 metropolitan municipalities
2 district municipalities



Residential Buildings

41.6% of residential buildings classified as informal/backyard



Gauteng

Industrial DNA

A young working population is expected to support Gauteng's position as South Africa's economic hub.

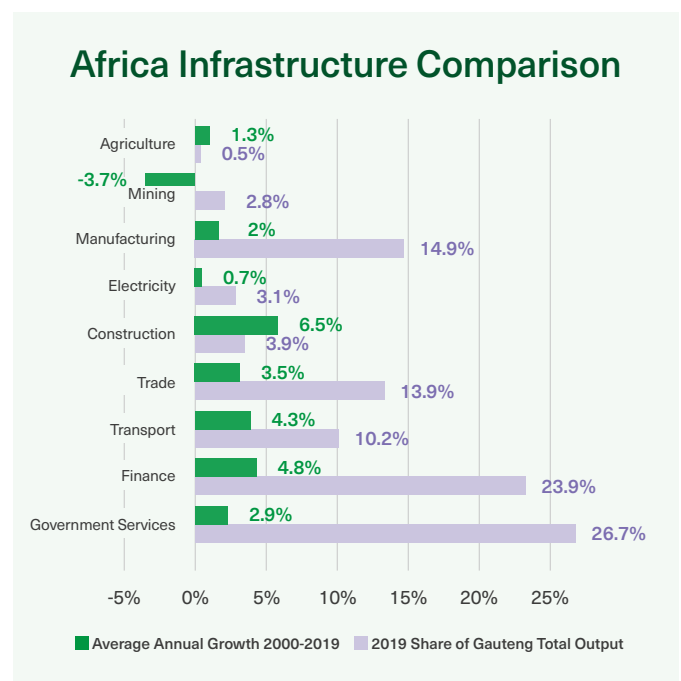
The finance, government, trade, and manufacturing industries dominate in terms of economic contribution, with construction experiencing the highest growth over 20 years. Like most economies, Gauteng needs more contribution from knowledge-based sectors for economic growth.

- Produces roughly **35%** of the national GDP
- **7th largest economy** on the African continent
- Regional base for **29 of top 500** global companies
- Headquarters for **11 of South Africa's top 14** companies




Infrastructure

- **72.2%** of Gauteng households have at least one member with access to internet, either in the home, work, place of study or internet café (national average of 59.3%)
- Only **14.8%** of Gauteng households have internet at home
- **Affordability of data** remains a key constraint

Despite significant investment in transport infrastructure and public transport, there is continued underinvestment in township areas.



Policy and Strategy Environment

<p>Economic growth</p> 	<p>Growing Gauteng Together 2030 outlines key “action areas” to reignite the Gauteng economy after the negative impact of Covid-19 and reduce levels of inequality, many of which are relevant to place-based innovation.</p>
<p>Innovation</p> 	<p>Innovation and Knowledge Economy Strategy (GIKES) (2012) lists improved economic competitiveness, public sector efficiency and community-led innovation as main objectives. At national level, creation of “local innovation systems” highlighted in South Africa’s White Paper on Science, Technology, and Innovation (DSI, 2019).</p>
<p>Township development</p> 	<p>Township Economy Revitalisation Strategy (2014) is being reinforced by Gauteng Township Economic Development Bill, due to have been passed in June 2021.</p>

Gauteng Innovation Ecosystem

- ✓ Highest level of all provinces of total R&D expenditure (R17.3 billion for 2017/2018)
- ✓ Attracts largest share of business, science council, government, and not-for-profit R&D expenditure
- ✓ 5 major higher education institutions and numerous public research institutions, serving both the province and country
- ✓ Between 2014 and 2016, almost 70% of South African businesses “innovation-active”
- ✓ Most of province’s tech start-ups funded through government programmes

Investments to date supporting innovation in the province come from across public, private, university and non-profit sectors and include:

- Innovation hubs and science parks
- Technology stations
- Accelerators, and incubators
- Fablabs and Maker Spaces
- Development of places, spaces, and neighbourhoods to be more innovative.

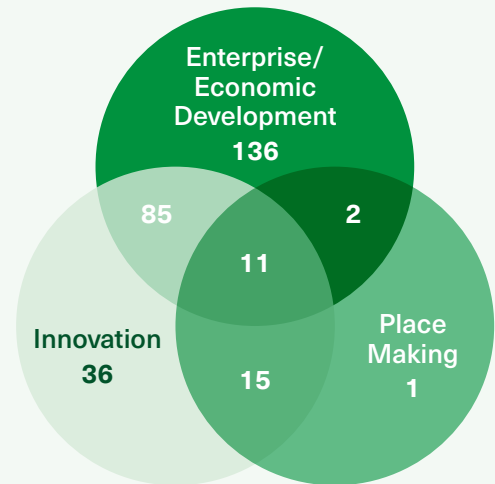
Ecosystem Innovation Stakeholders

The ecosystem contact list includes close to 300 entries (excluding hundreds of thousands of potential beneficiaries, micro-enterprise, individual innovators, etc.).

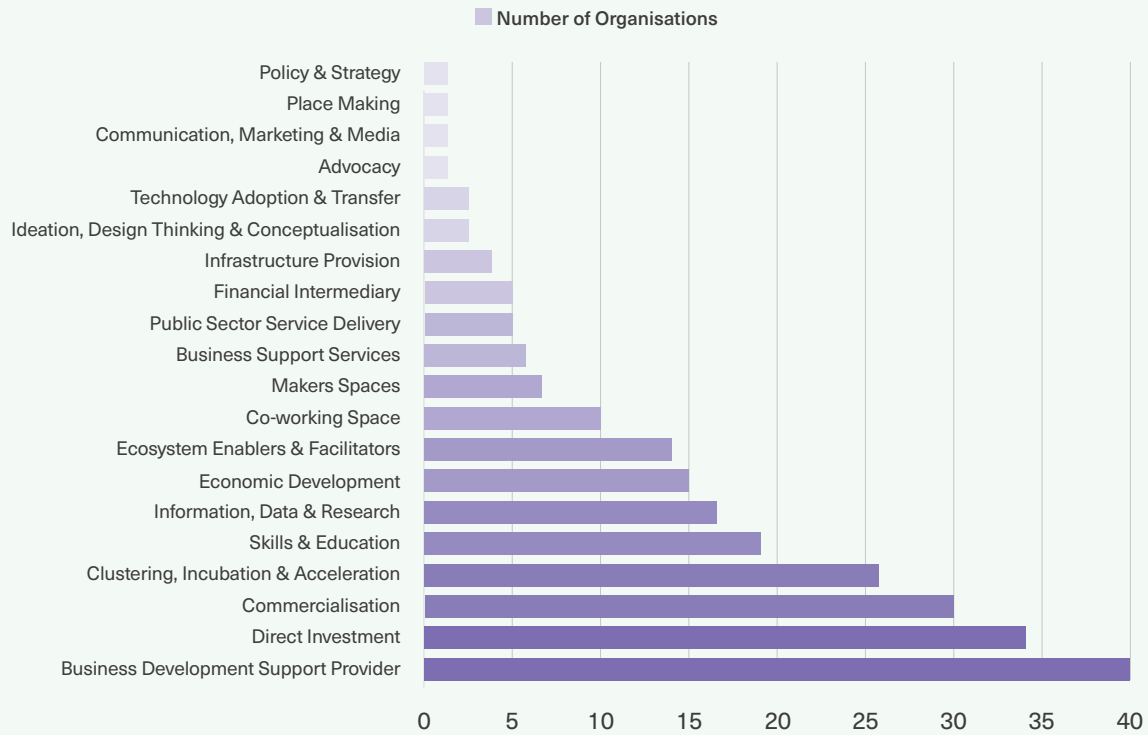
While many organisations provide widespread support or focus on more than one sector, dominant sector priorities include:

- Technology and ICT
- Green economy (waste, water, energy, climate)
- Bioeconomy, urban agriculture, and food systems

Categorisation of Organisation



Focus Areas of Organisations



Fragmentation, Gaps and Opportunities

Efforts are being made around a SMME district ecosystem facilitation model, and trying to increase coordination and referrals; however, fragmentation and capability and capacity gaps remain an issue. In terms of opportunities, numerous public, private, social enterprise and community market opportunities have been identified.

“The value of the ecosystem is knowing who to call but also that we have trust and rapport. We have the ingredients but how do we bring them together?”

Ecosystem group engagement



Areas of Fragmentation & Disconnects

- Information flow on innovation cycle and available support
- Support available within ecosystem (including funders)
- Expectations between innovators and funders
- Access to funding, eg where available; burdensome application process
- Networks (between place-making and innovation, and individuals with and without resources) and access to market/opportunities
- Spatial connections with 'fences', particularly in remote areas
- Resources - dispersed across numerous initiatives and heavily burdened
- Public-private support mechanisms with low trust levels
- Corporate and informal private innovators
- Capacity & Capability Gaps

Capacity & Capability Gaps

- Size of teams relative to need in terms of direct service delivery and stakeholder engagement
- Skills and experience of innovation support entity leadership and support provider teams
- Experienced, suitable and willing mentors with a shift to paid mentorship model by some service providers
- Sectors presenting Opportunities

Sectors presenting Opportunities

- Technology and ICT
- Food systems, urban agriculture and culinary
- Green economy and climate (including waste, water and energy)
- Bioeconomy
- Others include arts and culture; active citizenship; sports & recreation; health; education; textiles; youth; community building; automotive; furniture



Recommended Interventions by Local Technology, Science & Innovation Community

Translating the ecosystem support needs into potential initiatives to strengthen the ecosystem:

- ✓ Platforms (including database) to enable support bodies and beneficiaries to understand available support, and build more coherent pipelines of support, knowledge transfer and referral systems.
- ✓ Multi-pronged activation campaigns to raise awareness about various interventions in townships.
- ✓ Regular virtual networking events and informal networking - and joining up the various informal "network navigators".
- ✓ Better resourcing for organisations with on-the-ground access in townships, and to township innovators and young entrepreneurs.
- ✓ Development of robust, sustainable mentorship model.
- ✓ Strengthen market access by, for example, expanding pilot procurement pilots, corporate initiatives to drive more strategic supplier development and innovation linkages, etc.
- ✓ Open innovation challenge platforms.



Recommended Key Entry Points for KTN Place-Based Innovation

Numerous opportunities exist for KTN to add value to the Gauteng place-based innovation ecosystem, and there are individuals and organisations with an appetite to partner to improve the functioning of the ecosystem. The priorities can be fine-tuned and prototyped in collaboration with the proposed informal advisory group, initially through a series of smaller projects, which eventually grow into a more ambitious scale to build trust.

Pilot Activities

- Informal monthly networking with those who have opted in for KTN communication and working with existing networking forums and sessions. These networking sessions could be designed to help bridge gaps in understanding and expectation differences between funders and potential beneficiaries.
- Convening advisory groups at sector level.
- Using relevant events being convened by stakeholders in the system to serve as entry point for KTN in building relationships and deepening understanding of issues. Many of the interviewees also extended invitations for ad-hoc site visits to their various hub sites.

Pilot Sectors and Region(s)

Three areas for initial support are identified that could generate quick wins, using KTN's mapping capability and inviting contributions to populate existing activities and relevant organisations:

- Specialist township distribution and logistics business models, with innovation around geospatial address solutions in less formal areas without registered addresses.
- Sustainable models for infrastructure development and maintenance.
- Green economy – waste, water, energy, and climate.

Areas recommended for open innovation challenges (could be further tested with advisory group) include:

- Service delivery innovation and related green economy areas (waste, water, and energy).
- Food systems and urban farming.

Three spatial options are:

1. Retain just the sectoral focus with no spatial focus.
2. Support networking across selected townships around innovation, for example working with eKasi labs to facilitate sharing across locations where they are active.
3. Focusing on integrating less well-served districts/corridors into available support: Sedibeng and West Rand.

Options 1 and 2 are likely to be easier to achieve given the small size of the initial in-country team.

“A lot of the projects rely on private funding, no proper structures in place to ensure sustainability.”

Ecosystem group engagement

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