Urban Maestro

New governance strategies
for Urban Design

Citywide public space inventory and assessment tool

Joy Mutai

Associate coordination officer,
Global Public Space
Programme, UN-Habitat

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INTRODUCTION

Little effort has been made towards developing citywide public space networks and correcting spatial imbalances in public space supply, distribution and quality in different neighbourhoods and settlements within cities. Additionally, in most cities, marginalised groups and other minorities are systematically excluded from decision-making processes and therefore their knowledge is not incorporated in the policy-making process and the way public spaces are planned and designed. This paper therefore, describes the citywide public space assessment tool and how planning public space strategies and designs is anchored within good governance. It describes how governance structures in planning and design of public spaces must be adapted or re-designed to accommodate stakeholder participation. This means that as local governments plan for public space networks, the roles and voices of different stakeholders ought to be included to improve the suitability of actions, increase support and facilitate implementation.

The tool is placed within a flexible framework designed to aid local governments and partners working in public space development to assess public spaces while ensuring social inclusion and human rights are considered through the process. This supports the development of a prioritized set of interventions – both spatial and non-spatial– that government and private entities can take to address. To ensure that recommendations are implementable, the regulatory framework, urban planning instruments, financing structure and institutional set-up are considered in the process. The findings and key recommendations are drawn from the application of the tool in 30 cities. 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 supports the development of a comprehensive evidence-based public space strategy or policy. This approach to policy-making and strategy development brings coordination among government levels and between public and non-public actors and the civil society in planning citywide public space networks. The tool is also key to monitor and achieve the public space commitments within the New Urban Agenda and the Agenda 2030.

1. BACKGROUND CONDITIONS

To support local governments to include a network of public spaces as part of their development plans, UN-Habitat developed the citywide public space inventory and assessment tool. This tool has been designed within a flexible framework to aid local governments and partners working in public spaces to assess the network[1], distribution[2], accessibility[3], quantity[4], and quality[5] 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.

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 and commitments within the New Urban Agenda. Since the monitoring of SDG 11.7[6] and the public space commitments in New Urban Agenda are done at the city level, this citywide public space assessment tool also supports local governments to report their progress towards achieving these commitments.

2. DETAILED DESCRIPTION OF THE TOOL[7]

The citywide public space inventory and assessment is a digital tool developed to assess public spaces in cities and identify gaps for the development of long-term public space strategies and policies. It utilizes a digital questionnaire that can be contextualized to fit different contexts and priorities. Therefore, the assessment could either be formulated to capture the broad and diverse aspects of public space or it can emphasize certain thematic [8] or geographical areas [9]. Application of the tool provides a basis for the actual state of public spaces in the city; that includes the state of public space, the problems, and their causes. Mapping of the supply, quality

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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] Proportion of urban surface devoted to public spaces

[5] Main design features, operation, and management (comfort, universal access, use, users, amenities and green)

[6] By 2030, provide universal access to safe, inclusive, and accessible, green, and public spaces, particularly for women and children, older persons and persons with disabilities

[7] The full document can be found: https://unhabitat.org/city-wide-public-space-assessment-toolkit-a-guide-to-community-led-digital-inventory-and-assessment

and distribution of public spaces are important, in order to determine priority areas and sectors of intervention, this included institution, financial and regulatory frameworks. 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. This approach supports the development of evidence-based policy, regulatory and spatial strategy development as well as provides a potential to reorganise institutional set-up and financial mechanisms within the city.

A citywide public space 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 to 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 frameworks and understand where to allocate funding more efficiently.
4. A city would like to tackle emerging issues such as climate change, safety, biodiversity loss, unplanned urbanization, encroachment of public spaces, heritage loss, and accessibility among others.
5. A country would like to revise or mainstream public space in their National Urban Policy[9].

Once the objective of the assessment has been developed, it is crucial to understand the spatial scale of the assessment within cities. The public space assessment could cover two 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 geographic scope and the overall objective of the assessment are set prior to undertaking the assessment.

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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 or public market strategy. 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.

[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 go beyond the administrative boundary of the city and may include other cities/jurisdictions. Therefore, a clear governance structure needs to be set-up.

3. THE APPROACH

UN-Habitat works with different city governments and partners in conducting citywide public space assessments in their respective cities. The model is flexible and dependent on the capacities of the local government and partner. The city-wide public space assessment tool ensures the active participation of the community 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.

Capturing data in the field usually means using paper, however, the citywide public space inventory and assessment uses an open source application called Kobo Collect[12]. The application is supported by android software but can be used by iPhone users through a web form. It supports multiple languages and further works offline. By using a smartphone or tablet, field data can be collected with all the advantages that electronic data gathering brings (value input control, auto-skipping irrelevant sections, elimination of transcribing errors from paper, etc.).

The process of conducting a citywide public space assessment has been designed 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, (iii) reporting and (iv) post- citywide assessment. Each of these parts has steps that should be followed with activities, tools and inspiring cases that are drawn from partners and UN-habitat's experiences working in cities. UN-Habitat recommends that each city follow the process 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.

3.1. 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

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[12] Open source mobile application, which allows the creation of 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.

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process fit for the city. It outlines 5 key steps and activities that should be conducted with each step having outputs that are important for the next steps.

Step 1: Reference/Project Group

A citywide public space inventory and assessment preparation does not belong to a single department function, a joint approach is required between all relevant stakeholders. This means representatives from different stakeholders, government departments within the city, experts and representatives from gender groups, youth and human rights council, persons with disabilities , older persons group and representatives from women and children, private sector, academia, NGOs and community members will be part of the reference group.

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 citywide public space assessment planning. Therefore, the public space planning department within the local authority should take a leading role.

IMAGE 1: Reference group for the district-wide public space assessment in Jianghan, Wuhan, China © Wuhan Landuse and Spatial Planning Research Centre

Step 2: Developing the assessment

The citywide public space assessment is designed to fit the local context. This step supports the preparation of the questionnaire that will be used in the field. The citywide public space assessment is divided into the following dimensions: city-wide and site-specific. Workshops and seminars are conducted with relevant stakeholders, community members, government bodies to define the assessment scope[13], questionnaire, and the thematic[14] entry point. This is to ensure that everyone is involved from the onset and alignment with existing approaches/activities are set. If a city is focused on a specific theme, additional dimensions could be added as well as new indicators in the existing dimensions. 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. The translation of the final assessment/digital questionnaire to the local language is done at this stage as well as testing the tool during the workshops.

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, financial plans as well as mapping of public space related initiatives in the city by government, partners and key stakeholders.

Step 4: Mobilizing the data collectors

Data collectors who will be undertaking the fieldwork are selected in this step. This team will primary do the field study with agreed terms of service. Data collectors could be university students, local government officials, community members, neighbourhood 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 with a representative from that community. The groups should have a balance gender

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[13] This could mean revising the agreed geographic scope, the typology of public space i.e. it could focus on open public spaces, streets or public facilities. It could also specify the type of public space i.e. markets, plazas, squares, playgrounds, sidewalks, religious institutions etc.

[14] Thematic focus of the public space assessment could be on blue green networks, mobility, arts, culture, and economic development among others.

representation. It is key to select a team leader to coordinate each group and support the teams on the ground and 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.

Step 5: Workshop/training

At this step, a workshop/training is conducted. This takes approximately 3-5 days. Prior to the workshop, a clear agenda should be developed. The participants of this training should include community members, relevant government departments, data collectors, key stakeholders, and other relevant bodies. In some instances, government officials are trained separately on the use of the data for decision-making. 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. 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 testing should not only test 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 to the reference group who will 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.

IMAGE 2: Community members and students being trained on the use of the city-wide public space assessment tool in Sharjah, UAE Sharjah © Urban Planning Council

IMAGE 3: Workshop to review and contextualize the questionnaire in Kabul, Afghanistan ©UN-Habitat

3.2. 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.

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. 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 citywide public space assessment tool as well as adhere to ethical considerations during data collection.

IMAGE 4: Municipality staff members and university students testing and familiarizing with the tool in a public space in Johannesburg, South Africa © Ayanda Roji

IMAGE 5: Data collector interviewing older persons in a public space in Jianghan, Wuhan, China © Wuhan Landuse and Spatial Planning Research Centre

Step 7: Data cleaning and updating GIS map

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. Time spent on data cleaning is usually shorter when proper training, pilot testing and quality control during data collection was conducted. Data cleaning includes duplicate or irrelevant data, entries with no data and privately-owned spaces. This step can be done either with Kobo Toolbox or ArcGIS/QGis.

3.3. Part 3: Reporting

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 to follow:

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. This process can be done by the local government, the academic partner, or other involved partner such as the private sector together with UN-Habitat. This is usually dependent on the capacities of the local government.

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
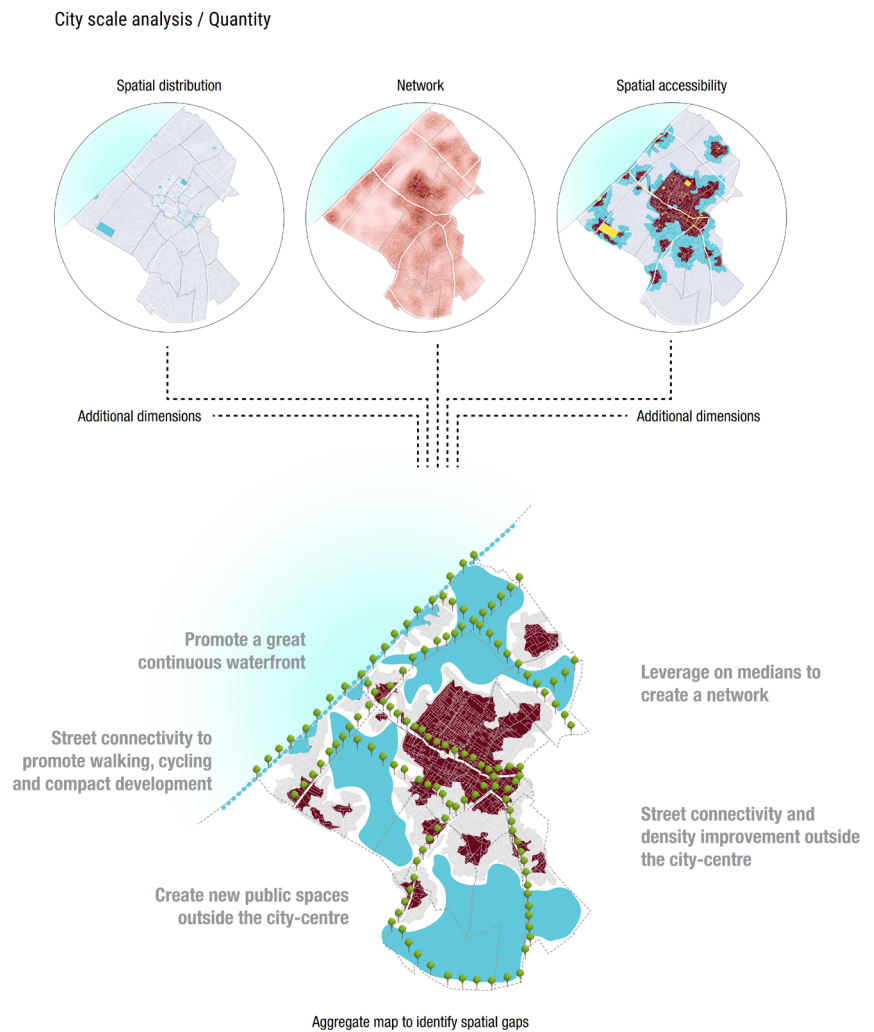
Aggregate map to identify spatial gaps

IMAGE 6: City-scale analysis: Aggregate map to identify spatial gaps and Site-scale analysis Aggregate map to identify priority public spaces for upgrading

Step 9: Public Space Assessment Report: 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 hotspot areas, analysis on the network, distribution, accessibility, quantity, and quality of the public spaces in the city, gaps and opportunities in the institution, legal, policy and other relevant guidelines and strategies. It is important to share this report with the municipality, community members and key stakeholders for inputs prior to the validation workshop.

IMAGE 7: Meeting with Key Government officials on progress made and some results on the citywide public space assessment in Jericho, Palestine © UN-Habitat_Palestine

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 and consult with experts and agree upon the recommendations emanating from the assessment. It is important to ensure that different departments of the local government, key professionals and stakeholders and community members are invited to the validation workshop. This workshop is usually a good opportunity to create a shared vision and goals for the city's public spaces. 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.

IMAGE 8: Group discussion during the first validation workshop for Nairobi public space assessment in 2015, UNON, Nairobi, Kenya © UN-Habitat

IMAGE 9: Validation workshop for Nairobi public space assessment in 2015, UNON, Nairobi, Kenya © UN-Habitat

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

Once the data has been validated, 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 and senior friendly public spaces 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 the most crucial stage of the process, as the report will form a basis for a long-term strategy/policy for the city.

IMAGE 10: Report -Bethlehem Cluster.

3.4. Part 4: Post-citywide assessment

This part involves developing a public space strategy, monitoring and evaluation plan and implementation of selected priority public spaces.

Step 12: Developing a citywide public space strategy

A citywide public space strategy is developed from the recommendations of the citywide public space assessment report. This 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 spaces.

Step 13: Site Specific Assessment

Once a city has selected public spaces to be upgraded from the citywide public space assessment, 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.

Step 14: Block-by-Block workshop

The Block by Block workshop uses the video-game Minecraft to co-design the selected public space with and by the community in a 3D model. Other design workshops can be used to get physical inputs from the community. Concept designs are made based on the results of the site-specific assessment and the participatory design workshop. This is then developed into architectural designs that are used for the implementation of the selected sites.

Step 15: Implementation

During the process of preparing the citywide 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 developers. 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, budget, and timescale for achieving the citywide 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.

Step 16: Monitoring and Evaluation

Another citywide 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 citywide 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 the citywide public space strategy to be a dynamic and adaptable instrument that responds to the development and growth of cities.

Some key considerations while undertaking the citywide public space inventory exercise includes.

During workshops/training and data collection

- It is required to ensure that representatives from gender, children, older persons and persons with disabilities are within the reference group. Representation from these groups should also be present during all workshops and training sessions.
- It is required that equal gender representation[15] within data collection teams and where possible include persons with disabilities and vulnerable groups[16] such as migrants, refugees.

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[15] 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.

[16] 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 caregivers, parents, and assistance within data collection teams.

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- Where children are required to undertake the data collection, children below the age of 5 need to be accompanied by parents or caregivers.

In the digital questionnaire

- Interview questions should be directed to a selected number of individuals using the public spaces, ensuring age and gender balance.
- Questions related to the use and social mixing 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 the presence of infrastructure to access public spaces by all and especially for persons with disabilities are required to be included.

During data analysis

- Disaggregation of the analysis by age, gender and disability is important especially when assessing the quality 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.

4. IMPACT OF THE CITY-WIDE PUBLIC SPACE ASSESSMENT TOOL

Since 2015, UN-Habitat has supported 30 human settlements of varying spatial scales to conduct the assessment. These include Dhaka, Bangladesh, Wuhan, China, Ulaanbaatar, Mongolia, Durban, South Africa, Addis Ababa, Ethiopia, Santo Domingo, Dominican Republic, Khan Younis, Palestine, among others. There has also been a keen interest by other cities to use this tool for their own citywide public space strategy work. The tool is also key in monitoring and reporting on SDG 11.7 as well as toward the implementation of the New Urban Agenda.

Local governments have seen the importance of using this tool to engage communities and key stakeholders in developing strategies and policy

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[17] Every individual has a right to have quality public spaces within walking distances to their homes.

recommendations. Through the validation workshops, citizens are involved in validating the data that has been collected and analyzed on maps. They recognize areas within the city that require creation of new public spaces but also public spaces that require upgrading. Additionally, they propose strategic directions that the city should take to ensure long-term provision of public spaces. However, these recommendations, in addition to responding to specific needs, must consider the institutional framework in which they will be promoted. In this regard, a review of the institutional framework of the municipality is done and proposals for change are made i.e. where the recommendations from the assessment could be anchored or a new public spaces department to be created. Kabul, among other cities in Afghanistan, has tried to leverage the goodwill of the general public to transform the city into a better one for citizens to fully enjoy their civil rights. To ensure a long-term approach to public space planning and implementation, recommendations were made to the institutional set-up of Kabul, which included listing some of the directorates within the City that could support the public space work to ensure that there is no duplication of mandate. Proposals also included placing the public space work within the Urban Planning or Public Works Departments, depending on the existing delivery capacity of the directorate and the political decision of the Mayor and his/her management team. Creation of a separate entity was also proposed under the Urban Planning and implementation directorate such as Deputy the Urban Planning and implementation. However, issues such as authority, hierarchy, teamwork and duplication of mandate were to be carefully looked at when defining this institutional position and the assignment of responsibilities and staff recruitment. Another proposal was to have a separate crosscutting department/directorate where all actions regarding public space are embedded into the existing administrative and functional structure but the manager of the department reports to the Deputy Mayor of the Urban Planning and implementation directorate. This was to limit duplication of mandate and ensure clear reporting.

It is also necessary to take into consideration both the regulatory framework and the financing structure that would make the recommendations a reality. With this objective, the citywide assessment 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. The process of undertaking a citywide public space assessment is usually financed by the local government with very few assessments financed by external donors. UN-Habitat's experience realized that cities do not usually have the financial and human resources to implement all the recommendations and therefore creating opportunities and incentives for private sector involvement could be an added advantage. Additionally, synchronizing these recommendations within the municipal workplan

could support implementation. In Bamenda, Cameroon, through the process the government realised the need for allocated financial resources to public spaces and has now dedicated 5 per cent of its annual budget to public space planning.

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. In Ethiopia, the citywide public space assessment in Addis Ababa was a great tool for the government to realize the importance of reviewing its master plan. It was also instrumental in mobilizing partners and communities in realizing the value and quality of their own public spaces. This has led to scaling up the approach to 5 other cities with implication to National policies. The visioning workshops and engagements also ensures that the process aligns with ongoing frameworks for example, in Kabul, Afghanistan, the city-wide pubic space assessment was aligned with the Kabul Urban Design Framework (KUDF) which envisages Kabul as a green city with parks and open spaces for residents to relax, gather together and enjoy the region's natural beauty. The recommendations from the public space assessment tool supplemented the KUDF and served as a catalyst to achieve a safe, inclusive and accessible public space network, especially for the most vulnerable demographic groups including children, women and girls, the elderly, persons with disabilities and youth. It further supported the approach to regenerate the central city and reinforce the city's conservation and open space network strategy by supporting a balanced ship between the built and natural environment. As a result, the Mayor has commissioned a greening action plan for the city.

The review of the regulatory framework is carried out to identify laws that refer to both the concept of public space in the context studied and its application. This stimulates the reflection on the bases under which public space is produced in specific contexts. In Nairobi, Kenya, the city-wide public space assessment did not only provide an inventory of all public spaces for the city, it also revealed that the bylaws were outdated and which have not been reviewed since the 70's and this is also impacting on the management and use of public space (e.g. loitering, cycling, vending, etc.).

5. EXAMPLES OF IMPLEMENTATION

Since 2015, the tool has been regularly updated with feedback from its application in a variety of urban contexts. It has been applied in 30 cities and engaged

approximately 1,750 data collectors with every city having different thematic entry points such as children, safety, markets, women, heritage etc.

Through the application of the tool, 40 training sessions to local governments, community members and volunteers have been conducted on the use of the tool but also the importance of public space and the need for data and participation for policy and strategy development. There have been over 25 visioning workshops to develop recommendations and strategic interventions for the cities.

5.1. HAYA Programme "Eliminating Violence Against Women in the West Bank and Gaza Strip"

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, the community, academia and private sector to 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 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 process of conducting the city-wide public space safety audits in the five cities had its challenges as far as public spaces, security and violence were concerned, and were related to the combination of restriction of movement and political violence, linked with the Israeli occupation, and the intra-Palestinian divide. Palestinian governance institutions have limited power and legitimacy because of the control exerted by Israel and the administrations that came before its occupation. Financial resources of most municipalities, especially in the Gaza Strip have been diminished in the last few years due to the current situation. They have however, leveraged community engagement and principles of transparency and accountability in planning processes.

Through the participation of over 150 active members of the local community including women associations, journalists, local NGOs, International NGOs, handicapped related associations, Ministry of Education, and youth activists; in addition to UN-Habitat, municipality, other municipalities, and representatives of local universities, recommendations were made for each city. Public space strategies that are proposed for Palestine Territory to promote safety and enhance social cohesion include; 1. spatial (reducing spatial inequality by ensuring public spaces are equally distributed within the cities), 2. social (re-integration strategies such as

improving public spaces and creating shared spaces by reducing car movement, promoting diversity and social programming in public spaces to reduce perception of unsafety and increase "eyes on the street", improving infrastructure to support the active use of public spaces) and 3. promote good governance (provide for rules of use in public spaces and apply penalties for all forms of violence against women in public space and ensuring maintenance of public spaces in order to avoid them being perceived as abandoned and thus attracting crime and antisocial behaviour). Public spaces were also prioritized for upgrading based on these assessments and it will lead to the development and regeneration of five safe and inclusive public spaces in the targeted Palestinian Cities.
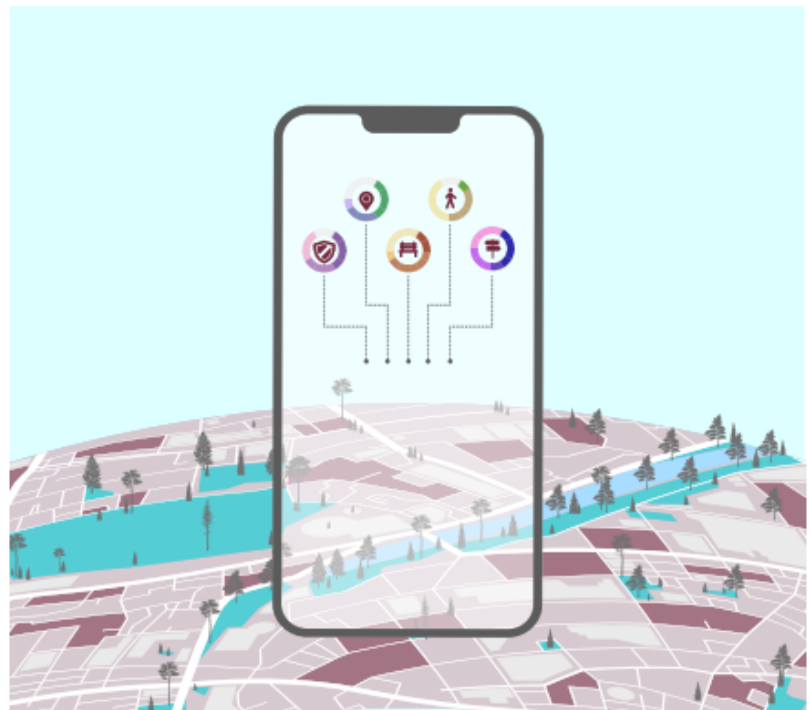
CITY-WIDE **PUBLIC SPACE ASSESSMENT TOOLKIT**

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

PUBLIC SPACE PROGRAMME

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FOR A BETTER URBAN FUTURE

IMAGE 11: Cover for the report

IMAGE 12: Data collector testing the tool in an open space in Khan Younis, Gaza Strip, Palestine © UN-Habitat Palestine

5.2. 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 citywide 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.

When the six dimensions used to assess the open public spaces from a child-friendly perspective were compared, presence of children in open public spaces by gender

and age (42 per cent) and open public spaces that promote social, emotional, physical and cognitive development for children (48 per cent) scored the least. Open public spaces that are climate adaptive scored the highest (79 per cent), however, the factors used for these were only three (grass coverage, presence of trees and urban agriculture). Additionally, it showed that 45 (75 per cent) open public spaces require moderate upgrading, 15 (25 per cent) require least upgrading while none require most improvement. This means that Sharjah could leverage on quick wins and low budgets improvement within these spaces and focus on new open public spaces in areas that lack provision while ensuring an interconnection of spaces through streets and green corridors The assessment informed the development of the Sharjah Child-Friendly Open Public Spaces Guidelines which is intended to act as a starting point for the design and development of child-friendly and family-friendly open public spaces in the Emirate.

IMAGE 13: Data collectors from Sharjah, UAE © Sharjah Urban Planning Council

5.3. Development of evidence-based public and public market strategy in Bamenda, Cameroon

Bamenda is the third largest city in Cameroon, after Yaoundé and Douala, and is the capital of the North-West Region. It is located at the cross route that links cities in Nigeria such as Enugu and Calabar. The current population is 500,000 however, according to the new master plan; the city is expected to be home for about 2.1 million inhabitants by 2026, and this will be over four times the current population. Notably, the city is well known for its market's places, which are the key drivers for its

economic development and job creation. According to the World Health Organization, Bamenda is the most polluted city in Africa in terms of $PM_{2.5}$. Furthermore, with abundant rainfall, very hilly relief, poor environmental conditions and very limited control of urban development, the city is exposed to flooding. The ambiguity of the land tenure system, urban poverty, poor civil protection, high population growth and uncontrolled spatial expansion of the city, explains the high vulnerability of its population.

Realizing that these challenges were impending, UN-Habitat collaborated with Bamenda City Council to conduct a citywide inventory and assessment. The survey was on all open public spaces, with a unique focus on markets, as key public spaces in the city. The city-wide open public space and market assessment was confined within the urban footprint of Bamenda and aimed to realize the gaps in the spatial location, distribution, accessibility, quantity and quality (in terms of accessibility, safety and inclusiveness) of markets and open public spaces in the city. Other parameters were also assessed such as environmental risk assessment of markets and open public spaces, comfort and ownership and management schemes of these spaces.

IMAGE 14: 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

The proportion of urban area dedicated to streets and public spaces is a crucial feature of the spatial plans of cities. Therefore, UN-Habitat recommends up to 50 per cent of urban land should be allocated to public space. This can be broken down to 30-35 per cent for streets and sidewalks and about 15%-20% for open spaces.

Notably, Bamenda has only 7 per cent of its urban land dedicated to open public space. The results of the survey highlighted issues such as the need for markets and open public spaces for economic and environmental sustainability, the gaps in their distribution, quality, inclusivity, safety and accessibility and how they can be used to promote sustainability and form the basis of market and open public space policy. This participatory process established key recommendations to meet the current challenges faced by the city's markets. It also informed the way forward for their renovation and modernization to meet citizens' needs and social changes. A citywide open public space strategy has been drafted based on the results of the assessment with two pilot projects being launched and the Mayor had committed 5 per cent of its budget to public space planning.

5.4. An integrated and multi-scale planning in West Nile, Uganda

UN-Habitat, in collaboration with Politecnico di 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 the 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 citywide open public space and public market inventory and assessment was conducted at the municipality scale. Prior to the data collection, UN-Habitat trained 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 that 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 refugees, they were present in the open public spaces and were also part of the vendors in the public markets.

This initiative seeks to support the 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".
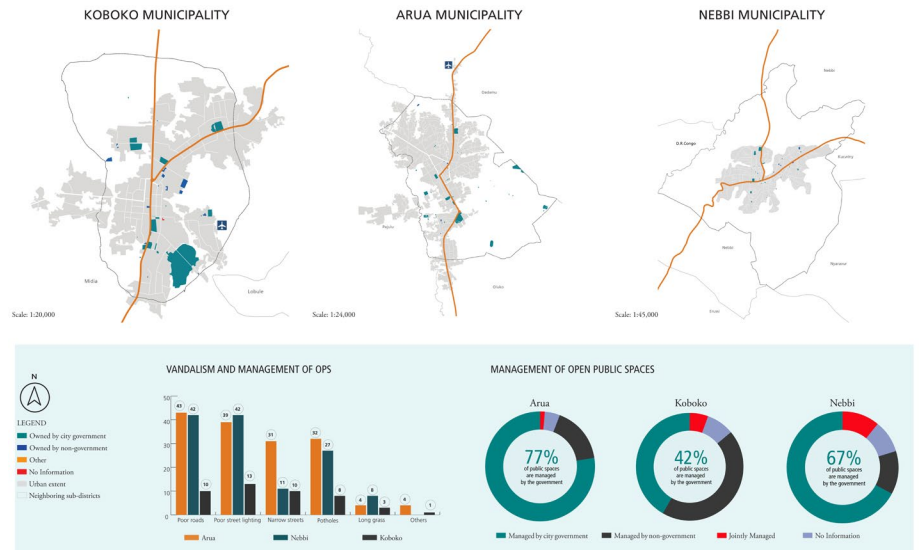

IMAGE 15: West Nile Management

IMAGE 16: Training of municipal governments on the importance of data for policy development in Arua, Uganda © Jia Ang Cong

5.5. Protecting public spaces in Jianghan, Wuhan, China

In 2017, UN-Habitat supported Wuhan Lands Use and Spatial Planning Research Centre to undertake a district-wide open public space inventory and assessment. This came at a time when public spaces in the district were being commercialized and threated by the expanding city structures. A training was done for the local government, Wuhan Land Use and Spatial Planning team and data collectors. The result of the city-wide public spaces assessment showed that Jiaghan district falls short of standards set by the National Ecological city of 11m2/capita as well as the international standard of 9m2/capita. Total green public space was just 2.2m2 per capita. Being the densest and least spacious district in Wuhan, Jianghan has to find innovative ways to counter this trend. Moreover, the increase of urban environments in Jianghan District has left public spaces to be derelict and therefore decreasing public space's function.

The citywide public space inventory and assessment in Jianghan identified gaps in the safety, accessibility and inclusivity of public spaces. Therefore, in 2018, UN-Habitat identified public spaces that require upgrading and the areas within the district that needed new public spaces to be created. Spaces that required upgrading were identified through an aggregate of indicators and UN-Habitat prepared a map of priority public space for improvement. It was noted that 21% (29) of all public spaces require the most improvement while 29% (41) require the least improvement measures. A spatial analysis of the distribution of public spaces in Jianghan was done and the areas that required new public spaces were identified to be at the periphery of the district accounting for 18% (4.9 km2) of the total area of the district.

These results led to the development of a public space strategy for the district, with an ambitious vision of having "Public Spaces in Jianghan District to be of High Quality, More Accessible, Unique and Diverse." This vision came with clear goals and objectives to achieve it. To achieve these goals and objectives, a phased implementation was proposed, combining near-term (2017-2022) and long-term (2023-2030) development projects. This was to ensure that upgrading of public spaces to enhance their quality was supported by a long-term green network plan in the district. One public space was selected for upgrading and was implemented in 2018. UN-Habitat together with WLSP will monitor and evaluate the achievements of this strategy.
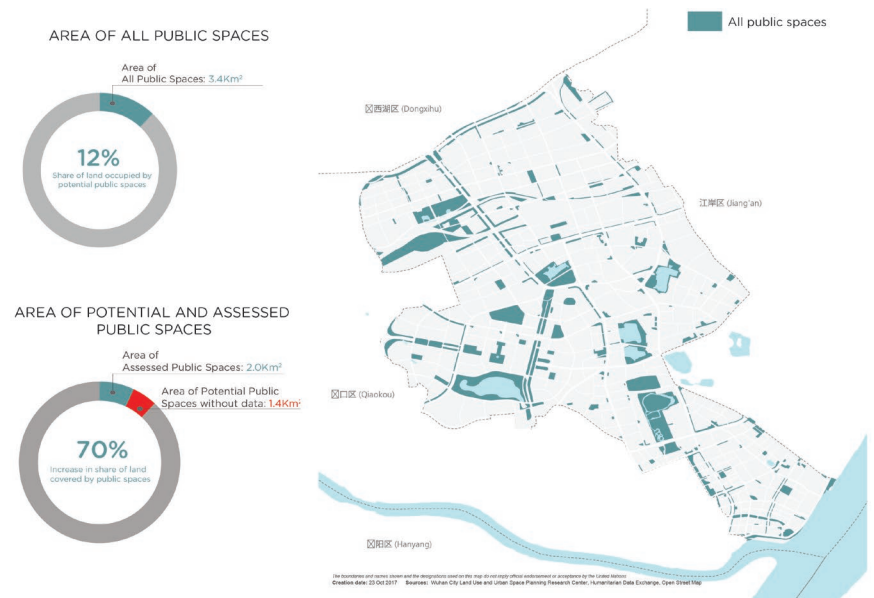
AREA OF ALL PUBLIC SPACES

Area of
All Public Spaces: 3.4Km²

12%
Share of land occupied by
potential public spaces

All public spaces

区西湖区 (Dongxihu)

江岸区 (Jiang'an)

AREA OF POTENTIAL AND ASSESSED
PUBLIC SPACES

Area of
Assessed Public Spaces: 2.0Km²

Area of Potential Public
Spaces without data: 1.4Km²

70%
Increase in share of land
covered by public spaces

区口区 (Qiaokou)

区阳区 (Hanyang)

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations
Creation date: 23 Oct 2017   Sources: Wuhan City Land Use and Urban Space Planning Research Center, Humanitarian Data Exchange, Open Street Map

IMAGE 17: Jianghan Assessed OPS and/or Jianghan_Management

IMAGE 18: Data collector in Jianghan,Wuhan,China © WLSP

6. KEY LESSONS AND TRANSFERABILITY

Through working in these cities and towns, UN-Habitat has considered how the citywide public space can deliver more value for cities. Therefore, some of the lessons and recommendations are highlighted below;

1. Securing **political support** to provide the mandate to execute the process for buy-in and allocation of both financial and human resources. UN-Habitat has found that without the support from the local government, the public space assessment reports remain a shelf report without informing the public debate or influencing the development community. The success of the public space assessment conducted in 5 cities in Palestine and in 4 Provincial Districts in Kabul, Afghanistan was as a result of direct endorsement by the local and national government.

2. Enhance **synergy among actors in public space**, including municipal government agencies, the private sector, NGOs, women's groups, older persons, persons with disabilities, community members and others. The citywide public space assessment is not a task for one individual stakeholder and an inclusive partnership is an important mechanism for its implementation and success. This should be built upon a shared vision and principles that places public space and people at the centre of planning. In all the cities we have worked conducting the assessments, a training is organised for targeted city officials from different departments within the local authority, representatives from academia, NGOs and community members. This orientation provides them with an overview of the activities and how they can align it with their already existing or planned activities. In Johannesburg and Durban, South Africa the Social Affairs department and the Police saw the importance of conducting hot spot analysis for safety to understand where and what type of safety concerns are present to be able to act upon them. In other cities, this continuous engagement has led to greater synergies among partners within the city eg, in Nairobi, Kenya, the process led to the creation of a Public Space Network that is active with over 60 members who support implementation of public space projects, leading urban design competitions and other public space initiatives.

3. **Build the capacity of local partners.** We have found in cities where we have worked, there is little capacity to conduct the survey and report on the findings from the citywide public space assessment. This leads to a lack of accountability and responsibility for taking the findings towards a long-term plan for the city or align it to already existing plans.

4. **Increase funding from sources other than municipal government**, such as from the national and provincial governments, donor agencies, the private sector and the public. The task of conducting a citywide public space assessment requires financial resources to conduct the field study and draw out findings that are useful for strategic and policy change. It also identifies public spaces that require upgrading and areas within the city that need prioritisation for creation of new public spaces. Often, the cities do not have the financial and human resources to implement all the recommendations and therefore creating opportunities and incentives for private sector involvement could be an added advantage.

5. Create **enabling institutional and regulatory frameworks** to accelerate public space development. In Nairobi, Kenya we supported the establishment of a public space unit under the urban planning department where the document and its implementation could be anchored. In other cities such as Kabul, we provided recommendations for institutionalising public space within the local government, to ensure its planning and implementation.

6. **Focus on the overall urban area rather than a small area of the city.** In some cities, such as Durban, South Africa we supported in piloting and testing the methodology in the Inner City and Ward 21. However, the recommendations remain for those areas rather than the overall city. Therefore, these cannot be implemented at a city scale and long-term strategies cannot be developed based on findings from only those areas. It is recommended that cities plan to conduct the assessment for the whole urban area to provide comprehensive strategic recommendations. In some cities, however, where the small urban area has an independent local authority, e.g, Wuchang District in Wuhan,China the recommendations can be implemented within the geographical scope.

7. Ensure an **action-oriented process and connect strategic thinking to project implementation.** In Jianghan, Wuhan, China, from the findings of the district-wide public space assessment and together with the local partner, we developed strategic priorities and made a road map for implementation. However, the recommendations were not synchronised within the municipal/district work plan and a detailed action plan was not developed, therefore, the implementation of these recommendations remain fluid.

8. **Balance external influences** *(political, economic, environmental and social cycles)* and long-term ownership of the process. Without a clear vision for public space, it is difficult to minimise external influences. A written vision is important for orientation of public space. The strength of it is the fact that it has been debated and discussed and aligned with city development plans

and policies and the actual state of public spaces based on results from the citywide public space assessment. This can help keep the city's public space planning on track, despite political or other changes. It helps avoid priorities being set in an ad hoc way by reacting to external pulls and pushes.

7. CONCLUSION

It has become evident through the application of this tool in 30 cities that the task of planning and designing city-wide networks of public spaces is not only to deliver equity in spatial distribution and gain from the wide benefits that public spaces have, but must also simultaneously design frameworks that will allow those plans to take place effectively and democratically. The process must, therefore, be anchored on a firm understanding of the role of stakeholders and the socio-political context where these plans and designs take place, but more importantly, should stem from the voices of those these plans are supposed to serve.

Participation is one of the tools that can limit bias in the planning public space. The city-wide public space assessment tool has therefore been anchored within a flexible framework where local governments are able to design new relationships between civil society, the private sector and communities and understand the state of public spaces, gaps and opportunities in the legal and institutional systems, existing forms of partnership and financing mechanisms to develop inclusive and evidence-based city-wide public space strategies. The tool is also applicable in varying contexts and can be adopted to fit priorities of a city and has shown that the inclusion of communities as key stakeholders in the planning process is necessary if actions towards acceptable or desired outcomes are to be met.

URBAN MAESTRO

DISCLAIMER

ACKNOWLEDGEMENTS