

C-6: Population connected to public water supply

General description

a) Brief definition: Share of population connected to public water supply.

b) Unit of measurement: Percentage of population, connected to public water supply

Context – Relation to other indicators from the Guidelines

This indicator relates to indicator “C-5: Public water supply”.

Relevance for environmental policy

a) **Purpose:** This indicator provides a measure of impact on human health and in a broader sense a measure of quality of life.

b) **Issue:** Rational quantities of water for meeting basic human needs are a prerequisite for life and health. The indicator is one of major ones defining the level of development of water economy services and the degree of water accessibility to cover all needs of population. This indicator helps to identify trends in rational water use in a particular country. Finally, this indicator differs from country to country depending not only on the size of population but also on the connection to public water supply. Appropriate quality of drinking water in water supply systems represents one of the basic preconditions for environmental health and prevention of water related diseases.

c) **International agreements and targets:**

Regional level: The Protocol on Water and Health to the UNECE Convention on the Protection and Use of Trans-boundary Watercourses and International Lakes requires that the Parties take all appropriate measures to ensure adequate supply of healthy drinking water.

Sub-regional level: The Environmental Strategy of countries of Eastern Europe, Caucasus and Central Asia, adopted by the 2003 Ministerial Conference “Environment for Europe”, requires the preparation and implementation of programmes for integrated water management.

In the European Union, the Water Framework Directive (Directive 2000/60/EC) obliges the Member States to promote sustainable use based on long-term protection of available water resources and to ensure a balance between abstraction and recharge of water with the aim of achieving “good water status” by 2015. Council Directive 98/83/EC on the quality of water intended for human consumption sets drinking water quality standards and obliges the Member States take the measures necessary to ensure that water intended for human consumption is healthy and clean.

Methodology and guidelines

a) **Data collection and calculations:** Data on percentage of population connected to public water supply can be obtained from subjects operating water supply facilities, and/or from census and other targeted surveys, e.g. households’ surveys. A simplified method of calculation of the population connected to public water supply (% CPPWS) can be described as follows:

$$(\text{CPPWS } \%) = (\text{number of CPPWS} : \text{total number of population}) \times 100$$

b) **Internationally agreed methodologies and standards:** The UNSD/UNEP Questionnaire on Environmental Statistics (Table W5). The UNCSD Methodology Sheets for Indicators of Sustainable Development (Proportion of population using improved water sources). The UNECE/WHO Guidelines on the Setting Targets, Evaluation of Progress and Reporting under the Protocol on Water and Health. International Recommendations for Water Statistics (IRWS), UNSD 2010.

Data sources and reporting

Data are collected based on statistical reporting by countries. In many countries databases and fairly comprehensive time series exist at the water cadastre level. Countries provide data to the UNSD Environment Statistics Database.

References at the international level

- The Protocol on Water and Health (1999):
<http://www.unece.org/fileadmin/DAM/env/documents/2000/wat/mp.wat.2000.1.e.pdf>;
- Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (Water Framework Directive): http://europa.eu.int/comm/environment/water/water-framework/index_en.html;
- Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption;
- The Protocol on Water and Health: Guidelines on the Setting Targets, Evaluation of Progress and Reporting, UNECE/WHO 2010:
http://www.unece.org/env/water/publications/documents/guidelines_target_setting.pdf;
- Indicators of Sustainable Development: Guidelines and Methodologies – Methodology Sheets, United Nations 2007:
http://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets.pdf;
- Europe's Environment, The 4th Assessment, EEA 2007;
- The European Environment-State and Outlook 2010: Synthesis, EEA 2010;
- Environmental Indicator Report 2012, EEA 2012;
- WMO: www.wmo.ch;
- WHO: <http://www.euro.who.int/ehindicators/>;
- NSD: <http://unstats.un.org/unsd/environment/>;
- IRWS: <http://unstats.un.org/unsd/envaccounting/irws/irwswebversion.pdf>;
- Aquastat: http://www.fao.org/ag/agl/aglw/aquastat/water_res/waterres_tab.htm;
- European Commission – Water policy: http://ec.europa.eu/environment/water/index_en.htm;
- Eurostat: <http://europa.eu.int/comm/eurostat>;
- EEA: <http://themes.eea.eu.int/IMS/CSI/>.