

# Metadata on SDGs Indicator 1.4.1

## Indicator category: Tier III

**Goal 1:** End poverty in all its forms everywhere

**Target 1.4:** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

**Indicator 1.4.1:** Proportion of population living in households with access to basic services



LAST REVIEWED: MARCH 2018

## 1. Institutional information

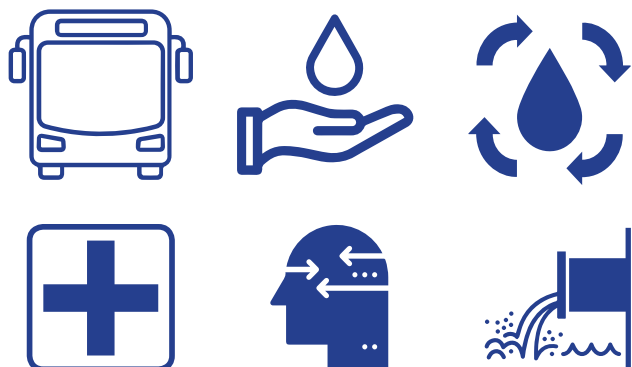
Organization(s): United Nations Human Settlements Programme (UN-Habitat)

## 2. Concepts and definitions

### 2.1 Rationale:

Poverty has many dimensions. It is not only a lack of material well-being but also a lack of opportunities to live a tolerable life. The international extreme poverty line was updated in 2015 to 1.90 USD per day using 2011 purchasing power parity (WB 2015). Living under the extreme poverty line means still to be deprived of safe drinking water, proper sanitation, access to modern energy, sustainable mobility to economic resources, information technology, healthcare, education, etc. Poverty is a manifestation of hunger and malnutrition, limited access to education and other basic services, social discrimination and exclusion as well as the lack of participation in decision-making. In this way, poverty is multidimensional.

Among the different aspects of poverty, this indicator focuses on 'access to basic services'. Providing access to basic services such as safe drinking water, sanitation facilities, sustainable energy and mobility, housing, education, healthcare etc. helps to improve the quality of life of the poor. The lack of basic service provision and the lack of empowerment and involvement of local governments in basic service delivery undermine the economic growth and quality of life in any community. Adequate basic service delivery systems promote socio-economic improvements and help to achieve economic growth, social inclusion, poverty reduction and equality. More specifically, improved basic services can help to raise human well-being and productivity, create jobs, save time and human effort in transporting water, crops, wood, and other commodities, improve health (by making medical care, clean water or solid waste collection available) or enhance the level of education.



In the Quito implementation plan for the New Urban Agenda adopted in Habitat III conference, member states commit to "promoting equitable and affordable access to sustainable basic physical and social infrastructure for all, without discrimination, including affordable serviced land, housing, modern and renewable energy, safe drinking water and sanitation, safe, nutritious and adequate food,

waste disposal, sustainable mobility, health care and family planning, education, culture, and information and communications technologies".

They further commit to "ensuring that these services are responsive to the rights and needs of women, children and youth, older persons and persons with disabilities, migrants, indigenous peoples and local communities, as appropriate, and to those of others in vulnerable situations".

Basic service delivery has to move towards a demand-driven approach, which is appropriate for the local needs – and hence able to respond to the concept of "Access for all" – as stated in the NUA. Basic services are fundamental to improving living standards. Governments have the responsibility for their provision. This indicator will measure levels of accessibility to basic services and guide the efforts of governments for provision of equitable basic services for all to eradicate poverty.



Schools sanitation project launch in Bondo, Kenya. 2010 © UN-Habitat.

## 2.2 Concepts:

The following key concepts should be defined to curtail the indicator in the context of poverty eradication.

**Basic Services** refer to public service provision systems that meet human basic needs including drinking water, sanitation and hygiene, energy, mobility, waste collection, health care, education and information technologies.

**Access to basic services** implies that sufficient and affordable service is reliably available with adequate quality.

**Access to Basic Drinking Water Services** refers to drinking water from an improved source is available with collection time not more than 30 minutes for a round trip, including queuing. Improved sources include; piped water, boreholes or tubewells, protected dug wells, protected springs, and packaged or delivered water. This definition is based on SDG indicator 6.1.

**Access to Basic Sanitation Services** refers to the use of improved facilities that are not shared with other households. Improved facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs. This definition is based on SDG 6.2.

**Access to Basic Hygiene Facilities** refers to availability of a handwashing facility on premises with soap and water. Handwashing facilities may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other handwashing agents. This definition is based on SDG 6.2.

**Access to Basic Mobility** refers to having access to all-weather-roads in a rural context (SDG 9.1.1) or having access to public transport in an urban context (SDG 11.2.1). The computation of "Access to Basic Mobility" shall therefore be a combination of the above.



Clean water, a challenge for women in Harar town, Ethiopia. © UN-Habitat.

## Rural context:

In order to synergize with SDG indicator 9.1.1 "Proportion of the rural population who live within 2 km of an all-season road", and it is suggested to use the Rural Access Index (RAI) that measures the percentage of the population <2km from an all-season road (equivalent to a walk of 20-25 mins).

To eradicate poverty, communities need to be connected to socio-economic opportunities by roads that are passable all season and attract reliable and affordable public transport services. In many areas, safe footpaths, footbridges and waterways may be required in conjunction with, or as an alternative, to roads. For reasons of simplification, specific emphasis shall be given to roads in this definition (based on the Rural

Access Index - RAI) since road transport reflects accessibility for the great majority of people in rural contexts. In those situations where another mode, such as water transport is dominant the definition can be modified to reflect that.

Access to mobility has shown some of the largest impacts on poverty reduction and has a strong correlation to educational, economic and health outcomes ("transport as an enabler").

The existing RAI methodology relies on household level survey data - however, is currently being revised into a GIS-based index that exploits advances in digital technology with the aim to create a more accurate and cost effective tool.

As a basic underlying assumption, it is understood that women and men equally benefit from access to all-weather roads.



A family makes its way down a mud-filled road in Vila Da Canpas in the Amazon region of Brazil © selvidasinfroterras.com.

## Urban Context:

The urban access of transport will be measured utilizing the metadata methodology of SDG 11.2.1 - measuring the proportion of the population that has convenient access to public transport by sex, age and persons with disabilities”.

The metadata methodology is currently being revised (UN-Habitat being the custodian agency) but will be a combination of spatial and qualitative analysis. A 500 m buffer around each public transport stop shall be overlaid with socio-demographic data - in order to identify the population served. It is understood that measuring spatial access is not sufficient and does not address the temporal dimension associated with the availability of public transport. Complementary to the above, other parameters of tracking the transport target can be related to street density/ no. of intersections, affordability, or quality in terms of safety, travel time, universal access.



Lack of public transport could stunt growth of Nairobi, Kenya © urbanafrika.net.

**Access to Basic Waste Collection Services** refers to the access that the population have to a reliable waste collection service, including both formal municipal and informal sector services. A ‘collection service’ may be ‘door to door’ or by deposit into a community container. ‘Collection’ includes collection for recycling as well as for treatment and disposal (so includes e.g. collection of recyclables by itinerant waste buyers). ‘Reliable’ means regular - frequency will depend on local conditions and on any pre-separation of the waste. For example, both mixed waste and organic waste are often collected daily in tropical climates for public health reasons, and generally at least weekly; source-separated dry recyclables may be collected less frequently.



India Urban waste © urbanizehub.

**Access to Basic Information Services** refers to having a broadband internet access. Broadband is defined as technologies that deliver advertised download speeds of at least 256 kbit/s. The main types of broadband services are:

- Fixed (wired) broadband network, such as DSL, cable modem, high speed leased lines, fibre-to-the-home/building, powerline and other fixed (wired) broadband;
- Terrestrial fixed (wireless) broadband network, such as WiMAX, fixed CDMA;
- Satellite broadband network (via a satellite connection);
- Mobile broadband network (at least 3G, e.g. UMTS) via a handset and 5) Mobile broadband network (at least 3G, e.g. UMTS) via a card (e.g. integrated SIM card in a computer) or USB modem.



Digital initiation session in Ivory Coast. © Issouf Sanogo AFP.

## 3. Methodology

### 3.1 Proposed Computation Method 1:

Proposed computation method 1 is getting proportion of population that have access to ALL the basic services mentioned above.

Proportion of Population with access to basic services

$$= 100 \left[ \frac{\text{No. of people with access to ALL the basic services}}{\text{Population}} \right]$$

Proportion of population with access to (all) basic services.

$$= \frac{5}{(4+7+5+6+3)} \times 100 = 20\%$$

Example:

	HH 1	HH 2	HH 3	HH 4	HH 5
<b>HH size</b>	4	7	5	6	3
<b>Drinking water service</b>	Yes	Yes	Yes	Yes	Yes
<b>Sanitation service</b>	Yes	No	Yes	Yes	Yes
<b>Hygiene facilities</b>	Yes	No	Yes	Yes	Yes
<b>Electricity</b>	Yes	No	Yes	No	Yes
<b>Clean fuels</b>	Yes	No	Yes	No	Yes
<b>Mobility</b>	Yes	No	Yes	Yes	Yes
<b>Waste collection</b>	No	No	Yes	No	Yes
<b>Health care</b>	No	No	Yes	No	No
<b>Education</b>	2	3	2	3	3
<b>Broadband internet</b>	Yes	No	Yes	Yes	No
<b>Total population with access to ALL BS</b>	0	0	5	0	0

However, this computation methodology has many drawbacks. This requires household survey for all the types of basic services although access to mobility, education, health care might not use household survey as a data source. For example, access to mobility is measured through GIS data rather than household survey. In this context, adding new questions for the sake of aggregation of this indicator could be an unnecessary duplication of work costing for a very small return. Also having an aggregated value showing access to ALL the basic services cannot inform policy makers of what areas most needs the intervention or investment for improvement.

### 3.2 Proposed Computation Method 2:

The proposed computation method 2 is to have spider web of the achievement of access to different basic services in a country by utilizing other SDG indicators or adding new questionnaire to household survey rather than obtaining aggregated data on proportion of population with access to ALL the basic services. In this way policy makers can be informed of most needed intervention areas. This methodology does not necessarily have a single aggregated value against 'proportion of population with access to basic services'. Figure 1 is an example of the outcomes.

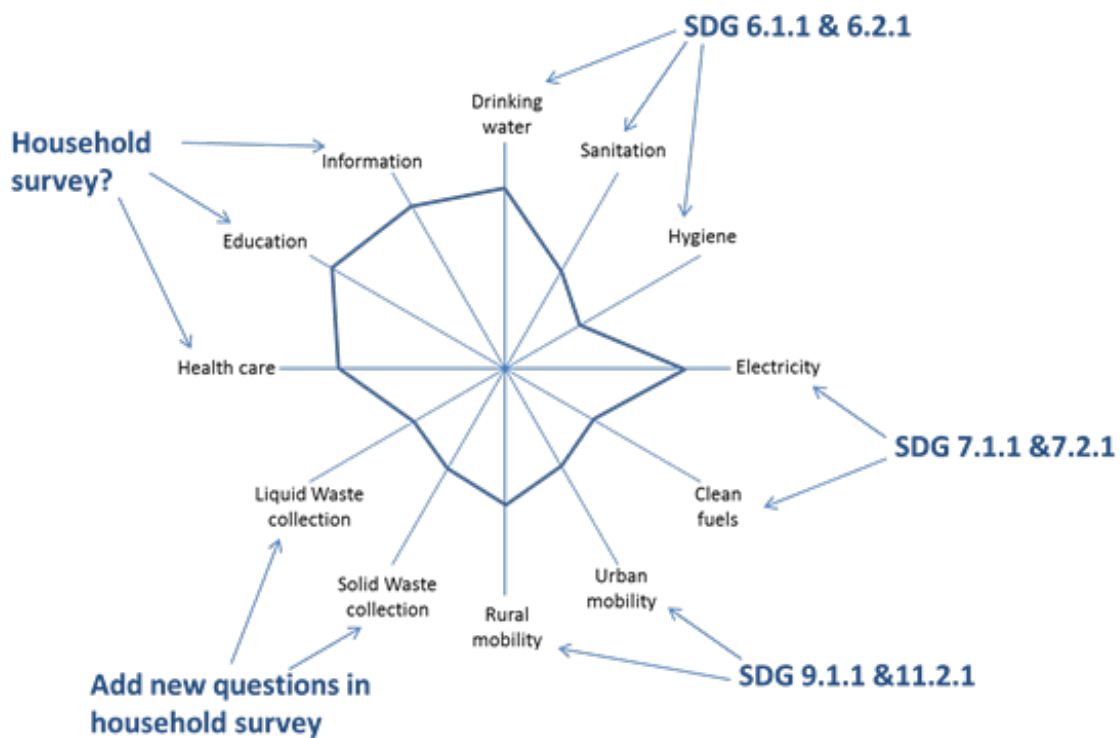


Figure 1; Spiderweb of the achievement of access to basic services

## 4. Disaggregation:

Data for this indicator can be disaggregated at the city and town levels.

- Disaggregation by urban /rural
- Disaggregation by gender
- Disaggregation by age
- Disaggregation by formal/informal settlements

## 5. Data Sources

Data sources differ depending on which computation methodology is adopted. If the computation methodology 1 is selected, source of data will be household surveys including DHS, MICS, LSMS, World Bank, UNICEF and UNDP. To fill the gap for the unavailable data, additional questionnaire should be added in the household survey.

If computation methodology 2 proposed above using spider web is adopted, data sources can be other SDG indicators monitoring results as well as additional data from household survey.

## 6. Comments and limitations

Different local characteristics of what constitutes as basic service around the world by some concerned authorities and stakeholders have made it difficult to agree on the universal definition and characteristic when talking about access to basic services.

Access to various elements of basic services will be measured under indicators 3.7.1 (health), 4.1.1 (education), 6.1.1 (water ), 6.2.1 (sanitation), 7.1.1 (energy), 11.2.1 (public transport), etc. There is need to clearly define what aspects of these basic services will be measured under indicator 1.4.1.

The lack of appropriate tools at national and city levels to measure all the components required to monitor indicator 1.4.1, as associated to the collection of the related indicator 11.1 has often brought challenges for statistics offices to reliably include all components that measure basic services, will sometimes result in the underestimation of households with access to basic services. For example, global/local data on urban transport systems do not exist. In addition, data is not harmonized and comparable at the world level. We have scheduled several technical workshops and EGMs that will help build the capacity for reporting in the first 3 years of the 2030 Agenda for Sustainable Development.

Finally, many countries still have limited capacities for data management, data collection and monitoring, and continue to grapple with limited data on large or densely populated geographical areas. This means that complementarity in data reporting will be key to ensure that both national and global figures achieve consistencies in the final reported data.

## 7. Data Availability

This indicator is currently under Tier III of which there is no established and standardized methodology and data is not yet available. However, data for the some of the sub-indicators such as water and sanitation, energy, information are readily available and already included in different international household survey framework. Refinement of definitions of different types of basic services and inclusion of the newly developed survey items in the existing household survey will be necessary.

## 8. Calendar

The monitoring and reporting of the indicator can be repeated at regular intervals of 3 to 5 years each. Measurement and reporting need to be feasible on a global basis, i.e. not so expensive that the costs are unreasonable particularly at country level.

## 9. Data Providers

Name: UN-Habitat and UNSD

Description: UN-Habitat will lead the data compilation process and work with different organizations responsible for sub-indicators necessary for this indicator.



Jovial children after receiving water containers provided by UN-Habitat in Harar, Ethiopia. © UN-Habitat.

## 10. Data Compilers

Name: UN-Habitat

Description: National statistical agencies and city management teams will lead the compilation and reporting at a national level. Global and regional reporting will be done by UN-Habitat. The collection of the data is possible through the collaboration of international institutions (UN-Habitat, UNEP, The World Bank, AfDB, IDB, EBRD and ADB) and bilateral donors (JICA, GDZ, etc.) by conducting survey and capacity development on data collection system.

## 11. References

1. World Bank, 2015 The International Poverty Line, <http://www.worldbank.org/en/programs/icp/brief/poverty-line>
2. WHO and UNICEF, 2017 Progress on Drinking Water, Sanitation and Hygiene Launch version July 12 2017, [https://www.unicef.org/publications/index\\_96611.html](https://www.unicef.org/publications/index_96611.html)
3. UNDP 2016 Technical Notes Calculating the Human Development Indices, <http://hdr.undp.org/en/content/multidimensional-poverty-index-mpi>
4. The World Bank Group, ESMAP, 2015 Beyond Connections Energy Access Redefined <http://www.worldbank.org/en/topic/energy/publication/energy-access-redefined>
5. ITU, 2015 ICT Indicators for the SDG Monitoring Framework , <http://www.itu.int/en/ITU-D/Statistics/Documents/intlcoop/sdgs/ITU-ICT-technical-information-sheets-for-the-SDG-indicators.pdf>
6. Wilson et al - Wasteaware ISWM indicators - doi10.1016/j.wasman.2014.10.006 - January 2015
7. Wilson\_et\_al\_Supplementary\_information\_Wasteaware\_ISWM\_Benchmark\_Indicators\_User\_Manual\_Online

## 12. Related indicators

Access to	Related SDG indicators
Safely managed drinking water services	6.1.1 Proportion of population using safely managed drinking water services
Safely managed sanitation services	6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water
Waste collection	11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities
Mobility and transport	9.1.1 Proportion of the rural population who live within 2 km of an all-season road
11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	
Modern energy	7.1.1 Percentage of population with access to electricity
7.1.2 Percentage of population with primary reliance on clean fuels and technology	
ICT	5.b.1 Proportion of individuals who own a mobile telephone, by sex
9.c.1 Proportion of population covered by a mobile network, by technology	
Education	4.1.1 Percentage of children/young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics.



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