CITY-WIDE **PUBLIC SPACE ASSESSMENT TOOLKIT**

A guide to community-led digital inventory and assessment of public spaces.

PUBLIC SPACE
PROGRAMME

UN@HABITAT
FOR A BETTER URBAN FUTURE

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ACKNOWLEDGMENTS

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WHAT IS IT FOR?

The purpose of this document is to guide cities when conducting a city-wide public space assessment. It illustrates the steps that should be followed within the process to ensure that the public space assessment meets the objectives of the city. By applying this tool, cities are able to understand the state of their public spaces, specifically the network[1], distribution[2], accessibility[3], quantity[4] and quality[5] of their public spaces. This guide sets out the "hooks" that will support the development of a comprehensive evidence-based public space strategy or policy building on the results of the assessment.

Once a city has commissioned an assessment of public spaces, the following steps, which are grouped into four parts, can be followed: (i) Pre-field work, (ii) Data collection and quality check (iii) Reporting and (iv) Post city-wide assessment.

WHO IS IT FOR?

This guide is designed primarily for local governments including field staff and partners with responsibility for planning, establishing and implementing the programmatic, managerial and organizational aspects of public spaces. It will also be useful for policy makers and supervisors in understanding and promoting public spaces.

HOW DO I USE IT?

This guide is a living document that draws from learning and experiences. It builds on UN-Habitat's recent experience in several cities and contexts. It is intended to be regularly updated with feedback from its applications in a variety of urban contexts. Local governments and partners are therefore encouraged to apply this guide fully or in part.

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1. A system of public spaces
2. Spatial balance of public spaces across the city
3 Spatial accessibility of public space to the population within walking distances
4. Main design features and management (comfort, universal access, use, users, amenities and green)
5. Proportion of urban surface devoted to public space

HOW DO I NAVIGATE THROUGH THIS GUIDE?

This guidebook has been designed in an interactive way with buttons and links to help navigate through it.

Move mouse to the circles to reveal the part/step and click to navigate to selected part/step

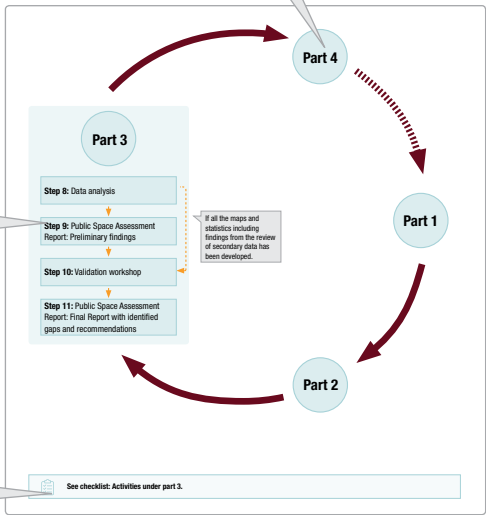Click each resource to access them

Step 1: Reference/Project Group

A city-wide public space inventory and assessment preparation does not belong to a single department function, a joint approach is required between all relevant stakeholders. The process starts with setting up a relevant target-oriented ad hoc reference group. This reference group assumes a central role in the formulation and planning of the public space assessment. The earlier they are involved, the quicker the synergy and their ownership in the process is created.

The reference group does not have to be formed as a permanent institution that will take over the roles of the existing government agency currently involved in public space. The reference group is an ad hoc team that can

Resources

BOX — See box 2: What is the spatial scope of the assessment.

See link: Test a sample questionnaire.

See case study: Towards Child-Friendly Open Public Spaces in Sharjah, UAE.
Thematic focus: Child-friendly public spaces

See case study: Eliminating Violence Against Women and Girls in Palestine.
Thematic Focus: Safety for women and girls

See case study: Assessment of Public Spaces in a Heritage District, Wuchang, Wuhan, China.

See case study: Towards a Regional Public Space Policy/Strategy in Latin America and the Caribbean.

Click to navigate to selected part

Part 4

Part 3

Step 8: Data analysis

Step 9: Public Space Assessment Report: Preliminary findings

Step 10: Validation workshop

Step 11: Public Space Assessment Report: Final Report with identified gaps and recommendations

If all the maps and statistics including findings from the review of secondary data has been developed.

Click to navigate to selected step

Part 1

Part 2

Click to navigate to checklist

See checklist: Activities under part 3.

Click to navigate to selected part

Part 1: Pre-fieldwork
- Step 1: Reference/Project Group
- Step 2: Developing the assessment
- Step 3: Information gathering
- Step 4: Mobilizing the data collectors
- Step 5: Workshop/training

Part 2: Data collection
- Step 6: Field work
- Step 7: Data cleaning and updating GIS map

Part 3: Reporting
- Step 8: Data analysis
- Step 9: Public Space Assessment Report: Preliminary findings

ACRONYMS

APP - Application

CSV - Comma-separated values file

DWG - Is a proprietary binary file format used for storing two- and three- dimensional design data and metadata

GIS - Geographic Information System

GPS - Global Positioning System

ICT - Information communication technology

KMZ - Zipped KML (Keyhole Markup Language)

NUA - New Urban Agenda

NUP - National Urban Policies

OPS - Open Public Spaces

OSM -Open Street Map

SDGs - Sustainable Development Goals

USGS - United States Geological Survey

GLOSSARY

Accessibility - This is the ease to get to a place. Accessibility for public spaces can be measured as (i) the accessibility of the open public spaces within walking distances via the road network (ii) the management and maintenance of a public space, (iii) the amount of money that is charged to access the open public space (iv) the time which the open public space is open for use (v) and the infrastructure available to access the open public spaces including those for persons with disabilities.

Administrative boundary - the spatial extent of legislative jusriduiction and regulatory geographic area usually with a certain degree of sel-governance.

Assessment - An analysis/evaluation/research of the current status of public spaces.

Digital literacy - It is recognized that any person possesses many skills, and can be low-skilled in one area of life, for example, digital know-how, but highly skilled in a different domain. This is broadly used to refer to people who have limited amounts of the skills needed to participate in digital activities and those that cannot read and write.

Equal spatial distribution: The arrangement of a public spaces across the city's land. A well distributed and hierarchical system of open public spaces that can be accessed by all regardless of income, gender, race or disability status and a spatial representation of such an arrangement is an important tool in assessing inequality within the city.

Inventory - a database of all public spaces.

Public Space Strategies -A city-wide public space strategy is a comprehensive long-term plan which includes the vision, missions, and goals of public space development as well as strategies to meet these goals

Ownership: Ownership is defined as providing the landholder with a complete bundle of rights, including the right to possess, exclude, use and transfer land. However, in systems where land is owned by the state, the term refers to possession of the rights to ownership in a private property system; for instance, long-term leases, occupancy, tenancy or use rights granted by the state, often for several decades, and that are transferrable.

Urban extent - A range of accepted definitions of the "city" exist, from those based on population data and extent of the built-up area to those that are based solely on administrative boundaries. These definitions vary within and between nations. Definitions of cities, metropolitan areas and urban agglomerations also vary depending on legal, administrative, political, economic or cultural criteria in the respective countries and regions. In this guide, urban extent is adopted from the defition approved by the United Nations Statistical Division which is degree of urbanisation (DEGUBRA). This definition combines population size and population density thresholds to classify the entire territory of a country along the urban-rural continuum, and captures the full extent of a city, including the dense neighbourhoods beyond the boundary of the central municipality,

UN-Habitat facilitator and data collectors testing the tool in a public space in Sharjah, UAE © Sharjah Urban Planning Council

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Children playing in a park in Ras Mekonnen, Addis Ababa, Ethiopia© Katla studios

SECTION 1

Towards safe inclusive and accessible green and quality public spaces

INTRODUCTION

Quality public spaces are a vital business and marketing tool as cities increasingly compete to attract investment, new residents, businesses, and visitors. As urban population grow, the effective management and sustainability of this growth including the needs and demands of the citizens especially the most vulnerable becomes critical.

While cities and local governments recognize the importance of public space and have made efforts to use public space to transform their cities and neighborhoods, these efforts have been primarily site - based. These site-based approaches can be scaled-up to many sites across the city but cannot provide a strategic approach to distribution, connectivity, accessibility, or programmatic diversity of public spaces. Little effort has also been made towards developing city-wide public space strategies and particularly involving the public in the development of policies. Without this city-wide approach to public space, there has been a growing trend on privatization, grabbing of public land, disappearance of public spaces and eventually creating unequal and segregated cities.

National and local governments need to recognize the role of good quality network of public spaces as a promoter of equity and prosperity. It provides the best means to manage urban growth, support economic development, protect the environment, and promote overall well-being of communities. However, this can only be achieved when cities correct imbalances in public space supply, distribution and quality in different neighborhoods and settlements within the city.

To support local governments to include a network of public spaces as part of their development plans, UN-Habitat developed the city-wide public space inventory and assessment tool. This tool has been designed as a flexible framework to aid local governments and partners working in public spaces to assess the network, distribution, accessibility , quantity , and quality of their public spaces in a cost-effective way. The tool takes a participatory approach that aims to determine priority areas and sectors of intervention – both spatial and non-spatial– that government and private entities can take to address them.

Since 2015, UN-Habitat has been supporting cities to map and assess their public spaces. It has done this through working directly with the local government, research institutes and other partners. Local governments have seen the importance of using this tool to engage communities and key stakeholders in developing strategies and policy recommendations.

To ensure that these recommendations are implementable, the regulatory framework, financing structure and institutional set-up are considered in the process. The methodology incorporates into its elaboration process the review of planning instruments and programs associated with the implementation, improvement, and maintenance of the public space network. Likewise, the evaluation of planning instruments, such as master plans, allows exploring the degree of relevance that public space has in the city vision and identifying the strategies established for its development.

The tool is also key to achieve the New Urban Agenda and to monitor progress towards achieving SDG 11.7. Therefore, this guide has been developed to support local governments and key stakeholders working on public spaces to undertake city-wide public spaces assessment. It illustrates the steps that should be followed within the process to ensure that the public space assessment meets the objectives of the city.

GLOBAL PUBLIC SPACE PROGRAMME

In 2011, UN-Habitat's Governing Council mandated UN-Habitat to consolidate agency-wide work on public space, to develop and promote public space policy, coordination, disseminate knowledge and directly assist cities in public space initiatives through resolution 23/4: Sustainable urban development through access to quality urban public spaces.

Following this resolution, in 2012, UN-Habitat established the Global Programme on Public Space. The programme is currently active in over 40 countries and aims to improve the quality of public spaces worldwide.

Despite a recent tendency to overlook and undervalue them, public spaces are again being recognized by cities as a key element of inclusion and sustainability. Additionally, public spaces has been widely acknowledged in international frameworks such as the 2030 Agenda, New Urban Agenda, the Paris Agreement. The 2030 Agenda has a specific target on public spaces.

"By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities." SDG 11.7

The New Urban Agenda has commitments to provide safe, inclusive, accessible, green and quality public spaces as referenced in paragraph

36,37,53,67,97,99,100 and 109

"We commit ourselves to promoting safe, inclusive, accessible, green and quality public spaces, including streets, sidewalks and cycling lanes, squares, waterfront areas, gardens and parks, that are multifunctional areas for social interaction and inclusion, human health and well-being, economic exchange and cultural expression and dialogue among a wide diversity of people and cultures, and that are designed and managed to ensure human development and build peaceful, inclusive and participatory societies, as well as to promote living together, connectivity and social inclusion.." Para 37

The global community agree that public spaces play a key role in achieving inclusive, safe, resilient and sustainable cities and human settlements. This means that interventions in public space can support achievement in several other targets within the 2030 Agenda.

Local level data is key to address challenges and achieve inclusive public spaces. Therefore, the Programme helps cities become more sustainable by providing policy advice, capacity building, knowledge sharing and support for public space regeneration and improvement. More concretely, it maps public spaces and works with cities to develop city-wide public space strategies and urban development frameworks. Good policies and practices are shared through its global network of partner organizations.

PUBLIC SPACE PROGRAMME FOCUS AREAS

THE PUBLIC SPACE ASSESSMENT

UN-Habitat provides guidance to local governments collecting data on public spaces and developing city-wide strategies. This helps cities take a strategic action-oriented approach to public space protection, development and management and enables them to have a better understanding of the state of public spaces, what resources are required to manage these spaces and set goals to improve them.

CIVIL SOCIETY AND PARTNERS

UN-Habitat brings together a broad global network of partners working on the issue of public space, and has agreements and ongoing activities with various organizations. These partners are brought together to share knowledge and collaborate on projects that show the positive impact of public spaces on urban life.

PARTICIPATION

Using digital platforms, tools and innovative approaches for mapping, co-creation and participatory urban design. The Programme uses technologies such as Kobo Toolbox to map public spaces, the video-game Minecraft for co-creation and mixed reality for public participation and visualization.

PUBLIC SPACE UPGRADING

Providing financing and technical support to local governments and civil society organizations for public space upgrading projects. Projects are selected through a yearly call for expressions of interest. The spaces are geographically distributed with a focus on the Global South and use a participatory approach that engages the community and the users of the space in the design process, setting up the management frameworks and implementation

POLICIES AND STRATEGIES

UN-Habitat supports national governments in mainstreaming public space in National Urban Policies as well as local governments in developing their own public space frameworks, policies and implementation strategies. Governments can recognize the importance of localized city-wide policies and the role they must play in developing and maximising public spaces in their cities.

CAPACITY BUILDING

Improving knowledge and building capacity to deal with public space issues at the neighbourhood, city and national levels. Development of contextualized and thematic guidelines tailored to the need of cities and provision of training and capacity building

HOW WE WORK

UN-Habitat has developed a framework to achieve long-term impacts and achievement of the Sustainable Development Goal SDG 11.7 and the New Urban Agenda (**see figure 1**) as well as build the institutional capacity of both the local and national governments. Each step within the process has tools that can be contextualized and applied to any city.

In summary, the first step is to understand the state of public spaces in the city by conducting a city wide assessment using the city-wide public space inventory and assessment tool. This tool detects both spatial and non-spatial gaps which then helps to identify priority projects for upgrading and areas for creating new public spaces.

The second step is to take into consideration the gaps identified from the public space assessment and develop a long-term public space strategy with a clear vision, mission and objectives for the city. In this regard, UN-Habitat has developed a compendium of inspiring practices for city-wide public space strategies and a step-by-step guide on how to develop a public space strategy for local governments.

Based on this exercise and as a third step, with the involvement of local experts, UN-Habitat supports the local government to develop contextualized guidelines and principles for public space development using the Public Space Toolkit as a reference.

The fourth step, is to develop a clear action plan which is based on shared vision and objectives of the strategy, that has clearly identified priority projects, stakeholders to be involved and the available budget for implementation. All programs included in the city-wide public strategy and annual public space action plan need to be synchronized into the municipal agency draft work plans. This synchronization is critical to achieving the objectives and targets set out in the strategy and to ensure implementation of the strategy.

The fifth step, building on the gaps identified through the assessment, is to identify demonstration public spaces projects for upgrading and conducting a site specific assessment which focuses on analyzing the qualitative aspect of the site itself and a 5 minutes walking radius to the site. Another tool that UN-Habitat uses within this step to engage communities especially marginalized groups to co-design their spaces is the video-game Minecraft that is embedded within the Block by Block Methodology.

As a final step, UN-Habitat supports local government to monitor and evaluate the strategy, action plan as well as the implemented demonstration projects. This is done through indicators identified at the 1st stage, and those within the local and national government as well as globally set indicators and standard. UN-Habitat recommends that the city-wide public space assessment is conducted every 5 years.

> UN-Habitat has developed this framework in such a way that it is flexible and non-linear and it can support any city at any stage of the process. It recognizes that cities will be at different stages of the process, have different panning structures and purposes as well as have different resources and capacities.

UN-Habitat's Public Space Programme Process and Tools

- Block by Block methodology
- Place analysis tool
- Design Charrattes

- Guide to city wide public space strategy
- Compendium of inspiring practices on city wide public space strategy

- Guide to city wide public space strategy
- Plan assessment tool
- Compendium of inspiring practices on city wide public space strategy

Pilot project

Monitoring and evaluation

Implementable (action) plan

Public space guidelines & principles

City wide assessment

Strategy & Policy

Scaling up
- SDG indicators 11.7 and 11.3
- Capacity building and training
- National guidance
- Policy tools
- Institutional support
- Resource mobilization

- 5 principles for sustainable neighbourhood planning
- Global public space toolkit
- Planned city extension tool

- Public space assessment tool
- City profiles
- Plan assessment tool
- International guidelines on urban and territorial planning

- Global public space toolkit
- Public space and NUP
- Guide to city wide public space strategy
- Urban planning for city leaders

Figure 1: UN-Habitat's Public Space Programme Process and Tools

Child playing in a newly upgraded Trang Keo park, implememnted by HealthBridge and supported by UN-Habitat in Hanoi, Vietnam
© UN-Habitat, Think Playgrounds

SECTION 2

Where are we in the realm of public space?

ABOUT THE PUBLIC SPACE ASSESSMENT TOOL

The city-wide public space assessment is a tool that supports local governments gather accurate data on the state of public spaces, identify areas to be secured for the creation of new public spaces, and develop future plans and strategies. It can be contextualized to fit different contexts and cities. Therefore, the assessment could either be formulated to capture the broad and diverse aspects of public space or it can emphasize certain thematic or geographical areas. The latter could for example be the case if a city or town already has a sufficient provision and quality of public space in the urban fabric - but where a rapid urban development and growth is expected. Hence, the assessment in this case could be designed towards addressing certain areas of concern, i.e. as a complement to already existing plans, policies and strategies such as safety, protection, heritage, ecological spaces, citizens' health, age-friendliness etc. In view of the above, the assessment can be delineated into thematic areas, illustrating the provision of larger parks and green areas, the provision and distribution of rivers and water bodies, areas of particular ecological importance, public and recreational functions etc. This tool helps to answer the question *"where are we?"* in the realm of public space.

The nature and direction of the city-wide assessment will have an impact on the various approaches and tools available for implementation. The assessment will produce recommendations on public space interventions in the city. This is not limited to types of intervention, but also includes areas that should be prioritized in developing new public spaces.

Preliminary generic approaches that a city can take prior to conducting a city-wide public space assessment includes:

- Securing political support to provide the mandate to execute the process for buy-in and allocation of both financial and human resources.
- Enhance synergy among actors in public space, including municipal government agencies, the private sector, NGOs, and others.
- Engage stakeholder groups, including community-based organizations, marginalised citizens such as women groups, persons with disabilities, older persons, children and youth in public space planning.
- Create enabling institutional and regulatory frameworks to accelerate public space development
- Create opportunities and incentives for private sector initiatives in public space development

The city-wide public space assessment is a digital tool[6] that uses a structured questionnaire that can be modified to fit any context as well as assess the priorities for any city. It uses the free open source application called Kobo Collect[7]: an open source mobile application. Capturing data in the field usually means using paper. By using a smartphone or tablet, field data can be collected with all the advantages that electronic data gathering brings **(see figure 2)** (value input control, skipping irrelevant sections, elimination of transcribing errors from paper, etc.).

This tool uses a participatory approach that allows the community to take part in the mapping and analysis of their public spaces as well as to propose ideas on how to improve them. This approach promotes social cohesion and leads to inclusive spaces.

It is a fast and effective tool for data collection as it minimizes enumeration errors and is a holistic tool for data collection process from data collection, to analysis and design.

The application is supported by android software but can be used by iPhone users through a web form. Data is gathered in situ with the data records stored on the device. Once the surveyor is within range of a WiFi or mobile phone data connection, he/she can send the data to a central server (**see figure 3**). Some of the advantages of the application are:

1. Open source and digital
2. Validation on the ground
3. Remote administration
4. Works under difficult conditions such as limited Internet.

Kobo Collect Application
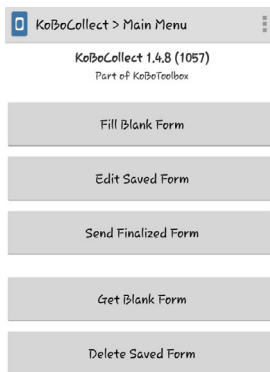
Figure 2: Kobo Toolbox application.

6. Open source application which allow one to create a questionnaire form, fill it out on a mobile phone or tablet, store and view the aggregated information on a central server, and retrieve the aggregated data to one's computer for analysis.
7. In this case the country will focus on a sample of cities that are representative of the country and conduct the assessments in these cities.

Kobo Collect used on Android, Iphone and web (Online) to collect data on public spaces.
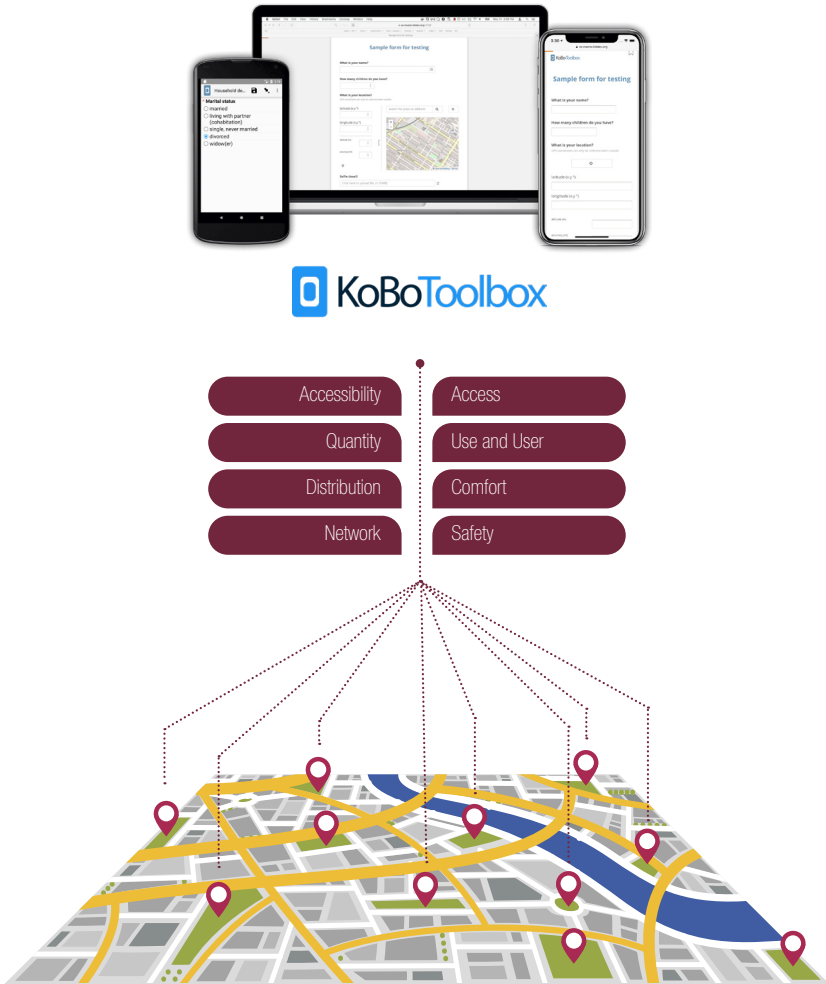
Figure 3: Kobo Collect used on Android, Iphone and web (Online) to collect data on public spaces.

WHY CONDUCT A CITY-WIDE PUBLIC SPACE ASSESSMENT?

The city-wide public space assessment can cover a single issue or a range of issues. In general it is easier to achieve success if there is a small number of focused objectives. An assessment can be commissioned by a local government due to several reasons, which could be:

?

1. A city might not have an inventory of their public spaces.

2. A city would like develop a new public space strategy or update an existing public space strategy[8].

3. A city would like to revise their institutional, legal and regulatory frameworksand understand where to allocate funding more efficiently.

4. A city would like to tackle emerging issues such as climate change, safety, bio-diversity loss, unplanned urbanization, encroachment of public spaces, heritage loss, accessibility among others.

5. A country would like to revise or mainstream public space their local plans/policies and in their national urban policy[9].

City-wide public spaces inventory and assessment provides data on existing public spaces in the city; that includes the state of public space, the problems, and their causes. Mapping of the supply, quality and distribution of public spaces are important, in order to determine priority areas and sectors of intervention. It also identifies where public spaces may be lacking, areas where there might be over provision, poor quality public spaces or poorly located public spaces and where there are opportunities for improvement to meet the local needs.

Since the monitoring of SDG 11.7 and the public space commitments in New Urban Agenda are done at the city level, city-wide surveys of public spaces also supports local governments to report their progress towards achieving these commitments.

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8. Public space strategies can range from thematic ones such as public space and health strategy, by typology such as a park strategy, or an activation strategy for public spaces. They can also be ambitious and incorporate several themes and typologies. This is however, dependent on the objective of the city

9. In this case the country will focus on a sample of cities that are representative of the country and conduct the assessments in these cities.

There are six key objectives in conducting city-wide public spaces assessment and these include:

1	2	3
To determine the level of accessibility of public spaces in respective cities and human settlements.	To establish the quantity of public spaces within urban boundaries while providing a benchmark against which improvements can be measured. This particularly is important in meeting local targets, and monitoring the implementation of SDG indicator 11.7.1	To understand the network of public spaces in cities and identify enablers and barriers for connectivity and linkages.

4	5	6
To understand the distribution of public spaces and identify disparities.	To assess the quality of public spaces with a special focus on accessibility, use and users, amenities, comfort and safety and green environment.	To develop comprehensive and implementable inclusive city-wide public space and funding strategies and policies.

BOX 2 **What is the spatial scope of the assessment?**

It is crucial to understand the spatial scale of the assessment within cities. The public space assessment could cover 2 different scales: the administrative boundary[10] and the urban extent[11]. In some instances, the assessment could be designed for specific neighbourhoods/geographical areas within the city. This could be in the case where the city would like to pilot and test the public space assessment tool and methodology in the city or where the neighbourhood has an independent government body and would like to develop strategies for their neighbourhood.

The administrative boundary
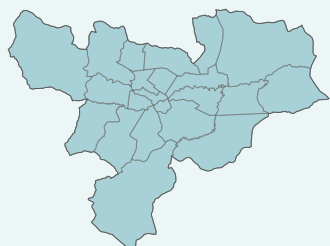
The urban extent
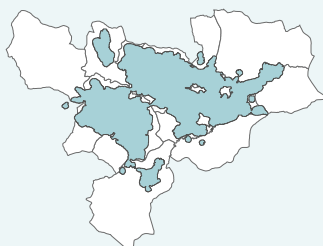
Pilot areas
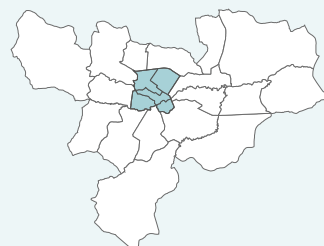
10. In this case, cities are able to develop strategies within clearly defined jurisdictions. It also becomes easy both in terms of gathering statistics and politically. Additionally, administrative units are frequently those for which policies are implemented.
11. It is important to note that in some contexts, urban extents goes beyond the administrative boundary of the city and may include other cities/jurisdictions. Therefore, a clear governance structure needs to be set-up.

HOW UN-HABITAT WORKS WITH CITIES IN CONDUCTING CITY-WIDE PUBLIC SPACE ASSESSMENT

UN-Habitat works with different city governments and partners in conducting city-wide public space assessments in their respective cities (**see figure 4**). This model show the entry points of the local government/partner and UN-Habitat through the process of conducting a city-wide public space assessment. The model is flexible and dependent on the capacities of the local government and partner.

How UN-Habitat works with partners to conduct city wide public space assessments.
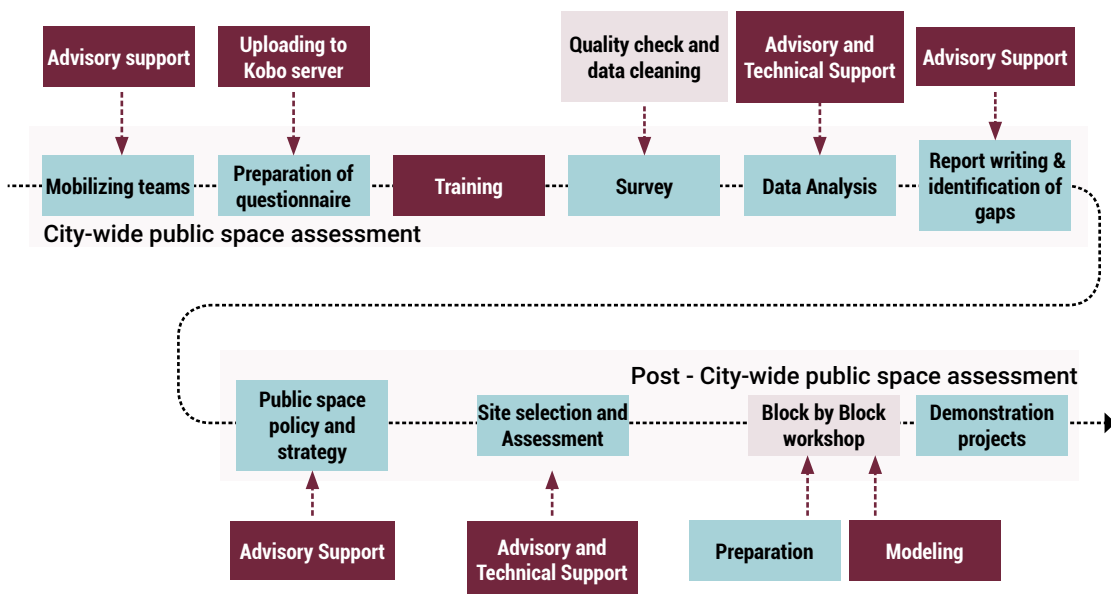
Figure 4: How UN-Habitat works with partners to conduct city wide public space assessments.

UN-Habitat recognizes the varied capacity of cities and this model is used as a guide and can be modified depending on city's needs.

| BOX 3 | WHAT IS THE THEORY OF CHANGE? |

Urban challenge

Inequality, exclusion and segregation in cities

Goal

Sustainable and inclusive cities and communities

Objective

To contribute to the provision of universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, youth, older persons and persons with disabilities

Activities

Assessment of the distribution, network, accessibility, quantity and quality of public spaces

Output

Strategies and policies for well-connected networks of safe, inclusive and accessible green and public spaces

Outcome

Equal and universal access to inclusive and quality green and public spaces

Impact

Sustainable and inclusive cities and communities

CITY-WIDE PUBLIC SPACE ASSESSMENT AND SOCIAL INCLUSION

The city-wide public space assessment is a tool that ensures all users are engaged through the process from formulation of the reference group, development of the assessment to proposing policy and strategic recommendations for the city's public spaces.

SOCIAL INCLUSION THROUGH THE PROCESS

During workshops/training and data collection

- It is required to ensure that representatives from different genders, children, youth, older persons and persons with disabilities are within the reference group. Representation from these groups should also be present during all workshops and trainings.
- It is required that equal gender representation[12] within data collection teams and where possible include persons with disabilities and merginalised groups[13] such as migrants, refugees, and indigineous people.
- Where children are required to undertake the data collection, children below the age of 5 need to be accompanied by parents or caregivers[14].
- Data collectors should captures all user groups in public spaces within the digital questionnaire, including the homeless and informal workers.

In the digital Questionnaire

- Interview questions should be directed to a selected number of individuals using the public spaces; ensuring age and gender balance[15].
- Questions related to the use, social mixing and cultural identity in the public space are required to be included.
- Questions related to the users of the public spaces disaggregated by age, gender and disability are required to be included.
- Questions on presence of infrastructure or barriers to access public spaces by all and especially for persons with disabilities are required to be included.

During data analysis

- Dissagregation of the analysis by age, gender and disability is important especially when assessing the quality[16] of the public spaces.
- Identification of neighborhoods and areas that do not have access to public spaces[17] within walking distance needs to be identified.

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12. In some contexts, during data collection, interviewees become comfortable talking to a female than a male interviewer, therefore gender balance within data collection teams is key
13. Although Kobo Collect is not inclusive for children below age 5, persons with some disabilities and persons with low digital literacy, it is possible to use third party assistance such as care givers, parents, and within data collection teams to support access to the tool.
14. UNICEF has developed guidelines on engaging children: Youth and Adolescent engagement,
15. It is important to prioritize women, older persons and persons with disabilities when conducting interviews. Through experience, not all user groups are represented in public spaces especially persons with disabilities, it is important to get their voices, the reference group needs to undertake interviews with the relevant departments working on planning, designing, construction and maintenance of public spaces to understand the under representation of certain user groups in public spaces.
16. Main design features and management (accessibility, use and users, amenities, comfort and safety and green environment).
17. Every individual has a right to have quality public spaces within walking distances to their homes.

Data collector interviewing older persons in a public space in Jianghan, Wuhan, China © Wuhan Landuse and Spatial Planning Research Centre

Training on the application of the city-wide public space assessment tool in Kabul, Afghanistan © UN-Habitat-Palestine

SECTION 3

Meaningful engagements - Participatory data collection - Reporting - Vision - Strategy and Recommendation

METHODOLOGY

This guide aims to provide a flexible framework designed to aid local governments and partners working in public spaces to assess public spaces and develop a prioritized set of interventions – both spatial and non-spatial– that government and private entities can take to address them. The process of conducting a city-wide public space assessment has been divided into **four parts** that are progressive with outputs that are as important as the process and social inclusion being considered at all stages of the process. The process includes **(i) Pre-field work, (ii) Data collection and quality check, (iii) Reporting and (iv) Post city-wide assessment[18].** Each of these parts has steps that should be followed with activities, tools and inspiring cases that have been drawn from partners and UN-habitat's experiences working in cities.

UN-Habitat recommends that each city follows the process[19] to guarantee long-term appropriate provision, quality and accessibility of public spaces. However, it recognizes that cities are different with different capacities and are at different stages of development. Therefore, depending on the objective of the city and the level of public space provision there are certain steps that are not mandatory to undertake.

Part 1: Pre-fieldwork

2 Months

Step 1: Setting-up a reference GROUP
Step 2: Developing the assessment
Step 3: Information gathering
Step 4: Mobilizing the data collectors
Step 5: Training

Part 2 : Data collection

1 Month

Step 6: Field work
Step 7: Data cleaning and updating GIS map

Part 3 : Reporting

3 Months

Step 8: Data analysis
Step 9: Public Space Assessment Report: Preliminary findings
Step 10: Validation workshop
Step 11: Public Space Assessment Report: Final Report with identified gaps and recommendations

Part 4 : Post City-wide assessment

≃6 Months

Step 12: Developing a city-wide public space strategy
Step 13: Site Specific Assessment
Step 14: Block-by-Block workshop
Step 15: Implementation
Step 16: Monitoring and Evaluation

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18. Part 4 of the process includes steps that are recommended but not mandatory for the city-wide public space assessment. Links are made to the resources/tools required to undertake these steps.
19. The process towards identification of gaps and recommendations for city-wide public space assessment usually takes 6 or more months depending on the needs and the capacity of the city. The time required for each part is dependent on the capacity and the geographical scope of the assessment.

Part 1: Pre-fieldwork

Step 1: Setting-up a reference group

Step 2: Developing the assessment

Step 3: Information gathering

Step 4: Mobilizing the data collectors

Step 5: Workshop/training

Step 6: Field work

Step 7: Data cleaning and updating GIS map

Step 8: Data analysis

Step 9: Public Space Assessment Report: Preliminary findings

Step 10: Validation workshop

Step 11: Public Space Assessment Report: Final Report with identified gaps and recommendations

Step 12: Developing a city-wide public space strategy

Step 13: Site Specific Assessment

Step 14: Block-by-Block workshop

Step 15: Implementation

Step 16: Monitoring and Evaluation

PART 1: PRE-FIELDWORK

Pre-fieldwork involves preparing clear protocols for ensuring high quality, consistent and accurate collection of data. It aims at developing a contextualized tool and process fit for the city. It outlines five key steps and activities that should be conducted with each step having outputs that are important for the next steps.

Step 1: Setting-up a reference group

A city-wide public space inventory and assessment preparation does not belong to a single department function, a joint approach is required between all relevant stakeholders. The process starts with setting up a relevant target-oriented ad hoc reference group. This reference group assumes a central role in the formulation and planning of the public space assessment. The earlier they are involved, the quicker the synergy and their ownership in the process is created.

The reference group does not have to be formed as a permanent institution that will take over the roles of the existing government agency currently involved in public space. The reference group is an ad hoc team that can better coordinate stakeholders to accelerate the city-wide public space assessment planning. Therefore, the public space planning department within the local authority should take a leading role. The presence of such a group is expected to support the coordination function of the local planning agency. It is important to ensure that this group is small and efficient. It is therefore important to develop a clear terms of service, It may be possible that in the future, this group may expand their role beyond public space assessment.

Time

Three weeks

Action

Mandatory

Activities

1. Identifying different stakeholders and government departments within the city that will be part of the reference group.

2. Identify experts and representatives from different gender groups, youth and human rights council, persons with disabilities, older persons group and representatives from women and children

3. Identify private sector, academia, NGOs and community members that will be part of the reference group.

4. Identify diverse expertise and groups that can represent more than one agenda.

5. Develop clear terms of service for the reference group.

6. Ensure the reference group is small end efficient. It is recommended to have 15-20 members

Resources

Output

1. Selection of a reference group with an agreed terms of reference

Reference group for the district-wide public space assessment in Jianghan, Wuhan, China © Wuhan Landuse and Spatial Planning Research Centre

Reference group reporting progress on city-wide public space assessment to the local government in Jericho, Palestine © UN-Habitat-Palestine

UN-Habitat facilitators with some participants of the city-wide public space training in Johannesburg, South Africa © Johannesburg Parks and Zoo

Step 2: Developing the Assessment

The city-wide public space assessment is designed to fit the local context. In this step, the geographical scope and the thematic focus of the assessment is established. This supports the preparation of the questionnaire that will be used in the field. The city-wide public space assessment is divided into the following dimensions/aspects: city-wide/quantity and site-specific/quality. Workshops and seminars could be conducted with relevant stakeholders to define the assessment scope, questionnaire and the thematic entry point. If a city is focused on a specific theme, additional dimensions could be added as well as new indicators in the existing dimensions/aspects. The results from this will be used to judge change in public space quality and provision. These indicators can incorporate indicators and benchmarks already set by the local government, national government and globally.

Time

Two weeks

Action

Mandatory

Activities

1. Identify the spatial scope of the assessment

2. Identify the thematic focus of the assessment

3. Identify the typology of public spaces to be assessed

4. Develop/revise and update the digital questionnaire.

5. Translate the digital questionnaire to local/preferred language

6. Testing of the questionnaire during workshops/seminars to ensure that interviewers and respondents understand questions and answers, and that the questionnaire works in terms of skips, filters, and precoded categories.

Resources

Output

1. A revised digital questionnaire

Dimensions and indicators

Spatial distribution
- Spatial balance of public spaces across the city

Network
- Street connectivity and intersection density
- Length of street per square kilometer
- Connectivity of one public space to another

Accessibility
- Walking distance to open public space (400m and 1Km) walking at an average speed of 5km/h

Quantity
- Share of land that is open public space
- Share of land that is allocated to streets
- Per capita public space
- Per capita green space

CITY-WIDE / QUANTITY DIMENSION

General
- Typology of public spaces
- Scale of public spaces
- Ownership
- Management
- Adjacent landuse
- Surface texture of public space
- Presence of special elements

Comfort
- Noise level
- Smell
- Uncollected garbage
- Open water body
- Presence trees
- Views

Accessibility
- Presence and condition of vehicular and bicycle parking
- Facilities that restrict vehicular movement
- Presence and conduction of infrastructure or barriers to access the site for persons with disabilities
- Presence of an entrance
- Level of accessibility

Green Environment
- Presence and quality of biodiversity in the public space
- Environmental resilience
- Presence of energy efficient elements in the public space

Safety
- Social problems
- Infrastructural problems
- Antisocial behavior including harassment directed to women and girls
- Traffic accidents
- Perception of safety during the day and night for women and men
- Clear sight lines-see and be seen
- Presence of CCTV cameras and street lighting
- Presence of security personnel

Use and Users
- Users in the public space by age, gender and disability
- Use of the space

Amenities

Presence, condition and sufficiency of;
- Street lighting
- Benches
- Garbage bins
- Public toilets
- Fire emergency
- Signage
- Water taps
- Drainage
- Artificial shading
- Kiosks
- Baby care facilities
- Emergency health facilities
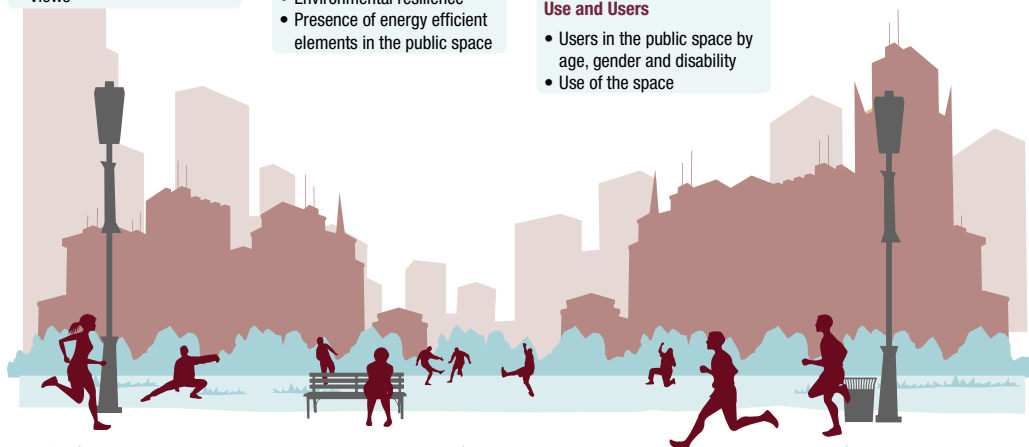
SITE-SPECIFIC / QUALITY DIMENSION

Figure 5: Dimensions and indicators.

Questions within the digital questionnaire

Dimension	Sub-dimension	Question	Method
General	Location	Record the GPS location of the public space	GPS recording
	Picture	Please take a picture of the public space	Photograph
Site-specific/Quality	Use and users	How many girls (age 13-18) are present in the public spaces?	Counting
	Comfort	Which infrastructure exist to access the public space for persons with disabilities	Observation
	Safety	Have there been cases of harassment directed to women in this public space?	Interview
	Comfort	Please record the noise level in the public space	Sound recording

Thematic focus

- Blue and Green open spaces (links to environment, biodiversity, climate change and recreation);
- Streets, bicycle and pedestrian paths (links to mobility and transport plans);
- Accessibility and connectivity in the urban fabric at large;
- Universal design and accessibility for persons with disabilities
- Provision and access to public facilities and functions;
- Arts, culture and heritage
- Age-friendly public spaces
- Safety and security
- Public realm and furnishing the public space;
- Signs and advertising;
- Urban ecology and leisure
- Economic development and tourism

Typology of public space

Category	Typology
Open public spaces	Parks, Gardens, Community, Playgrounds, Squares, Plazas etc
Public facilities	Schools, religious institutions,, Markets, Public Libraries etc
Streets	Sidewalks, boulevards, avenues

Workshop to review and
contextualize the questionnaire
in Johannesburg, South Africa
© Ayanda Roji

Training on public space basics
and public space tools in
Sharjah, UAE © Sharjah Urban
Planning Council

Step 3: Information gathering

The reference group collects all the information relevant to public space, reviewing existing strategies, laws and regulations, assessing institutional set-up as well as mapping of public space related initiatives in the city by government, partners and key stakeholders.

Time

One week

Action

Mandatory

Activities

1. Map all public space initiatives within the city.

2. Conduct a review of all relevant documents, legislation, laws, policies, strategies, building codes etc. that have a bearing on public space

3. Acquire GIS information/data on existing and planned public space from the local authority, academia and other partners.

4. Download open public space data from open source.

5. Acquire high resolution satellite imagery[1]

1 This is useful in cities that do not have a database of their public spaces and the reference group will need to digitize all public spaces or digitize all remaining public spaces after acquiring open source data.

Resources

Output

1. Overview of exiting public space initiatives and activities in the city.

2. A map of public spaces in GIS environment.

3. An overview of the institution framework, legislation, laws and policies and strategies related to public space

Step 4: Mobilizing of data collectors

In this step, data collectors are selected. This team will primary do the field study with an agreed terms of service. Data collectors could be university students, local government officials, community members, neighborhood groups e.g. block associations, local religious groups etc. It is highly recommended that students are selected from appropriate disciplines (urban planning, landscape architecture, forestry, agriculture, environment, ecology). It is also advised that some data collectors speak the local language. The data collectors should be grouped according to the area where they will conduct the survey as well as composed of representation from all genders. It is key to select a team leader to coordinate each group and support the teams on the ground and also to do the quality control of the submitted questionnaires. The team leader communicates directly to the reference group. Where possible, persons with disabilities should be included in the data collection teams. In this case, measures should be taken in order to facilitate persons with disabilities' use of ICT and guarantee inclusive communication. To facilitate data collection in the field and to inform the public of the ongoing activity, the reference group should develop an authorization letter to be presented by the data collectors to the public where needed.

Time

One week

Action

Mandatory

Activities

1. Assess the required number of data collectors

2. Introduce research ethics to the data collectors

3. Developing a terms of service for the data collectors

4. Establish contact and introduce the survey objective

5. Identification of teams and selecting of team leaders

6. Administering the geographical location for data collection for each team

Resources

Output

1. Selected data collectors with teams and team leaders

2. Signing of the terms of service

3. Allocation of teams to specific geographical areas for data collection

4. Authorization letter for data collection

Step 5: Training

At this step, a workshop/ straining is conducted. This takes approximately 2-5 days. Prior to the workshop, a clear agenda should be developed and a strategy for facilitating access to communication and information by persons with disabilities should be traced. Participants are trained on public space definitions, issues, theories, principles and design considerations. A training on the application of the tool is conducted including testing the tool. The pilot test should provide an estimation of the time to undertake the overall assessment for each site including conducting interviews. Pilot test should test not only the questionnaire, but all aspects of fieldwork, including logistics, supervision, and data entry. Translations of the questionnaire should also be checked at this point. It is useful to do a quick analysis of the data collected to check for any problems that might otherwise be overlooked. Following the pilot test the survey team should share lessons learned, modify and finalize the questionnaire and fieldwork plan.

A 'training of trainers' could also be conducted to a selected number of representatives including the reference group who will then conduct a training to the data collectors. This is in the case where there could be barriers such as cultural, linguistic, availability of facilitators or data collectors etc.

This step is also an opportunity to train local governments on the importance of public spaces and how they can integrate this process and public space into their development plans.

Time

One week

Action

Mandatory

Output

1.Updated questionnaire

2.Workshop/training report

Activities

1.Prepare agenda, invitation, book venue and gather equipments and stationery. Invite participants ensuring representation from different age, gender and disabilities

2.Take measures to guarantee access to information and communication by persons with disabilities

3.Training on types of public space, definitions and principles as well as an introduction to the benefits and importance of developing a public space strategy

4.Training on the use of kobo collect including setting-up and configuring the tool

5.Testing the questionnaire and field work logistics

6.Update the questionnaire based on the outcome of the workshop and training

Resources

Orientation workshop for municipality staff in Kabul, Afghanistan © UN-Habitat

Mr. Vincent Nji Ndumu, the then Mayor of Bamenda City, addressing the training participants on the importance of public space for the city, Bamenda City, Cameroon © UN-Habitat

Workshop on public space for Johannesburg municipality, universities and key stakeholders in Johannesburg, South Africa © Ayanda Roji

Data collectors being trained on the application and setting-up of the tool in Sharjah, UAE © Sharjah Urban Planning Council

Trained data collectors on using the city-wide public space assessment tool to assess public space from a heritage lens in Wuchang, Wuhan, China © UN-Habitat

Training on city-wide public space assessment for social inclusion in Arua, Uganda © UN-Habitat

Municipality staff members and university students testing and familiarizing with tool in a public space in Johannesburg, South Africa © Ayanda Roji

Data collector testing the tool at the Ethiopia-Cuba Friendship Memorial Park in Addis Ababa, Ethiopia © UN-Habitat

Data collector testing the tool in an open space in Khan Younis, Gaza Strip, Palestine © UN-Habitat-Palestine

ACTIVITY CHECKLIST FOR PART 1: PRE-FIELD WORK

STEP 1: Setting-up a reference group

☐ **Reference group:** A city-wide public space inventory and assessment preparation does not belong to a single department function, a joint approach is required between all relevant stakeholders. The process starts with setting up a relevant target-oriented ad hoc reference group.

- ☐ Local government should take a leading role.
- ☐ Involve diverse expertise and groups that can represent more than one agenda within the reference group.
- ☐ Representation of the community, women, children,youth, older persons, gender experts and persons with disabilities
- ☐ Representation from relevant departments within the local government e.g GIS department, Urban Planning
- ☐ Representation from private sector, academia, NGOs and community members.
- ☐ Develop a terms of reference for the reference group.

STEP 2: Developing the assessment

☐ **Questionnaire:** A city-wide public space assessment is designed to fit the local context. Identification of the geographical scope and the thematic focus of the assessment is done. This supports the preparation of the questionnaire that will be used in the field which reflect the local context.

- ☐ Identify the spatial scope of the assessment
- ☐ Identify the spatial scope of the assessment
- ☐ Identify the typology of public spaces to be assessed
- ☐ Develop/revise and update the digital questionnaire.
- ☐ Translate the digital questionnaire to local/preferred language
- ☐ Testing of the questionnaire during workshops/seminars

STEP 3: Information gathering

☐ **Information gathering:** Collecting of all the information relevant to public space including GIS data, reviewing existing strategies, laws and regulations, assessing institutional set-up as well as mapping of public space related initiatives in the city by government, partners and key stakeholders.

- ☐ Map all public space initiatives within the city.
- ☐ Conduct a review of all relevant documents, legislation, laws, policies, strategies that have a bearing on public space
- ☐ Acquire GIS information/data on existing and planned public space from the local authority, academia and other partners.
- ☐ Download open public space data from open source.
- ☐ Acquire high resolution satellite imagery

STEP 4: Mobilizing the data collectors

☐ **Data collectors:** If the reference group does not have the capacity to conduct data collection in the field, data collectors are selected in this step. This team will primary do the field study with an agreed terms of service.

- ☐ Assess the required number of data collectors
- ☐ Introduce research ethics to the data collectors
- ☐ Developing a terms of service for the data collectors
- ☐ Establish contact and introduce the survey objective
- ☐ Identification of teams and selecting of team leaders
- ☐ Administering the geographical location for data collection for each team

STEP 5: Training

☐ **Training:** Participants are trained on public space definitions, issues, theories, principles and design considerations. A training on the application of the tool is conducted including testing the tool.

- ☐ Prepare agenda, invitation, book venue and gather equipments and stationery.
- ☐ Take measures to guarantee access to information and communication by persons with disabilities
- ☐ Ensure that representatives from different genders, children, youth, older persons and persons with disabilities are presnet in workshops and trainings.
- ☐ Training on types of public space, definitions and principles as well as an introduction to the benefits and importance of developing a public space strategy
- ☐ Training on the use of Kobo collect including setting-up and configuring the tool
- ☐ Testing the questionnaire and field work logistics
- ☐ Update the questionnaire based on the outcome of the workshop and training

●

　　Step 1: Setting-up a reference group

　　Step 2: Developing the assessment

　　Step 3: Information gathering

　　Step 4: Mobilizing the data collectors

　　Step 5: Training

● **Part 2: Data collection**

　　Step 6: Field work

　　Step 7: Data cleaning and updating GIS map

●

　　Step 8: Data analysis

　　Step 9: Public Space Assessment Report: Preliminary findings

　　Step 10: Validation workshop

　　Step 11: Public Space Assessment Report: Final Report with identified gaps and recommendations

●

　　Step 12: Developing a city-wide public space strategy

　　Step 13: Site Specific Assessment

　　Step 14: Block-by-Block workshop

　　Step 15: Implementation

　　Step 16: Monitoring and Evaluation

PART 2: DATA COLLECTION AND QUALITY CHECK

This part has two steps with activities included to each step. Data collection protocols involves field work to collect data on each public space in the city while quality checks aims to assure that data were, in fact, collected in accordance with the requirements and that the data has been submitted to the database

If the data collection was done for a specific public spaces that are within the local governments database in GIS environment
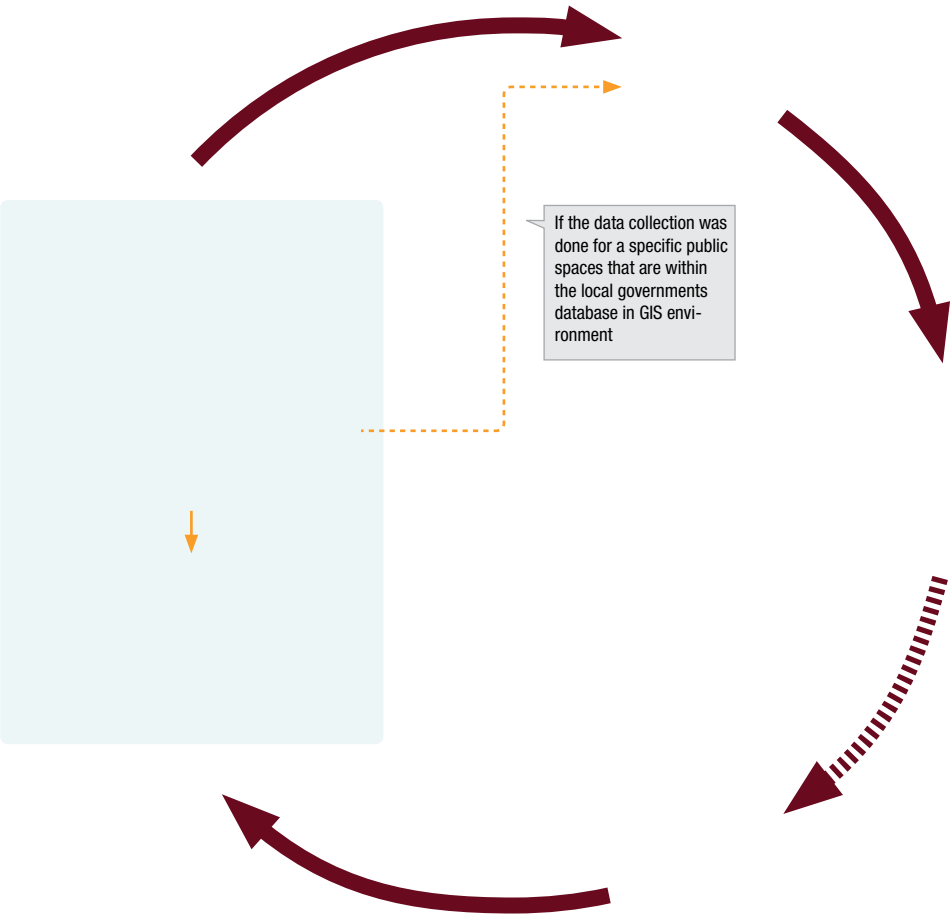
Step 6 Field work

In this step, data collectors are sent to the field to conduct the survey as per their designated location. It is important for the reference group and the team leaders to determine the best day for data collection. Considerations should be made about how people use different places on weekdays and weekends throughout different seasons. Additionally, data collectors should avoid extraordinary weather events or activities to get a sense of what the site is like on an everyday basis. Depending on the geographical scope of the assessment the city/reference group may need to organize for transportation for the data collection teams and assess the safety of data collectors. It is essential to ensure that the data collectors have a supply of food, and refreshments when out in the field. Data collectors should be aware of all the data collection tools that have been integrated into the city-wide public space assessment tool as well as adhere to the ethical considerations during data collection.

⏱ Time

Three weeks

⚠ Action

Mandatory

☑ Output

1. Raw data collected for all sites in each city

2. Summary report extracted from Kobo toolbox of the data collected

⚙ Activities

1. Determine best day for data collection and assess safety concerns.

2. Data collectors should be on their respective site. Turn on the GPS on the device. It is recommended to be at the center/middle of the site while taking the GPS coordinates for the site.

3. Take photos in landscape mode that clearly describe the situation of the site. The photos should be taken from different angles showing different activities and characteristics of the site

4. Respond to the questions based on the site existing/ current situation rather than personal knowledge.

5. Respond to all the questions with red asterisks (*) and finalize before trying to upload including interviews.

6. Complete and upload the information for one site and start a new questionnaire on the new site.

7. Ensure quality control by using the credentials provided by UN-Habitat.

8. Upload each point collected in the field to the server when phone is connected to the Internet.

⟡ Resources

Data capture methods within the tool

Location data
- GPS Location
- Area of space

Data collectors in Kabul, Afghanistan © UN-Habitat

Sound recording
- Noise levels in spaces.

Data collectors in Khan Younis, Palestine © UN-Habitat-Palestine

Photos
- Pictures of existing elements, facilities, users present etc.

Data collectors in Khan Younis, Palestine © UN-Habitat-Palestine

Surveyor's observations
- Presence (users, elements, etc) and condition (facilities, etc)

Data collectors in Sharjah, UAE © Sharjah Urban Planning Council

Interviews
- Structured interviews
- Focus group interviews

Data collector in Jianghan, Wuhan, China © WLSP

Figure 6: Data capture methods within the tool.

BOX 6   **EXAMPLE OF OUTPUT MAP FROM DATA COLLECTION, NAIROBI, KENYA**

● Each point represents a questionnaires that has been filled for a public space.
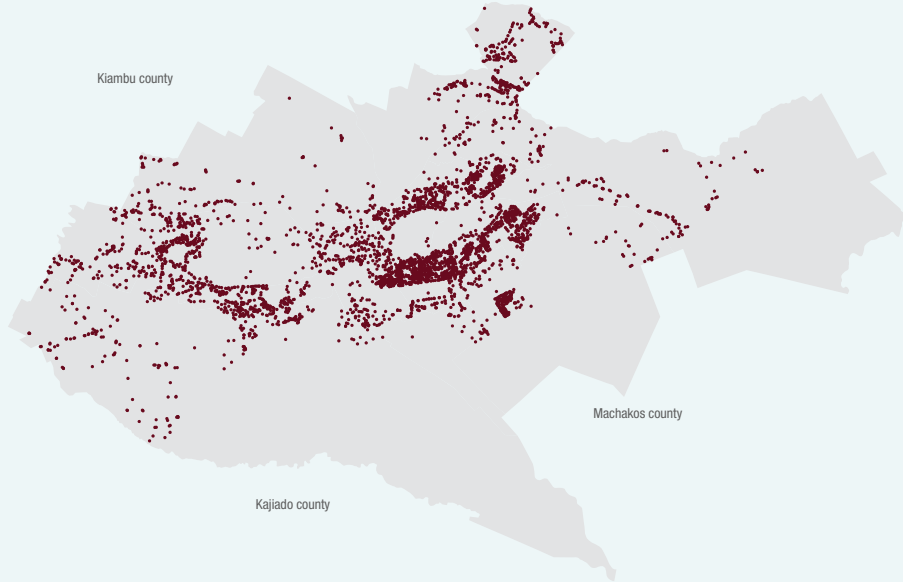
762Km Area of Nairobi's administrative boundary	**4,085** Number of data points collected	**75** Number of data collectors	**3wks** Time for data collection
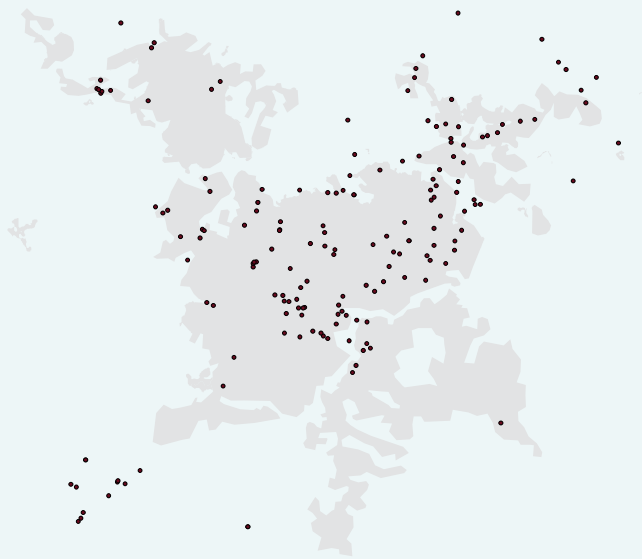
61Km Area of Bamenda's urban extent (2016)	**158** Number of data points collected	**30** Number of data collectors	**10days** Time for data collection

Step 7: Data cleaning and updating GIS layers

Data cleaning refers to the process of identifying and removing (or correcting) inaccurate records from the data set collected and this is done by the team leader, the reference group in collaboration with the Municipality/local government. Proper data cleaning can make or break the assessment results and it usually takes a large portion of time on this step. In other words "garbage in gets you garbage out!". Time spent on data cleaning is usually shorter when proper training, pilot testing and quality control during data collection was conducted.

Data cleaning involves removing duplicate or irrelevant data, entries with no data and privately-owned spaces. This step can either be done with Kobo Toolbox or ArcGIS/QGis as below:

Time

One week

Action

Mandatory

Output

1. A map of all public spaces joined with information from the field

2. A fact sheet of the process of data cleaning. Recording the original data, data deleted and reasons for deleting and final number of data cleaned.

Activities

A. Merging data

Using Kobo Toolbox Server

1. Accessing the administrative account of Kobo toolbox through the credentials provided by UN-Habitat and edit the data.

Using ArcGIS/QGis

1. Download the KMZ file, the CSV file and the zip file for all pictures and media from administrative account of Kobo toolbox

2. Add all public space data from step 1 Add the CSV file in ArcGIS/QGis.

3. Join the CSV file with the public space shapefile using the PS-ID field to transfer all data from the field to the public space shapefiles.

4. Delete duplicates, multiple entries and entries with no data.

B. Updating GIS layers

1. Where polygons were drawn using satellite imagery, remove all privately owned spaces

2. Draw new public spaces identified during data collection

Resources

ACTIVITY CHECKLIST FOR PART 2: DATA COLLECTION AND QUALITY CHECK

STEP 6: Fieldwork

☐ **Field work:** Data collectors are sent to the field to conduct the survey as per their designated location.

    ☐ Determine best day for data collection

    ☐ Data collectors should be on their respective site.

    ☐ Turn on the GPS on the device while capturing the data. It is recommended to be at the center/middle of the site while taking the GPS coordinates for the site.

    ☐ Take photos that clearly describe the situation of the site. The photos should be taken from different angles showing different activities and characteristics of the site

    ☐ Respond to the questions based on the site existing/ current situation rather than personal knowledge.

    ☐ Respond to all the questions with red asterisks (*) and finalize before trying to upload

    ☐ Complete and upload the information for one site as requested and start a new questionnaire on the new site.

    ☐ Ensure quality control by using the credentials provided by UN-Habitat.

    ☐ Upload each point collected in the field to the server when phone is connected to the Internet.

STEP 7: Data cleaning and updating GIS layers

☐ **Questionnaire:** A city-wide public space assessment is designed to fit the local context. Identification of the geographical scope and the thematic focus of the assessment is done. This supports the preparation of the questionnaire that will be used in the field which reflect the local context.

Using Kobo Toolbox Server

    ☐ Accessing the administrative account of Kobo toolbox through the credentials provided by UN-Habitat and edit the data.

    ☐ Identify the spatial scope of the assessment

Using ArcGIS/QGIS

    ☐ Download the KMZ file, the CSV file and the zip file for all pictures and media from administrative account of Kobo toolbox

    ☐ Add all public space data from step 3. Add the CSV file in ArcGIS/QGis.

    ☐ Join the CSV file with the public space shapefile using the PS-ID field to transfer all data from the field to the public space shapefiles.

    ☐ Delete duplicates, multiple entries and entries with no data.

Updating GIS Layers

    ☐ Where data was drawn using satellite imagery, remove all privately owned spaces

    ☐ Draw new public spaces identified during data collection

UN-Habitat facilitator and data collectors testing the tool in a Manger Square in Bethlehem, Palestine © Bethlehem Municipality

- Step 1: Setting-up a reference group
- Step 2: Developing the assessment
- Step 3: Information gathering
- Step 4: Mobilizing the data collectors
- Step 5: Training

- Step 6: Field work
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Part 3: Reporting
- Step 8: Data analysis
- Step 9: Public Space Assessment Report: Preliminary findings
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- Step 12: Developing a city-wide public space strategy
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- Step 15: Implementation
- Step 16: Monitoring and Evaluation

This part focuses on developing the final report from step one. This included consultations with the local government, validation workshops together with the community and key stakeholders and drafting the vision. There are four steps that are followed in this part.

If all the maps and statistics including findings from the review of secondary data has been developed.
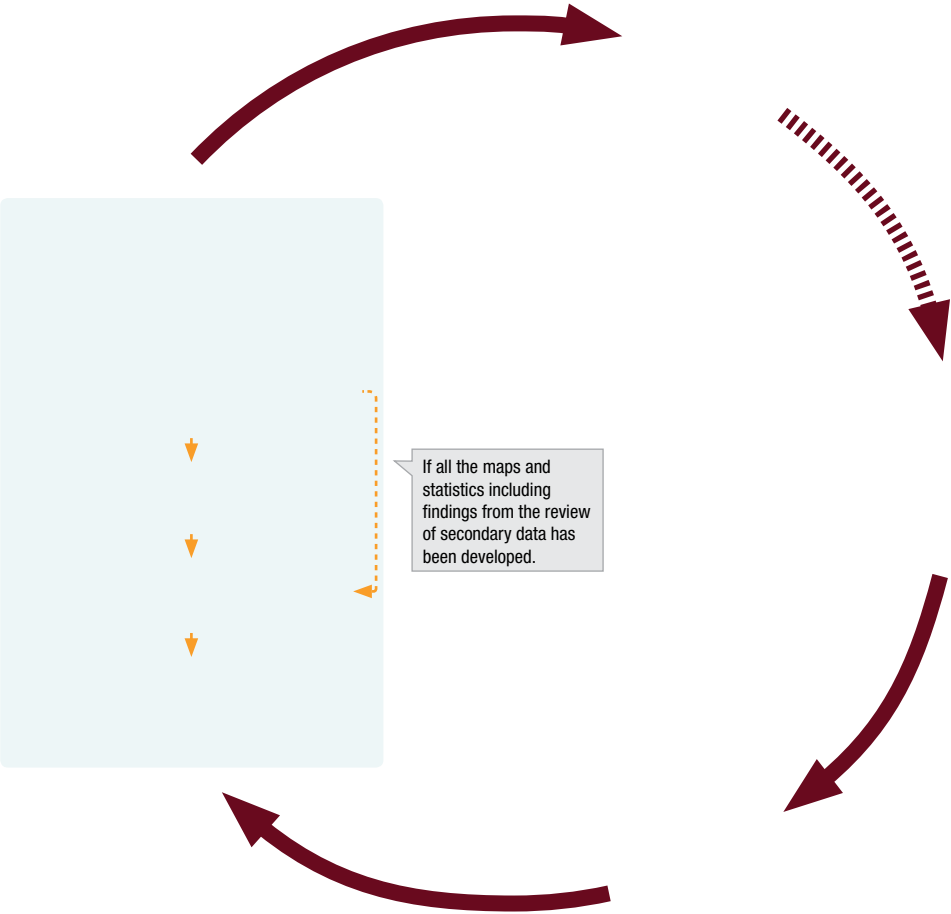
Step 8: Data analysis

Data analysis is a process of transforming, and modeling data with the goal of identifying the gaps, developing recommendations, and informing decision-making. The public space assessment tool has several indicators related to safety, inclusivity, accessibility, ownership and management, typology and scale. However, further spatial analysis is required such as, spatial distribution, land allocated to public space and green space, trend in the distribution and allocation of public space in relation to population density, population growth and spatial growth of the city. Additionally, a more in depth analysis of the key priorities or thematic focus of the city is required e.g. safety, heritage, health etc. This also means reporting on the gaps (if any) and aligning with the existing institutional framework, the legal framework, the policies and other relevant guidelines and strategies within the city/municipality.

Time

Five weeks

Action

Mandatory

Activities

1. Prepare opportunities and challenges of public spaces related to the situation on the ground and the review of documents.

2. Categorize all the analysis into the 2 categories (city-wide/quantitative and site-specific/qualitative)

3. Prepare maps for each of the dimensions under the three categories. Dimensions and indicators will vary based on the thematic focus of the assessment, however, UN-Habitat recommends the analysis of safety, inclusivity and accessibility are always included.

4. Aggregate the results into two maps - priority public spaces for upgrading and priority areas for creation of public spaces

Resources

Output

1. Maps and data representing different dimensions and providing actionable items for the municipality

2. Gaps and opportunities in

City scale analysis / Quantity

Spatial distribution

Network

Spatial accessibility

Additional dimensions

Additional dimensions

Promote a great continuous waterfront

Leverage on medians to create a network

Street connectivity to promote walking, cycling and compact development

Street connectivity and density improvement outside the city-centre

Create new public spaces outside the city-centre

Aggregate map to identify spatial gaps

Figure 7: City-scale analysis: Aggregate map to identify spatial gaps

Site scale analysis / Quality

Amenities

Use

Users

Comfort

Additional dimensions ----

Remove physical barriers and increase accessibility for persons with disabilities

Aggregate map to identify priority public spaces for upgrading

Safety

Access

Green environment

Figure 8: Site-scale analysis: Aggregate map to identify priority public spaces for upgrading

Step 9: Public Space Assessment Reporting: Preliminary findings

Before providing concrete recommendations to the municipality. It is important to have a report on the preliminary findings from the research. This report provides an overview of the data, maps on key hot-spot areas, data analysis, the vision, mission and strategic direction for the city/municipality, gaps and opportunities in the institution, legal, policy and other relevant guidelines and strategies. It is important to share this report with the municipality and key stakeholders for inputs prior to the validation workshop.

Time

two weeks

Action

Mandatory

Activities

1. Prepare fact sheet report with key findings from the institution, legal, policy and other relevant guidelines and strategies

2. Prepare maps and analyze data from the field study for each of the categories and dimensions with a short narrative on the results

3. Share the findings with local government and key partners prior to validation workshop

Resources

Output

1. A report on the key findings from the analysis.

2. A report on the gaps and opportunities in the existing institutional framework, the legal framework, the policies and other relevant guidelines and strategies within the city/municipality. This can be geared towards the priorities of the city.

3. Individual maps for the key dimensions at a scale that is visible. This will also be used during the validation workshop.

Step 10: Validation workshop

Organizing and holding a validation workshop is key to be able to ensure that the information gathered is accurate and correct. The validation workshop also provides an opportunity to identify the professionals and agree upon the recommendations emanating from the assessment. It is important to ensure that different departments of national and local government, key professionals and stakeholders and community members are invited to the validation workshop. It is also importtant to ensure that there is gender balance, people from different ages, including children youth and older persons, and if possible the presence of persons with disabilities. Furthermore, there should be measures to guarantee persons with disabilities have access to information and communication.The validation workshop is also an opportunity to mobilize social and political support and to obtain the commitment necessary for the development of a public space strategy/policy.

Time

One week

Action

Mandatory

Activities

1. Conduct a validation workshop with the local governments, the community members, academia and other relevant stakeholders involved in public space work.

2. Present the findings from the report and the exercise

3. Use the maps prepared in step 8 and group the participants to assess the data and provide inputs

4. In the case that a vision, mission, objectives and strategic goals of the municipality/city is missing, this can be a starting point on the needs assessment and visioning process.

5. Distribute the reports for further comments

Resources

Output

1. Workshop report

2. Consolidation of the outcome from the group exercise.

3. Recommendations for the public space strategy.

4. A short paper on the vision for the city, objectives and strategic direction- if available. If not, a visioning process needs to be planned with workshops, seminars etc. This can be done as part of step 12

Step 11: Public Space Assessment Report: Final Report with identified gaps and Recommendations

Once the data has been validated by the municipality. A final report is prepared, this report will provide a comprehensive overview of the state of public space in the city including a strong component on the priority area for the city/municipality and this could be related to heritage, mobility, biodiversity, safety, child-friendly, senior friendly public spaces and universal design etc. A long term strategic vision and public space spatial plan for the city needs to be prepared at this step including key recommendations on policy, institutional set-up to anchor the public space strategy development and implementation. This is the most crucial stage of the process as the report will form a basis for a long term strategy. This strategy should address spatial inequalities and promote equity in access to urban infrastructure. Additionally, new proposed public spaces should avoid displacement or eviction and, when relocation is necessary it follows human rights protocols.

Time

Four weeks

Action

Mandatory

Output

1. A comprehensive report on data gaps and long term spatial and non-spatial recommendation for the city in relation to the vision, mission and objectives of the city.

Activities

1. All inputs consolidated from different actors regarding the report and the data is revised and incorporated into the report accordingly

2. Findings: (spatial such as deprived neighbourhoods, priority public spaces for upgrading) and non-spatial (institutional set-up, legislation, policy gaps) from the analysis and research can be documented in a separate section of the report

3. Preliminary recommendation on the spatial strategy, institution set-up and policy

4. New proposed public spaces that avoid displacement or eviction and, when relocation is necessary it follows human rights protocols.

5. New public spaces addressing spatial inequalities and promote equity in access to urban infrastructure.

6. Dissemination strategy for the report is actioned.

Resources

It is most realistic and economical to prioritize improvement of existing vacant spaces or underutilized spaces.

ACTIVITY CHECKLIST FOR PART 3: REPORTING

STEP 8: Data Analysis

☐ **Data Analysis:** The public space assessment tool has several indicators related to safety, inclusivity, accessibility, ownership and management, typology and scale. However, further spatial analysis is required such as, spatial distribution, land allocated to public space and green space, trend in the distribution and allocation of public space in relation to population density, population growth and spatial growth of the city. Additionally, a more in depth analysis of the key priorities or thematic focus of the city is required e.g. safety, heritage, health etc.

☐ Prepare opportunities and challenges of public spaces related to the situation on the ground and the review of documents.

☐ Categorize all the analysis into the 2 categories (city-wide/quantitative and site-specific/qualitative)

☐ Prepare maps for each of the dimensions under the three categories. Dimensions and indicators will vary based on the thematic focus of the assessment, however, UN-Habitat recommends the analysis of safety, inclusivity and accessibility are always included.

☐ Aggregate the results into two maps - priority public spaces for upgrading and priority areas for creation of public spaces

STEP 9: Public Space Assessment Reporting: Preliminary findings

☐ **Preliminary Report:** It is important to have a report on the preliminary findings from the research. This report provides an overview of the data, maps on key hotspot areas, data analysis, the vision, mission and strategic direction for the city/municipality, gaps and opportunities in the institution, legal, policy and other relevant guidelines and strategies.

☐ Prepare fact sheet report with key findings from the institution, legal, policy and other relevant guidelines and strategies

☐ Prepare maps and analysed data from the field study for each of the categories and dimensions with a short narrative on the results

☐ Share the findings with local government and key partners prior to validation workshop

STEP 10: Validation Workshop

☐ **Validation workshop:** Organizing and holding a validation workshop is key to be able to ensure that the information gathered is accurate and correct. The validation workshop also provides an opportunity to identify the professionals and agree upon the recommendations emanating from the assessment.

☐ Conduct a validation workshop with the local governments, the community members, academia and other relevant stakeholders involved in public space work.

☐ Ensure that representatives from different genders, children, youth, older persons and persons with disabilities are present in workshops and trainings.

☐ Facilitating access to information and communication for persons with disabilities.

☐ Present the findings from the report and the exercise

☐ Use the maps prepared in step 6 and group the participants to assess the data and provide inputs

☐ In the case that a vision, mission, objectives and strategic goals of the municipality/city is missing, this can be a starting point on the needs assessment and visioning process.

☐ Distribute the reports for further comments

STEP 11: Public Space Assessment Report: Final Report with identified gaps and Recommendations

☐ **Final Report:** A final report is prepared, this report will provide a comprehensive overview of the state of public space in the city including a strong component on the priority area for the city/municipality. A long term strategic vision and public space spatial plan for the city needs to be prepared at this step including key recommendations on policy, institutional set-up to anchor the public space strategy development and implementation. This is the most crucial stage of the process as the report will form a basis for a long term strategy for the city

☐ All inputs consolidated from different actors regarding the report and the data is revised and incorporated into the report accordingly

☐ Findings: (spatial such as deprived neighbourhoods, priority public spaces for upgrading) and non-spatial (institutional set-up, legislation, policy gaps) from the analysis and research can be documented in a separate section of the report

☐ Preliminary recommendation on the spatial strategy, institution set-up and policy

☐ New proposed public spaces avoid displacement or eviction and, when relocation is necessary it follows human rights protocols.

☐ New public spaces address spatial inequalities and promote equity in access to urban infrastructure.

☐ Dissemination strategy for the report is actioned.

Step 1: Setting-up a reference group

Step 2: Developing the assessment

Step 3: Information gathering

Step 4: Mobilizing the data collectors

Step 5: Training

Step 6: Field work

Step 7: Data cleaning and updating GIS map

Step 8: Data analysis

Step 9: Public Space Assessment Report: Preliminary findings

Step 10: Validation workshop

Step 11: Public Space Assessment Report: Final Report with identified gaps and recommendations

Part 4: Post-city-wide assessment

Step 12: Developing a city-wide public space strategy

Step 13: Site Specific Assessment

Step 14: Block-by-Block workshop

Step 15: Implementation

Step 16: Monitoring and Evaluation

PART 4: POST CITY-WIDE PUBLIC SPACE ASSESSMENT

This part involves developing a public space strategy, monitoring and evaluation plan and implementation of selected priority public spaces or areas prioritized for creation of new public spaces.

If the city would like to update their public space strategy or evaluate their performance in public space provision against previously conducted assessment

If the city would like to develop an action plan prior to piloting public space demonstration projects

If the city has applied other participatory and co-design tools
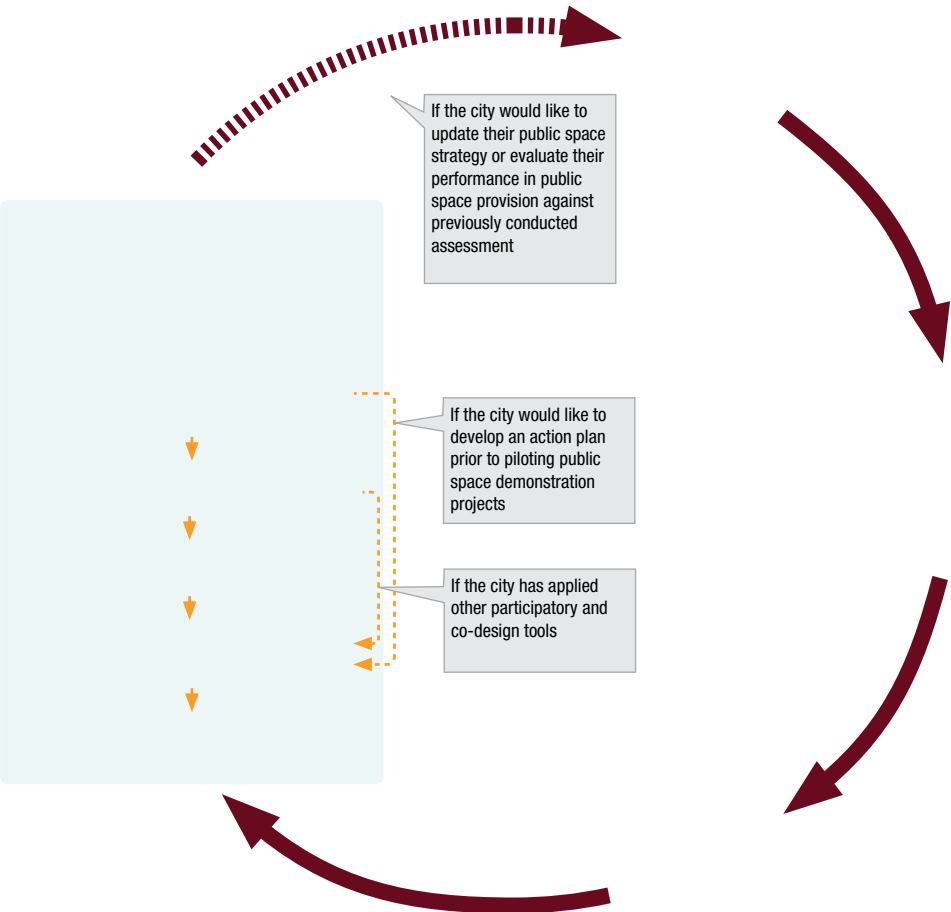
Step 12: Developing a City-wide Public Space Strategy

A city-wide public space strategy provides an action-oriented approach to acquiring, setting up, planning, implementing and maintaining a network of high quality public spaces in a city or town for future sustainability. It confronts the present actual state of the public spaces in the city, identifies needs and demands and crystallizes a collective vision and goals through better management and development of public space.

Time

18 months

Action

Mandatory

Activities

1. Engage stakeholders to formulate a shared vision, mission, goals policies and targets

2. Develop a communication strategy

3.. Examine your city's anticipated needs over the next 30-50 years.

4. Establish recommended options that are appropriate for your city

5. After city-wide public space assessment, prepare a strategic map with the type of public spaces to be offered.

6. Define standards, guidelines and regulations

7. Draft the strategy

8. Secure approval and formal endorsement

Resources

CITY-WIDE PUBLIC SPACE STRATEGIES
A COMPENDIUM OF INSPIRING PRACTICES
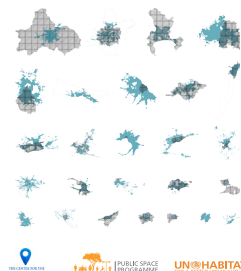
CITY-WIDE PUBLIC SPACE STRATEGIES
A GUIDEBOOK FOR CITY LEADERS
ADVANCE REVIEW COPY
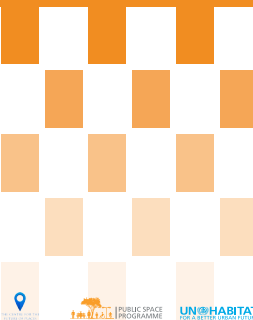
Output

1. A public space strategy for the city

Step 13: Site-specific Assessment

Once a city has selected public spaces to be upgraded, a site-specific assessment is recommended prior to the design and implementation. The Public Space Site-specific Assessment consists of a series of activities and tools to understand the quality of public spaces and influence, through a participatory process, the design of the site. The assessment focuses on a selected open public space and its five (5) minute walking radius.

Time

2 months

Action

Mandatory

Activities

A. Pre-assessment

1. Project preparation

2. Desktop research.

B. Data gathering

3. Observation

4. Site-survey

5. Interviews

6. Exploratory/safety walks

7. Focus group discussion

C. Analysis

8. Findings map

9. Quality scoring

10. Recommendations

D. Evaluation

11. Comparative findings

Resources

Public space site-specific assessment
Guidelines to achieve quality public spaces at neighbourhood level

PUBLIC SPACE PROGRAMME   UN@HABITAT
FOR A BETTER URBAN FUTURE

Output

1. Quality assessment of public spaces prior to upgrading

2. Quality framework for new public spaces

Step 14: BlockbyBlock Workshop

The Block by Block workshop uses the video-game Minecraft to co-design the public space with and by the community in a 3D model. Other design workshops can be used to get physical inputs from the community.

⏱ Time

3 days

⚠ Action

Recommended

☑ Output

1. Block by Block workshop report including the list of priorities and screenshots of the community's intervention

2. Final Minecraft model

⚙ Activities

A. Preparation

1. Provide picture, videos and geolocation of the public space to the Minecraft Model developer at least one month prior the activity

2. Prepare a detailed agenda and all required materials.

3. Schedule an adequate time, book a location and invite the participants. Ensure age and gender balance.

4. Install Minecraft on each computer and test if it works one day before the workshop

B. Workshop

1. Introduce public spaces principles

2. Do a site visit with the participants to identify the main challenges and opportunities

3. Group the participants into 3 or 4 people and assign a computer to each group

4. Train the participants on the basic commands and let them put their ideas in the model

5. Invite the groups to present their interventions.

6. Take note of the ideas and prepare a list of priorities

7. Develop a final model with all the priorities to hand-over to the expert team

👆 Resources

Block by Block training kit
Using Minecraft as a participatory tool to co-create public spaces

PUBLIC SPACE PROGRAMME   UN@HABITAT
FOR A BETTER URBAN FUTURE
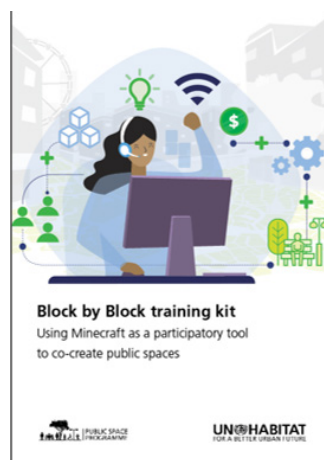
Step 15: Implementation

During the process of preparing the city wide strategy on public space, it will be necessary to identify relevant tools and instruments for an effective and efficient implementation. The tools and mechanisms can be applied by the local authority itself, as well as, in collaboration with external partners, such NGOs, community groups, private and public developer. Each strategy in the public space development is accompanied by an action plan. It is important that all partners agree on who the implementers of the plan are and set the lead for each project. The action plan should also be able to anticipate future needs for the public space system.

The action plan describes in detail the steps, personnel, timescale and funding required for achieving the city-wide public space strategy's aims and objectives. It is usually derived from the strategic policies. Individual actions may need to be expanded into more detailed, site-specific activities.

Time

Three weeks

Action

Mandatory

Activities

1. Review - The proposed activities listed in the citywide public space strategy are reviewed and selected by each relevant municipal work unit/department.

2. Consolidation - Proposed activities that passed the review step are grouped together to ensure effective and efficient implementation.

3. Prioritization - The public space reference group prepares a list of proposed activities that has been adjusted to the available budget.

4. Pilot - proposed interventions in the action plan will be tested in the pilot projects. This will provide lessons for consequent plan

5. Prepare detailed design, cost estimates and implementation schedule

6. Synchronize action-plan with municipal work plans.

Resources

Output

1. Action plan

Step 16: Monitoring and Evaluation

Another city-wide public space assessment is commissioned when a city would like to update their public space strategy or to evaluate the city's progress in public space provision. In this case the process of conducting a city-wide public space assessment is followed and the results are measured against previous results. Additionally, any public space strategy should include a monitoring and evaluation component. Such review could for example be connected to the reviewing of the overall city development plan/strategy, in conjunction with the municipal budgeting cycle or similar. In case the set strategies are not working, new strategies are set. The objective of this is to allow for the city-wide public space strategy to be a dynamic and adaptable instrument that responds to the development and growth of cities.

Time

Continuous

Action

Mandatory

Activities

1. Evaluate city-wide public space assessment results from previous results

2. Monitor city-wide public space strategy implementation against set objectives.

3. Review annual public space action plan to revise the following year's action plan.

4. Report on outcomes of public space implementation

5. Monitor implementation against key performance indicators

6. Update GIS database.

Resources

Output

1. A report on the monitoring and evaluation of the implementation of the city-wide public space strategy

2. An evaluation of the city's performance in provision of public spaces against previous city-wide public space assessment

Group discussion during the first validation workshop for Nairobi public space assessment in 2015, UNON, Nairobi, Kenya © UN-Habitat

Data collectors from Sharjah, UAE © Sharjah Urban Planning Council

Data collectors testing the tool in Mwanza, Tanzania © UN-Habitat

RESOURCES

ANNEX 1: TEMPLATE ON STAKEHOLDER ANALYSIS.

Stakeholder	Interest	Contribution	Relevance to the process	Future relevance	Reference Group
(Example) Persons with disabilities representatives	*(Example)* Involved in advocating for input on questions and indicators for inclusive and universal accessibility of public spaces	*(Example)* Knowledge of the needs and requirements for inclusive and accessible public spaces for persons with disabilities	*(Essential/Important/Minor)*	*(Essential/Important/Minor)*	Yes/No
Local government representatives	Will take the lead and implement recommendations from the assessment	Leadership, Political support, technical expertise, implementations of recommendations from ongoing initiatives			

ANNEX 2: TERMS OF REFERENCE TEMPLATE FOR A REFERENCE GROUP.

Name of reference group *(What is the name of the reference group/project team?)*
Purpose of the reference group *(3-4 Bullet points on the purpose of the working group)*
Period active and time commitments *(How long will the reference group to be active? What is the end date? What is the frequency and time for planned meetings?)*
Roles and responsibilities of the reference group *(What are the expected activities and outputs from participants of the reference group?)*

ANNEX 3: MAPPING PUBLIC SPACE INITIATIVES TEMPLATE.

No	Activity	Stakeholder	Level of influence	Relevance to the process	Future relevance
1	(Example) Safety audits	(Example) Local government	(High/Medium/low) High	(Essential/Important/Minor)	(Essential/Important/Minor)
2	Public space upgrading projects	Will take the lead and implement recommendations from the assessment	Medium		
3					
4					
5					

Map all initiatives in this matrix

ANNEX 4: EXAMPLE OF INSTITUTIONAL SET-UP.

Mayor

Mayor Secretary

Region Directorate — Head of Office — Deputy Head of office

Internal Audit Directorate — Plan, Policy, M&E Directorate — Deputy Director Plan, Policy, M&E

Spokesperson — Control Administrative

International Affair Advisor — Revenue and Economic Affair advisor

Procurement Affair Advisor — Legal Affair Advisor

Women Affair Advisor — Technical Affair Advisor

IT Administrative — MIS and IT Directorate — Legal Affair Directorate

Deputy District Directorate — District Directorates — Fundraising Directorate

Deputy Mayor (Technical and Construction)

Deputy Director Work

Deputy Director Maintenance

Work and Maintenance Directorate

Programmes Management Directorate

Macroryan lightening Directorate

Deputy Mayor (Transport and Traffic)

Infrastructure Planning Directorate

Traffic Management Directorate

Urban Public Transport Directorate

Deputy Mayor (Planning and Urban Design)

Property Directorate — Buildings Control Directorate

Acquisition Directorate — Urban Planning and Implementation Directorate

Improvement Directorate — Buildings Certificate Issue Directorate

Deputy Mayor (Admin and Finance)

HR Directorate — Deputy HR Directorate

Admin/ Finance Directorate

Deputy Director (Accounting)

Budgeting officer

Procurement directorate

Revenue Directorate — Deputy Revenue Directorate

Gender Unit

Deputy Mayor (Urban Services and environment)

Environmental Health Directorate

Commerce and industry Directorate

Sanitation Directorate

Greenery Directorate

Environmental Health Deputy Directorate

Commerce and industry Deputy Directorate

Sanitation Directorate

Deputy Directorate (Administration)

Deputy Directorate (Technical)

Directorates that could benefit from the assessment and implement the recommendations

ANNEX 5: TERMS OF SERVICE TEMPLATE.

ADD LETTER HEAD
[INSERT PROJECT TITLE]

VOLUNTEERING TERMS OF SERVICE

ACTIVITY: Public Space Assessment - Data Collection
OUTPUT: Questionnaire filled in Kobo Collect App

THIS VOLUNTEERING TERMS of SERVICE is made this _____ day of___ between the UN-HABITAT and _____

(hereinafter referred to as the "VOLUNTEER") whose mobile number is_____

The Volunteer agree as follows:

1. **Services to be performed**

   Volunteer Data Collector agrees to perform the following services for the project output – Questionnaire filled in KoboCollect, herein referred to as Public space Assessment in_____.

   a)   The Volunteer Data Collector shall conduct an on-site survey, on Kobo Collect App using Android operating system mobile gadget/ phone by visiting each public space within the municipality as stipulated by UN-Habitat.

   b)   The data collector shall undertake interviews prioritizing women, girls, older persons, people living with disabilities using the public space.

   c)   The Volunteer Data Collector shall undertake the survey based on existing site conditions and not based on prior knowledge of the public space.

   d)   The Volunteer Data Collector shall administer questionnaires per day for a period of _____ in _____ city.

   e)   The Volunteers' Team Leader for Data Collectors shall synchronize collected data at the end of each day by way of gathering at an agreed central place with all Volunteer Data Collectors in his/her Team. This shall be done by using mobile data bundles through mobile Wi-Fi to synchronize and send the data collected to UN-Habitat server.

2. **Fees**

   a)   The Volunteer shall be paid _____per day, as an appreciation to accept volunteering for a period of _____ days to administer a questionnaire.

   b)   The Volunteer shall be paid an allowance of _____per day, as daily food allowance for a period of 21 days.

   c)   The Volunteer shall be paid _____per day for airtime/data bundle to communicate any challenges encountered in the field to UN-Habitat field back up staff for _____ days.

   d)   The Team Leader shall be paid _____ per day for data bundles to transmit and upload data to UN-Habitat server at the end of each day of data collection. This shall be done by connecting all Team Members to Mobile WI-FI by meeting at an agreed time and central place daily.

3. **Terms of Service:** The period of this Terms of Service shall be from the date it is fully executed for a period of _____ days, unless terminated earlier by either party. In the event of performing below target, the volunteer shall be paid per Questionnaire Rate_____

4. **Payment for Services:** Payment for services shall be done on the last day of task completion. Payment shall be on cash basis at_____ location

5. **Ownership of Products of Service:** All work gadgets and items issued during data collection shall remain UN-Habitat property and must be returned.

6. **Insurance Requirement:** Throughout the term of this Volunteer Terms of Service, the Volunteer shall not be required to provide proof of insurance cover and shall not be covered under any UN-Habitat insurance cover. The Volunteer Enumerator must take care to avoid any injuries.

7. **Ethics:** The Volunteer Enumerator agrees to protect human participants involved; to ensure that research is conducted in a way that serves interests of UN-Habitat, as well as individuals, groups and/or society involved. Finally, ensure ethical soundness, including management of risk, protection of confidentiality and the process of informed consent.

8. **Notices:** Any notices or other communications given under or in relation to this Voluntary Data Collection Terms of Service shall be deemed duly given if served through mobile phone and associated social media platforms created for this task.

9. **Entire Terms of Service:** This Terms of Service constitutes the entire Terms of Service of duties to be executed between the Volunteer Data Collector and UN-Habitat. This Terms of Service may be amended only by written instrument signed by each party.

IN WITNESS WHEREOF, the parties have executed this Voluntary Data Collection Terms of Service as of the day and year written below.

CITY NAME _____

VOLUNTEER:
Full Names: _____

Date: _____

WITNESSED BY:
 Full Names:_____

Date: _____

ANNEX 6: ETHICAL CONSIDERATION DURING DATA COLLECTION.

PERSONAL

- Take care of yourself
    - Avoid dangerous unclear paths,
    - Be hydrated, eat enough food,
    - Use comfortable clothes and shoes. A Hat and Umbrella can help to shield you from the sun.
    - Always carry some money with you. Carry all your daily convivence goodies/items (chewing gum, water bottle, lunch box, sanitary ware, handbag, wallet, medication, etc…)
    - If you have any medical condition, ensure you have your medication
    - Ensure you are physically, mentally fit to do data collection
    - If you feel sick/unhealthy, communicate to UN-Habitat/reference group/team leader or Field Back-Up staff immediately. Do not force yourself to work when you are sick
- Take care of all gadgets/items issued to you for data collection to ensure that they are safe
- Return all gadgets/items issued to you in good working order
- Ensure your phone is functioning well
    - Always carry your charger and ensure you fully charge your phone,
    - Always ask to charge your phone whilst doing an interview,
    - Carry your power bank/ or borrow from family and friends,
    - Ensure enough memory on your mobile phone/gadget i.e. use Memory Card,
    - Try to get android version 4.0 or higher mobile gadget, WIFI enabled
- Apple mobile gadgets i.e. iPhone/iPad etc. are not compatible with Kobo Toolbox App. However, through Web Link, it is possible to use Apple Gadgets for Data Collection.

INTERVIEWS

- Greet the Interviewee with respect. Carry yourself with respectful throughout Data Collection.
    - Good morning/Hello, etc, be friendly, try to make the interview interesting
- Introduce your self
    - Give your full names e.g. I am Joy Mutai …
- Give reason (s) why you visit that public space
    - To carry out an interview on the quality of the public space and understand user experiences of the space..
- Give the names of the organizations involved in the data collection/research
    - UN-Habitat, Government of Kenya, District Government of Wuchang… etc
- Inform the interviewee the approximate Time the interview will take and Photos Disclaimer/ Consent
    - I will take approximately ____ mins of your time.
    - I will take about __ photos during the Interview
    - I will take quotes from the interview
- When needed, photo consent should be asked when taking photos of users and activities in the public spaces
- Ask the Interviewee if they would allow you to continue to do the Interview

ANNEX 7: REQUIREMENTS FOR DATA COLLECTION AND GIS RE-QUIREMENTS FOR ANALYSIS.

PHONE REQUIREMENTS

- It is recommended to have a smart phone running on Android version 4 or above.
- Ensure there is enough storage in the phone.
- Ensure that there is no uncertified anti-virus as this may restrict installation.
- Charge your phone.

REQUIREMENTS BEFORE DATA COLLECTION IN THE FIELD

- Ensure Kobo Collect app is installed on your phone or you have access to the web form.
- Printed out map of the area where the field work is going to carried out.
- Note: Internet connection is only needed to install the kobo toolbox app and to submit the data to the server. The data can be collected without an internet connection

GIS REQUIREMENTS FOR DATA ANALYSIS

- Shapefiles of administrative boundaries of the city/municipality which includes the population information for the lowest administrative boundary disaggregated by age, gender and if possible disability.
- Shapefile of the urban extent of the city (this can go beyond the administrative boundary)
- Shapefiles of all open public spaces.
- Shapefiles of all pedestrian streets (sidewalks, avenues, boulevards).
- Shapefiles of all public facilities (markets, public schools, hospitals, civic buildings, public libraries)
- Shapefiles of land use.
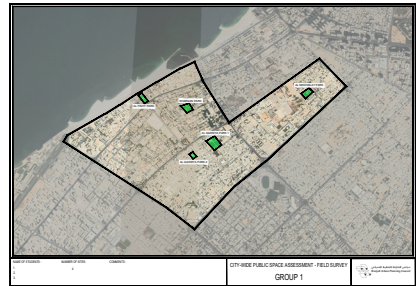- High resolution ortho-photo.

ANNEX 8: HOW TO ASSIGN TEAM TO GEOGRAPHICAL AREAS FOR DATA COLLECTION.

Divide the geographic focus area into feasible zones for walking and accessing public spaces within those zones. If it is not possible to walk within the zones, the local government should provide transportation.
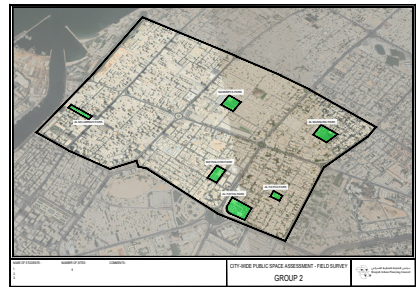
Group the data collectors into 3/4 people and assign a zone(s) to each group. Where possible, ensure that the data collectors come from the same area as the zone allocated to them or there is a representative from that community within the group.
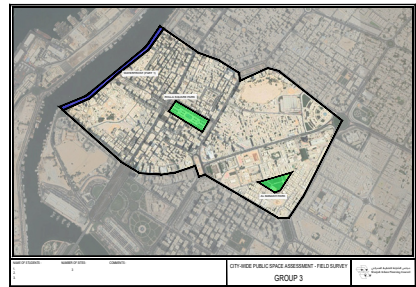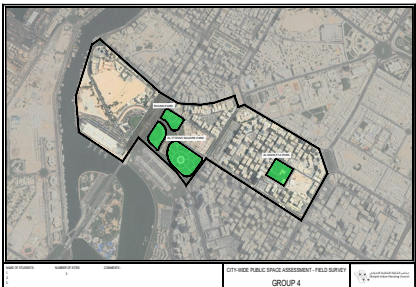
Group **1**

CITY-WIDE PUBLIC SPACE ASSESSMENT - FIELD SURVEY
GROUP 1

Group **2**

CITY-WIDE PUBLIC SPACE ASSESSMENT - FIELD SURVEY
GROUP 2

Group **3**

CITY-WIDE PUBLIC SPACE ASSESSMENT - FIELD SURVEY
GROUP 3

Group **4**

CITY-WIDE PUBLIC SPACE ASSESSMENT - FIELD SURVEY
GROUP 4

CITY-WIDE PUBLIC SPACE ASSESSMENT - FIELD SURVEY
KEY PLAN
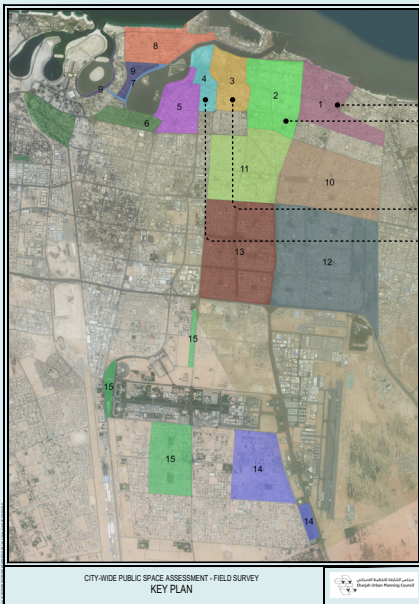
ANNEX 9: EXAMPLE OF AUTHORIZATION LETTER FOR DATA COLLECTION.

[Insert letterhead]

[Insert title of the project]

Authorization Letter for Data Collection

Date

Dear Respondent,

In order for [name of your organization], [name of your partner] and [name of your municipality] to effectively determine the needs of the municipalities towards a [your planned vision for public space], volunteers are conducting a survey of all [open public spaces and markets] in [insert location]. This project will support the implementation of [insert the intended links to steering documents or vision]. Your response to this survey is crucial in providing the necessary information to formulate useful decisions and strategies for the future of the [insert location].

The [insert location] will be analyzed from the spatial development perspective through a city wide public space assessment. The purpose of this is to determine the distribution, quality, quantity, inclusivity, accessibility and safety of these spaces. In addition, your assessment of the experiences in the area as well as your knowledge of the [insert location] will provide beneficial information. Please feel free to include any additional comments you deem necessary or relevant to improving the information already available. Your response and time is greatly appreciated. Thank you!

Sincerely,
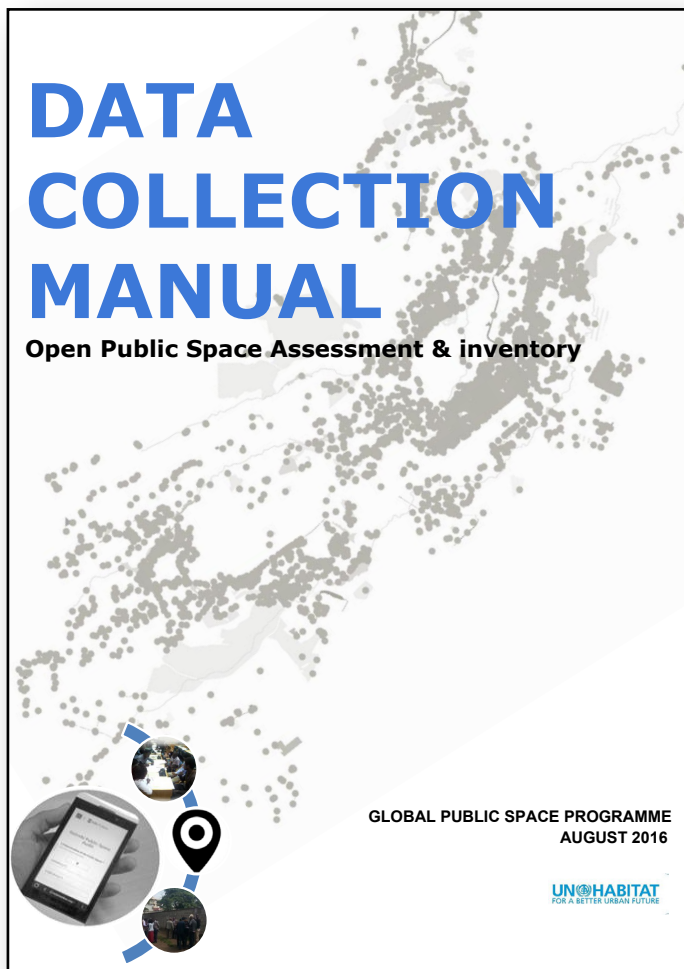
[Signature]
[Name]
[Your title]
[Your Organisation]

ANNEX 10: TRAINING PROGRAMME TEMPLATE.

DAY	SESSION
DAY 1	PUBLIC SPACE BASICS GLOBAL PRINCIPLES TO LOCAL ACTION KNOWING WHERE YOU ARE TO KNOW WHERE TO GO
DAY 2	SETTING-UP AND CONFIGURING THE TOOL REVIEW OF QUESTIONNAIRE
DAY 3	FIELD TEST RUN REVIEW OF RESULTS FROM TEST RUN
DAY 4	TOWARDS A STRATEGY

ANNEX 11: SETTING-UP AND CONFIGURING KOBO COLLECT.

DATA COLLECTION MANUAL

Open Public Space Assessment & inventory

GLOBAL PUBLIC SPACE PROGRAMME
AUGUST 2016

UN@HABITAT
FOR A BETTER URBAN FUTURE

ANNEX 13: CATEGORIES AND DIMENSIONS OF ANALYSIS..

No	Dimension	Sub-dimension	Indicator	Disaggregate/proxy
1	Spatial distri-bution	Land allocated to public space	Land allocated to OPS	Scale of ops, Typology of ops
2			Land allocated to Streets	Type of street
3			Land allocated to OPS in Public Facilities	Type of public facility
4		Per capita public space	Per capita open public space	Smallest administrative division
5			Per capita green area	Smallest administrative division
6		Distance to public space	5 minutes walk to public space	Population with access by age, gender and disability
7			10 minutes walk to public space	Population with access by age, gender and disability
8		Street Connectivity	Number of intersection per square kilometer	
9			Street length per square kilometer	
10			Length of bicycle lane to length of roads (excluding motorways)	
11			Length of sidewalks to length of roads (excluding motorways)	
12		Network/Distribution of public space	Open public space fragmentation	Smallest administrative division
13			Proximity of one public space to another	
14		Land cover dates	Change in green area over time (years)	
15			Change in urban extent over time (years)	
16			Change in average surface temperature (years)	
17	Governance	Finance and Economy	Land value change around public spaces over time	Urban, sub-urban
18			Per cent of municipal budget allocated to public space	Utilities, creation, management and maintenance
19		Policy	Presence of public space plans/strategies including action plans	
20			Plans/strategies that have included high-quality network of public spaces	Type of plan eg. urban exten-sion, renewal, regeneration, slum upgrading strategies
21			Acquisition of land for public space	Mean of acquisition eg. expro-priation
22			Planning Standards for Public Space	
23			Management of public spaces	

No	Dimension	Sub-dimension	Indicator	Disaggregate/proxy
24	Accessibility	Level of accessibility	Number of ops with free access (no entrance fee charged)	Typology of public space
25			Number of ops with controlled access (by opening hours)	Typology of public space
26		Infrastructure to access	Public spaces with access infrastructure for all	Mode of transport, age, gender and disability
27	Safety	Social problems in the public space	Number of incidences in the public space within the last 12 months	Age, gender, jurisdiction and type of social problem eg vandalism, harassment, drug abuse, robbery
28		Infrastructure problems in the public space	Number of public spaces with infrastructural problems	Age, gender and type of infrastructural problem eg poor street lighting, poor pavements, no traffic calming
29		Environment	Noise pollution	
30			Mean levels of particulate matter in public spaces	
31			Waste disposal	Type of waste
32	Inclusivity	Users in public space	Number of users in public spaces in the last 12 months	Age, gender and disability
33		Civic engagement	Number of participants in the design, implementation, maintenance, policy of public spaces	Age and gender, type of engagement eg workshop, training, charrette
34		Use of public space	Type of activity in the public space	Type of activity eg mono-functional, pluri functional, multi functional.....socializing, resting, eating
35			Amenities for use	Type of amenity eg. public toilets, seating furniture

CASE STUDY: TOWARDS CHILD-FRIENDLY OPEN PUBLIC SPACES IN SHARJAH, UAE.

The Emirate of Sharjah is committed to providing safe, vibrant, inclusive and resilient open public spaces that are child friendly. It aims to ensure the process of open public space development promotes the diverse benefits that public spaces offer but also that are child friendly. To this end, a city-wide open public space assessment was conducted for 60 open public spaces within Sharjah City. This is part of the Child-friendly Urban Planning Project by Sharjah Urban Planning Council (SUPC) and Sharjah Child Friendly Office (SCFO) with the support from UNICEF and UN-Habitat.

The assessment focused on six main areas: the presence of children in open public spaces, the presence and condition of facilities and services for use in open public spaces, spaces that promote social, emotional, physical and cognitive development for children, accessibility and comfort of open public spaces, safety and security, and climate adaptiveness of the open public spaces. There were 45 volunteers who were trained and conducted the field survey.
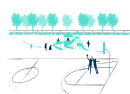

Presence of children in open public spaces by gender and age

Presence of facilities and services for use

Open public spaces that promote social, emotional, physical and cognitive development for children
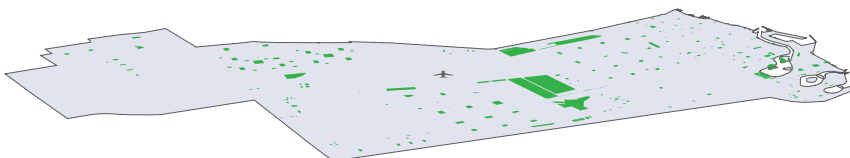
Open public spaces that are accessible and comfortable for all

Open public spaces that are safe and secure for children

Open public spaces that are climate adaptive

CASE STUDY: ELIMINATING VIOLENCE AGAINST WOMEN AND GIRLS IN PALESTINE.

To support the "HAYA" Programme "Eliminating Violence Against Women in the West Bank and Gaza Strip", UN-Habitat in collaboration with Ministry of Local Government and the private sector conducted city-wide public space safety audits in five cities in Palestine; Khan Younis, Jenin, Nablus, Jericho and Bethlehem Cluster of Ad Doha, Beit Sahour, Beit Jala and Bethlehem. The aim was to understand women's and girls' safety concerns in public spaces and to develop city-level public space strategies that will feed into the national public space policy development process. The assessment focused on 6 areas: social problems, infrastructural problems, anti-social behavior, harassment, perception of unsafety and experiences of crime and harassment.

The most common safety concerns by women and girls in public spaces in the West Bank and Gaza Strip are infrastructure problems, perception of unsafety, social problems and experiences of crime and harassment in public spaces. Approximately 27 per cent of the public spaces in the West Bank and Gaza Strip have infrastructural problems these are poor or lack of street lighting, poor roads, lack of traffic calming measures and overall lack of gender-responsive designs. Users of public spaces feel unsafe in 25 percent of the public spaces in West Bank, this number increases to 49.3 per cent in Gaza Strip while in both areas, women and girls felt more unsafe compared to men. Social problems such as robbery, prostitution, illegal dumping, vandalism, mugging, theft, murder, and violence were another safety concern observed in 15 per cent of the public spaces in West Bank and in 13.2 per cent of public spaces in Gaza Strip. In Gaza strip, users in 14.7 per cent of public spaces reported experiencing some forms of crime and harassment with the main ones being sexual abuse and robbery while in the West Bank experiences of crime and harassment were found in 7.2 per cent of public spaces with mugging and car-jacking being the most prevalent. Harassment is witnessed in 10 per cent of public spaces in the West Bank but only 3 per cent in Gaza Strip, these include verbal abuse, ogling, physical abuse, following and stalking

CASE STUDY: AN INTEGRATED AND MULTI-SCALE PLANNING IN WEST NILE REGION, UGANDA.

UN-Habitat, in collaboration with Politecnico de Milano, and together with the Municipality of Koboko, Arua and Nebbi, is undertaking a multi-scalar advisory research project in the West Nile Region. The aim is to support the integrated territorial development in the region with Arua as core "city" in a "system of cities" along the Nebbi-Koboko corridor. Since July 2016, Uganda has received over one million refugees from South Sudan with majority of the settling in the West Nile Region. This is however not the first humanitarian response in the area. Over the past twenty years there have been three humanitarian responses to the West Nile Region. This influx of refugees is one of the factors that leads to population increase in the region and thereby putting pressure on not only the land but also other sectors such as health and basic service provision within the urban areas. Given this protracted displacement and the likelihood of future refugee responses, the Government of Uganda and UNHCR are calling for approaches to help refugees engage in sustainable livelihoods and become self-reliant by participating in the local economy.

Therefore, as part of UN-Habitat's response, a city-wide open public space and market place inventory and assessment was conducted at the municipality scale. Prior to the data collection, UN-Habitat trained a total of 149 participants in Arua, Koboko and Nebbi on the importance of public space and data collection for evidence-based policy and strategy. Majority of public spaces data were collected in Arua Municipality which had 162 data entries, out of these, 126 were open public spaces and 36 were markets. Nebbi Municipality which had 156 data entries, 100 being open public spaces and 56 markets and Koboko had the least number of data entries having 93 in total with 48 classified as open public spaces and 26 as markets. It was found that even with a lack of data on urban refugee, they were present in the open public spaces and were also part of the vendors in the market places.

This initiative seeks to support Ugandan government in developing policies, plans and projects that will foster the sustainable economic, social and environmental development of the West Nile Region (from Nebbi to Koboko) with Arua as Hub for an "economic development".

CASE STUDY: ASSESSMENT OF PUBLIC SPACES IN A HERITAGE DISTRICT, WUCHANG, WUHAN, CHINA.

Since 2016, UN-Habitat has successfully supported Wuhan, China with smart tools for mapping and assessing their public spaces. In 2018, as part of its ongoing collaboration with Wuhan Land Use and Spatial Planning Research Centre (WLSP) and the support from the local government, a city-wide open public space and heritage assessment was undertaken in Wuchang District, a heritage district within Wuhan. The district covers an area of 94 square kilometres. It is located on the right bank of the Yangtze River, opposite the mouth of the Han River. It borders the districts of Qingshan to the northeast and Hongshan to the east and south; on the left bank it borders Jiang'an, Jianghan and Hanyang. Wuchang is the oldest of the three former cities of the Wuhan conurbation. According to the 2015 population and housing census, the district had a resident population of 1,199,000 and population density of 12,755 persons per square kilometres. It has the largest area and the largest population in the seven central urban areas of the city. Wuchang historical area is very rich in historical and cultural resources. It has 2 national-class relic units, 23 province class relic units and 23 historical buildings. Wuchang historical area was the place where many important historical events took place such as Xin Hai Revolution, Farmers' movement of Wuchang, the Wuchang Uprising. It is also a multi-functional area with various cultures. It has rich natural resources like the Snake Mountain, Phoenix Mountain and Zi Yang Lake.

However, the district is undergoing transformations that alter its historic and artistic value. Additionally, the historical buildings are being damaged and destroyed to make way for rapid urbanization and there is an evident lack of public green space and squares for public activities and social relationship. Nonetheless, the district is endowed with rich cultural and natural heritage resources that need to be protected and conserved for future generations. Therefore, the city-wide open public space and heritage assessment commissioned by UN-Habitat and WLSP was conducted to map the built heritage, the natural heritage and to assess the people's lifestyles and culture in the district. This was to form a basis for the districts strategy to maintain, reconstruct and renew the heritage areas as well as to formulate and enforce laws to protect these areas

Prior to the survey, an Expert Group meeting was organized which highlighted some of the key issues and areas of focus in the heritage district.

CASE STUDY: TOWARDS A REGIONAL PUBLIC SPACE POLICY: URUGUAY, DOMINICAN REPUBLIC, COLOMBIA

The project is part of the collaboration between the Global Public Spaces Program and the Inter-American Development Bank (IDB) Cities Lab, aimed at promoting innovation, design, and experimentation for sustainable urban development in Latin America and the Caribbean (LAC). Its main objective is to evaluate the development state of the public space in the region by applying the City-Wide Public Space Assessment in 3 cities: Montevideo, Santo Domingo, and Monteria. Although each of them is framed in different geographic and cultural contexts, they are regional references for the promotion of public space. In this sense, their evaluation allows not only an understanding of the state of public space but the elaboration of public policy recommendations that are scalable and replicable at a regional level.

The innovative character of the project is reflected in the development and application of the City-Wide Assessment methodology. The basic concept guiding the analysis is the network of public spaces. For this reason, the assessment is not limited to the public space-built extension, but rather contemplates the systemic interaction between units of public space considering a 400 meters radius (5 minutes walking distance estimation). In this way, rather than evaluating the set of public spaces individually, the analysis allows an understanding of the network behaviour and the service it offers to its users.
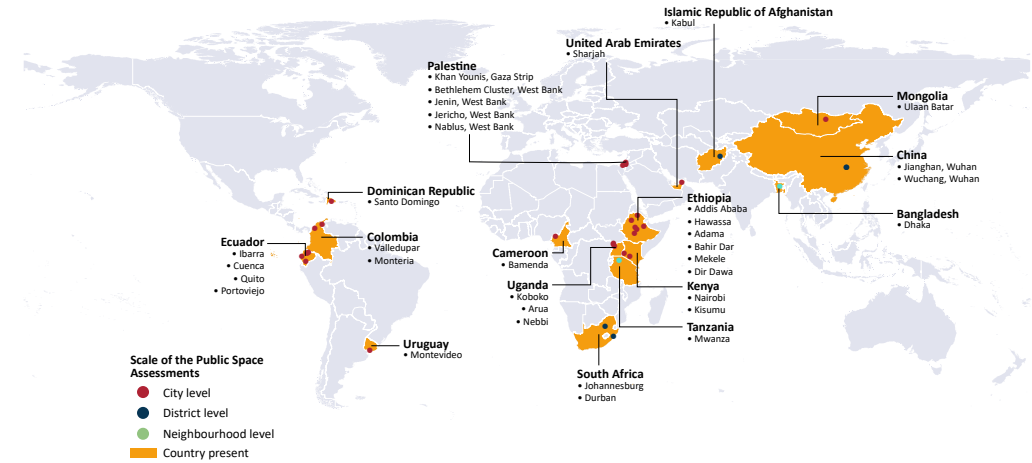
Furthermore, the evaluation recognizes the public space network as one element of the urban system. Therefore, it acknowledges that its improvement is not just conditioned to actions limited to the public space-built extension, but the morphology of the urban system. For this reason, it evaluates the interactions with other elements integrating this system and that directly influences the way it is used, such as population density, the diversity of land uses, vegetation coverage, and the levels of walkability offered by the road network and the different modes of transport.

Finally, the results are disaggregated considering the local governance structure, allowing the identification of the performance of each of the territorial management units concerning their public spaces. This facilitates the identification of territorial imbalances that serves as a base for the formulation of public policy recommendation and the prioritization of financial resources oriented to the public space network improvement. The recommendations developed are based on existing planning instruments, so that they are integrated and are complementary to the development processes already started.

As a result, the project produced three individual reports and a comparative one that not only enriches the understanding of the public space development state in the region but also presents scalable and replicable public policy recommendations for its improvement.

OTHER EXAMPLES OF CITY-WIDE PUBLIC SPACE ASSESSMENT REPORTS

Islamic Republic of Afghanistan
• Kabul

United Arab Emirates
• Sharjah

Palestine
• Khan Younis, Gaza Strip
• Bethlehem Cluster, West Bank
• Jenin, West Bank
• Jericho, West Bank
• Nablus, West Bank

Mongolia
• Ulaan Batar

China
• Jianghan, Wuhan
• Wuchang, Wuhan

Dominican Republic
• Santo Domingo

Ethiopia
• Addis Ababa
• Hawassa
• Adama
• Bahir Dar
• Mekele
• Dir Dawa

Bangladesh
• Dhaka

Ecuador
• Ibarra
• Cuenca
• Quito
• Portoviejo

Colombia
• Valledupar
• Monteria

Cameroon
• Bamenda

Kenya
• Nairobi
• Kisumu

Uganda
• Koboko
• Arua
• Nebbi

Tanzania
• Mwanza

Uruguay
• Montevideo

South Africa
• Johannesburg
• Durban

Scale of the Public Space Assessments
- 🔴 City level
- 🔵 District level
- 🟢 Neighbourhood level
- 🟧 Country present

See reports: Ecuador.	See reports: Cameroon.
See reports: Afghanistan.	See reports: Ethiopia.
See reports: Bangladesh.	See reports: Kenya.
	See reports: South Africa.

NOTES

NOTES

The purpose of this document is to guide cities when conducting a city-wide public space assessment. It illustrates the steps that should be followed within the process to ensure that the public space assessment meets the objectives of the city. By applying this tool, cities are able to understand the state of their public spaces, specifically the network, distribution, accessibility, quantity and quality of their public spaces. This will support the development of a comprehensive evidence-based public space strategy or policy.

This guide provides a flexible framework designed to aid local governments and partners working in public spaces to assess public spaces and develop a prioritized set of interventions – both spatial and non-spatial– that government and private entities can take to address them. The process has been divided into four parts that are progressive with outputs that are as important as the process and social inclusion and human rights being considered at all stages of the process.

To ensure that recommendations are implementable, the regulatory framework, urban planning instruments, financing structure and institutional set-up are considered in the process. The tool is also key to monitor and achieve the public space commitments within the New Urban Agenda and the Agenda 2030.

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