

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Target 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

Indicator 11.1.1: Proportion of urban population living in slums, informal settlements or inadequate housing

## Institutional information

### Organization(s):

United Nations Human Settlements Programme (UN-Habitat)

## Concepts and definitions

### Definition:

**Methodology** – This indicator integrates the component of the population living in slums that has been monitored for the last 15 years by UN-Habitat in mostly developing countries with two new components – people living in inadequate housing and informal settlements - that aim at broadening the spectrum of inadequate living conditions to capture realities also present in more developed countries and wealthier urban contexts. By integrating these three components, the indicator is now universal and can be monitored in both developing and developed regions.

This indicator will focus on documenting the limitations manifested in realizing the right to adequate housing for all as measured through the proportion of the population that live in slums, informal settlements or inadequate housing. The below definitions and concepts are important for reporting on this indicator.

The proportion of urban population living in slums, informal settlements or inadequate housing is currently being measured by the proportion of urban population living in slums.

### Rationale:

As the Millennium Development Goals (MDGs) are turning a page, the unprecedented proliferation of slums and informal settlements, and a chronic lack of adequate housing, continue to be amongst the major challenges of urbanization and its sustainability. Slums, informal settlements and inadequate housing are the face of poverty and inequality in cities, and no transformative action will be achieved in the world without addressing the challenge of urban poverty represented by them. Therefore, it is necessary to further ensure access for all to adequate housing and basic services and upgrade slums, for the full recognition of the urban poor as rightful urban dwellers, for realizing their potential and for enhancing their prosperity, and thus the prosperity of the whole urban environ.

This indicator is extremely relevant since it is partly a continuation of the MDGs (Target 7.D) and provides therefore also a comprehensive baseline for developing countries worldwide. As per all the agreed goals and targets, to measure the achievement of this indicator will require the mobilisation of the means required to efficiently monitor them, calling up for a revitalised partnership with the participation of all countries, all stakeholders and all communities concerned.

Today, in our world, one in eight people live in slums (UN-Habitat, 2016; UN-Habitat, 2015b). This means that a quarter of the world's urban population are slum dwellers. In several cities, poor families struggle to access adequate housing. Living in central locations often equals to inadequate living conditions, while living in peripheries, where housing can be more affordable, entails deprivation of basic services, urban amenities and access to livelihoods.

Slum upgrading and adequate housing have an equalizing impact in the distribution of prosperity, thus helping urban environs to be inclusive and end urban poverty in the world.

In order to address the wording proposed by Target 11.1 and Indicator 11.1, and to provide a statistical continuity between MDGs and SDGs in what refers to the people living in slums, the five components of the 'slum household' definition (access to improved water, access to improved sanitation, structural durability, overcrowding and security of tenure; all of them part of the definition of adequate housing) must form the basis to monitor SDG 11 Target 11.1, complemented by the extra indicators that will allow measurements referring to informal settlements and inadequate housing, respectively.

It is suggested that one extra indicator for inadequate housing and one for informal settlements – totaling seven variables to be measured – could keep the tracking of this target feasible. For example, in the case of informal settlements, the existence of a municipal permit is a workable means of measurement, while inadequate housing could be effectively measured through the affordability criteria, as at least 330 million households around the world are financially stretched by housing costs (McKinsey Global Institute, 2014).

### **Concepts:**

a. Slums – In the wake of the MDGs' launching, an Expert Group Meeting was convened in 2002 by the United Nations Human Settlements Programme (UN-Habitat), the United Nations Statistics Division and the Cities Alliance to agree on an operational definition for slums to be used for measuring the indicator of MDG 7 Target 7.D, 'to have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers'. The agreed definition classified a 'slum household' as one in which the inhabitants suffer one or more of the following 'household deprivations': 1) Lack of access to improved water source, 2) Lack of access to improved sanitation facilities, 3) Lack of sufficient living area, 4) Lack of housing durability and, 5) Lack of security of tenure. By extension, the term 'slum dweller' refers to a person living in a household that lacks any of the above attributes (UN-Habitat, 2003a).

These five components –derived from the 'adequate housing' definition (A/HRC/25/54, 2013; see below) – have been used, ever since for reporting and tracking of the MDGs, as the primary or secondary data measured to determine the number of slum dwellers living in developing countries, and they were also the basis to establish the successful achievement of MDG Target 7.D. For each component, the experts agreed with the following definitions (UN-Habitat, 2003b; United Nations, 2007):

Access to improved water – A household is considered to have access to improved drinking water if it has sufficient amount of water (20 litres/person/day) for family use, at an affordable price (less than 10% of the total household income) and available to household members without being subject to extreme effort (less than one hour a day for the minimum sufficient quantity), especially to women and children. An improved drinking water source is a facility that is protected from outside contamination, in particular from faecal matters' contamination. Improved drinking water sources include: piped water into dwelling, plot or yard; public tap/stand pipe serving no more than 5 households; protected spring; rainwater collection; bottled water (if secondary source is also improved); bore hole/tube well; and, protected dug well.

Access to improved sanitation – A household is considered to have access to improved sanitation if an excreta disposal system, either in the form of a private toilet or a public toilet shared with a reasonable

number of people, is available to household members. Such improved sanitation facilities, therefore, hygienically separates human waste from human contact. Improved facilities include: flush/pour-flush toilets or latrines connected to a sewer, septic tank or pit; ventilated improved pit latrine; pit latrine with a slab or platform which covers the pit entirely; and, composting toilets/latrines.

Sufficient living area – A dwelling unit provides sufficient living area for the household members if not more than three people share the same habitable room. Additional indicators of overcrowding have been proposed: area-level indicators such as average in-house living area per person or the number of households per area. Additionally, housing-unit level indicators such as the number of persons per bed or the number of children under five per room may also be viable. However, the number of persons per room has been shown to correlate with adverse health risks and is more commonly collected through household surveys (UN-Habitat, 1998).

Structural quality/durability of dwellings – A house is considered as ‘durable’ if it is built on a non-hazardous location and has a permanent and adequate structure able to protect its inhabitants from the extremes of climatic conditions such as rain, heat, cold, and humidity. The following criteria are used to determine the structural quality/durability of dwellings: permanency of structure (permanent building material for the walls, roof and floor; compliance with building codes; the dwelling is not in a dilapidated state; the dwelling is not in need of major repair); and location of house (hazardous location; the dwelling is not located on or near toxic waste; the dwelling is not located in a flood plain; the dwelling is not located on a steep slope; the dwelling is not located in a dangerous right of way – rail , highway, airport, power lines).

Security of tenure – Secure tenure is the right of all individuals and groups to effective protection by the State against forced evictions. Security of tenure is understood as a set of relationships with respect to housing and land, established through statutory or customary law or informal or hybrid arrangements, that enables one to live in one’s home with security, peace and dignity (A/HRC/25/54). Regardless of the type of tenure, all persons with security of tenure have a legal status against arbitrary unlawful eviction, harassment and other threats. People have secure tenure when: there is evidence of documentation that can be used as proof of secure tenure status; and, there is either de facto or perceived protection from forced evictions. Important progress has been made to integrate the measurement of this component into the computation of the people living in slums.

b. Informal Settlements – Informal settlements are not only found in the developing world, but they exist in the developed world, too. Similarly, informal housing units are not poverty’s peculiarity, but they belong to all income levels. Therefore, informal settlements can be defined (United Nations, 2015; UN-Habitat, 2015b) as residential areas where: 1) inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing, 2) the neighbourhoods usually lack, or are cut off from, basic services and formal city infrastructure and 3) the housing may not comply with current planning and building regulations, is often situated in geographically and environmentally hazardous areas, and may lack a municipal permit. Informal settlements can be a form of real estate speculation for all income levels of urban residents, affluent and poor. Slums are the poorest and most dilapidated form of informal settlements.

Informality should be understood as a technicality more than an income-based denomination that stigmatises the poor, therefore informal settlements’ estimates should be based on a technical compliance relevant to all income levels. For example, an approved municipal permit for any given housing unit would be a clear indication of formality. If municipalities lack the capacity to deliver such a permit, this is an administrative gap that this indicator will also point out.

c. Inadequate Housing – Article 25 of the Universal Declaration of Human Rights includes ‘adequate housing’ as one of the components of the right to adequate standards of living for all. Adequate housing must provide more than four walls and a roof. The United Nations Committee on Economic, Social and Cultural Rights’ general comments No.4 (1991) on the right to adequate housing and No.7 (1997) on forced evictions have underlined that the right to adequate housing should be seen as the right to live somewhere in security, peace and dignity. For housing to be adequate, it must, at a minimum, meet the following criteria: 1) Legal security of tenure, which guarantees legal protection against forced evictions, harassment and other threats; 2) Availability of services, materials, facilities and infrastructure, including safe drinking water, adequate sanitation, energy for cooking, heating, lighting, food storage or refuse disposal; 3) Affordability, as housing is not adequate if its cost threatens or compromises the occupants’ enjoyment of other human rights; 4) Habitability, as housing is not adequate if it does not guarantee physical safety or provide adequate space, as well as protection against the cold, damp, heat, rain, wind, other threats to health and structural hazards; 5) Accessibility, as housing is not adequate if the specific needs of disadvantaged and marginalized groups are not taken into account (such as the poor, people facing discrimination; persons with disabilities, victims of natural disasters); 6) Location, as housing is not adequate if it is cut off from employment opportunities, health-care services, schools, childcare centres and other social facilities, or if located in dangerous or polluted sites or in immediate proximity to pollution sources; 7) Cultural adequacy, as housing is not adequate if it does not respect and take into account the expression of cultural identity and ways of life.

The measurement of ‘inadequate housing’ is meant to broaden that of slums and informal settlements particularly in the developed world where the ‘slum household’ definition is less applicable, ensuring the universality of Indicator 11.1. Even though countries with available data could measure the full spectrum of the adequate housing components, for the purpose of measurability it is recommended that only one of the elements of the adequate housing definition is selected for measurement. In this regard, affordability is not only a key housing adequacy criterion, but could be the most suitable means of measurement for inadequate housing, as affordability increasingly becomes a global crisis with strong negative impact on the wellbeing of people and on the exacerbation of urban inequality. The underlying principle is that households financial costs associated with housing should not threaten or compromise the attainment and satisfaction of other basic needs such as, food, education, access to health care, transport, etc. Based on the existing method and data through the Urban Indicators Program (1996-2006), affordability is measured as the net monthly expenditure on housing cost that exceeds 30% of the total monthly income of the household.

#### **Comments and limitations:**

Different local characteristics of poor housing units around the world and the under recognition of the slum challenge by some concerned authorities and stakeholders, have made it difficult to agree universally on some definitions and characteristics when referring to poor informal housing.

The lack of appropriate tools at national and city levels to measure all the components required to monitor indicator 11.1 has often brought challenges for statistics offices to reliably include all components that measure slums, sometimes resulting in the underestimation of poor housing units or slum households. 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.

In the case of security of tenure, its complicated relation with land and property makes it a difficult aspect to include in the different related surveys and, therefore, to measure and monitor due to lack of routine data. However, the most recent years, important progress has been made to integrate the measurement of this component into major surveys and censuses in several countries.

Also, Indicator 11.1 does not capture homelessness, as it is not included in household surveys.

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.

## Methodology

### Computation Method:

Method of computation – This indicator considers three components to be computed as follows:

a) Slum households (SH): =  $100[(\text{Number of people living in slum})/(\text{City population})]$

b) Informal settlements households (ISH): =  $100[(\text{No. of people living in informal settlements households})/(\text{City population})]$

c) Inadequate housing households (IHH): =  $100[(\text{No. of people living in inadequate housing})/(\text{City population})]$

The unit of measurements for all these indicators will be %. At a later stage an index of measurements will be developed that will incorporate all measures and provide one estimate.

The data for this indicator is already being reported in nearly all developing countries in what refers to the slum component. We expect to carry this success, lessons learnt and experiences to the reporting of informal settlements and inadequate housing data for all countries.

### Disaggregation:

Potential Disaggregation: Disaggregation by location (intra-urban), Disaggregation by income group, Disaggregation by sex, race, ethnicity, religion, migration status (head of household), Disaggregation by age (household members), Disaggregation by disability (household members)

Quantifiable Derivatives: Proportion of households with durable housing, Proportion of households with improved water, Proportion of households with improved sanitation, Proportion of households with sufficient living space, Proportion of households with security of tenure, Proportion of households with one (1) housing deprivation, Proportion of households with multiple (3 or more) housing deprivations, Proportion of households with approved municipal permit, Proportion of households with (in)adequate housing (affordability).

### Treatment of missing values:

- **At country level**

All countries are expected to fully report on this indicator more consistently with few challenges where missing values will be reported at the national/global level. At the national level, it is possible that missing values will be recorded perhaps representing gaps of non-measurements among populations whose status of slum-hood or informality or inadequate housing is not recorded or unknown or where data is unavailable. Because the values will be aggregated at the national levels, missing values will be less observed at these levels, but are likely to affect the estimates. At the survey and data collection level, survey procedures for managing missing values will be applied based on the unit of analysis/ primary sampling units.

- [At regional and global levels](#)

Global estimates will be adjusted with modelling based on trends to cater for missing information or data.

#### **Regional aggregates:**

Regional and global estimates will be derived from national figures with an appropriate disaggregation level. Specialized tools will be developed and agreed upon with local and international stakeholders. Systems of quality assurance on the use of the tools, analysis and reporting will be deployed regionally, and global to ensure that standards are uniform and that definitions are universally applied.

#### **Sources of discrepancies:**

As national agencies are responsible for data collection, no differences between country produced data and international estimated data on the indicator are expected to arise if standard methodologies and procedures are followed at all stages of the reporting process. Missing data and other local variables and frequency of data collection usually affects the figures reported at the global and national level. For this indicator, national data will be used to derive global figures. In instances where global values differ from national figures, efforts will be made for harmonization. There are many instances where lack of new data will be replaced with modelled data for the global figures. These figures will be acceptable for reporting at the national and global levels with the relevant notes attached to such figures. This is likely to be the case for countries where they have long intervals of collection of new data, or where countries face unstable situations such post-disaster or post-war years.

## Data Sources

#### **Description:**

Data for the slum and informal settlement components of the indicator can be computed from Census and national household surveys, including DHS and MICS. Data for the inadequate housing component can be computed by using income and expenditure household surveys that capture household expenditures.

UN-Habitat will continue to provide technical support on the estimation of this indicator and its recent integration of spatial and risk analysis and the disaggregation of the information at city level will be further expanded for this indicator. So far, UN-Habitat collects information related to slums and improved shelter as part of the City Prosperity Initiative (CPI) including several other related indicators, such as: i) improved shelter; ii) access to improved water; iii) access to improved sanitation; and iv) overcrowding. Data is being collected for nearly 1000 cities around the world. The method of data collection and the use of this information are critical for the understanding of indicator 11.1. The inadequate housing component of the indicator has extensive evidence, studies and analysis that have been undertaken using collected data and some of these documents are listed as part of biographic references.

#### **Collection process:**

We expect that investments in improved data collection and monitoring at country level will produce incentives for governments to improve reporting and performance and also greater readiness to engage with multiple stakeholders in data collection and analysis and in achieving better understanding of the strengths

and weaknesses of existing slum definitions and their applications. This will lessen the errors and improve the quality and timeliness of data reporting at the national level.

## Data Availability

### Description:

Data on slums is available for all developing countries as it has been reported by UN-Habitat in the Millennium Development Goals' reports in a yearly basis. Recently, UN-Habitat has disaggregated information on this indicator at city level, increasing its suitability for SDG 11, its target and indicators. The people living in slums' indicator is currently measured in more than 320 cities across the world as part of UN-Habitat City Prosperity Initiative. It is also a key element of the Participatory Slum Upgrading Programme implemented in 190 cities and in cooperation with around 4 million slum dwellers in Africa, the Caribbean and the Pacific as well as the resilience profiling currently underway.

Data on inadequate housing, measured through housing affordability, is available in many countries. UN-Habitat and World Bank computed this indicator for many years (1996-2006) as part of the Urban Indicators Programme. Recently, the Global Housing Indicators Working Group, a collaborative effort of Cities Alliance, Habitat for Humanity International, the Inter-American Development Bank, UN-Habitat proposed the collection of data on this indicator worldwide.

### Time series:

The indicator is updated annually, depending on new data that becomes available in the reference year.

## Calendar

### Data collection:

All major surveys and census data collection process will continue to incorporate the aspects/components necessary for reporting on this indicator. The monitoring of this indicator will be repeated at regular intervals of 3-5 years, allowing for three-five year reporting points until the year 2030. (From NA to NA)

### Data release:

Data has been produced annually for this indicator, and this trend is expected to continue throughout the lifetime of the SDGs.

## Data providers

### Name:

UN-Habitat, UNEP, Cities Alliance, Slum dwellers International, and World Bank

### Description:

This indicator has largely been successfully due to the collaborations between several organizations and institutions including UN-Habitat, UNEP, Cities Alliance, Slum Dwellers International, and World Bank. There are several other experts who have also contributed to the development of the concepts, rationale and

definitions, and metadata and will also support measurement, reporting and policy dialogue at the country level, based on the indicators. For primary reporting, national data provider especially the statistical agencies will play an important role of generation of the primary data through census and surveys.

## Data compilers

**Name:**

UN-Habitat

**Description:**

Final Compilation & reporting at the global level will be lead and guided by UN-Habitat and selected partners.

## References

**URL:**

<http://unhabitat.org/urban-knowledge/global-urban-observatory-guo/>

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- [4]: <http://unhabitat.org/urban-initiatives/initiatives-programmes/participatory-slum-upgrading/>
- [5]: <http://unhabitat.org/slum-almanac-2015-2016/>
- [6]: <http://wcr.unhabitat.org/>
- [7]: [http://www.unhabitat.org/programmes/guo/documents/EGM final report 4 Dec 02.pdf](http://www.unhabitat.org/programmes/guo/documents/EGM_final_report_4_Dec_02.pdf)

## Related indicators

### 1.1.1:

Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

### 1.1.2:

Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

### 6.1.1:

Proportion of population using safely managed drinking water services

### 6.2.1:

Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water

### 7.1.1:

Proportion of population with access to electricity

### 8.3.1:

Proportion of informal employment in non-agriculture employment, by sex

8.5.2:

Unemployment rate, by sex, age and persons with disabilities