Introduction

The population census is one of the pillars of a national statistical system not only because it is the most complex and most expensive operation, but also because of its relevance. In many countries the census provides the only legal population counting, which is used for instance to allocate financial resources and parliamentary seats. The census population counting (and the inter-censual population estimates often based on the decennial counting) is also the basis to calculate many of the key national indicators such as GDP per capita, government expenditures per capita, or educational enrolment ratios. The quality of the data provided for these indicators depends not only on the numerator such as GDP, government expenditures, enrolment, but also on the denominator, total population. The census is also relevant because it is a major source of local area statistics, particularly in countries that do not heavily rely on administrative sources. Many programmes are implemented at local level and these data are essential for policy implementation and monitoring.

The ECE region has always seen the emerging of new methods to conduct censuses. A few decades ago some countries in the region moved away from the so-called "traditional census" towards a register-based approach. Also in preparation for the 2010 censuses, innovative approaches have been developed. Increasingly, countries are trying to use registers also in combination with other sources (such as surveys) to decrease costs and improve efficiency. For countries that cannot yet rely on administrative registers, other methodologies are emerging, with the objective to:

- provide data on a more continuous basis;
- improve the accuracy of the data;
- improve the timeliness in the releasing of the results; and
- reduce costs or have a more homogeneous disbursement of funds during the 10 year cycle.

The papers presented in this special issue of the Statistical Journal of the UNECE describe some of these new approaches, in order to share the lessons learned and the research already undertaken by pioneer countries with the whole region. These approaches are based on the combined use of different sources including registers and sample surveys, as a complement or even to replace traditional fieldwork operations. The use of sampling and other statistical methodologies are presented in various forms, and the French revolutionary approach of "rolling census" is also described. This issue of the Journal also presents the innovative adoption of emerging technologies for census data collection, like the pioneer use of handheld devices in the 2003 census of the Sultanate of Oman.

The papers were presented at the "Seminar on new methods for population censuses" organised by the UNECE Statistical Division in Geneva on 22 November 2004. The seminar provided an opportunity to discuss how the traditional idea of census taking is evolving in the region, and what are the implications on the four internationally recognized fundamental features of a census: individual enumeration, universality within a defined territory, simultaneity, and defined periodicity.

The seminar was organised as a side meeting of the two Joint UNECE-Eurostat Work Sessions on Population and Housing Censuses (Geneva, 23–26 November 2004²), which were dedicated to the revision of the recommendations for the 2010 round of censuses in the ECE region.

The website of the seminar can be accessed at: http://www.unece.org/stats/documents/2004.11.censussem.htm.

²The websites of the two work sessions can be accessed at: http://www.unece.org/stats/documents/2004.11.census1.htm http://www.unece.org/stats/documents/2004.11.census2.htm.

2 Introduction

Census recommendations are important to ensure the international comparability of census data. In the context of globalisation, international comparability of statistics is increasingly important, and the development of census recommendations becomes even more relevant than in the past. Countries need to compare their data with other countries in order to better understand their own statistics, but the comparisons are more meaningful if done in a similar context. Previous recommendations for the ECE region were prepared in the past census rounds (from the 1960 to the 2000 round) and were widely used by countries in the region. The recommendations for the ECE region – which are prepared jointly by UNECE and Eurostat – can bridge the work carried out at world level³ into the more specific needs of the region, where countries are less diverse than at global level.

In light of the innovative census approaches, the recommendations for the 2010 round of censuses in the ECE region (which are expected to be finalised in 2006) will reflect the evolution in the methodology. For the first time they will cover not only census information content, but also census methodology and technology, providing countries with information on the different approaches together with their advantages and disadvantages.

Angela Me and Paolo Valente UN Economic Commission for Europe Geneva Switzerland

³The "Principles and recommendations for population and housing censuses" are currently being revised within the framework of the 2010 World Programme on Population and Housing Censuses, under the coordination of the United Nations Statistics Division of the United Nations Department of Economic and Social Affairs (UN-DESA, New York). The revision of the "Principles and recommendations" benefits from the work being done for the revision of the census recommendations for the ECE region, in order to optimise the available resources and avoid duplication.