

| PROPORTION OF URBAN POPULATION LIVING IN SLUMS | | |
|--|-------------------|----------------|
| Poverty | Living conditions | Core indicator |

1. INDICATOR

- (a) **Name:** Proportion of urban population living in slums
- (b) **Brief Definition:** The proportion of urban population lacking at least one of the following five housing conditions: Access to improved water; Access to improved sanitation facilities; Sufficient-living area, not overcrowded; Structural quality/durability of dwellings; Security of tenure.
- (c) **Unit of Measurement:** Percentage.
- (d) **Placement in the CSD Indicator Set:** Poverty/Living conditions

2. POLICY RELEVANCE

- (a) **Purpose:** This indicator measures the proportion of urban dwellers living in deprived housing conditions. It is a key indicator measuring the adequacy of the basic human need for shelter. An increase of this indicator is sign for deteriorating living conditions in urban areas.
- (b) **Relevance to Sustainable/Unsustainable Development (theme/sub-theme):** Overcrowding, inadequate housing, lack of water and sanitation are manifestations of poverty. They deprive residents from their human rights, are associated with certain categories of health risks and are often detriments to future development
- (c) **International Conventions and Agreements:** to be added
- (d) **International Targets/Recommended Standards:** MDG target 11: "By 2020, to have achieved a significant improvement in the lives of at least 100 million slum-dwellers"
- (e) **Linkages to Other Indicators:** This indicator is closely linked to the indicators on access to improved sanitation, access to safe drinking water, rate of growth of urban population, as well as to other socio-economic indicators.

3. METHODOLOGICAL DESCRIPTION

- (a) **Underlying Definitions and Concepts:** The five housing conditions used for this indicator are defined as follows:
Access to improved water: A household is considered to have access to improved drinking water if it has sufficient amount of water for family use, at an affordable price, available to household members without being subject to extreme effort, especially to women and children. A sufficient amount is the availability of at least 20

liters/person/day. The following criteria are used to determine the access to improved water:

- Piped connection to house or plot
- Public stand pipe serving no more than 5 households
- Bore hole
- Protected dug well
- Protected spring
- Rain water collection
- Bottle water (new)

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. The following criteria are used to determine the access to improved sanitation:

- Direct connection to public sewer
- Direct connection to septic tank
- Poor flush latrine
- Ventilated improved pit latrine
- Pit latrine with slab (new)

Sufficient-living area, not overcrowded: A dwelling unit is considered to provide a sufficient living area for the household members if there are fewer than four people per 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; 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. See UN-HABITAT (1998), "Crowding and Health in Low Income Settlements of Guinea Bissau", SIEP Occasional Series No.

Structural quality/durability of dwellings: A house is considered as 'durable' if it is built on a non-hazardous location and has a structure permanent and adequate enough to protect its inhabitants from the extremes of climatic conditions such as rain, heat, cold, humidity. Durability of housing will manifest itself in various ways in different cities. For example, in Nairobi a non-durable house may be made of a patchwork of tin, cardboard, plastic sheets; while in Moscow it could be a dilapidated condominium. Considerable variability in local definition is allowed. For the estimation procedure the durability of housing is measured by the building materials for the roof, walls and/or the floor. An earthen floor is an indicator of a slum dwelling.

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 of building codes
- The dwelling is not in a dilapidated state

- The dwelling is not in need of major repair
- Location of house (hazardous)
- 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 arbitrary unlawful evictions. Secure tenure can be made evident through formal or informal mechanisms in codified law and in customary law. In its most formal presentation secure tenure is based on a cadastral system where title deeds or lease agreements are registered with the authorities. Less formal security of tenure is more commonly found. It is recognized that informal customary secure tenure practice may also offer effective protection against arbitrary eviction.

The following criteria are used to determine security of tenure:

- Evidence of documentation that can be used as proof of secure tenure status
- Either *de facto* or perceived / protection from forced evictions

(b) Measurement Methods: In principle, the indicator can easily be computed if data on all five conditions are contained in household surveys. UN Habitat has developed estimation methods for multiple data sources and missing data on certain attributes.

In the context of monitoring progress towards the MDG target “By 2020, to have achieved a significant improvement in the lives of at least 100 million slum-dwellers”, the criterion of tenure security is excluded due to non-availability of internationally comparable data. The following hypothetical example shows the general estimation method used by UN Habitat for computing this indicator in the MDG context:

| Order of Estimation | Indicator | Cumulative Percent of Households |
|---------------------|--------------------------------|----------------------------------|
| Step 1 | Lack of improved water | 20 % |
| Step 2 'OR' | Lack of improved sanitation | 50 % |
| Step 3 'OR' | Lack of sufficient living area | 60 % |
| Step 4 'OR' | Lack of durable housing | 65 % |

The operation is a logical 'OR' condition. If any one, any combination of, or all of the indicator conditions are 'TRUE' then a household is counted only once as a slum dwelling. The TRUE condition means that the household lacks the attribute identified by the indicator. In practice, 'lack of improved sanitation' was the dominant feature identifying slum households.

(c) Limitations of the Indicator: The indicator does not cover the spatial dimension of slums. As the indicator cannot take into account how many and to which extent the five conditions of deprived housing are fulfilled, it cannot provide information on the severity of slum conditions.

(d) **Status of the Methodology:** Methodology is applied for monitoring the MDG indicator. Further work on the methodology is ongoing.

(e) **Alternative Definitions:** According to the situation in a specific city the basic definition of a household living in a slum may be locally adapted. For example, in Rio de Janeiro living area is insufficient for both the middle classes and the slum population and is not a good discriminator. It could either be omitted, or it could be formulated as *two or more* of the conditions such as overcrowding and durability of housing.

4. ASSESSMENT OF DATA

(a) **Data Needed to Compile the Indicator:** Data on number of households with access to improved water, access to improved sanitation, sufficient living area, structural quality/durability of dwellings and secure tenure as well as number of persons per household.

(b) **National and International Data Availability and Sources:** Data availability is general good for access to improved water and access to improved sanitation. For sufficient living area, structural quality/durability of dwellings the data availability is fair, whereas data on tenure security is not available in many countries. Primary data sources include household surveys such as DHS, MICS.

(c) **Data References:** International data is available on the MDG website <http://mdgs.un.org/unsd/mdg/>.

5. AGENCIES INVOLVED WITH THE DEVELOPMENT OF THE INDICATOR

(a) **Lead Agency:** The lead agency is the United Nations Human Settlements Programme (UN-HABITAT).

(b) **Other Contributing Organizations:**

6. REFERENCES

(a) **Readings:**

World Bank. *Housing: Enabling Markets to Work*. The World Bank, Washington D.C., 1993 (A World Bank Policy Paper).

UN-HABITAT. *State of the World's Cities 2006/2007*, UN-HABITAT, Nairobi, 2006.

UN-HABITAT. *The Global Report on Human Settlements 2003: The Challenge of Slums*, UN-HABITAT, Nairobi, 2003.

UN-HABITAT. *Improving the lives of 100 Million Slum Dwellers: Guide to Monitoring Target 11*, UN-HABITAT, Nairobi, 2003.

UN-HABITAT Global Urban Indicators Database, UN-HABITAT, Nairobi, 2002

(b) Internet site:

UN Habitat website : <http://www.unhabitat.org/>

MDG website of the United Nations Statistics Division:

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