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

Introduction to the National Sample of Cities and Urban Observatories Models

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Outline

Part 1: The National Sample of Cities
- Rationale
- Objective
- Constructing an NSC
- Conclusion

Part 2: The Urban Observatory Model
- Background
- What is an urban observatory
- Why urban observatories
- The UO architecture
- Setting up and maintaining urban observatories
1. The National Sample of Cities
SDG 11 indicators should be computed at city level, and reporting done at national level (urban aggregated value)

Not a problem to produce data on all cities / urban areas for smaller countries

For big countries / those with many urban areas, it’s NOT possible, and perhaps NOT necessary to consider all cities to monitor national trends on urban SDGs

The National Sample of Cities (NSC) was developed to help these countries;

• Create a consistent set of cities that are representative of a country’s urban context
• Aggregate data collected at city level to national level
Objective of NSC

Facilitate reporting at regional and global levels on locally produced urban SDGs indicators data.

- Assist countries in measuring national progress in a systematic and scientific manner
  - Sample that reflects systems of cities
  - Facilitate low-cost monitoring and reporting in countries where resources are a big constraint.
How to construct an NSC?

6 Steps To Be Followed

1. IDENTIFICATION
   - Compiling the national sampling frame of cities

2. SELECTION
   - Defining and localizing the selection criteria

3. SAMPLING
   - Selection of the Sample of Cities
   - Weights calculation and representativeness of the sample

4. WEIGHT CALCULATION
   - Testing of the National Sample of Cities

5. TESTING
   - Preparation of regional and global report

6. REPORT
   - Weights calculation and representativeness of the sample

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FOR A BETTER URBAN FUTURE
How to construct an NSC?

STEP 1: Compiling the national sampling frame of cities

Identify and compile a complete listing of all the cities in a given country.
How to construct an NSC?

**STEP 2: Defining and localizing the selection criteria**

Ensure final sample is consistent and representative of a given country’s territory, geography, size, history, and systems of cities.

**Stratification characteristics**

- **Population size**
  - Total population living in each city.

- **City area size**
  - Total surface area of the city

- **Geographic location**
  - Geographic position within the country

- **City function**
  - Financial centre, commercial centre, manufacturing/industrial centre, administrative centre; etc.

- **Economic / Political importance**
  - Contribution of the city to the national GDP or city income per capita.
Defining city clusters/combinations

Country X where 3 criteria have been determined:

- Geographic location: 6 categories (North, South, West, East,...)
- City population size: 4 categories (Less than 10k, 10k-30k, etc.)
- City area size: 3 categories (Less than 3000 km², 3000-7500, 7500+)

=> # of boxes/cells will be: 72 (=6 x 4 x 3).

Step 3: Selection of the Sample of Cities

Defining city clusters/combinations
How to construct an NSC?

Step 3: Selection of the Sample of Cities: **Defining city cluster / combinations**

The selected Box above contains a cluster of cities that:
- Belong to Country region 6,
- Have Category 1 land area and
- Category 1 city population.
How to construct an NSC?

Step 3: Selection of the Sample of Cities: Random sampling within clusters

Procedure for sampling within clusters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population in Box 811 (A)</td>
<td>14,992,779</td>
</tr>
<tr>
<td>Total Population in Universe (B)</td>
<td>829,516,078</td>
</tr>
<tr>
<td>% of Box 811 in total population (C)=(A)/(B)*100</td>
<td>2%</td>
</tr>
<tr>
<td>Total cities in Box 811 (D)</td>
<td>320</td>
</tr>
<tr>
<td>Number of cities to be randomly sampled from Box 811 (E)= (D)*(C)</td>
<td>6</td>
</tr>
</tbody>
</table>

Total sample = Sum of all sampled cities in each box
How to construct an NSC?

**STEP 4: Weights calculation**

Each city in the sample represents a group of cities in the universe

- Weight that is proportional to the share of the population of this group in the total population of the universe.
- Weight for each city used to calculate SDG 11 indicators and other urban attributes of interest
  - Access to public open spaces, Access to public transport, air quality, etc.

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Every resident in the cities in the sample in Box 811 represented 10 residents in the universe of cities in Box 811.

1 city represents 53 cities.
How to construct an NSC?

STEP 5: Testing of the NSC

Test sample for monitoring and reporting using SDGs Indicators.

- Look at population growth rate as an indicator to test the representativeness of the sample.

- Compare the average population growth rates during a certain period in all the cities in the universe with both the city-based and population-based weighted averages of the cities in the sample during the same period.

- Involved all relevant stakeholders

STEP 6: Preparation of regional and global reports
In conclusion...

Application of the approach is not a straightforward process
Countries with many cities are expected to experience more complications in the selection of cities than countries with few cities.

Make practical decisions considering context

NSO has a key role but VERY important to involve other stakeholders
Important for countries to have wide consultations involving all relevant stakeholders during the process of developing an NSC.

Adopting NSC approach is a choice that a country must make after weighing the options available for national level monitoring of all cities to report for SDG indicators.
Technical support available
2. The Urban Observatory Model
Background

- Cities / human settlements are complex systems, requiring multi-level monitoring
- **Clear understanding** of conditions, situations, vulnerabilities and opportunities for all populations and areas through urban data is **key for sustainable, inclusive and collective development**
- Most places face **acute data challenges at local city level**
  - > 60% of local authorities recognize that they don’t have appropriate capacities, means and tools to understand urban dynamics and challenges with accurate data and information. *(UN-Habitat urban indicators database)*
- Many cities face major disconnects in use of data to inform decision making processes
  - Lack of or too much information that is not well linked, complexities in data presentation for informed decision making.
What are urban observatories

A local network and integrated system for producing, analyzing, disseminating data across indicators and its use for informed decision making

Objectives of urban observatories

- To create sustainable urban monitoring systems in support of local planning and management processes, linking data to policy;
- To strengthen local capacity for the development and use of urban indicators that facilitate the collection of disaggregated data at city and sub-city levels;
- To promote local ownership of urban indicator systems and a culture of monitoring and assessment in the urban sector.

Different observatories are housed at different places

LUOs - existing city department, non-governmental organization or university.
NUOs – statistical offices, ministry in charge of planning / urban development, research institute
RUO – Commissions
GUO – UN-Habitat
Why urban observatories?

1. Dynamic, multi-layered, easy to use and adapt monitoring system that:
   • Supports and guides collection and collation of relevant, accurate and up to date data
   • Supports analysis of urban data and its translation into simple to understand information
   • Supports production of data-backed reports to inform decision making processes

2. A feedback system in the planning cycle
   • Assess current situation;
   • Formulate policies and programs, prioritize objectives and set targets;
   • Monitor implementation;
   • Provide feedback to make mid-course changes; and
   • Communicate results

3. Urban observatories promote data-informed local decisions and actions, and link local priorities to national and global agenda
The Urban Observatory Architecture

**Stakeholders network**
- Observatory managers, data producers, etc

**Urban Observatory**

**Observatory Support System**
- UN-Habitat for guidance & certification, external donors, GUO-Network

**Data**
- Indicator framework, methods & tools, analyzed data, etc

**Data Dissemination Platform**
- Website, stand alone apps etc

**Decision Support Interface**
- Reports, community engagement system, feedback mechanism etc
Setting up and Maintaining an Urban Observatory

**Phase 1: Inception and feasibility assessment**

1. **STEP 1** Create a steering committee
2. **STEP 2** Generate stakeholder participation
3. **STEP 3** Assess local capacity
4. **STEP 4** Nominate a host institution
5. **STEP 5** Build local capacity
6. **STEP 6** Initiate the certification process

**Phase 2: Organizational development**

1. **STEP 1** Define the objective
2. **STEP 2** Develop a mission statement and a vision for the observatory
3. **STEP 3** Identify the purpose of the observatory
4. **STEP 4** Identify the sectoral focus
5. **STEP 5** Develop a clear and concrete approach
6. **STEP 6** Select the primary actors and composition of the observatory
7. **STEP 7** Specify the level of intervention
8. **STEP 8** Identify the necessary skills to accomplish the objectives
9. **STEP 9** Describe expected results in terms of products
10. **STEP 10** Plan for sustainability
UN-Habitat Coordinates and Supports Urban Observatories Globally

**Technical guidance**
- Provide Technical guideline to LUO, NUO and RUO

**Evidence Generation**
- Information to Knowledge

**Facilitate learning**
- Share Best practice and lessons learnt

**Guide policy formulation**
- Guidance in informed policy formulation

**Facilitate partnerships**
- Facilitate partnership agreement

**Certifies**
Example of Al Qassim urban observatory products

"Al Qassim Urban Observatory is an instrumental mechanism for evidence-based decision-making as it generates various urban indicators in support of development across sectors."

- HRH Dr. Faisal Bin Mashal Al-Saud, Governor of Al Qassim and Chairperson of Qassim Urban Observatory Council
THANK YOU!

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