

# SESRIC – UN-HABITAT Webinar on Measurement Methods for SDG 11 and the New Urban Agenda in the OIC Countries

## Introduction to SDG 11 and New Urban Agenda Monitoring Frameworks

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Donatien Beguy  
Data and Analytics Unit  
Knowledge and Innovation Branch  
UN-HABITAT



**DATA AND ANALYTICS**  
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FOR A BETTER URBAN FUTURE

# Outline

## Part 1: The SDG and NUA Monitoring Frameworks

- The SDGs monitoring framework
- SDG 11 overview
- SDG 11 indicators
- Linkages between SDG 11 and other SDGs
- Overview of the New Urban Agenda

## Part 2: Overview of Measurement Methods for Select SDG 11 Indicators



## Overview of SDG 11



# 2030 Agenda for Sustainable Development

SDGs offer a 'supremely ambitious and transformational vision' for our common future till 2030.

1 Agenda

5 Main areas

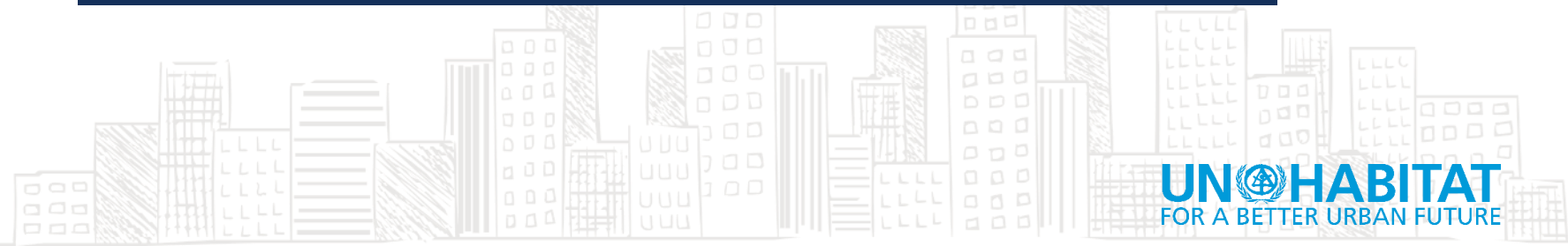
17 Goals

169 Targets

240 Indicators



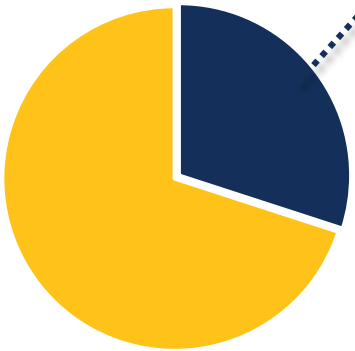
People Prosperity Planet Peace Partnership



# SDG Indicators with Urban Component

**240 Indicators** are part of the Global Monitoring Framework adopted by the Statistical Commission

Around 1/3 of them  
can be measured at  
the local level



Direct connection to urban policies and  
clear impact on cities and human  
settlements



**11** SUSTAINABLE CITIES  
AND COMMUNITIES



The Urban Goal, SDG 11 aims to: **"Make cities and human settlements inclusive, safe, resilient and sustainable"**

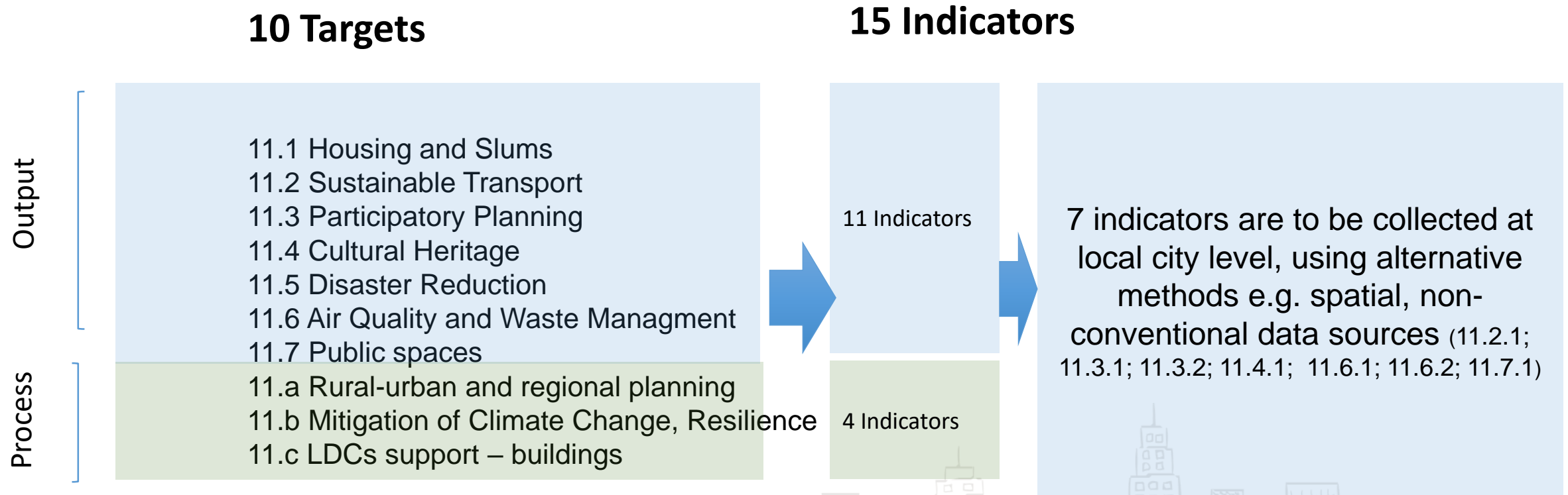
# Cities and Sustainable Development

**Goal 11**, the **stand-alone goal** on cities and human settlements affirms their importance for attainment of sustainable development



# Overview of SDG 11

Make cities and human settlements inclusive, safe, resilient and sustainable



**Other indicators:** SDG 1 (1.4.1 - basic services; 1.4.2 – secure tenure rights) and SDG 6 (6.3.1 – wastewater treatment )

# Urban indicators in SDG Goal 11 and 6 and 1

Target	Indicator	Tier (Custodian Agency)
<b>11.1</b>	11.1.1: Proportion of urban population living in slums, informal settlements or inadequate housing	Tier I (UN-Habitat)
<b>11.2</b>	11.2.1: Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Tier II (UN-Habitat)
<b>11.3</b>	11.3.1: Ratio of land consumption rate to population growth rate	Tier II (UN-Habitat)
	11.3.2: Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically	Tier II (UN-Habitat)
<b>11.4</b>	11.4.1: Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)	Tier II (UNESCO)
<b>11.5</b>	11.5.1: Number of deaths, missing persons and directly affected persons attributed to disaster per 100,000 population	Tier I (UNDRR)
	11.5.2: Direct economic loss in relation loss to global GDP, damage to critical infrastructure and number if disruption to basic services, attributed to disasters.	Tier II (UNDRR)
<b>11.6</b>	11.6.1: Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities	Tier II (UN-Habitat)
	11.6.2: Annual mean levels of fine particulate matter (e.g. PM 2.5 and PM10) in cities	Tier I (WHO)

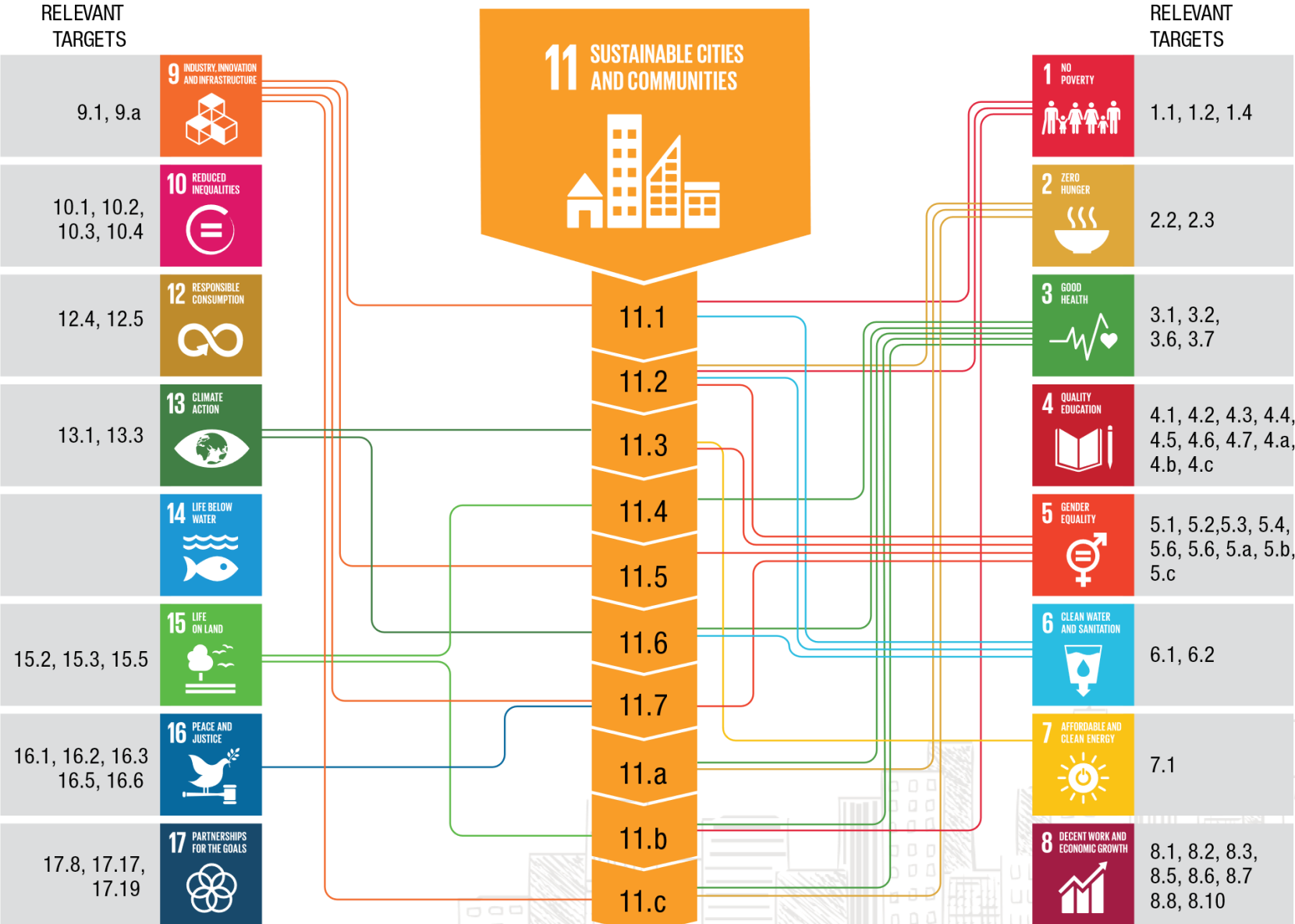


# Urban indicators in SDG Goal 11, 1 and 6

Target	Indicator	Tier (Custodian Agency)
<b>11.7</b>	11.7.1: Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	Tier II (UN-Habitat)
	11.7.2: Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months.	Tier II (UNODC)
<b>11.a</b>	11.a.1: Number of countries that have a National Urban Policy or Regional Development Plans that (a) respond to population dynamics, (b) ensure balanced territorial development, and (c) increase local fiscal space.	Tier II (UN-Habitat)
<b>11.b</b>	11.b.1: Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030.	Tier II (UNDRR)
	11.b.2: Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030	Tier II (UNDRR)
<b>1.4</b>	1.4.1: Proportion of population living on households with access to basic services	Tier I (UN-Habitat)
	1.4.2: Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure	Tier II (UN-Habitat, World Bank)
<b>6.3</b>	6.3.1: Proportion of wastewater safely treated	Tier II (WHO)



# Interlinkages between SDG 11 and other SDGs



# Overview of the New Urban Agenda



IMPLEMENTING  
THE NEW  
URBAN AGENDA



# The New Urban Agenda

Adopted in **October 2016** in **Quito, Ecuador**

Focuses on **interventions** required to ensure that cities and human settlements are **planned, developed and managed in sustainable ways** in supporting the implementation of the 2030 Agenda

First internationally agreed document detailing implementation of the urban dimension of the SDGs



# The New Urban Agenda



IMPLEMENTING  
THE NEW  
URBAN AGENDA

- Extension of the 2030 Agenda for Sustainable Development (complements SDGs processes)
- **Builds on SDG 11**, but addresses a wider range of urbanization and human settlements issues
- Enables implementation of SDG 11 in a more expansive and integrated way
  - by addressing essential strategic spatial and governance frameworks
  - National urban policies, legislation, spatial planning and local finance frameworks.
- **Provides spatial framework for the delivery of SDGs** within urban areas by **focusing on local level implementation.**
- **Places emphasis on the need to develop capacity of local authorities** and other local actors for NUA and SDG implementation at the urban local level.

# Pillars of the New Urban Agenda & Linkages to SDG 11

## 1. National Urban Policies (NUPs)

**SDG 11a, 11b**

- Land Governance;
- Ministerial Coordination;
- The Attribution of the functions to Subnational (Regional or Provincial) and Local Governments;
- The General Financial Framework for Subnational or Local Governments

## 2. Rules and Regulations

**SDG 1.4, 11.7**

- Land legislation;
- Allocation of public space (streets and parks);
- Plotting of the buildable space;
- Acquisition of Public Space (Expropriation vs Land Readjustment)

## 3. Urban Planning and Design

**SDG 11.3, 11.7**

The physical layout of the buildable plots, public space, and their relationship

## 4. Financing Urbanization

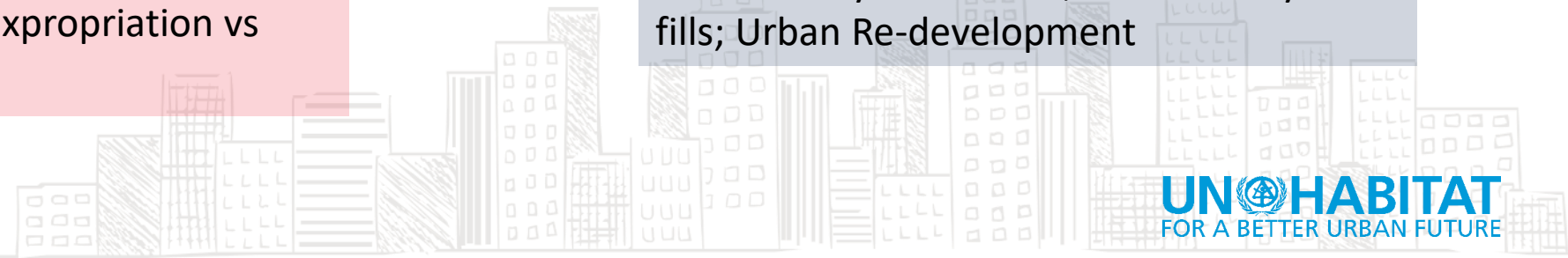
**SDG 1.4, 11.2, 11.7**

Core Urbanization Functions; Basic Urban Services; Complementary Services

## 5. Local Implementation

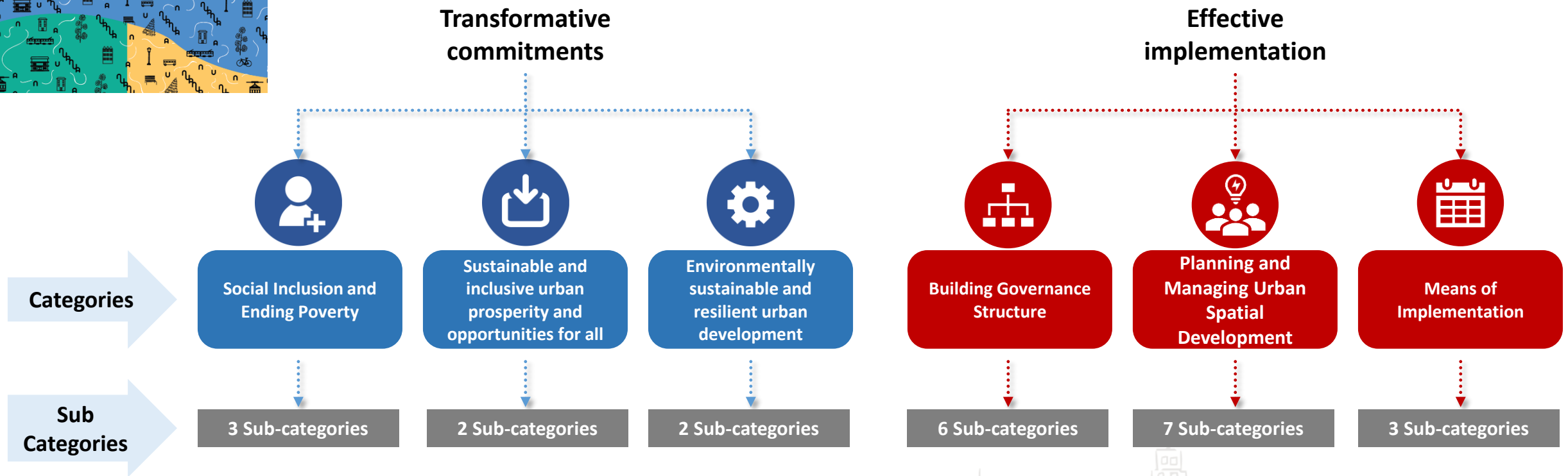
**SDG 11.3**

Planned City Extensions; Planned City In-fills; Urban Re-development



# The New Urban Agenda monitoring framework

## New Urban Agenda Monitoring Framework



- NUA draws on many global frameworks such as SDGs
- Total of 77 indicators in the current version combines quantitative and qualitative measures

## Part 2: Overview of Measurement Methods for Select SDG 11 Indicators

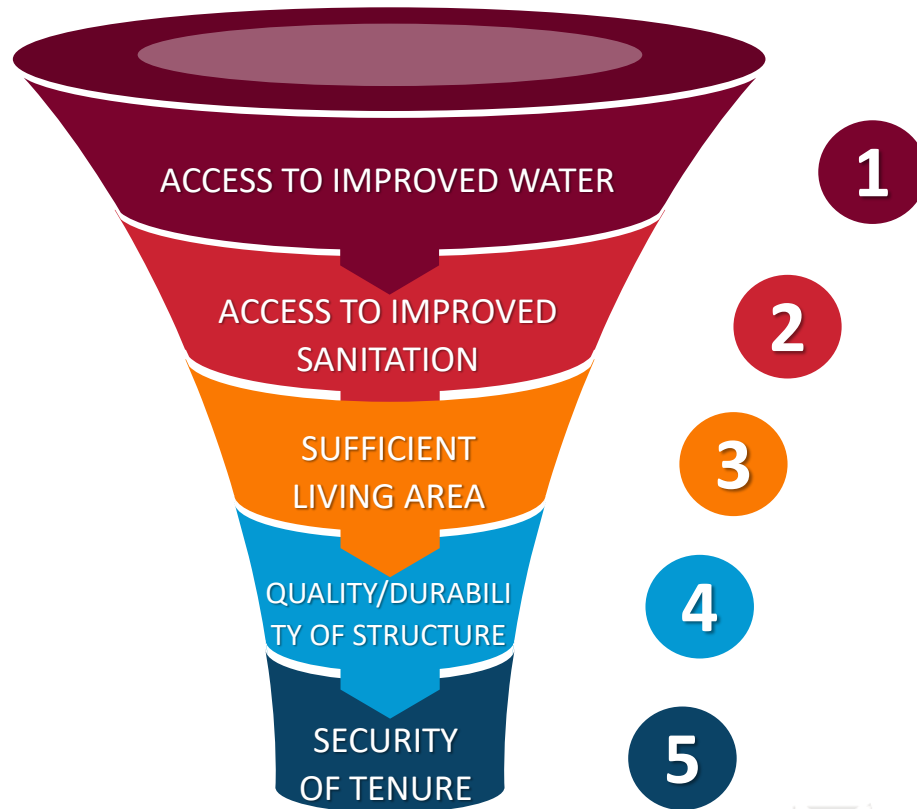


# Indicator 11.1.1: Adequate housing and slum upgrading

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

## Component 1: Slums and Informal Settlements

Indicator considers deprivations in:



Considerations for single and multiple deprivations

One deprivation

- Lack 1 component

Two deprivation

- Lack 2 components

Three deprivation

- Lack 3 components

Four deprivation

- Lack 4 components

Five deprivation

- Lack all components

Data sources: Censuses and surveys

# Component 1: Slums and Informal Settlements









## Example of deprivation level computation

Housing conditions	Percentage of households by number of housing deprivation		Housing conditions	Percentage of households by number of housing deprivation
Lack sanitation only	1.3%	→	One shelter deprivation	21.4%
Lack water only	3.0%		Two shelter deprivations	6.7%
Lack durable housing only	7.8%		Three shelter deprivations	3.5%
Lack Living area only	9.3%		Four shelter deprivations	.2%
Lack water and sanitation	.2%	→	Non-slum household	68.3%
Lack water and living area	.9%		Total	100.0%
Lack water and Durable housing	1.5%		Slum households	31.7%
Lack sanitation and living area	.4%			
Lack sanitation and durable housing	1.0%	→		
Lack living area and durable housing	2.7%			
Lack water and sanitation and living area	.1%			
Lack water and sanitation and durable housing	2.0%			
Lack water and living area and durable housing	.9%	→		
Lack sanitation and living area and durable housing	.5%			
Lack water and sanitation and living area and durable housing	.2%			
Non-slum household	68.3%			
Total	100.0%			

# Component 1: Inadequate housing

Housing adequacy is measured by the [affordability criterion](#) only

Affordability is the most relevant and easier to measure

		Slums	Informal settlements	Inadequate housing
	Access to water	✓	✓	✓
	Access to sanitation	✓	✓	✓
	Sufficient living area, overcrowding	✓		✓
	Structural quality, durability and location	✓	✓	✓
	Security of tenure	✓	✓	✓
	Affordability			✓
	Accessibility			✓
	Cultural adequacy			✓

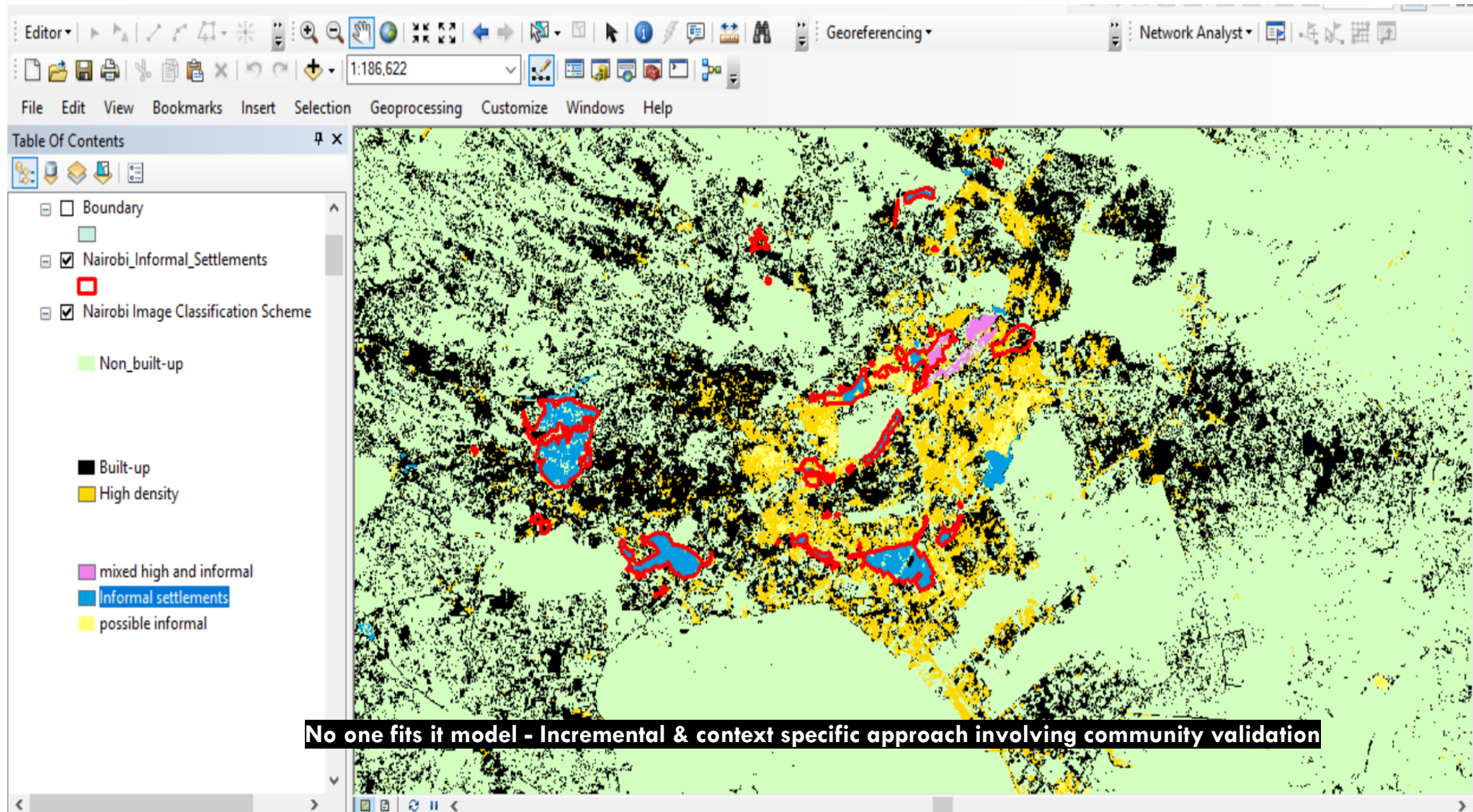
A housing is considered **affordable** if the household's expenditure on housing alone does not exceed 30% of the total monthly income of the household

Housing affordability = Suitable means of measuring inadequate housing in a more encompassing manner

Percentage of households living in inadequate housing

=  $\left[ \frac{\text{Number of HHDs spending more than 30\% of income on housing}}{\text{Total HHDs}} \right] \text{ (in \%)}$

# From HH to Settlements: Integrating EO & GI in deprivation mapping



# Indicator 11.3.2: Civic Participation in Urban Planning and Management

Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically

Use of scorecards for evaluation

- A questionnaire with 4-point Likert scale (Strongly Disagree, Disagree, Agree, and Strongly Agree) to measure and test the level of participation in urban governance and management using the following criteria:

Questions	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Are there structures for civil society participation in urban planning, including design and agreements that are direct, regular and democratic?				
Are there structures for civil society participation in urban budget decision making that are direct, regular and democratic?				
Are there structures for civil society evaluation and feedback on the performance of urban management, which are direct, regular and democratic?				
Do the structures promote the participation of women, young men and women, and/or other marginalized groups?				

The evaluators will score each of the questions on the Likert Scale, categorized as:

- 1. Strongly Disagree,**
- 2. Disagree,**
- 3. Agree,**
- 4. Strongly Agree**

# Methodology

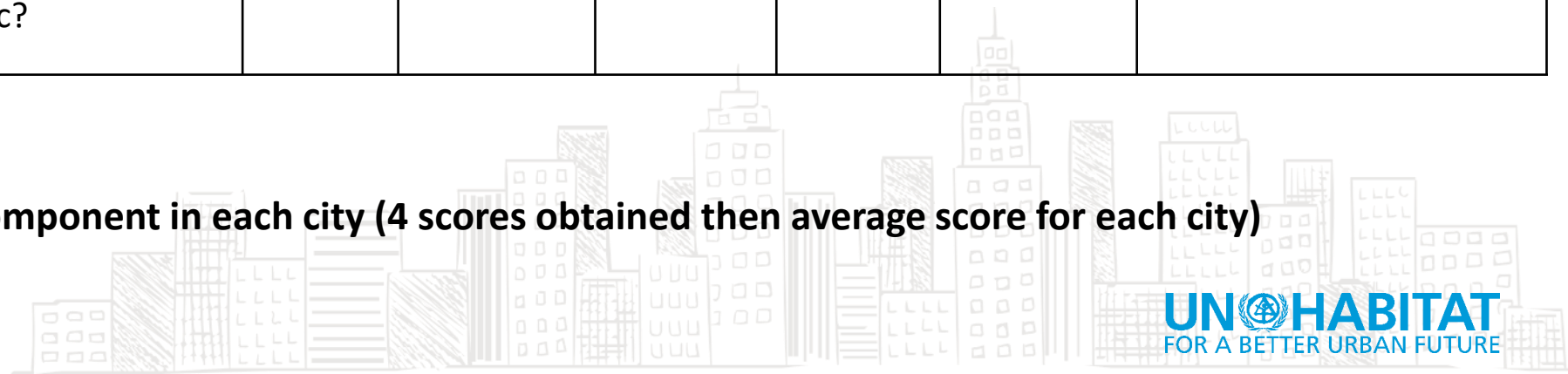
- A number of cities are selected
  - For each city, the evaluators will score each of the questions on the Likert scale

## E.G Urban Planning

	Evaluat or (1)	Evaluator (2)	Evaluator (3)	Evaluato r (4)	Evaluator (5)	Average respondent score
1. a) Are there structures for civil society participation in urban planning, including design and agreements, that are direct?	X1	X2	X3	X4	X5	$Qx\ 2=(X1+...+X5)/5$
1. b) Are there structures for civil society participation in urban planning, including design and agreements, that are regular?	Y1	Y2	Y3	Y4	Y5	$QY2 =(Y1+...+Y5)/5$
1. c) Are there structures for civil society participation in urban planning, including design and agreements that are democratic?	Z1	Z2	Z3	Z4	Z5	$QZ2 =(Z1+...+Z5)/5$

**Overall average score: B1**

**Process is repeated for each component in each city (4 scores obtained then average score for each city)**



# Methodology

## Aggregating values per city

From the calculated scores for the 4 questions, the overall value of the assessment will be derived as follows:

$$B = \frac{B1 + B2 + B3 + B4}{4}$$

### Where

**B1, B2, B3 and B4** are the average scores for each question/component

## Aggregating city values to national score

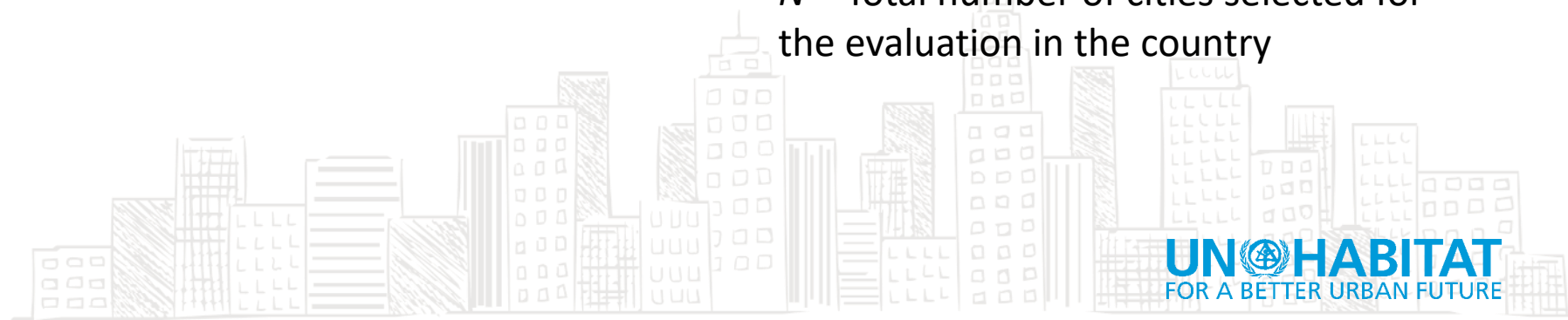
If we have  $N$  cities selected for the evaluation in a given country, and  $n$  is the number of cities with scores that are higher than the mid-point, the value of the indicator will be calculated as:

$$\text{Value of Indicator} = \frac{n}{N} \text{ (in \%)}$$

### Where

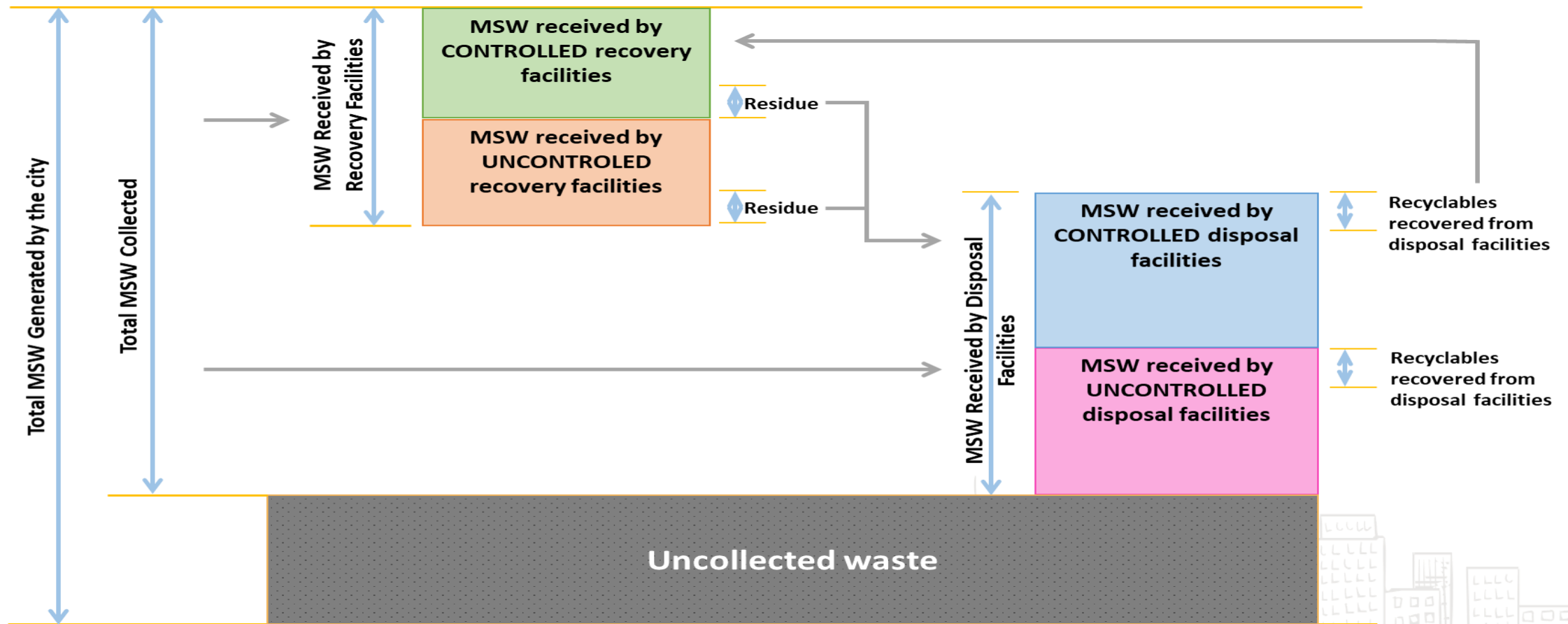
$n$  = number of cities with scores higher than the mid-point

$N$  = Total number of cities selected for the evaluation in the country



# Indicator 11.6.1: Solid waste management

Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal solid waste generated, by the city



# Methodology

$$\text{SDG 11.6.1} = \frac{\text{Total MSW collected and managed in controlled facilities}}{\text{Total municipal solid waste generated by city}} \times 100 (\%)$$

Two other sub-indicators:

$$\text{SDG 11.6.1.a} = \frac{\text{Total MSW collected}}{\text{Total MSW generated}} \times 100 (\%)$$

$$\text{SDG 11.6.1.b} = \frac{\text{Total MSW managed in controlled facilities}}{\text{Total MSW generated}} \times 100 (\%)$$

The **Waste Wise Cities Tool - Step by Step Guide to Assess a City's MSWM Performance through SDG indicator 11.6.1**  
**Monitoring** provides detailed methodology for data collection

<https://unhabitat.org/sites/default/files/2021-02/Waste%20wise%20cities%20tool%20-%20EN%207%20%281%29.pdf>

# Indicator 1.4.1: Access to Basic Services

Proportion of population living in households with access to basic services



Basic sanitation services



Basic hygiene services



Waste collection



Mobility and transport



ICT



Health



Education

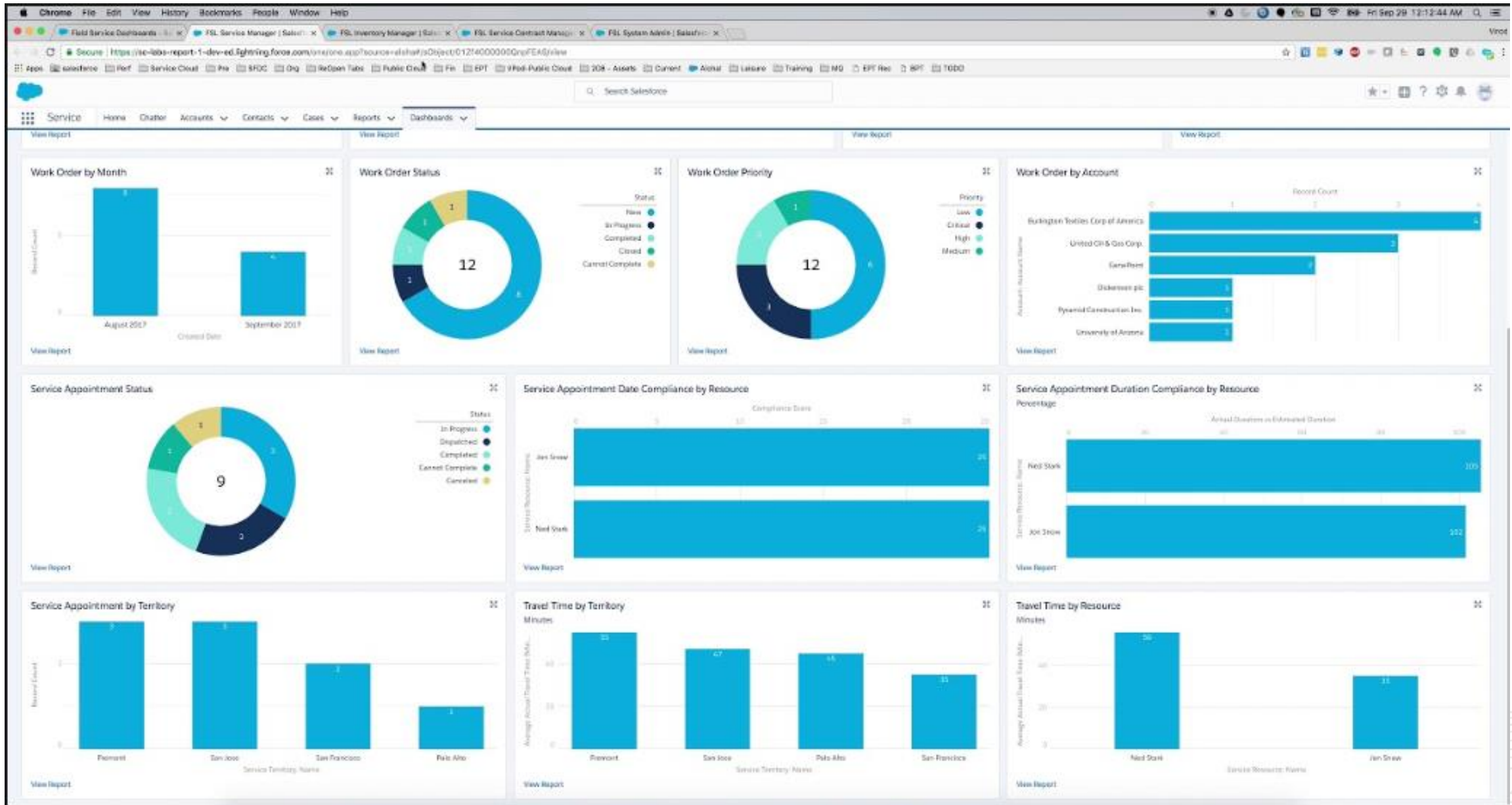


Modern energy

# Basic Services: SDG Indicators

	Access to	Related SDG indicators	Custodian Agency	Tier	
Physical infrastructure	Basic drinking water services	Proportion of population using basic drinking water services (Part of 6.1.1)	WHO, UNICEF	Tier I	Physical infrastructure
	Basic sanitation services	Proportion of population using basic sanitation services (Part of 6.2.1)	WHO, UNICEF	Tier I	
	Waste collection	11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities	UN-Habitat	Tier II	
	Mobility and transport	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities 9.1.1 Proportion of the population living within 2km of an all-season road	UN-Habitat WB	Tier II	
	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	WB WHO	Tier I Tier I	
Social I/F	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	ITU	Tier I Tier I	Social I/F
	Healthcare	3.8.1 Coverage of essential health services	WHO	Tier II	
	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.	UNESCO-UIS	Tier II	

Presentation and reporting will on dashboard. Below is an example of a dashboard presentation



# Indicator 1.4.2: Secure Tenure Rights to Land

**Proportion of total adult population with secure tenure rights to land, with legally recognized documentation, and who perceive their rights to land as secure, by sex and type of tenure.**

## **Legally recognized documentation:**

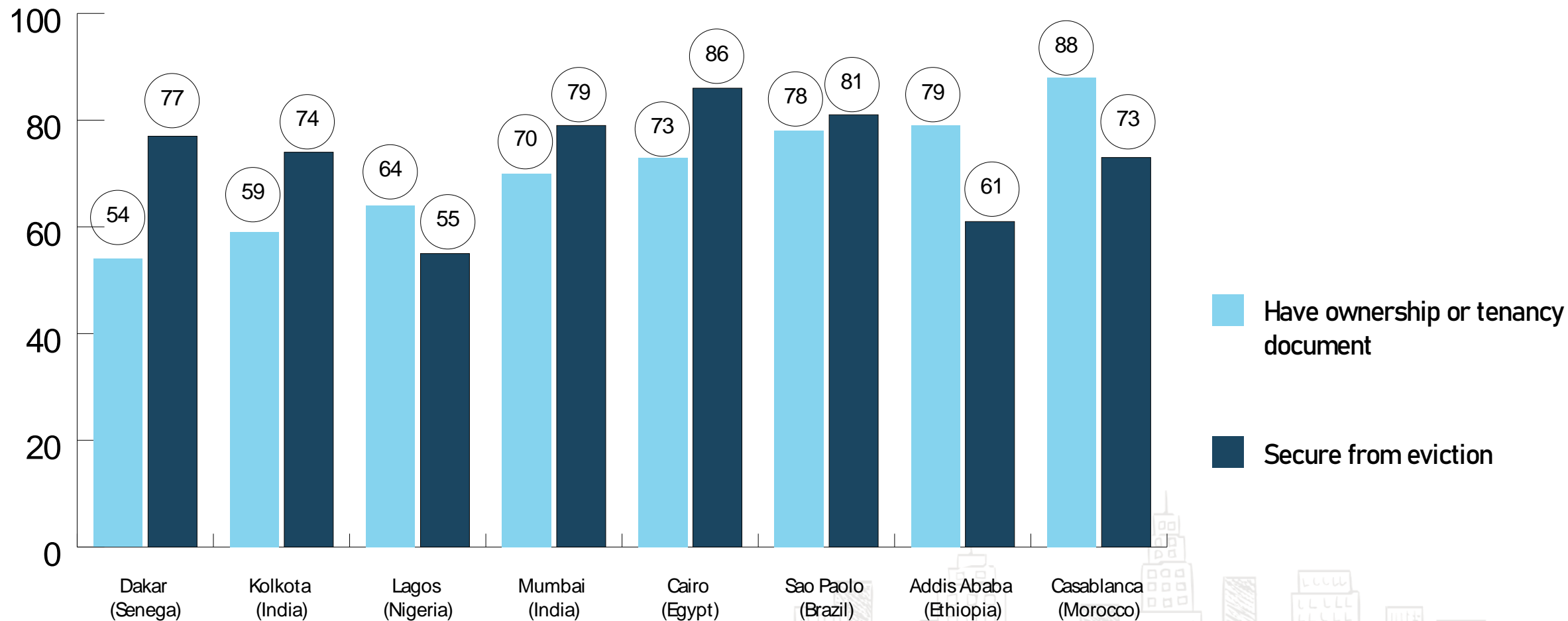
- Legal documentation of rights refers to the recording and publication of information on the nature and location of land, rights and right holders in a form that is recognized by government and is therefore official.
- Country specific metadata will define what documentation on land rights will be counted as legally recognized.

## **Perceived security of tenure:**

- Perception of tenure security refers to an individual's perception of the likelihood of involuntary loss of land, such as disagreement of the ownership rights over land or ability to use it, regardless of the formal status and can be more optimistic or pessimistic.
  - Although those without land rights' documentation may frequently be perceived to be under threat, and those with documentation perceived as protected, there may be situations where documented land rights alone are insufficient to guarantee tenure security.
  - Important to have information on people's satisfaction with quality of service, transparency, appropriateness, accessibility and affordability of land administrative services and justice systems



## Proportion of households with adequate document for proof of ownership or tenancy, and proportion of households secure from eviction, selected cities, 2004/2007



# Method of computation

Indicator 1.4.2 is composed of 2 sub-indicators:

**Part A** Measures the incidence of adults with legally recognized documentation over land among the total adult population;

**Part B** focuses on the incidence of adults who report having perceived secure rights to land among the adult population

**Part (A) and part (B) provide two complementary data sets on security of tenure rights.**

$$\text{Part A} = \frac{\text{People (Adult) with legally recognized documentation over land}}{\text{Total adult population}} \times 100$$

$$\text{Part B} = \frac{\text{People (Adult) who perceive their rights as secure}}{\text{Total adult population}} \times 100$$



# Harmonization of land indicators

- Similarity in data needs for 1.4.2 and 5.a.1
- **FAO, UN-HABITAT and the World Bank** collaborated to **align concepts**, definitions and data collection tools, to facilitate countries in the collection and generation of these indicators.
  - A **common 'land tenure module'** has been developed with the aim of generating the data for calculating both indicator 5.a.1 and 1.4.2.
- Guidance note available [online](#)

## Measuring Individuals' Rights to Land

An Integrated Approach to Data Collection for  
SDG Indicators 1.4.2 and 5.a.1



COLOUR CODES	SDG 1.4.2	Both 1.4.2 & 5.a.1	Analytical purposes only
	SDG 5.a.1		

Q0. Do you own or hold use rights to any parcel of land, either alone or jointly with someone else, irrespective of whether the parcel is used by your or another household, and irrespective of the use of the parcel (including dwelling plot, agricultural, pastoral, forest and business/commercial plots)?

YES...1

NO....2 >> END OF QUESTIONS

7

ENUMERATOR: AFTER CREATING THE ROSTER OF PARCELS, GO THROUGH THE ENTIRE MODULE ONE PARCEL AT A TIME.

[illegible]

# Some indicator specific challenges

Indicator	Challenge
11.1.1	<ul style="list-style-type: none"> <li>• Lack of appropriate tools               <ul style="list-style-type: none"> <li>• Many global data collection exercises, including censuses, do not track populations living in places identified as slums</li> <li>• Most surveys, that use sampling frames taken from censuses are unable to distinguish between slum and non-slum clusters in urban areas.</li> </ul> </li> <li>• Lack of routine data on security of tenure</li> </ul>
11.3.2	<ul style="list-style-type: none"> <li>• Level of participation based on the perception of informed representatives from cities               <ul style="list-style-type: none"> <li>• Cultural expectations, biases or lack of information may influence perceptions by these informed representatives.</li> </ul> </li> <li>• Some concepts may not be clear for all.</li> <li>• Different countries have different perceptions of civil society participation in urban planning and management.</li> </ul>
1.4.1	<ul style="list-style-type: none"> <li>• Definition and boundary of ‘basic services’</li> <li>• Is just measuring ‘access to basic services’ enough in line with the target?               <ul style="list-style-type: none"> <li>• Whether or not include social and quality of basic services in the monitoring scope</li> </ul> </li> </ul>
1.4.2	<ul style="list-style-type: none"> <li>• Limited capacities for land management, data collection and monitoring, and inadequate existing land information systems, poorly kept land registries, and limited data on large or densely populated geographical areas</li> <li>• Coverage of administrative data may however be geographically skewed</li> <li>• Logistical and cost constraints with the implementation of household surveys</li> </ul>





**THANK YOU!**



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[Donatien.Beguy@un.org](mailto:Donatien.Beguy@un.org)