Deep Dive

Harnessing Data for Urban Insights: Observatories and the Urban Monitoring Framework (UMF)

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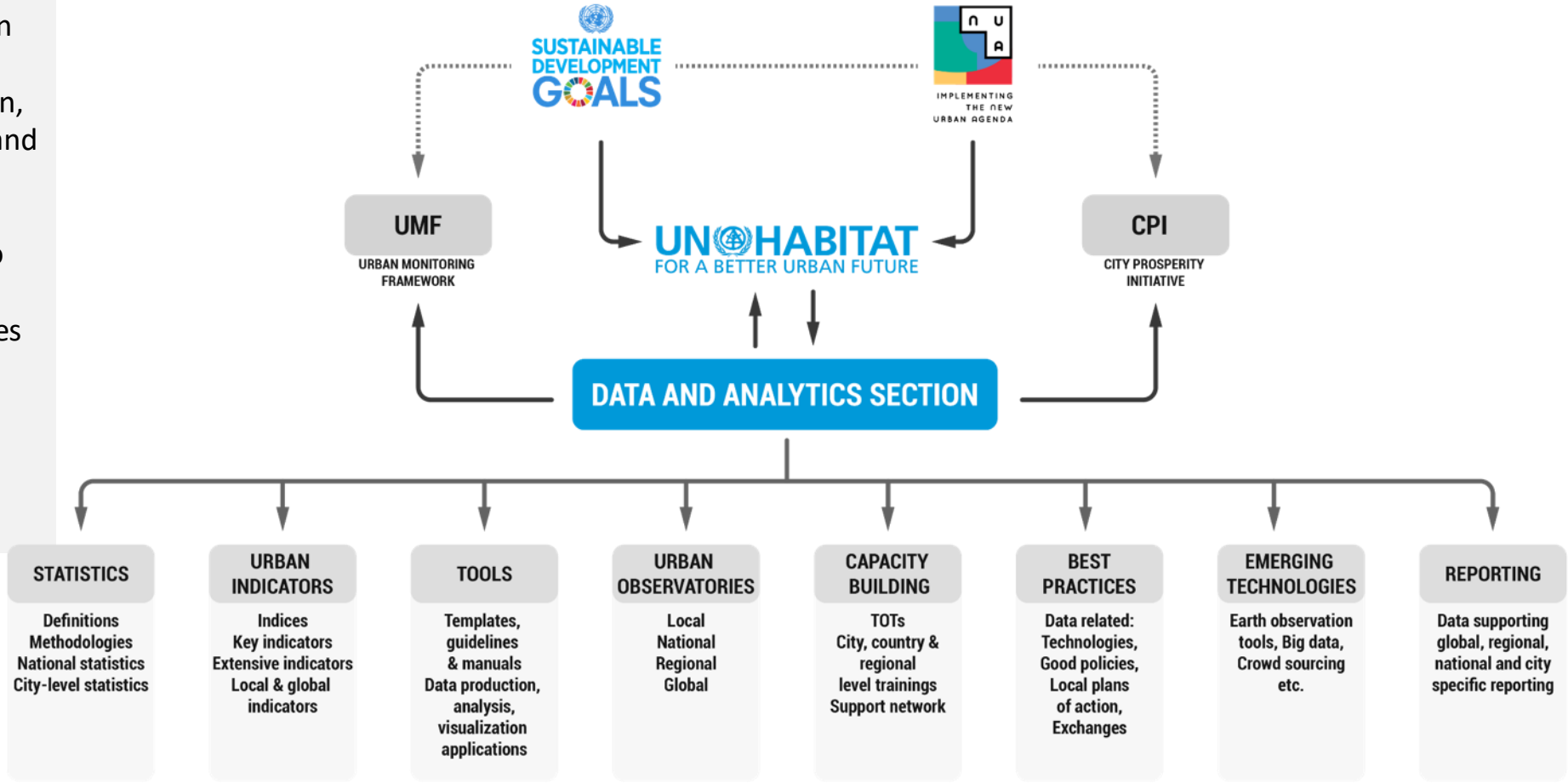
GUO NET
GLOBAL URBAN OBSERVATORY NETWORK

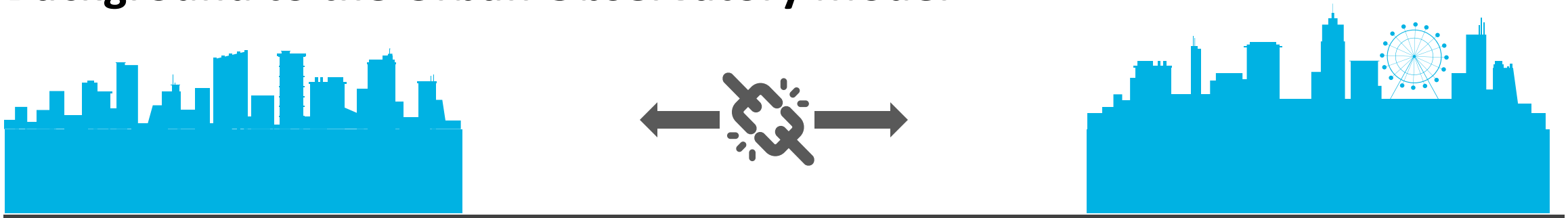
About the Data and Analytics Unit, UN-Habitat

- Focal point for sustainable urbanization data within the SDGs
- Oversee data production, capacity development and reports production
- Lead development of tailor-made solutions to measure urban development trajectories and conditions

Our focus areas



Background to the Urban Observatory Model



Many cities face major disconnects between data production and decision-making processes

- Lack of good quality, relevant, accessible and timely data on cities
- Too much information that is not well-linked, complexities in data collection and management

Hence the Urban Observatory model was created to:
Assist countries in strengthening data capacities at national, sub-national, and local levels, providing platforms to facilitate effective knowledge exchange and promote evidence-based governance.

What is an urban observatory?

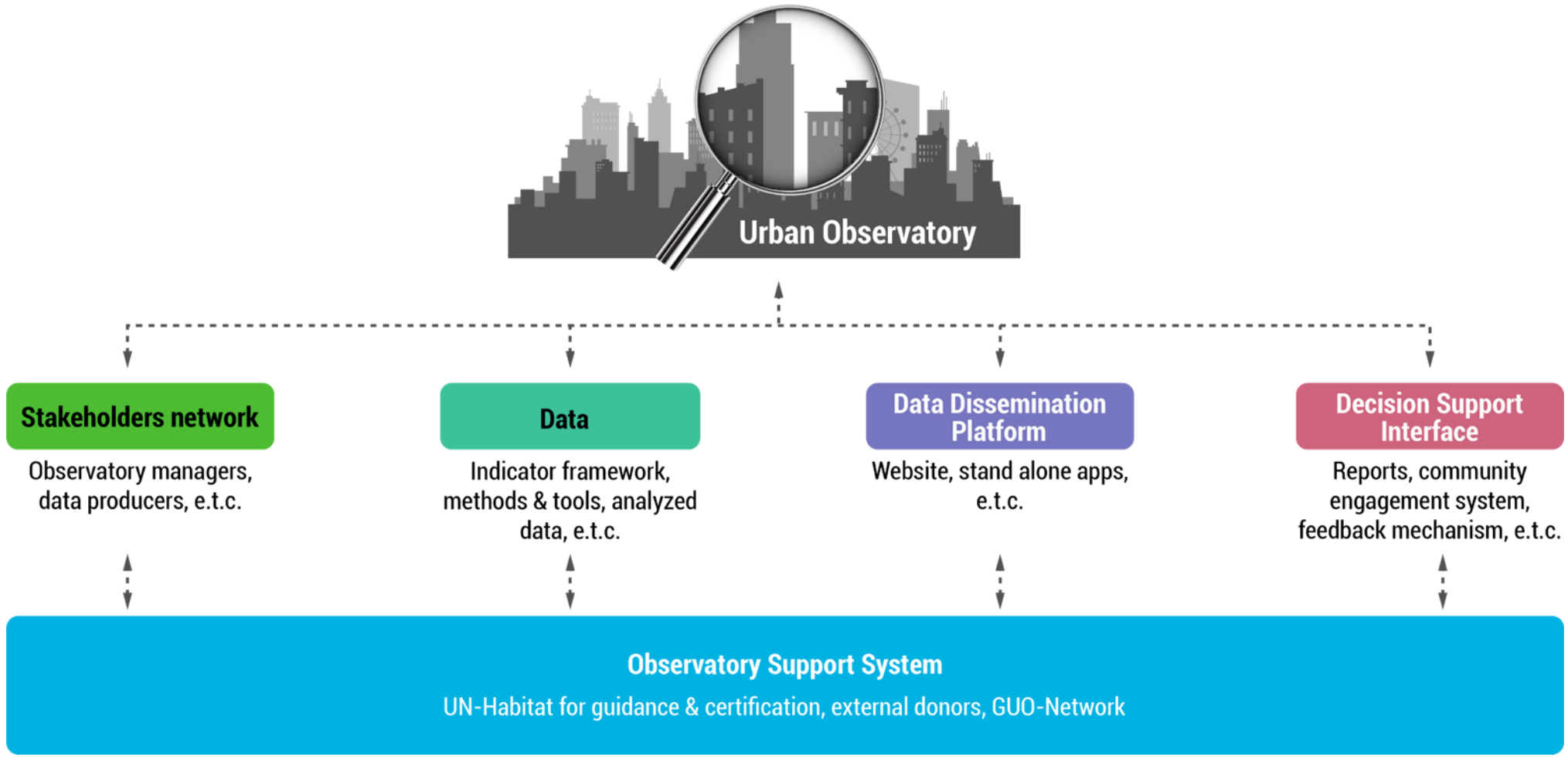
A local network and integrated system for producing, analyzing, disseminating data across indicators and its use for informed decision-making at local level

Constitutes both a process and a platform

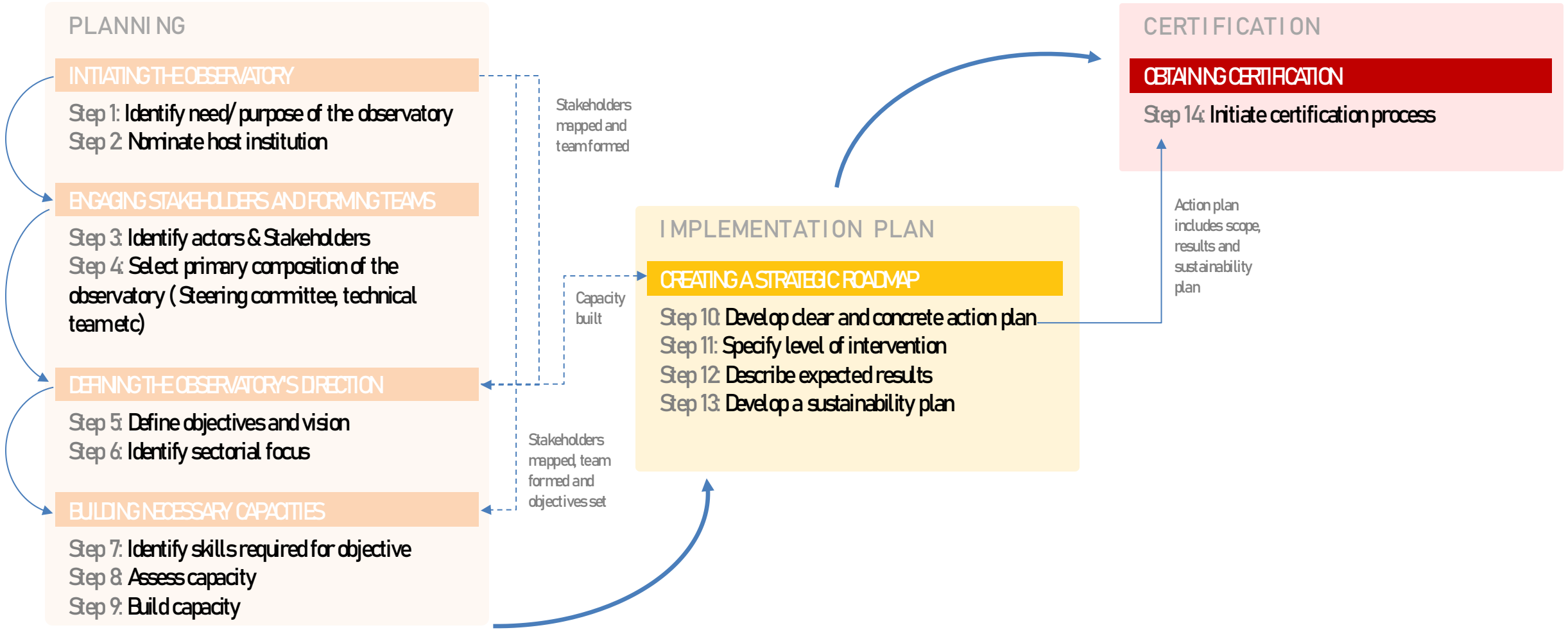
Specific Aims

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

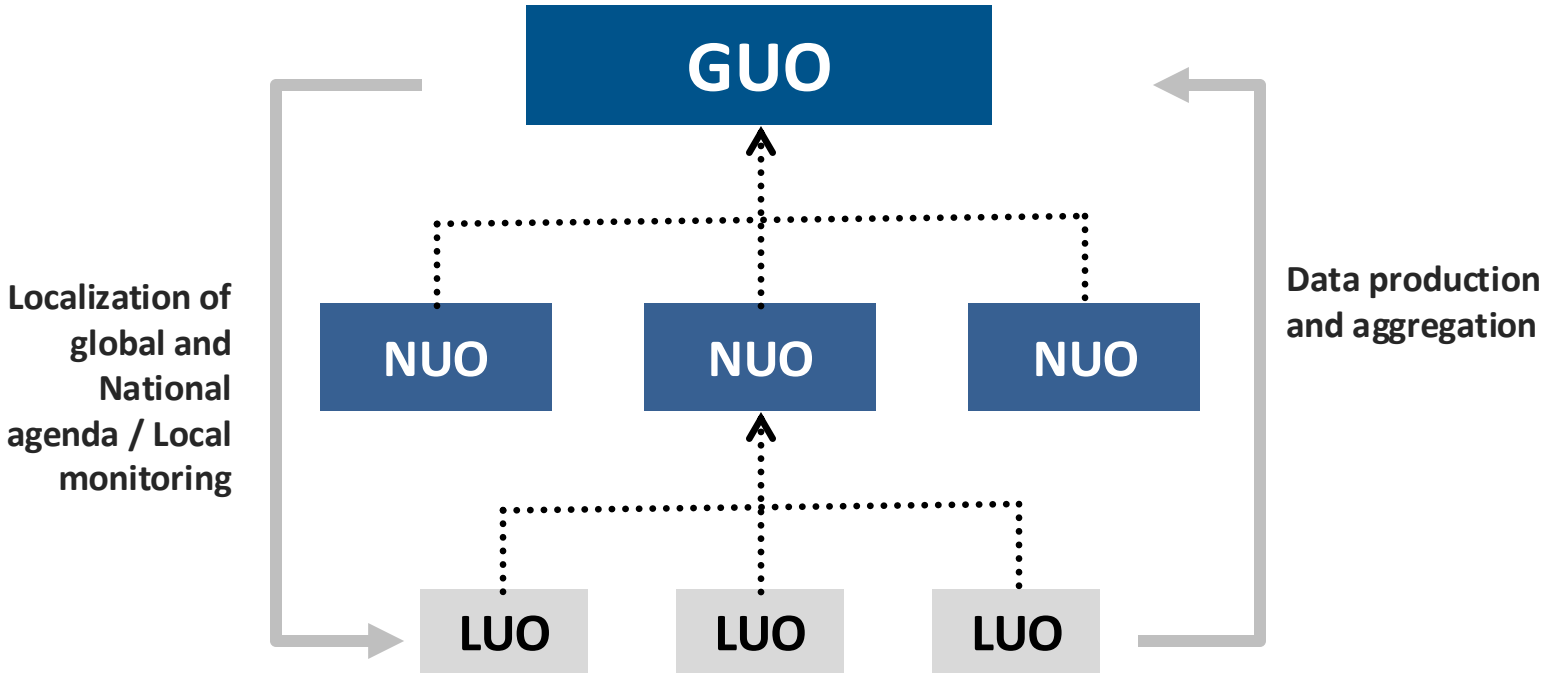
How an urban observatory works…. Five key components



Steps in setting up an urban observatory



Interactions between different urban observatory levels



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

GUO –UN-Habitat

Urban Observatories are connected through the GUO-Network

GUO NET
GLOBAL URBAN OBSERVATORY NETWORK

A worldwide network of urban observatories at different levels, aimed at sharing knowledge and supporting implementation of urban agendas at the national and local levels.

Technical guidance

Provide Technical guidance to LUO, NUO and RUO in urban planning and policy issues

Inform

Improve information flows between all levels for better urban decision-making

Share

Share best practices and lessons learnt

Facilitate partnerships

Facilitate partnership agreement

Guide policy formulation

Guidance in informed policy formulation

GUO-Network is managed through a steering committee, recommended by the network members and constituted in 2022

UN-Habitat's support

Supporting UOs setup and capacity development

Capacity building activities on UO set up and monitoring needs

Monitoring frameworks

Development of guides and manuals on monitoring needs at the local level based on global standards eg UMF

Institutional assessments and needs assessment consultations

Support UOs to identify institutional partners and personnel and conduct initial needs assessment activities.

Partnerships

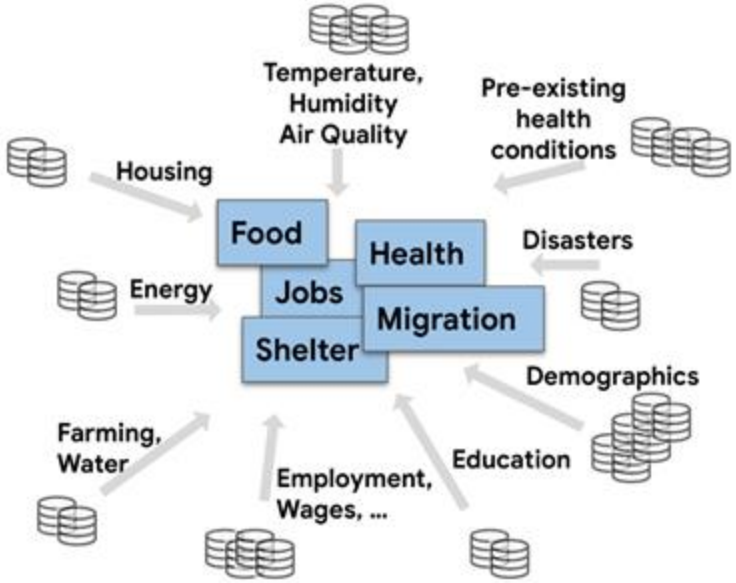
Relationships with wide range of urban stakeholders and other urban observatories to learn from past experiences regarding methods and approaches
+
Overall coordination of GUO-Net activities

Certification process

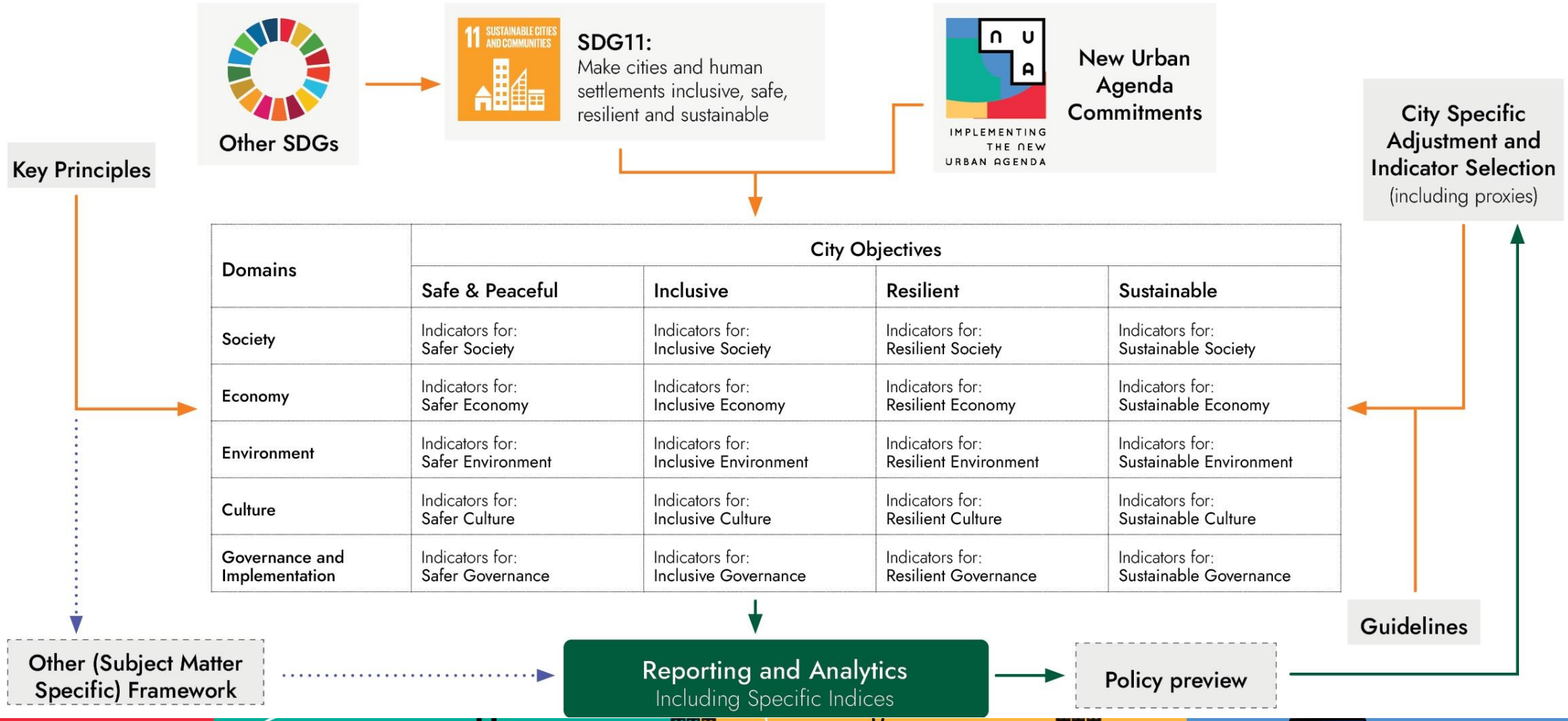
Why the Global Urban Monitoring Framework

- ✓ Many of the big challenges we face — climate change, increasing inequities, epidemics of diabetes — **will need deep, holistic insights** (data) to solve for urban areas.
- ✓ **Complex challenges don't get solved with a single data source**
- ✓ **Data fragmentation** gets in the way of being used to make a big difference.

Climate change in cities • Example

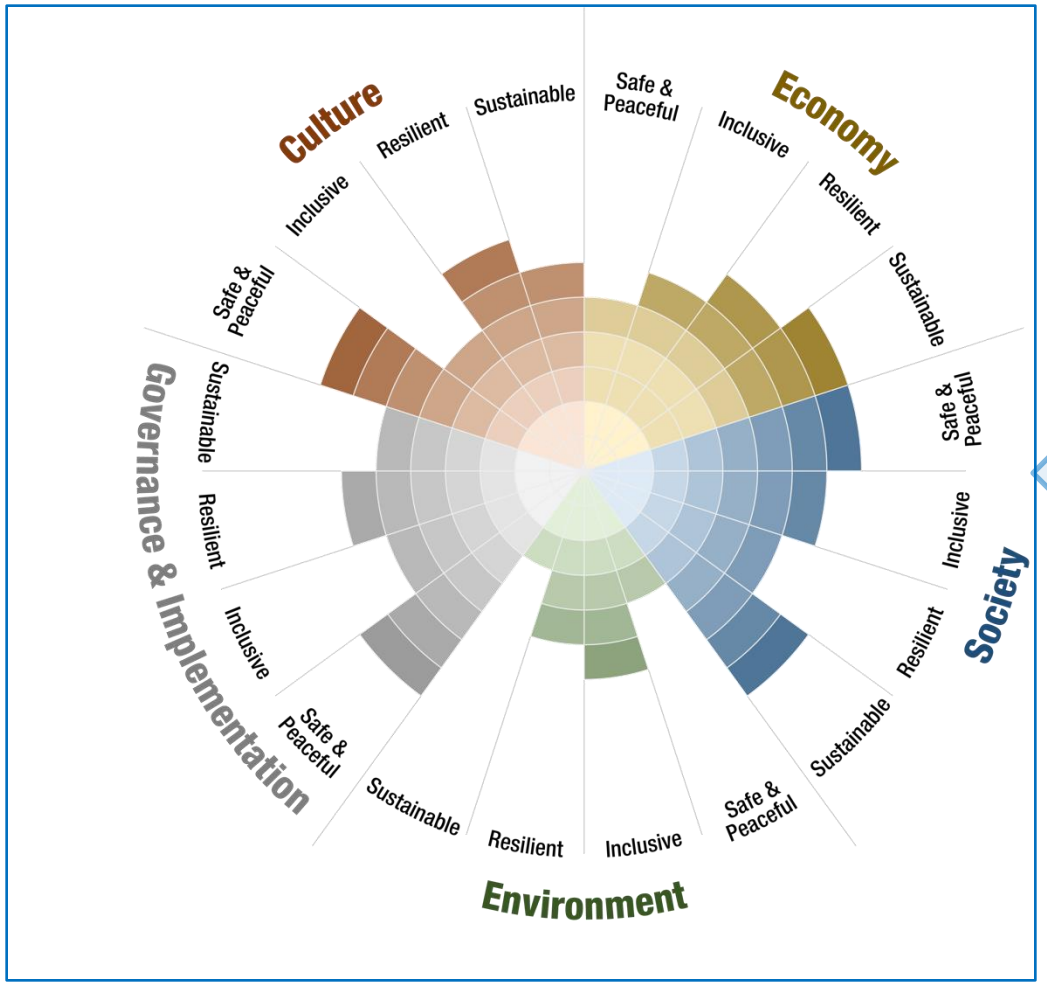


The Global Urban Monitoring Framework

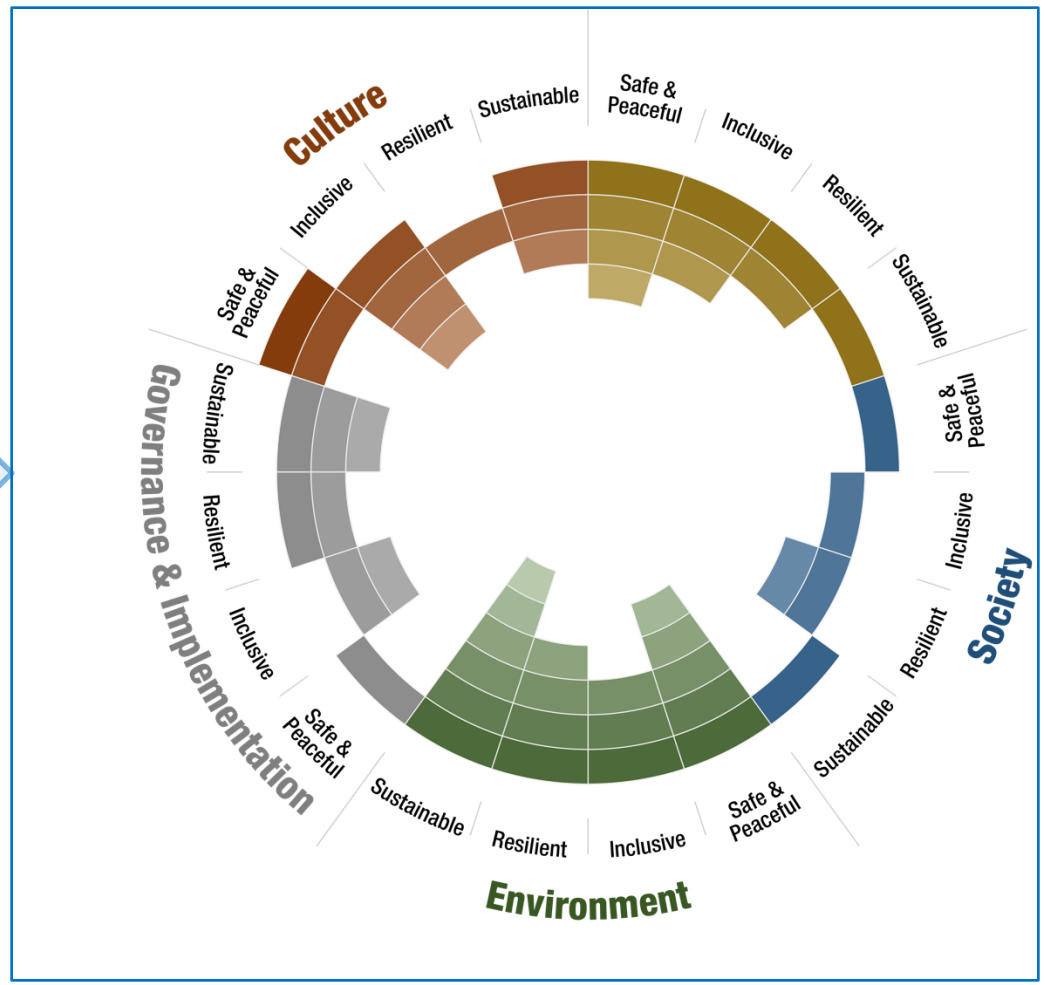


Domains	City Objectives			
	Safe & Peaceful	Inclusive	Resilient	Sustainable
Society	Indicators for: Safer Society	Indicators for: Inclusive Society	Indicators for: Resilient Society	Indicators for: Sustainable Society
Economy	Indicators for: Safer Economy	Indicators for: Inclusive Economy	Indicators for: Resilient Economy	Indicators for: Sustainable Economy
Environment	Indicators for: Safer Environment	Indicators for: Inclusive Environment	Indicators for: Resilient Environment	Indicators for: Sustainable Environment
Culture	Indicators for: Safer Culture	Indicators for: Inclusive Culture	Indicators for: Resilient Culture	Indicators for: Sustainable Culture
Governance and Implementation	Indicators for: Safer Governance	Indicators for: Inclusive Governance	Indicators for: Resilient Governance	Indicators for: Sustainable Governance

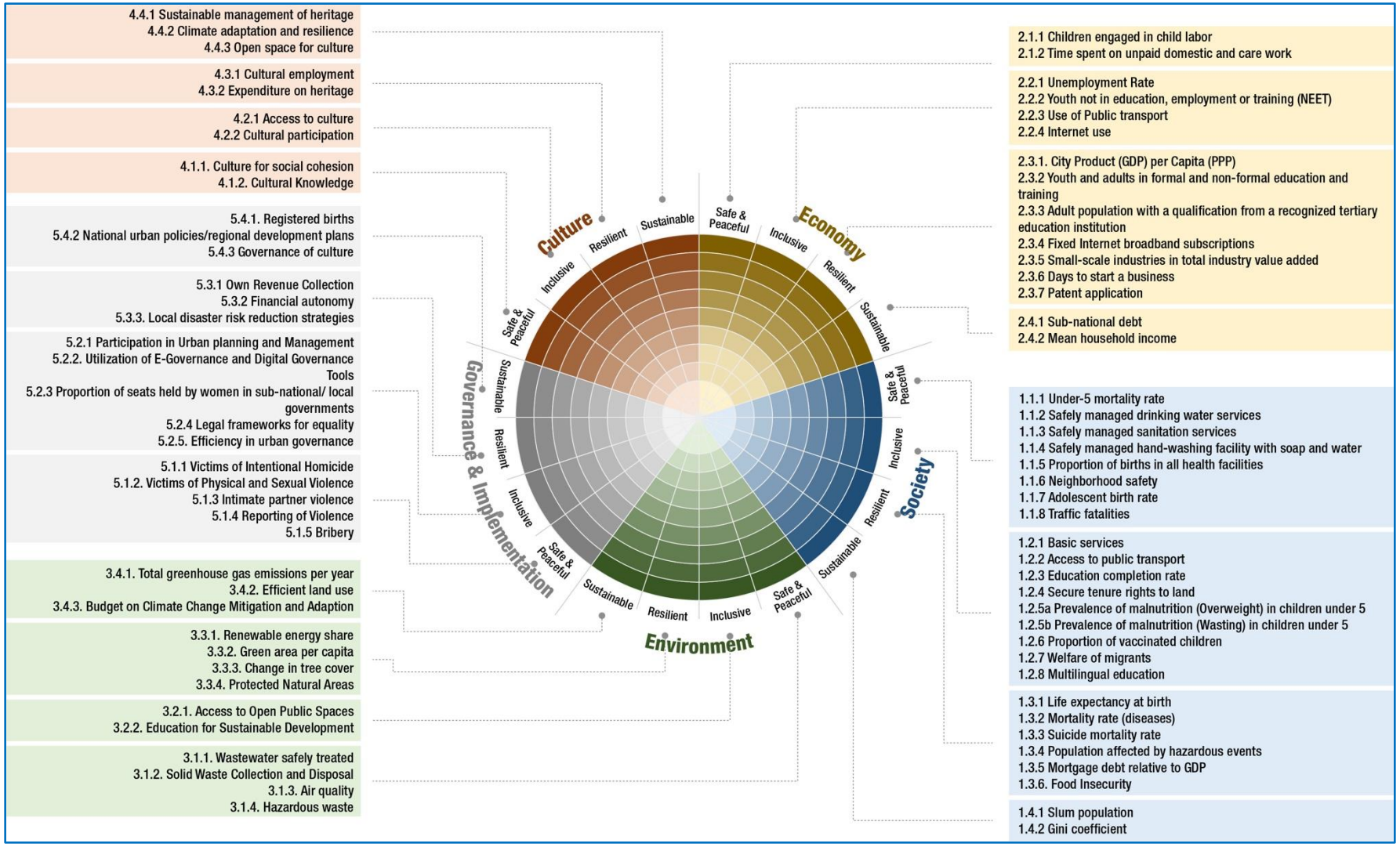
The UMF helps link monitoring to local actions



Gaps & Actions Identification



The UMF Wheel Diagram



The UMF Adapted Indices & SDG Alignment

City Objectives	Indicator		Sources/ Origins	Spatial Indicator
1. Society				
1.1 Safe and Peaceful	1.1.1 (UMF-01)	Under-5 mortality rate	SDG 3.2.1	No
	1.1.2 (UMF-02)	Safely managed drinking water services	SDG 6.1.1	No
	1.1.3 (UMF-03)	Safely managed sanitation services	SDG 6.2.1a	No
	1.1.4 (UMF-04)	Safely managed hand-washing facility with soap and water	SDG 6.2.1b	No
	1.1.5 (UMF-05)	Proportion of births in all health facilities	UNICEF 8	No
	1.1.6 (UMF-06)	Neighborhood safety	SDG 16.1.4	No
	1.1.7 (UMF-07)	Adolescent birth rate	SDG 3.7.2	No
	1.1.8 (UMF-08)	Traffic fatalities	SDG 3.6.1	No
1.2 Inclusive	1.2.1 (UMF-09)	Basic services	SDG 1.4.1	Yes
	1.2.2 (UMF-10)	Access to public transport	SDG 11.2.1	Yes
	1.2.3 (UMF-11)	Education completion rate	SDG 4.1.2	No
	1.2.4 (UMF-12)	Secure tenure rights to land	SDG 1.4.2	No
	1.2.5a (UMF-13a)	Prevalence of malnutrition in children under 5 (Overweight)	SDG 2.2.2a	No
	1.2.5b (UMF-13b)	Prevalence of malnutrition in children under 5 (Wasting)	SDG 2.2.2b	No
	1.2.6 (UMF-14)	Proportion of vaccinated children	UNICEF 9	No
	1.2.7 (UMF-15)	Welfare of migrants	SDG 10.7.2	No
	1.2.8 (UMF-16)	Multilingual education	C2030-15	No
1.3 Resilient	1.3.1 (UMF-17)	Life expectancy at birth	CPI	No
	1.3.2 (UMF-18)	Mortality rate (diseases)	SDG 3.4.1	No
	1.3.3 (UMF-19)	Suicide mortality rate	SDG 3.4.2	No
	1.3.4 (UMF-20)	Population affected by hazardous events	SDG 11.5.1	No
	1.3.5 (UMF-21)	Mortgage debt relative to GDP	NUA 3.7	No
	1.3.6 (UMF-22)	Food Insecurity	SDG 2.1.2	No
1.4 Sustainable	1.4.1 (UMF-23)	Slum population	SDG 11.1.1	No
	1.4.2 (UMF-24)	Gini coefficient	CPI	No

- *City Prosperity Index (CPI)*
  Has now been replaced by the UMF.
- Quality of Life Initiative
- Economist Impact – Urban Performance Index (UPI)
- Shanghai UMF Adapted Index (SAI)

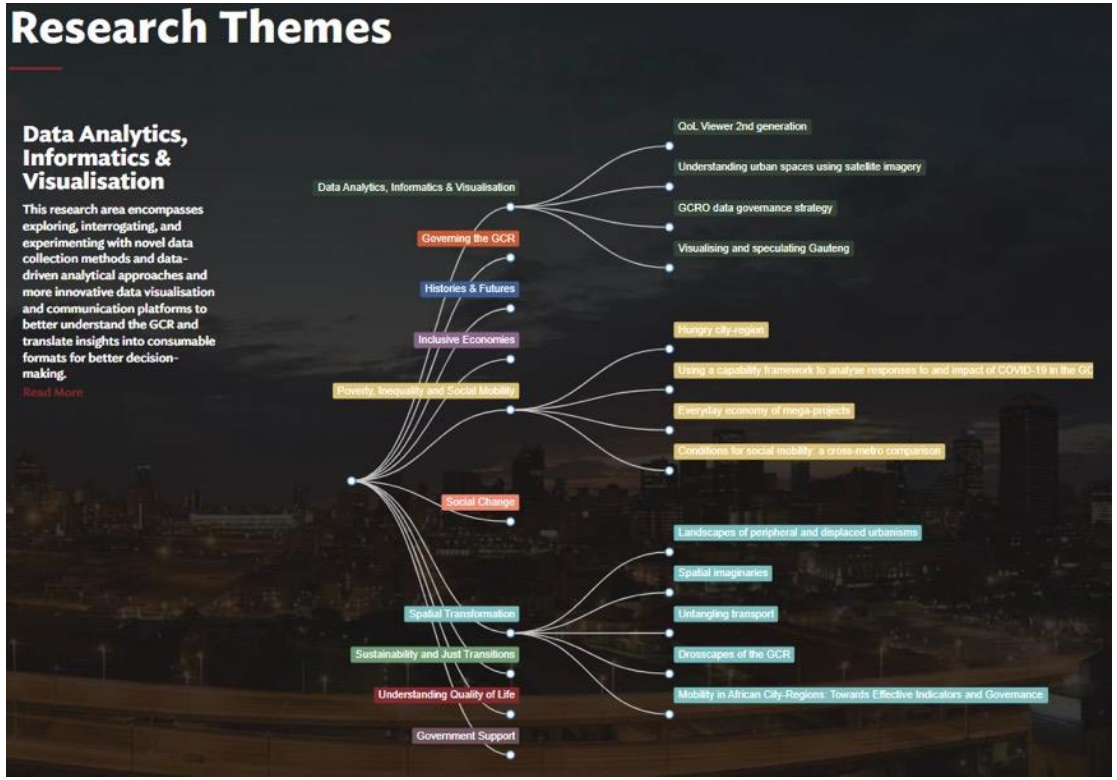
Some examples of urban observatories

Gauteng City-Region Observatory, South Africa

- Launched September 2008
- Institutional collaboration between:
  - Gauteng Provincial Government
  - Organised local government in Gauteng
  - University of the Witwatersrand (Wits)
  - University of Johannesburg (UJ)
- Funded with a core grant from the Gauteng Premier's Office, with UJ and Wits contributing additional in-kind support

Main areas of work

- On request policy work
- Data, indicators and benchmarks
- Medium to long term research
- Academic contributions
- Partnership and networks
- Government – academia portal

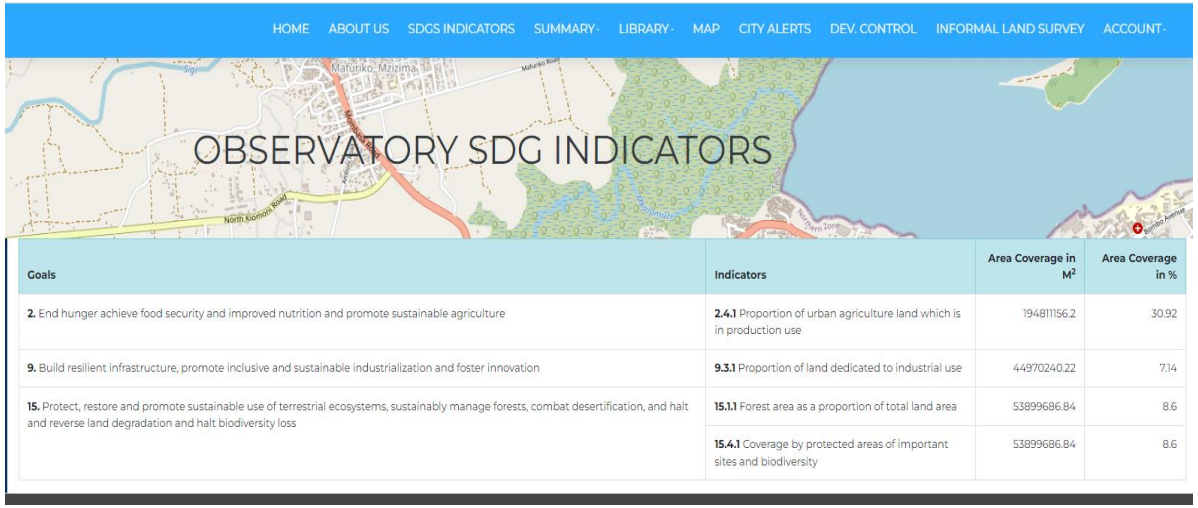


Slide credits: GCRO www.gcro.ac.za

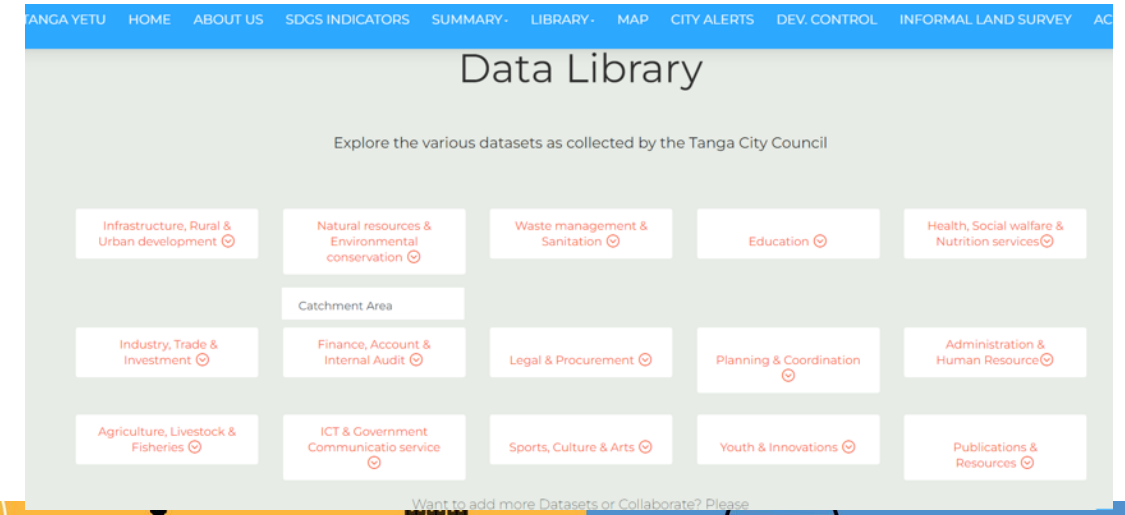
Some examples of urban observatories

Tanga City Observatory, Tanzania

https://tanga.cityobservatory.or.tz/

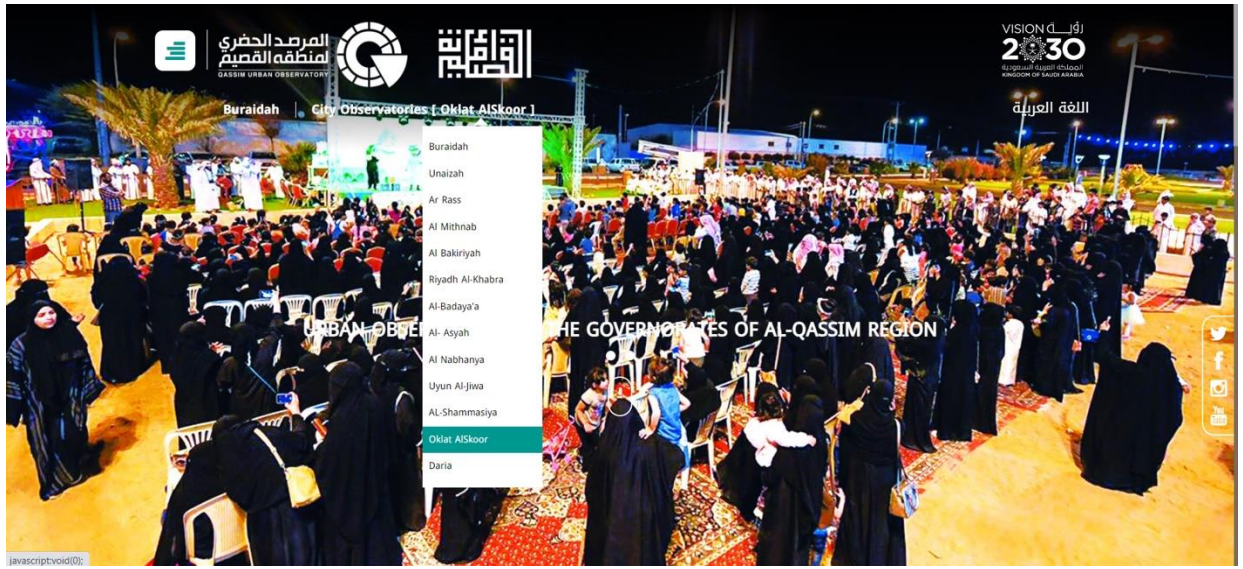


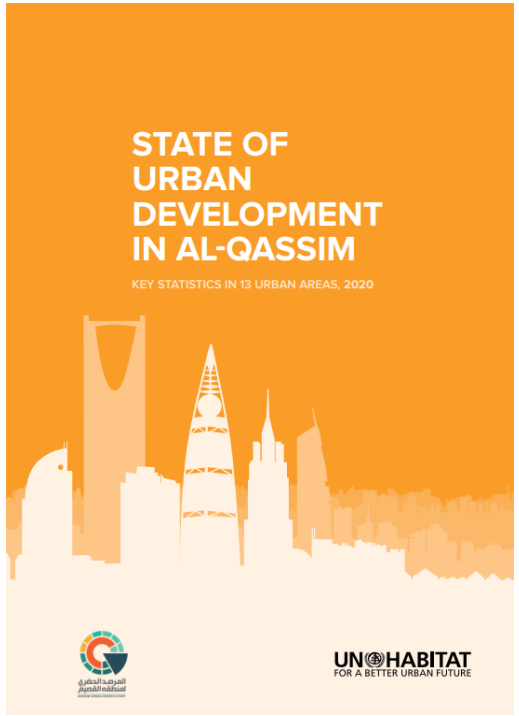
Goals	Indicators	Area Coverage in M^2	Area Coverage in %
2. End hunger achieve food security and improved nutrition and promote sustainable agriculture	**2.4.1** Proportion of urban agriculture land which is in production use	194811156.2	30.92
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	**9.3.1** Proportion of land dedicated to industrial use	44970240.22	7.14
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	**15.1.1** Forest area as a proportion of total land area	53899686.84	8.6
	15.4.1 Coverage by protected areas of important sites and biodiversity	53899686.84	8.6



Some examples of urban observatories

Qassim Urban Observatories, Saudi Arabia



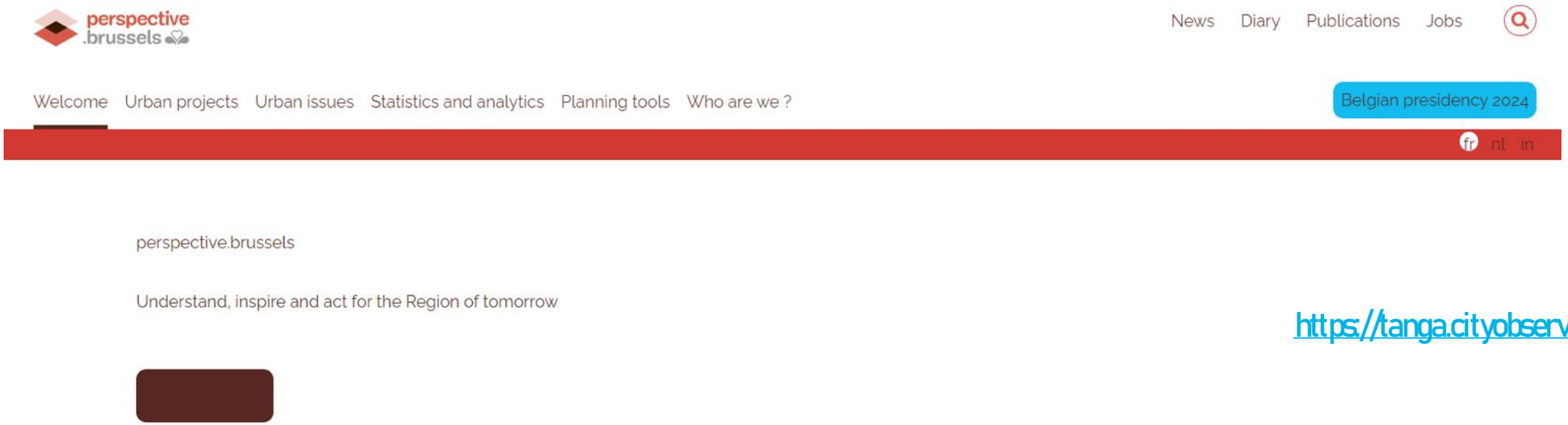


https://portal.marsad-buridah.com/Pages/2/101/Home

https://arabcityobservatory.org/

Some examples of urban observatories

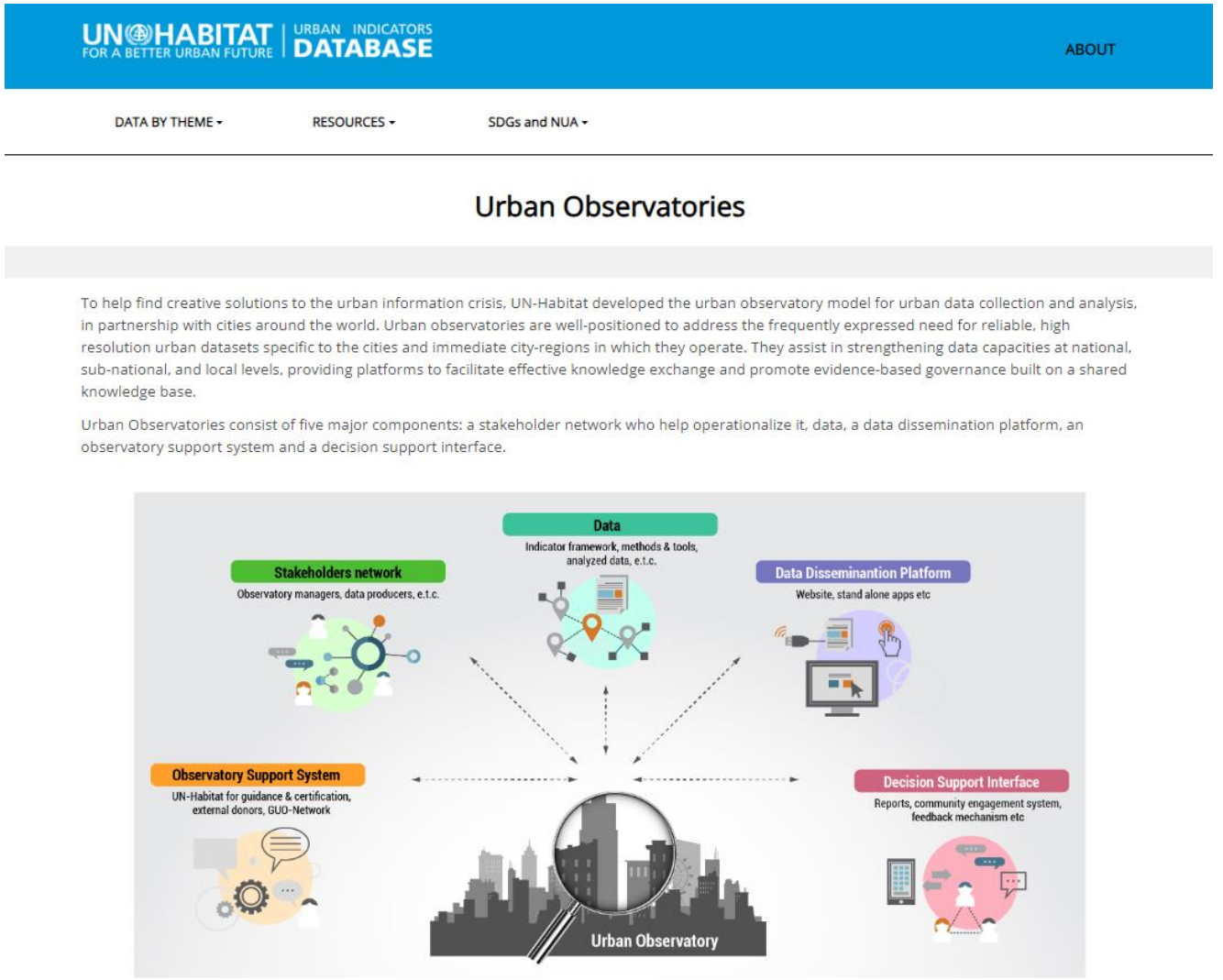
Perspective. Brussels, Belgium



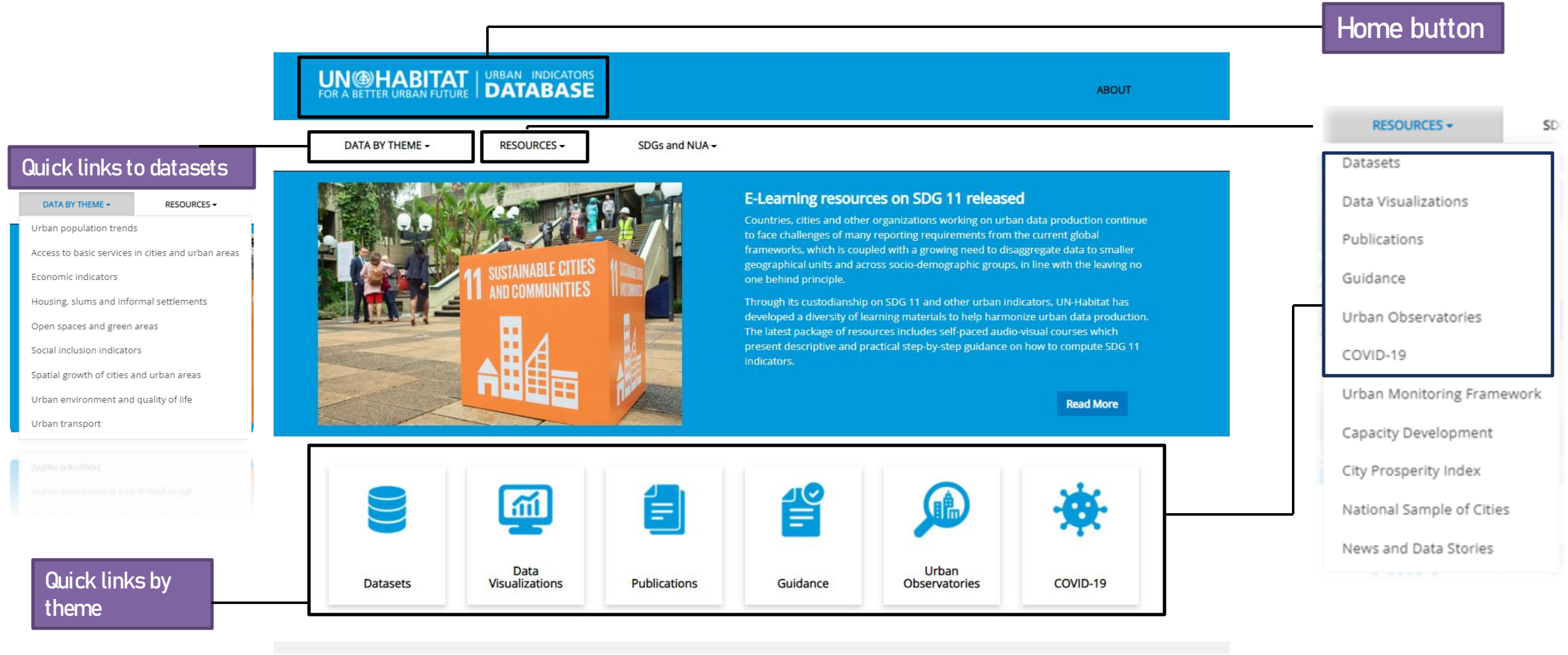
https://tanga.cityobservatory.or.tz/

More information ….

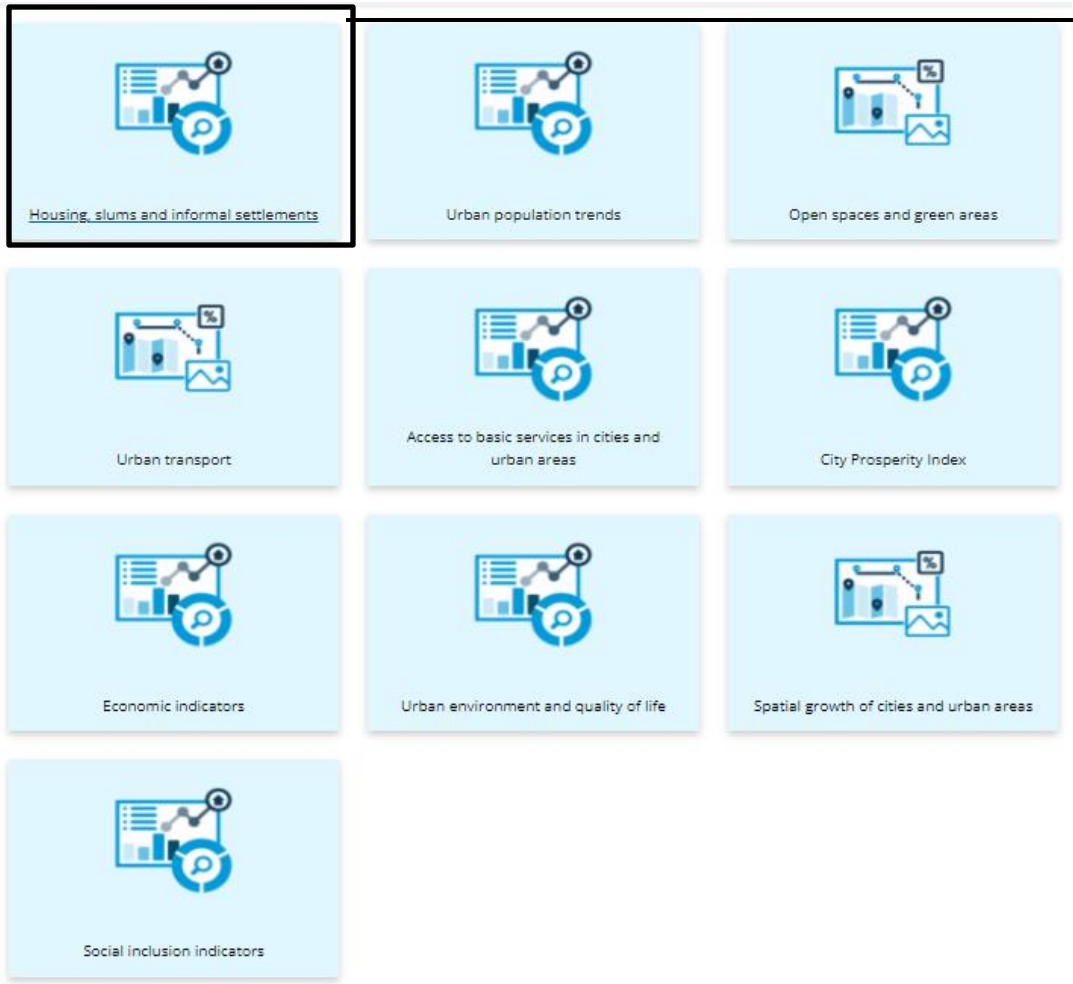
https://data.unhabitat.org/pages/urban-observatories

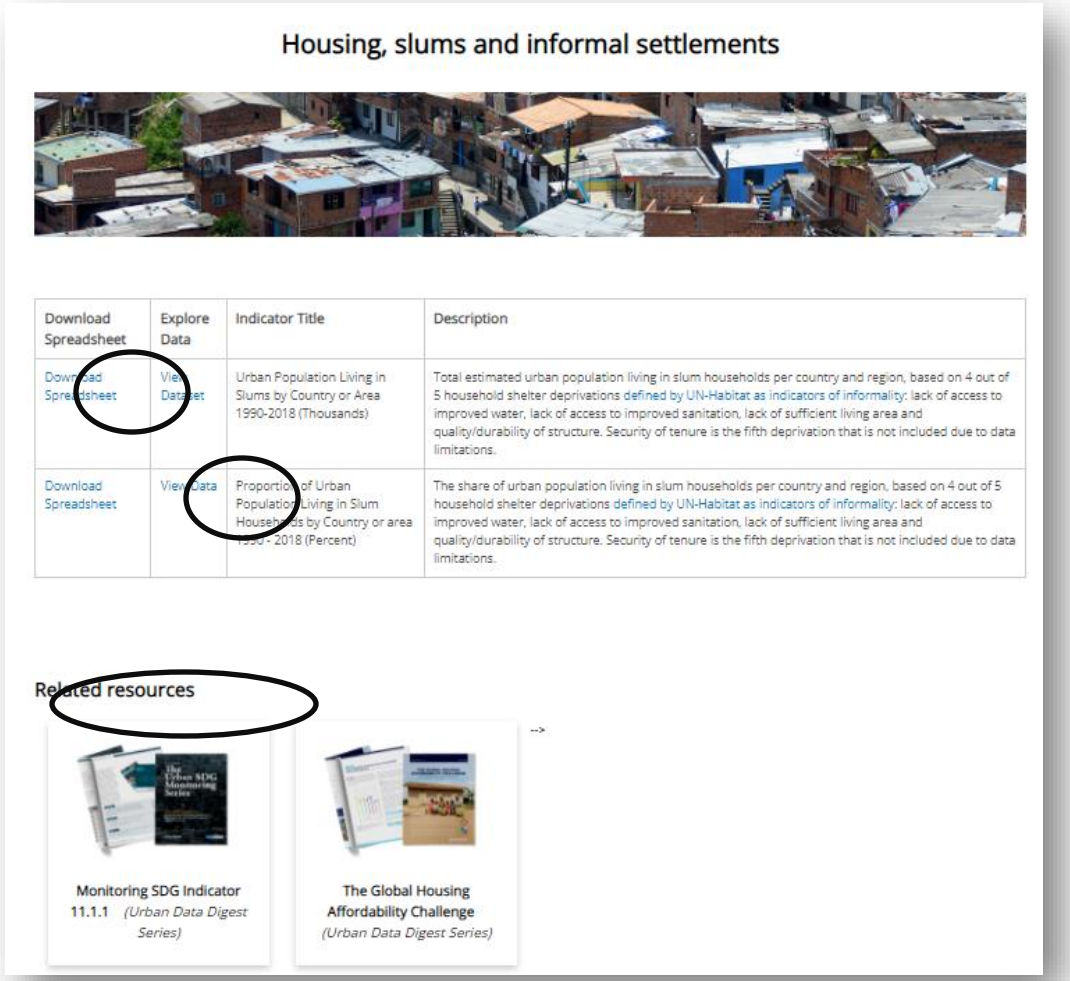


Urban Indicator Database



The Urban Indicators Platform: Datasets





Housing, slums and informal settlements

Download Spreadsheet	Explore Data	Indicator Title	Description
Download Spreadsheet	View Dataset	Urban Population Living in Slums by Country or Area 1990-2018 (Thousands)	Total estimated urban population living in slum households per country and region, based on 4 out of 5 household shelter deprivations defined by UN-Habitat as indicators of informality: lack of access to improved water, lack of access to improved sanitation, lack of sufficient living area and quality/durability of structure. Security of tenure is the fifth deprivation that is not included due to data limitations.
Download Spreadsheet	View Data	Proportion of Urban Population Living in Slum Households by Country or area 1990 - 2018 (Percent)	The share of urban population living in slum households per country and region, based on 4 out of 5 household shelter deprivations defined by UN-Habitat as indicators of informality: lack of access to improved water, lack of access to improved sanitation, lack of sufficient living area and quality/durability of structure. Security of tenure is the fifth deprivation that is not included due to data limitations.

Related resources

Monitoring SDG Indicator 11.1.1 *(Urban Data Digest Series)*

The Global Housing Affordability Challenge *(Urban Data Digest Series)*

The Urban Indicators Platform: Guidance

SDG 11+ Metadata

SDG 1.4.1:*Access to basic services*

Download Metadata

SDG 1.4.2: *Land rights and tenure security*

Download Metadata

SDG 6.3.1: *Wastewater management*

Download Metadata

SDG 11.2.1:*Sustainable urban transport*

Download Metadata

SDG 11.3.1: *Demographic and spatial urbanization trends*

Download Metadata

SDG 11.3.2: *Participation in planning processes*

Download Metadata

SDG 11+ step by step computation resources

SDG 11 Computation E-learns

Read more & start learning

SDG 1.4.2: *Land rights and tenure security*

Download Module

SDG 6.3.1: *Wastewater management*

Download Module

SDG 11.2.1:*Sustainable urban transport*

Download Module

SDG 11.7.1: *Open public spaces*

Download Module

SDG 11.a.1: *National Urban Policies*

Download Module

Linkages to UN-Habitat learning platform: **https://learn.urbanagendaplatform.org/**

The Urban Indicators Platform: SDGs and NUA

SDG 11 progress tracking and identification of required actions / interventions

SDG 11 targets progress at the global level

SDG Target 11.1

With more than one billion people living in slums today, the world is still a long way from attaining sustainable urbanization and access to decent housing and quality of life for all. Informal settlements and slums remain the only home for millions of urban residents in developing countries, with populations lacking access to basic services such as water and sanitation. Equally, many more populations in all world regions suffer from other housing related inequities such as homelessness, unaffordability and inadequacy, all of which further make the attainment of target 11.1 a far-fetched goal.

The COVID-19 pandemic has further worsened the situation in many urban centers, and as economies recover, the urban poor, many of whom live in informal settlements continue to experience the severest of impacts and risks. Amidst this pandemic, achieving affordable and adequate housing for all by 2030 requires renewed policy focus and increased investments in the low-cost housing sector. If the concerns of the urban poor and marginalized remain ignored, then the goal to "make cities and human settlements inclusive, safe, resilient and sustainable" will only be achieved partially, and in the process, deny millions the benefits of urbanization.

SDG Target 11.2

Provision and access to public transport significantly improves access to opportunities and services in cities and urban areas, with the poor being the biggest beneficiaries. Based on data from a globally representative sample of 610 cities from 95 countries, only half of the world's population is estimated to have access to a public transit stop/ station within a walking distance of 500 meters (for capacity transport systems e.g. buses, trams etc) and 1000 meters to high capacity systems (e.g. trains, metros, ferries, etc), indicating that we are at the half-mark in attainment of target 11. While all regions need to invest more in public transport, significant action is needed in Eastern and South-eastern Asia, Central and Southern Asia, Sub-Saharan Africa and Western Asia and Northern Africa, where access ranges from 33% to 38%.

Only three sub-regions recorded more than 10% convenient access to high capacity transport systems, with North America and Europe recording the highest access at 31.7%. In addition, many cities, especially those in Western Asia and Northern Africa and the Sub-Saharan Africa sub-regions have a high prevalence of informal transport systems. These systems depict unique characteristics, some of which include unclear operational and regulatory structures, lack of clearly identifiable pickup and drop off patterns and unclear route patterns, yet they significantly contribute to access to opportunities and services in these regions.

Countries and cities have a major task ahead to put in place systems for enhancing access to safe, affordable, accessible and sustainable public transport systems, which should be integrated with other modes such as walking and cycling. The required interventions range from direct investments in the core infrastructure to formulation and

Disseminating NUA monitoring information

Guidance documents

NUA Indicator Framework

Download Framework

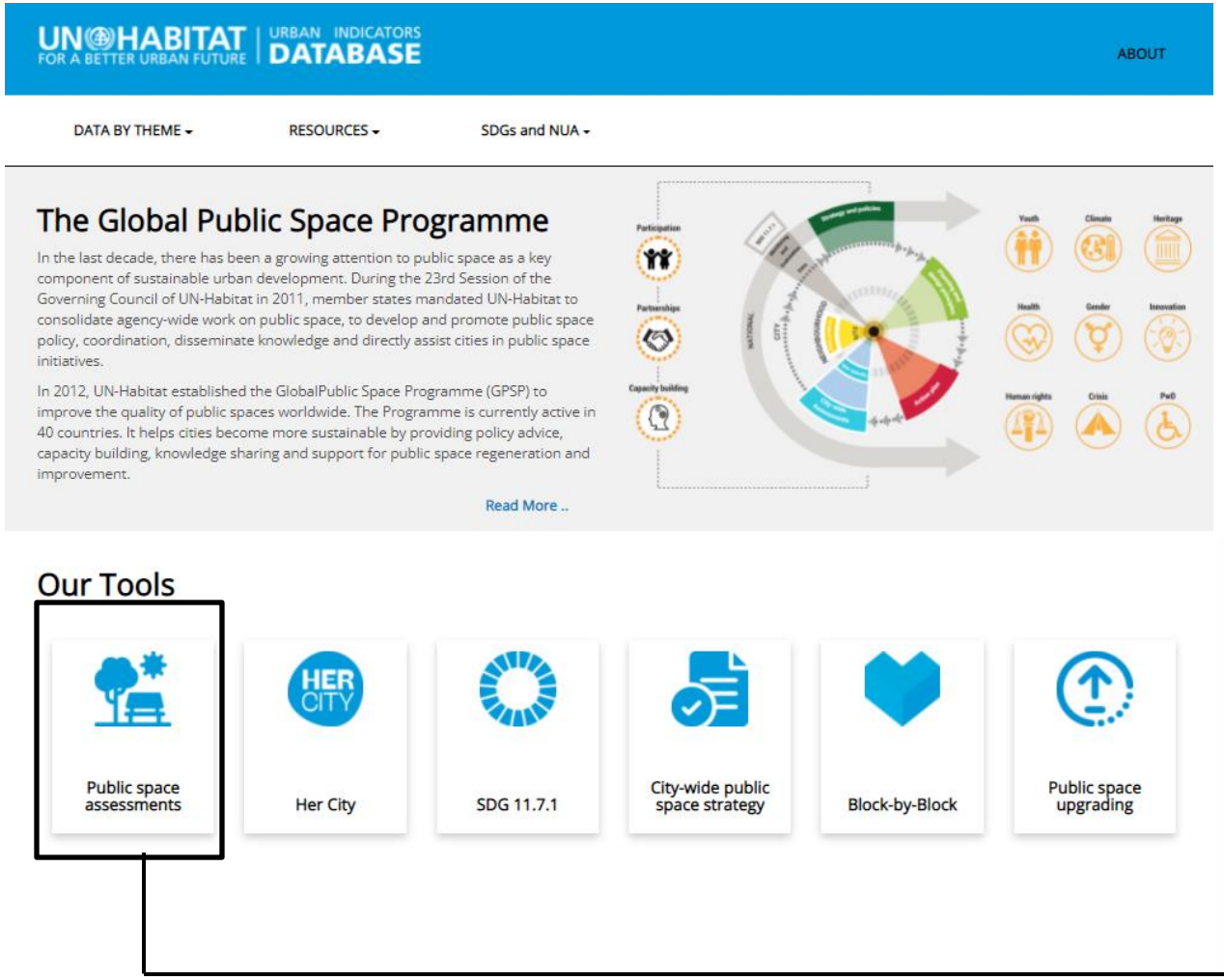
Guidelines for Reporting on the Implementation of NUA

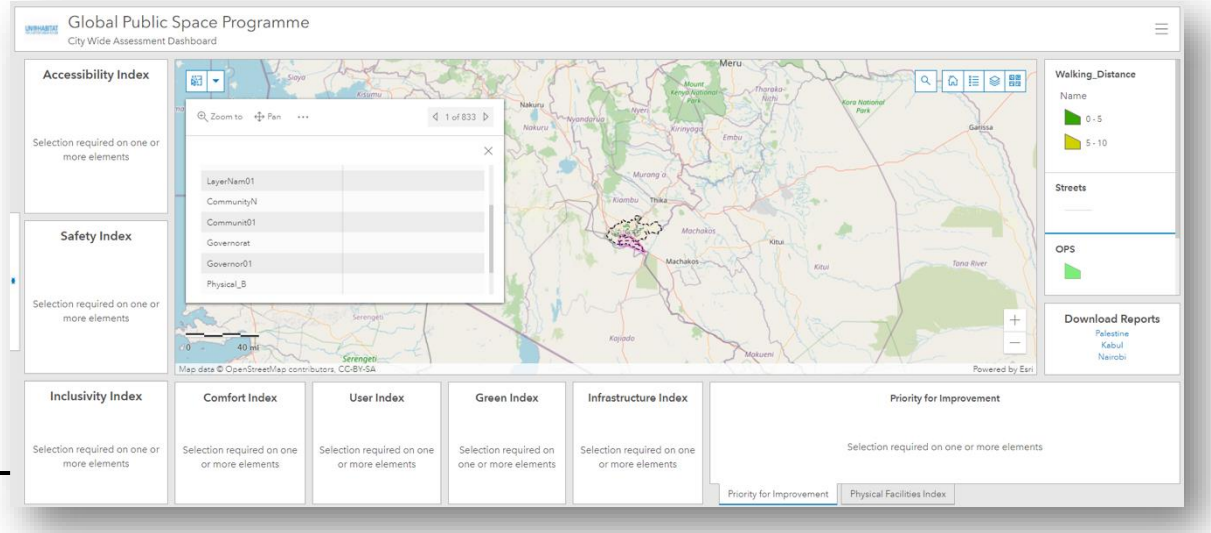
Download Guidelines

Related resources

Urban Agenda Platform

The Urban Indicators Platform: Towards harmonization of UN-Habitat data dissemination





THANK YOU!