Applying the degree of urbanisation manual - How the principles of official statistics and classifications are fulfilled

Statistics Explained

4. How the principles of official statistics and classifications are fulfilled

This article forms part of an online methodological manual, *Applying the Degree of Urbanisation – A methodological manual to define cities, towns and rural areas for international comparisons: 2021 edition* .

This chapter reviews the methodology that is used to compile statistics by degree of urbanisation according to the 10 principles specified in *Best Practice Guidelines for Developing International Statistical Classifications* (UN (2013)).

- **Conceptual basis:** the degree of urbanisation classification relies on population density and size. Population size is also used in most national definitions of urban and rural areas. The functional urban area classification additionally uses commuting data, which is often used for national definitions of metropolitan areas. Each of these elements is clearly defined. Tests have shown that the methodology captures settlements of different sizes and economic relations between cities and their surrounding commuting zones.

- **Classification structures:** the degree of urbanisation classification is hierarchical with two levels, the functional urban area classification has a single level.

- **Classification types:** the methodology proposes two international reference classifications. As a result, the classifications may require some adaption to meet country specific conditions. There may be categories defined for international use which do not apply in country specific circumstances, or there may be country specific circumstances which are not catered for in the international reference classifications. In such cases, producers of statistics are advised to provide details of the correspondence linking country specific circumstances to the international classifications.

- **Mutual exclusivity:** the classes at each level (levels 1 and 2) of the degree of urbanisation classification for both the grid cell and the small spatial unit classification and the functional urban area classification are mutually exclusive.

- **Exhaustiveness:** levels 1 and 2 of the degree of urbanisation classification are exhaustive, in other words, they classify the entire territory of a country. The functional urban area classification is also exhaustive, insofar as it covers metropolitan and non-metropolitan areas that together make up the entire territory of a country.

- **Statistical balance:** estimates based on the *Global Human Settlement Layer (GHSL)* population grid show that the classifications produce classes where the populations are not too disparate in size. As a result, they will allow for effective cross-tabulation of data.

- **Statistical feasibility:** the classifications were kept simple so as to make them feasible to apply across all countries of the world. The degree of urbanisation classification requires a population grid, which has already been estimated globally. A growing number of countries have produced or are planning to produce such a grid. The functional urban area classification also requires commuting data, which are not widely available across countries. However, auxiliary data sources such as from mobile telephones or employment registers can help to fill this gap.

- **Classification units/statistical units:** the classifications propose simple classes (such as cities, towns and semi-dense area, rural areas or metropolitan areas) which can be used with a wide variety of statistical units such as people, jobs, enterprises, buildings, farms, land use, and so on.

- **Time-series comparability:** estimates based on the GHSL population grid show that data using the degree of urbanisation classification capture changes over time, but are not too volatile.

External links

- UN (2013), *Best Practice Guidelines for Developing International Statistical Classifications*, Expert Group on International Statistical Classifications, Department of Economic and Social Affairs, Statistics Division, United Nations, New York.

- UN (2014), *Fundamental Principles of Official Statistics*, United Nations, General Assembly, A/RES/68/261, New York.

- UNECE, ' Part B Metadata Concepts, Standards, Models and Registries ',*Common Metadata Framework* , online publication, United Nations, Geneva.