Regions, Cities, the Global Village

Contribution to an international framework for regional and urban statistics

Willem de Vries,
United Nations Statistics Division[1]

Introduction; why a framework is necessary

This paper is meant to stimulate the discussion about a *relatively simple* system of internationally comparable statistics about cities and regions.

At present, international comparisons of regional and urban statistics are very difficult. There are several reasons. First of all, there is no worldwide agreement on and application of basic definitions and nomenclatures of sub-national spatial units. Second, there is even less agreement on statistical variables. Third, there is no systematic, coordinated data collection about cities and regions. Fourth, there is no agreed international mechanism for discussions on regional and urban statistics[2]. Fifth, not only is there a lack of harmonization and coordination, there is also duplication of effort[3]. Sixth, the international standards that exist, are often not followed by countries.

I believe there are several reasons why the promotion of comparable statistics about cities and regions has become an international concern.

- First of all, due to globalization, regions and cities of the world are increasingly 'competing' with each other.
- Second, the promotion of economic and social development is not just a national matter; within countries, there are often big inequalities between regions.
- Third, the living conditions in (big) cities have increasingly become an issue of global concern. Of course, this also involves research on the interactions between cities and regions, and therefore statistical data on those interactions, such as migration flows.
- Fourth, some phenomena, e.g. some environmental problems, are regional or urban rather than national.

Sub-national level statistics, a gap in international coordination

With a few exceptions, *intern-governmental* international organizations so far have not done a great deal about harmonizing and coordinating of statistics about sub-national entities, such as regions and cities. By nature, they have been primarily concerned with coordination of statistics at the level of *countries*.

Some of the notable exceptions are:
- The European Union (Eurostat), having developed a comprehensive system of regional statistics, as well as a nomenclature of sub-national entities (NUTS – Nomenclature of Units of Territorial Statistics).
- Interestingly, the United Nations has shown an (albeit restricted) interest in spatial matters from the very start, in particular regarding geographical names and cartography (Regional

---

[1] This paper represents the personal views of the author and does not necessarily reflect UN views or policies.

[2] A non-governmental organization that does important work is SCORUS, the Standing Committee for Regional and Urban Statistics of the International Association for Official Statistics, one of the sections of the International Statistical Institute.

[3] For example, some of the data in NUREC's Large Cities publication and corresponding data in the UN Human Settlements publications and in fact the UN Demographic Yearbook are very similar, but –surprise!- not fully comparable and when they ought to be, theoretically, not identical.

Cartography Conferences and United Nations Group of Experts on Geographical Names (UNGEGN).
- Habitat (the UN organization for Human Settlements, also known as the Cities Agency) has done some work on concepts and methods, usually in cooperation with the United Nations Statistics Division.

Of the *non-governmental* organizations that have been somehow active in regional and urban statistics, the following ought to be mentioned in particular:
- ISO (International Standards Organization). ISO is a non-governmental organization established in 1947. In geography, their important product are the publications with *Codes for the representation of names of countries and their subdivisions* (ISO 3166).
- IULA (International Union of Local Authorities). IULA works to promote and unite democratic local government worldwide. It cooperates closely with
- ICLEI (International Council for Local Environment Initiatives) and also with
- NUREC (Network for Urban Research in the European Union). NUREC publishes several statistical products, including 1000 Cities - International Yearbook of Large Cities Statistics. Last but not least
- SCORUS must of course be mentioned as the platform where regional and urban statisticians meet at a regular basis.

Human settlements and the environment

Interestingly, one of the first attempts to create guidelines (or a framework) for international comparability of human settlements statistics came from the environment statisticians. In the UNSD program for the development of environmental statistics, human settlements were seen as part of the (man-made) environment. Environment statistics included ecological data, but also socio-demographic and economic statistics[4].

The format of the Framework for the Development of Environment Statistics was the following matrix [5]. The rows of the matrix distinguish 'components of the environment':
- Flora – Fauna- Atmosphere -Water - Land/soil - Human settlements

The columns of the matrix are 'information categories':
- Social and economic activities, natural events-Environmental impacts of activities/events-Responses to environmental impacts-Stocks, inventories and background conditions.

For each 'cell' of the matrix, an information system was worked out in some detail. And finally, variables per category were recommended. It was recognized that, in addition, for each variable a classification is needed, including accompanying definitions, e.g. in the case of 'residential and non-residential buildings' for types of buildings.

Recommendations for housing censuses

Apart from human settlements as part of the interaction between man and the environment, there is also 'simple' and straightforward counting of people and dwellings. In its most recent main methodological publications about Population and Housing Censuses[6], the UN recommends 'Topics to be investigated in housing censuses'.

---

[4] Concepts and methods of environment statistics; Human Settlement statistics- a technical report, United Nations Department of International Economic and Social Affairs, Statistical Office, UN, New York, 1988, Studies in Methods, series F 51.
[5] F 51 page 2.
[6] Principles and Recommendations for Population and Housing Censuses, Revision I, , Statistical Papers, Series M, No. 67/Rev. 1, UN Statistics Division, New York, 1998.

The following categories of living quarters are distinguished: 1.Housing units; 1.1 Conventional dwellings; 1.2 Basic dwellings; 1.3 Temporary housing units; 1.3 Mobile housing units; 1.4 Marginal housing units; 1.5 Collective living quarters.

It is interesting to have a look at how it has worked out in practice, e.g. in the UN publication Housing in the World[7]. Let us look at the variable 'type of housing units or living quarters (numbers)' and at four randomly selected countries from different continents:

- Algeria had these data about housing units by type: Flats, individual houses, traditional houses,, and marginal living quarters (shacks, barracks, cellars, barns etc.)
- Panama produced the following data: Permanent (detached) houses (made of durable material), Semi-permanent houses (made of sun-dried brick, straw, bamboo etc.), Improvised houses (made of waste and provisional materials), and Apartments.
- Pakistan gave data about housing units by type of construction of walls, and distinguished between Pakka (good, strong), Semi Pakka (undefined), Katcha (poor, unfinished) and Other (undefined).
- Norway distinguished no less than 7 types of housing units, none of them, however, directly corresponding to UN categories.

So far for comparability in practice. I believe that the case of comparability might be better served by systems that have two inter-connected layers. The first layer would have to be a basic structure that can be applied to all or most countries. A more detailed sub-structure might be used by some countries that wish to do so. In the case of 'housing units or living quarters', this basic structure might just have distinguished between: Flats/apartments, Houses, Other dwellings.

Data that are specific for cities and regions

Developing a framework for internationally comparable regional and urban statistics may seem a daunting task, but there are mitigating circumstances. One is that many of the data that one would need to compare *regions* are conceptually not different from data that are collected nationally. In other words, there is no need to re-invent the wheel. The only point is that data have to be regionalized.

The story is slightly different for cities and agglomerations. However, looking at the example of Habitat (Human Settlements Basic Statistics) it seems that much of the nature of the data collected is identical to what is collected by other agencies at the country level. Among these are: various demographic data, data about employment by broad sector, some data about households (numbers and size), some socio-economic data (housing expenditure, poverty), some data about health services, school enrolment and literacy. Some other data, however, are more specific to human settlement and indeed city issues: Number of dwellings by type, Persons per room, Rooms per housing unit, Owner occupied housing, Housing with access to piped water, access to safe water, Housing units with toilet, electrical lighting, kitchen, Road, rail and telephone density.

Some basic requirements for a framework and how to get there

I would suggest that the very first step to set up a framework for internationally comparable regional and urban statistics is agreement on which sub-national entities to use. I think that a three-tier classification will suffice: national, regional and sub-regional. The best thing to do, for pragmatic reasons (data availability), may be to use administrative units.

Second, agreement on variables has to be reached. It might be practical to stick to an internationally agreed system of indicators, e.g. the so-called CCA list. Some human settlement or city specific variables will have to be added to the list. I strongly recommend that no variables are introduced for

---

[7] Housing in the world, Graphical Presentation of Statistical Data, Studies in Methods, Series F No. 63, UN Statistical Division, New York, 1993.

which it is extremely difficult to compile statistics at the regional or indeed city level (e.g. 'city GDP').

Third, agreement on some definitions is needed: e.g. cities, urban areas, agglomerations and slums. About a fair number of variables that are relevant for both the national and the regional level, as mentioned above, there is already agreement on definitions.

Fourth, agreement on data collection, maintenance of a database and dissemination is required. Existing structures should be used as much as possible, for example a joint venture between Habitat, NUREC, Eurostat, IULA, UNSD and perhaps others.

SCORUS, being one of the most politically neutral players in the area of urban and regional statistics, might wish to take the lead in the exercise. To compensate for its lack of resources, however, co-sponsorship of one or more national statistical offices that are strong in regional and urban statistics and/or one or more international organizations will be necessary. To enhance international impact, the effort might be organized in the shape of a 'city group' (a group of 'volunteer' national statistical offices and international bodies that reports to the UN Statistical Commission). The basis for such a city group may be created at one of the forthcoming SCORUS conferences.