0.a. Goal

6. Ensure availability and sustainable management of water and sanitation for all

0.b. Target

6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all

0.c. Indicator

6.1.1 Proportion of population using safely managed drinking water services

0.e. Metadata update

November 2020

1.a. Organisation

National Institute of Statistics (NIS), Ministry of Planning

1.b. Contact person(s)

Po Mao (Mr.) / Som Bony (Mr)

1.c. Contact organisation unit

Social Statistics Department and/or Statistical Standard and Statistical Analysis Department

1.d. Contact person function

Deputy Director

1.e. Contact phone

+855 12 894 934 / 12 724 222

1.f. Contact mail

No. 386 Street 360, Sangkat Boeung Kengkang I, Khan Chamkarmon, Phnom Penh, Cambodia

1.g. Contact email

pomao.nis@gmail.com; bony_som@yahoo.com

2.a. Definition and concepts

Proportion of population using safely managed drinking water services is measured by the proportion of households using an improved basic drinking water source which is located on premises (within the dwelling, yard, or plot), or available when needed. ‘Improved’ drinking water sources include: piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tube wells; protected dug wells; protected springs; packaged water; delivered water; rainwater and bottled water/bought water.

Drinking water is defined as water used for ingestion, food preparation, and basic hygiene purposes.

2.b. Unit of measure

Percent

3.a. Data sources

Cambodia Socio-Economic Survey (CSES)

3.b. Data collection method

CSES is conducted by NIS since 1993. The survey provides a comprehensive set of indicators on living conditions in Cambodia, covering main socio-economic areas such as housing conditions, health, education, labor force, economic activities, victimization, vulnerability and others. The survey questionnaire was asked for the household and for the household members. The CSES is conducted annually from 2007 to 2017. The sample size was determined for annual CSES is about 3,600 households. Every 5 years it is conducted with a big sample size is about 12,000 households. The last four big sample surveys were conducted in 2004, 2009, 2014 and 2019.

Since the CSES 2004, the diary method for collecting data on household expenditure/consumption and household income was introduced. As the recall method has been used in the previous rounds it was also decided to include in the recall modules. Thus, both methods are retained. The data collection was carried out throughout the whole calendar year, started from January to December. Face-to-face interview using the questionnaire was done and about 15 households per village were selected.

The detailed documentations of the survey, such as questionnaire, filed operation annual and technical report on survey design and implementation are stored in NADA (National Data Archive), NIS website: http://nada.nis.gov.kh/index.php/home

3.c. Data collection calendar

The next round survey: Qrt1, 2021

3.d. Data release calendar

One year after the reference period of the survey

3.e. Data providers

National Institute of Statistics

3.f. Data compilers

National Institute of Statistics

3.g. Institutional mandate

By virtue of the article 12 of Statistics Law, NIS in is responsible for:

- Collecting, processing, compiling, analyzing, publishing and disseminating basic data by conducting censuses and surveys, and utilizing administrative data sources;
- Compiling national accounts and price indexes, as well as economic, environment and socio-demographic indicators;
- Coordination with line ministries as data producers as mandated by the Statistics Law; and
- Functioning as the central repository of SDG indicators.

4.a. Rationale

MDG target 7C called for ‘sustainable access’ to ‘safe drinking water’. At the start of the MDG period, there was a complete lack of nationally representative data about drinking water safety in developing countries, and such data were not collected through household surveys or censuses. The JMP developed the concept of ‘improved’ water sources, which was used as a proxy for ‘safe water’, as such sources are likely to be protected against faecal contamination, and this metric has been used since 2000 to track progress towards the MDG target. International consultations since 2011 have established consensus on the need to build on and address the shortcomings of this indicator; specifically, to address normative criteria of the human right to water including accessibility, availability and quality.

The above consultation concluded that JMP should go beyond the basic level of access and address safe management of drinking water services, including dimensions of accessibility, availability and quality. The proposed indicator of ‘safely managed drinking water services’ is designed to address this.

4.b. Comment and limitations

Comparisons of the results from the 2007 CSES with previous surveys in 1993/94, 1996, 1997 and 1999, are not recommended due to differences in the survey design. Fieldwork from the last five surveys (2004, 2007, 2008, 2009 and 2010) covered 15 months, and results can be reported for both 12 month (calendar year) and 15 month periods.

The weights used in the reports from CSES 2004, are adjusted by using the preliminary population projections which give over estimated population counts. The weights in CSES 2007 are adjusted by using the preliminary result from 2008 Population Census. Some provinces were excluded, due to cost and other reasons, in the sample for 2007. The estimates are however, adjusted for the under coverage error caused by excluding those provinces. A recalculation of the weights in CSES 2004 has been made for the coming analyses to obtain higher comparability between CSES 2004, and the surveys conducted from 2007 and onwards.

Due to lack of resource and technical limited, data on water quality treatment for faecal and chemical contamination through this survey are not collected.

4.c. Method of computation

The indictor is computed by dividing the number of households who used an improved water source to the total number of households and multiply by 100.

4.d. Validation

To align the global concept and definition, the applied average household size and the total of population has been used and the results in general are the same of household-based approach.

4.i. Quality management

The NIS decided to use statistical methods (calibration) to achieve better comparability between the different rounds of the CSES surveys by adjusting the samples to the population size and structure that was established by the national population census carried out in 2008. To mirror the rapid changes in the population, it proved necessary to project the population forwards to 2017 and backwards to 1993, taking into account fertility, mortality and internal migration rates.

5. Data availability and disaggregation

Data availability by geographic location: urban/rural and by ecological zones: Tonle Sap lake, plain, coastal, and plateau and mountain.

6. Comparability/deviation from international standards

The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) estimates access to basic services for Cambodia by fitting a regression line to a series of data points from household surveys and censuses, for example CSES, CDHS, CIPS and GPCC. This approach the WHO/UNICEF JMP was used to report on use of ‘improved water’ sources for SDG monitoring, whereas Cambodia used only data from CSES.

7. References and Documentation

Cambodia Socio-Economic Survey Reports: https://www.nis.gov.kh/index.php/km/14-cses/12-cambodia-socio-economic-survey-reports