

Sub-regional workshop on integration of administrative data, big data and geospatial information for the compilation of SDG indicators and International Workshop on Global Fundamental Geospatial Data Themes for Africa

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Compiled by

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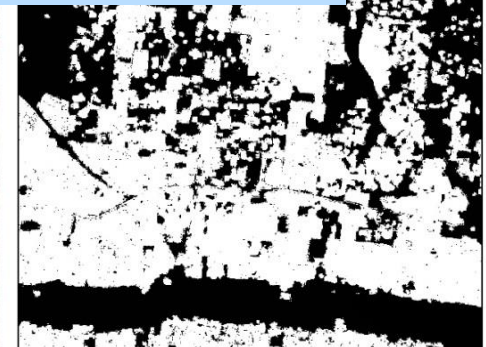
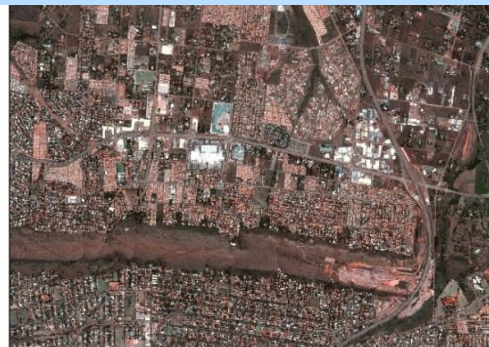


11.3.1 Ratio of land consumption rate to population growth rate

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- Indicator monitors the relationship between land consumption and population growth
- Some results: (limitations - too few data points – only over 2 censuses & too few sample areas used – only 5 municipalities)
- Large metropolitan cities have used land more conservatively (smaller changes in urban expansion). This can link back to their SDFs (Spatial Development Frameworks) with strategies of densification, urban edge, etc.
- The local municipalities tend to still be at the expansion phase.
- Imagery, especially time series proved to be very useful.
- Imagery, especially useful for updated disaggregated information BUT requires the corresponding updated statistics.
- Census data, outdated. Estimates will be useful.

Spot image over part of City of Tshwane (Black: non built-up areas; White: built-up areas)



Joint research by the European Union's Joint Research Centre) and Statistics South Africa (Stats SA)

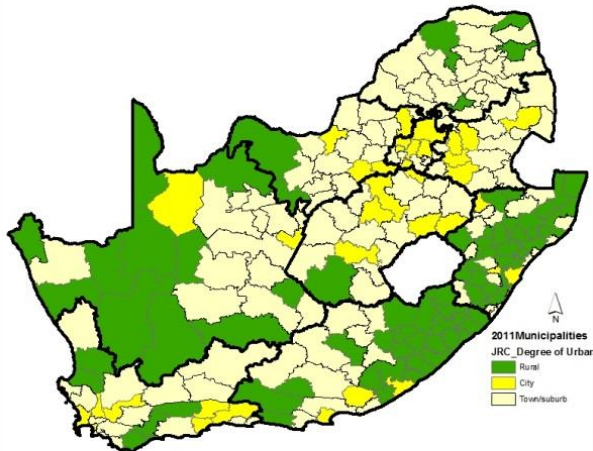
Towards a global, people-based definition of Cities and Settlements *The degree of urbanisation in South Africa*

- **Seeking a global definition to compare urbanisation for the different countries. Measure SDGs comparably across countries.**
- **South Africa a pilot country.**
- **JRC makes use of the Human Settlement Layer. Grid concept. Grid population using updated imagery and census data.**
- **GRID population for small areas (like places) derived from imagery useful, more frequent estimates possible, given aging census data.**
- **Local typology (CSIR Settlement typology) (also GRID data – put our census data in a GRID)**
- **Ability to role-up to various levels of geography.**
- **Compared / validated with local typology (CSIR Settlement typology).**
- **Study found similarities and differences in classification of places (proposed global vs local typology)**

Towards a global, people-based definition of Cities and Settlements

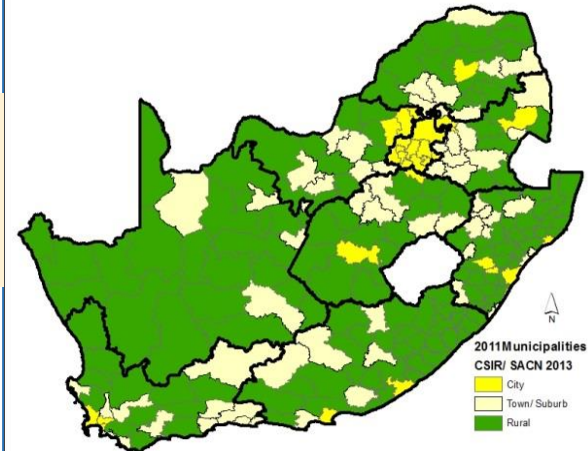
The degree of urbanisation in South Africa

**Draft global definition
(joint project)
(cities, towns, rural areas)**



comparing/
validating -
municipalities

**Local typology
(cities, towns, rural areas)**

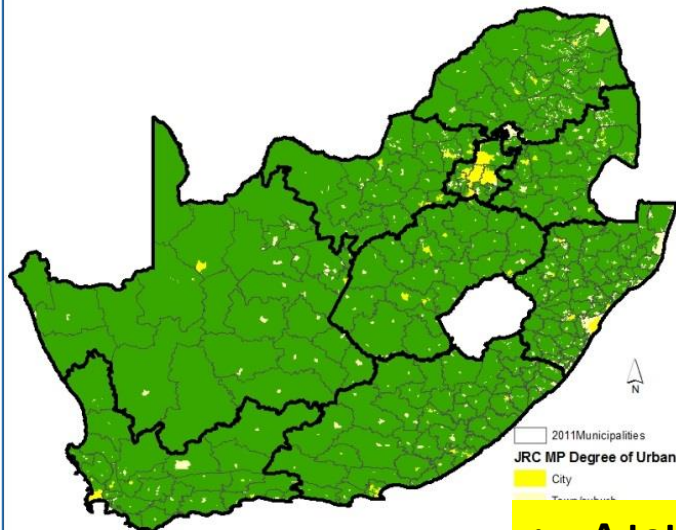


- There are similarities and differences in classification of municipalities.
- Must capture local context.

Towards a global, people-based definition of Cities and Settlements

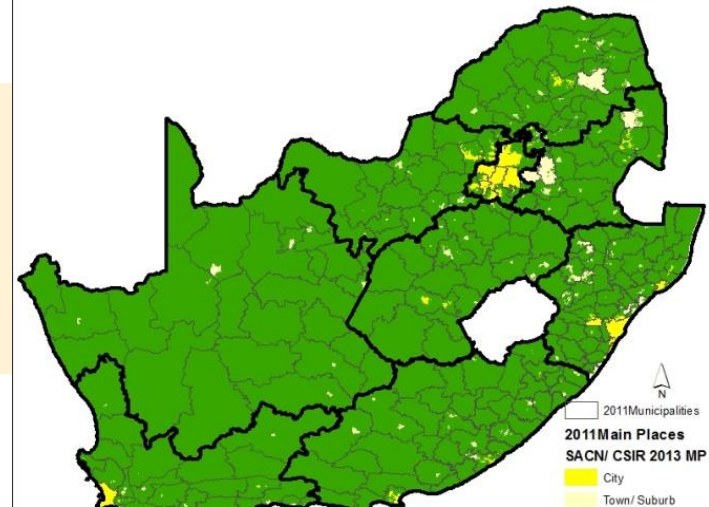
The degree of urbanisation in South Africa

Draft global definition
(joint project)
(cities, towns, rural areas)



comparing/
validating -
Places
(more
targeted)

Local typology
(cities, towns, rural areas)



- A total people-based definition might not capture all elements of the definition
- Other spatial data is useful, like measures of productive capacity.
- More data is required. Spatial modelling for small areas a possibility, but more data is required.



Work in progress ...

Integrated Indicator Framework (IIF) by Stats SA

- Integrates targets & indicators across local, regional and global policy frameworks;
- Opportunity to define the information gap for reporting;
- Opportunity to execute coordination programme for statistical production and development;
- The use of geospatial information will be in cooperated.

Work explored by others

- **SANSA:** study to identify how geospatial technologies can contribute to the SDGs (Earth Observation data).
- ???



SDG Indicator 11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing



References

- South African National Space Agency (SANSA) & Statistics South Africa (Stats SA) (version March 2018) Methodology to calculate ratio of rate of land consumption to rate of population growth using SANSA human settlement product.
- European Union (EU), Joint Research Centre (JRC) & Statistics South Africa (Stats SA) (version March 2018) Towards a global, people-based definition of cities and settlements: the degree of urbanisation in South Africa.
- Statistics South Africa (Stats SA): South African National Statistical System (SANSS). An Integrated Indicator Framework (IIF) for the National Statistics System (NSS) – Its role in determining and closing the NSS Information Gap.
- Draft document, South African National Space Agency (SANSA). SANSA and the UN SDGs.