

PROPORTION OF POPULATION USING AN IMPROVED WATER SOURCE		
Poverty/Health	Drinking Water	Core indicator

### 1. INDICATOR

- (a) **Name:** Proportion of population using an improved water source, urban and rural.
- (b) **Brief Definition:** Proportion of population with access to an improved drinking water source in a dwelling or located within a convenient distance from the user's dwelling.
- (c) **Unit of Measurement:** %.
- (d) **Placement in the CSD Indicator Set:** Poverty/Drinking Water.

### 2. POLICY RELEVANCE

- (a) **Purpose:** To monitor progress in the accessibility of the population to improved water sources.
- (b) **Relevance to Sustainable/Unsustainable Development (theme/sub-theme):** Accessibility to improved water sources is of fundamental significance to lowering the faecal risk and frequency of associated diseases. Its association with other socioeconomic characteristics, including education and income, makes it a good universal indicator of human development. When broken down by geographic (such as rural/urban zones), or social or economic criteria, it provides useful information on equity issues.
- (c) **International Conventions and Agreements:** Agenda 21 of UNCED (1992) indicates the need for universal coverage and the Second World Water Forum and Ministerial Conference, The Hague, March 2000 established the target of universal coverage by the year 2025, the Millennium Summit, 2000, established the target of halving the proportion of unserved by 2015.
- (d) **International Targets/Recommended Standards:** International targets for this indicator have been established according to different international events (see above).
- (e) **Linkages to Other Indicators:** This indicator is closely associated with other socioeconomic indicators on the proportion of people covered by adequate sanitation. These indicators are among the eight elements of primary health care and are one of the targets of the Millennium Development Goals. It also has close links to other water indicators such as withdrawals, reserves, consumption, or quality. (See section 2(b) above.)

### 3. METHODOLOGICAL DESCRIPTION

- (a) **Underlying Definitions and Concepts:** This indicator requires definitions for several elements.

- i) Population covered: This includes urban and rural population served by house connections, or without house connections but with reasonable access to other sources.
- ii) Reasonable access to water: not more than 1000 metres from a house to a public stand post or any other improved drinking water source providing at least 20 litres per capita per day may be considered reasonable access.
- iii) Minimum amount of water: The amount of water needed to satisfy metabolic, hygienic, and domestic requirements. This is usually defined as twenty litres of safe water per person per day.
- iv) Safe water: The water does not contain biological or chemical agents at concentration levels directly detrimental to health according to WHO's guidelines for drinking water quality or national standards of water quality. It is likely that treated surface waters, and water such as that from protected boreholes, springs, and sanitary wells are safe. Untreated surface waters, such as streams and lakes, should be considered safe only if the water quality is regularly monitored and considered acceptable by public health officials. Water from unimproved sources is likely to be unsafe.

**(b) Measurement Methods:** This indicator may be calculated as follows: The numerator is the number of persons with sustainable access to an improved drinking water source located within a convenient distance from the user's dwelling multiplied by 100. The denominator is the total population.

**(c) Limitations of the Indicator:** The existence of a water outlet within reasonable distance is often used as a proxy for availability of safe water. The existence of a water outlet, however, is no guarantee in itself that water will always be available or safe, or that people always use such sources.

**(d) Status of the Methodology:** The estimates of access to improved drinking water facilities are obtained from the use of existing sample household surveys such as DHS, MICS and national censuses. Trend lines of urban and rural coverage are build up, which provide estimates for relevant years as required (the last estimates were carried out in 2004 referring to coverage figures for 1990 and 2002).

**(e) Alternative Definitions/Indicators:** An additional indicator expressed as the percent of population with access to household connections from a public piped distribution system would be very relevant.

#### 4. ASSESSMENT OF DATA

**(a) Data Needed to Compile the Indicator:** The number of people with access to improved water sources, and the total population. Data on the source of water, for example, house tap or yard pipe, would provide additional meaning to this indicator.

**(b) National and International Data Availability and Sources:** Routinely collected at the national and sub-national levels in most countries using censuses and surveys. Household surveys used by the JMP include: USAID supported Demographic and Health Surveys (DHS); UNICEF supported Multiple Indicator Cluster Surveys (MICS); national

census reports; WHO supported World Health Surveys; and other reliable country surveys that allow data to be compared.

(c) **Data References:** International data is included in the MDG database maintained by the United Nations Statistics Division as well as in the World Health Statistics published by WHO.

## 5. AGENCIES INVOLVED IN THE DEVELOPMENT OF THE INDICATOR

(a) **Lead Agency:** The lead agencies are the World Health Organization (WHO) and UNICEF through the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP). The contact point is the Coordinator, Water, Sanitation and Health, WHO or the Unit Chief WES at UNICEF

(b) **Other Contributing Organizations:** Members of the JMP Technical Advisory Group including individual experts from academic institutions and civil society, plus representatives of organizations involved in both water and sanitation and data collection, including UN-Habitat, ORC Macro International, United Nations Environment Programme, the Environmental Health Project of the United States Agency for International Development, the World Bank, the Water Supply and Sanitation Collaborative Council and the Millennium Project.

## 6. REFERENCES

### (a) **Readings:**

World Health Organization, *Global Strategy for Health for All by the Year 2000*. Geneva, WHO, 1981.

World Health Organization, *Development of Indicators for Monitoring Progress Towards Health for All by the Year 2000*. Geneva, WHO, 1981, p. 40.

World Health Organization. *National and Global Monitoring of Water Supply and Sanitation*. CWS Series of Cooperative Action for the Decade, No. 2, 1982.

World Health Organization. *Water Supply and Sanitation Sector Monitoring Report (WSSMR)*, 1990.

World Health Organization, *Ninth General Programme of Work Covering the Period 1996-2001*. Geneva, WHO, 1994.

World Health Organization, *Guidelines for Drinking-Water Quality*, third edition. Geneva, WHO, 2004

World Health Organization and UNICEF, *Meeting the MDG drinking water and sanitation target: the urban and rural challenge of the decade*. Geneva, WHO, 2006

### (b) **Internet site:**

World Health Statistics: <http://www.who.int/whosis/en/index.html>

Water, Sanitation and Health: [http://www.who.int/water\\_sanitation\\_health/en/](http://www.who.int/water_sanitation_health/en/)

MDG Indicators: <http://mdgs.un.org/unsd/mdg/Default.aspx>