Developing a global definition of cities and rural areas?

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Introduction

- **2016** Work on global definition launched at Habitat III conference by European Union, OECD and World Bank
- **2017** Side-event at UN Statistical Commission as part of UNGGIM
- **2017** Expert workshop in Brussels organised by UN-Habitat
- **2017-18** FAO, ILO and UN-Habitat join the coalition
- **2018** Dedicated side-event at UN Statistical Commission
- **2019** UN Expert meeting and dedicated side event
- **2019** Presented for information at UN Statistical Commission
- **2020** UN Statistical Commission for discussion and approval?
- **2021** Implementation post census?
These Urban SDG indicators are very sensitive to the city boundaries

• 11.2.1  Proportion of population that has convenient access to public transport
• 11.3.1  Ratio of land consumption rate to population growth rate
• 11.6.2  Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities
• 11.7.1  Average share of the built-up area of cities that is open space for public use for all
Access to public transport by distance to centre

% of population

km from city centre

Praha
Berlin
London
Madrid
Paris
These SDG indicators are sensitive to what settlements are called rural

- 3.c.1 Health worker density and distribution
- 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 % of rural population with access to an all weather road
National definitions vary and are often not statistical

- 75 countries use population size or density, but thresholds and spatial units vary
- 47 use a combination of population and other indicators
- 10 use other indicators than population
- 100 countries use administrative designations, not a statistical definition that can be replicated in other countries
DEGREE OF URBANISATION
LEVEL 1
Two definitions with a common element: Cities

- Degree of urbanisation
  - Towns & suburbs
  - Rural areas

- Functional urban area
  - Commuting zones
  - Outside FUA
# Three types of grid cells

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urban centres</strong></td>
<td>Contiguous cells with density above 1,500 residents per km(^2) or at least 50% built-up and at least 50,000 people in the centre</td>
</tr>
<tr>
<td><strong>Urban Clusters</strong></td>
<td>Contiguous cells with a density above 300 residents per km(^2) and at least 5,000 people in the cluster</td>
</tr>
<tr>
<td><strong>Rural grid cells</strong></td>
<td>Cells with a density below 300 residents per km(^2) and other cells outside urban clusters and centres</td>
</tr>
</tbody>
</table>
Cork, Ireland: Urban centre, urban clusters and rural grid cells
# Three types of local units

<table>
<thead>
<tr>
<th>Urban area</th>
<th>Cities + towns and suburbs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cities</strong></td>
<td>&gt; 50% population in urban centres</td>
</tr>
<tr>
<td><strong>Towns and suburbs</strong></td>
<td>&gt; 50% population in urban clusters and not classified as city</td>
</tr>
<tr>
<td><strong>Rural area</strong></td>
<td>&gt; 50% population in rural grid cells</td>
</tr>
</tbody>
</table>
Cork, Ireland: City, towns & suburbs, and rural areas
DEGREE OF URBANISATION LEVEL 2: TOWNS AND VILLAGES
Degree of urbanisation: Level 1 & 2

- City
- Towns & suburbs
- Rural area

City

- Town
- Suburb
- Village
- Dispersed rural area
- Mostly uninhabited
The level 2 of degree of urbanisation ...

Suburbs are contiguous with or within 2km of a city and/or a dense town
... captures the full settlement hierarchy

Suburbs are contiguous with or within 2km of a city and/or a dense town
EU-OECD Functional Urban Area definition used three concepts

- **Urban centre**: Contiguous grid cells with at least 1,500 inhabitants per km$^2$ and at least 50,000 inhabitants in the centre
- **City**: one or more municipalities with at least 50% of their population in an urban centre
- **Commuting zone**: Contiguous municipalities with at least 15% of their employed population working in the city

- **Functional Urban Area** = City + Commuting zone
EU-OECD City definition: Graz, Austria
City + Commuting zone = Functional urban area
Conclusions

• A stronger policy demand: SDGs, AFINUA, GSARS...
• A new statistical instrument: The population grid
• New data sources: Remote sensing and geospatial data
• Two new definitions: Degree of urbanisation and FUA

• A unique coalition of six international organisations...
• ... that aims to create the first globally recommended definition of cities and rural areas to facilitate international comparisons (and not to replace national definitions!)
More information

- https://ec.europa.eu/eurostat/cros/content/global-city-and-settlement-definition_en
- Free global population grid 1975-2015
- Nice visualisation of global data: http://luminocity3d.org/WorldPopDen/
- Visualisation of the European data: http://ec.europa.eu/regional_policy/mapapps/urban/degurba.html