Applying the Degree of Urbanisation
A METHODOLOGICAL MANUAL TO DEFINE CITIES, TOWNS AND RURAL AREAS FOR INTERNATIONAL COMPARISONS
2021 edition

MANUALS AND GUIDELINES
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Applying the degree of urbanisation

How to define cities, towns and rural areas for international comparison

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EUROSTAT

These SDG indicators are …

sensitive to the **rural** definition used

- 4.1.1 Children in school & proficiency

- 4.6.1   Adult literacy and numeracy

- 6.1.1   Access to safe drinking water

- 7.1.1   Access to electricity

- 8.10.1 Use of banking services

- 9.c.1   Coverage by mobile network

- 9.1.1 Rural population with access to an all weather road

sensitive to the **city** definition used

- 11.2.1 Population that has convenient access to public transport

- 11.3.1 Land consumption over population growth

- 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities

- 11.7.1 Open public space for public use for all

What is the solution?

- **Apply** the global, people-based definition of cities, urban and rural areas that could be generally used across the world for international statistical comparisons

- This method is the **Degree of Urbanisation** and its two extensions
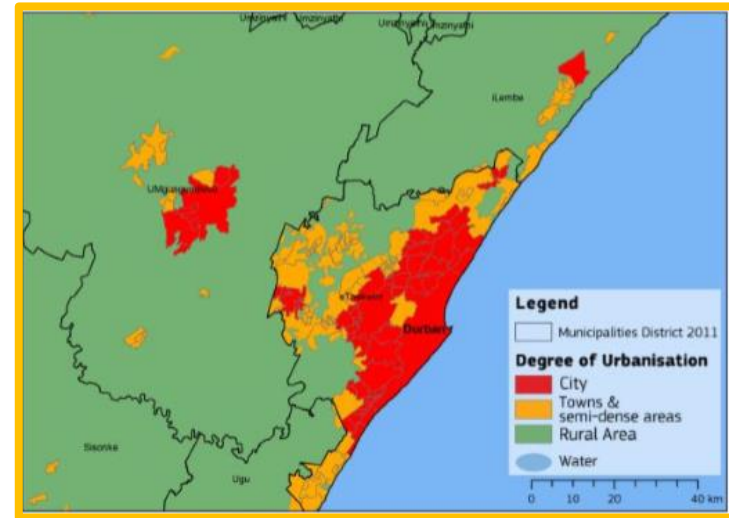
The Degree of Urbanisation level 1

Step 1 – Identify clusters based on population density, size and contiguity
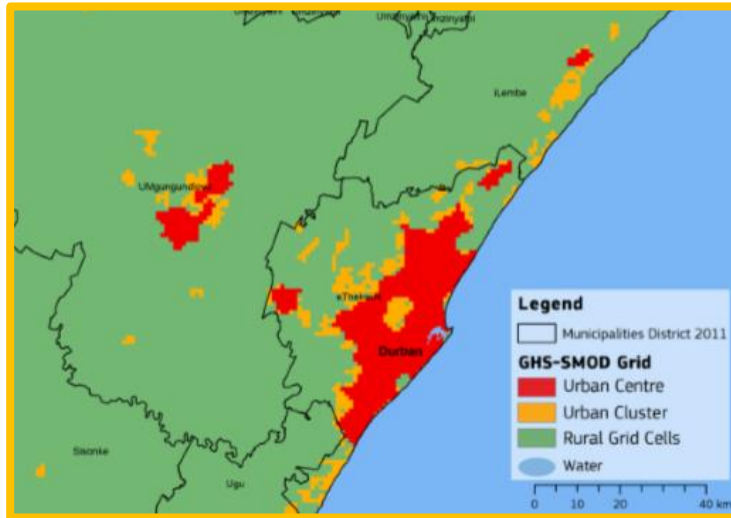
Urban centre, urban cluster and **rural grid cells** around Durban, South Africa

Source: (Florczyk et al 2019)
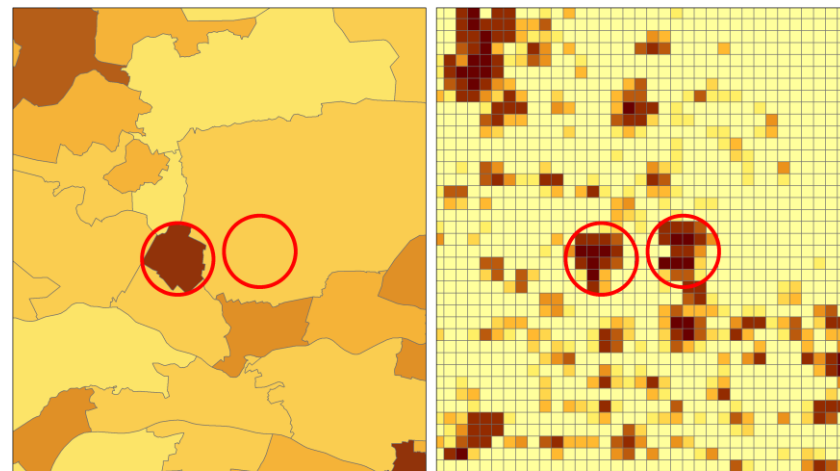
Step 2 – Overlay clusters with local units and classify them

City, towns & semi-dense areas, and **rural areas** around Durban, South Africa

Six advantages

1. Starts from a population grid to reduce the bias generated by the different shapes and sizes of spatial units

2. Measures population clusters directly, instead by proxy through building clusters

3. Uses the same population size and density thresholds across the globe
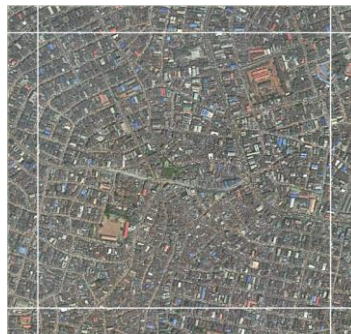

Veenendaal (NL) : population density
Inhabitants per km²

< 150	301 – 500	1,001 – 1,500	2,501 – 5,000
151 – 300	501 – 1,000	1,501 – 2,500	> 5,000

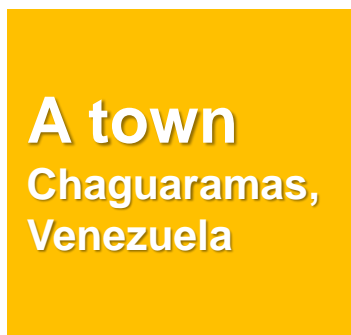Sources: Eurostat (GEOSTAT 2011)

0   5   10 km

Six advantages

4. Captures the urban-rural continuum in harmonised manner

5. Defines areas to monitor access to services, not areas defined by access to services

6. Proposes a cost-effective approach

A city
Lagos, Nigeria
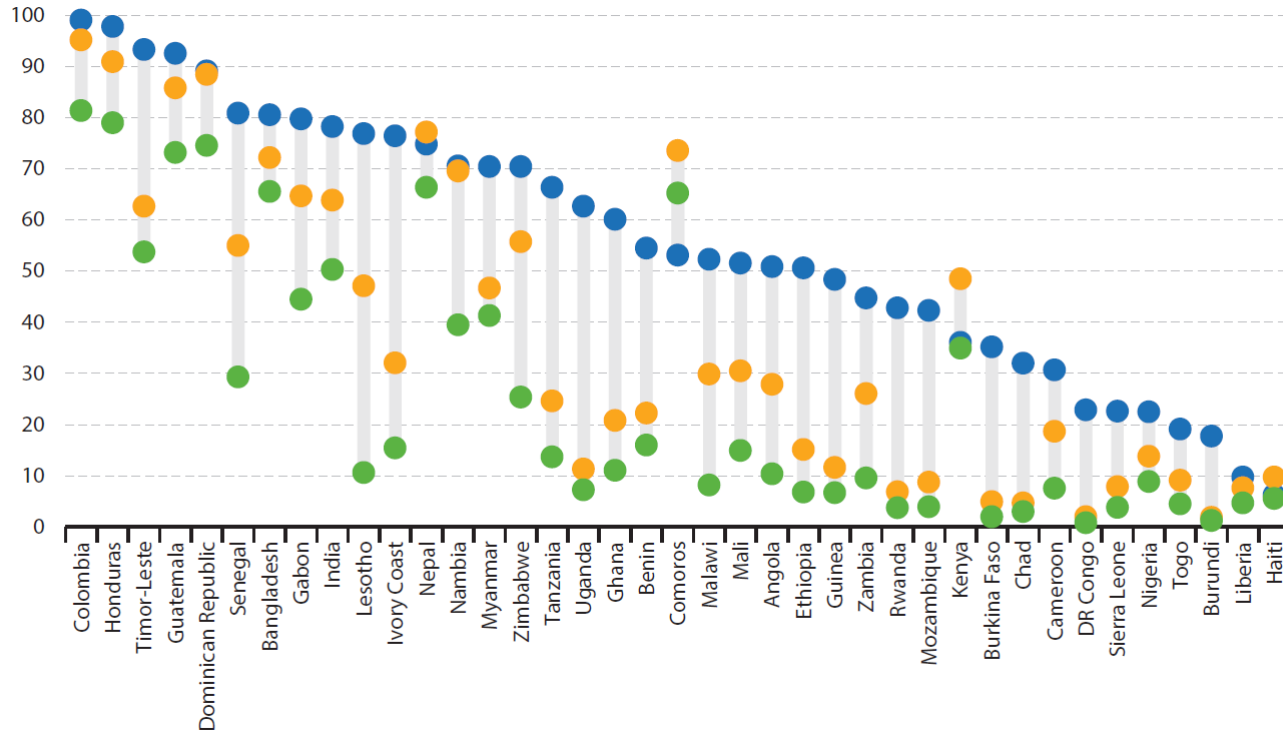
A town
Chaguaramas, Venezuela

Rural area
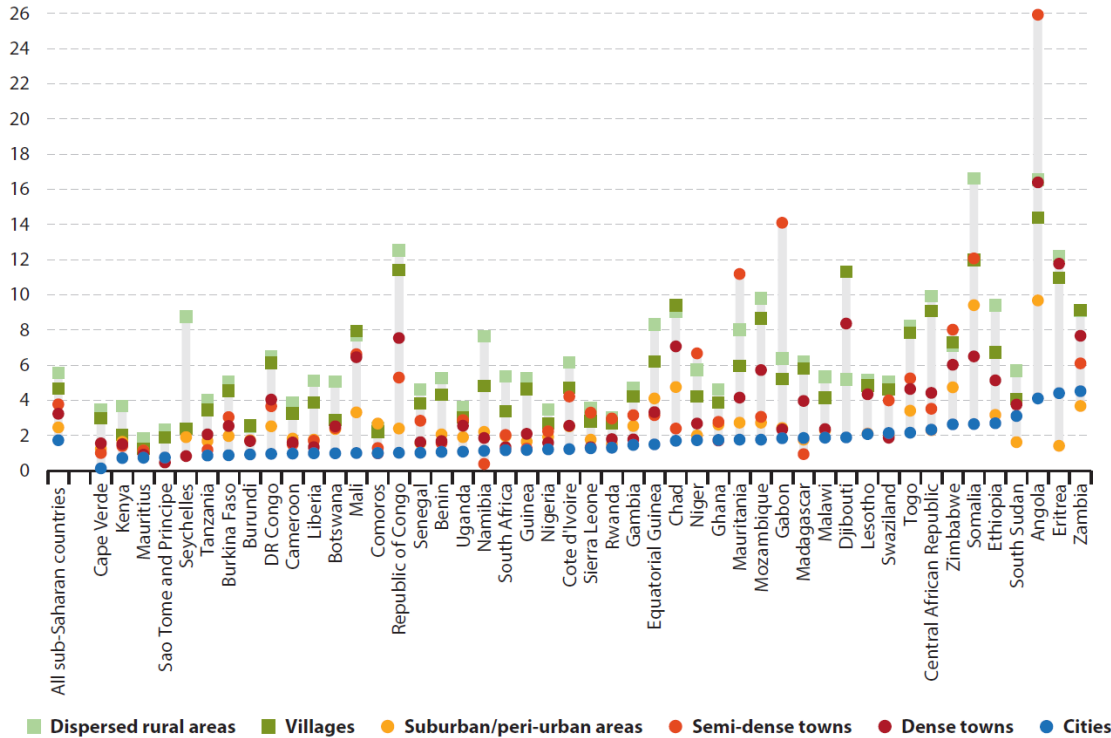**Ayeyarwady region Myanmar**

Example on using the Degree of Urbanisation level 1

Share of households having access to safely managed drinking water, by degree of urbanisation, selected countries, 2010-2016

Extension: Degree of Urbanisation level 2

Average distance (in km) to the nearest health care facility, by degree of urbanisation, sub-Saharan countries, 2012-2016

Legend: ■ Dispersed rural areas ■ Villages ● Suburban/peri-urban areas ● Semi-dense towns ● Dense towns ● Cities

Endorsed the methodology for delineation of cities and urban and rural areas for international and regional statistical comparison purposes, *as presented in the report, while emphasizing that the methodology is not intended to replace national definitions of urban and rural areas, but to complement them;*

More information

- Joint Manual on how to apply the Degree of Urbanisation: https://ec.europa.eu/eurostat/product?code=ks-02-20-499

- UN Recommendation: https://unstats.un.org/unsd/statcom/51st-session/documents/BG-Item3j-Recommendation-E.pdf

- UN Statistical Commission endorsement: https://unstats.un.org/unsd/statcom/51st-session/documents/2020-37-FinalReport-E.pdf

- Tools and data from the JRC: https://ghsl.jrc.ec.europa.eu/degurba.php

- OECD-EC Cities in the World Report: https://www.oecd.org/publications/cities-in-the-world-d0efcbda-en.htm

Thank you for your attention!