

# **Block by Block**

Using Minecraft as a participation tool to co-design public spaces

March 2021





# **ABOUT UN-HABITAT**

The United Nations Human Settlements Programme (UN-Habitat) is the United Nations agency for sustainable towns and cities. It is mandated to promote socially and environmentally sustainable towns and cities while advocating adequate shelter for all. UN-Habitat works to expand understanding of inadequate shelter and urban poverty, and to facilitate the tracking of progress in urban development. It also sets out norms and best practice for sustainable urbanization and urban poverty reduction, promoting realistic and integrated urban planning as the key to harnessing the economic potential of cities. UN-Habitat is mandated by the UN General Assembly to be the focal point for all urbanization and human settlement matters within the UN system. It plays a role in delivering the 2030 Sustainable Development Agenda, adopted by Member States in 2015. The agency has a specific focus on Goal 11, to make cities and human settlements inclusive, safe, resilient and sustainable.



#### **UN-Habitat's Global Programme on Public Space**

In 2012, UN-Habitat launched its Global Public Space Programme, now active in more than 75 cities across the world, with the objective to promote public spaces as the cornerstone for sustainable cities in order to ensure good quality of life for all.

The Global Public Space Programme adopts a consolidated and integrated approach to public space improvement across UN-Habitat. Over the last seven years, we have developed an iterative approach to public space that includes a variety of normative and operational tools, methodologies and practices that support local and national governments and other partners to make public spaces safer, more inclusive, accessible and green. This includes public space assessments, policy guides, strategies and design principles, capacity building, participatory tools, technology and innovation projects and carrying out advocacy work and actual implementation.

Our overall goal is to support local governments in creating and promoting socially inclusive, integrated, connected, environmentally sustainable and safe streets and public spaces, especially for the most vulnerable. We strongly believe that through our multi-sectoral approach we can create a greater impact on the community and the built environment. Ideally, our approach starts at the city-wide level by understanding the status quo as well as gaps and needs through a comprehensive assessment of public spaces. The data we collect can inform the local government on their city's performance, report on SDG11.7 and create a baseline to develop and adopt relevant planning frameworks and strategies to guide, prioritize and manage the public realm while contributing to the long-term transformation of the city.

# ...socially inclusive, integrated, connected, environmentally sustainable and safe streets and public spaces.

#### SOCIALLY INCLUSIVE

Good public spaces must be designed to meet the needs of all users. This means paying attention to quality and inclusive design and accommodating the values and preferences of different groups, ages and abilities. Public participation and civic engagement are key to empowering communities and ensuring both inclusion and greater longevity in the sense of ownership and custodianship.

#### BETTER INTEGRATED

Integrated planning encourages a dialogue between all departmental actors with a stake in the public realm. The Global Public Space Programme adopts both vertical and horizontal integration approaches. Vertical integration is in terms of the early integration and involvement of the various government, administration and non-government players involved in urban development. Horizontal integration is in terms of integrating the various sectorial policies and actions of the public and private sector for sustainable development. Integration links the spatial aspect with other dimensions of urban life such as social, economic, political and cultural factors.

#### BETTER CONNECTED

For maximum positive effect on the neighbourhood, public spaces should be connected through networks that enable people to move around freely and easily. This requires policy makers take a holistic view of the city and seek to maximize the potential of existing infrastructure. Policies coupled with good urban planning and design can offer better physical and social connectivity for urban residents.

#### ENVIRONMENTALLY SUSTAINABLE

A well-planned city-wide public space system can create green networks to regenerate ecological systems, restore environmental connectivity and support biodiversity in urban areas. This can, in turn, create ample benefits for local residents and attract visitors. The role that public space can play in the provision of ecological services is extremely important in mitigation and adaptation strategies to climate change.

#### SAFE

A mixed and diverse public space provides a place that is vibrant, busy and automatically reduces insecurity. Fear of crime and crime itself can deter all people, not just vulnerable groups, from using high-quality public spaces. Physical changes to, and the better management of public space can help to alleviate these fears. Public spaces can reduce feelings of insecurity by attracting a large cross section of people at all times of the day.





than **1.8 million people** 



#### How we can support?

Following the interest from Cabo Verde on using innovative ways to better engage residents, UN-Habitat, through its Global Public Space Programme, is proposing to do a Training of Trainers and capacitate the municipality on how to use the site-specific assessment methodology including Block by Block as well as to support with the facilitation of Minecraft workshops.

# SITE-SPECIFIC ASSESSMENT TRAINING



#### BLOCK BY BLOCK TRAINING



FACILITATION OF MINECRAFT WORKSHOP



## SITE-SPECIFIC ASSESSMENT

7

The Public Space Site-specific Assessment goes through four phases and guides the user to measure the quality of public spaces by assessing five dimensions and 20 indicators. Depending on the local context, the assessment allows to select, add and prioritise certain indicators. Each phase has a set of activities and digital tools that explains how to collect and analyse data and what level of participation is needed in each. These guidelines are a valuable resource to assess the quality of an existing public space that needs upgrading, as well as setting up a quality framework to create new site.

With the goal to achieve SDG11.7, the Global Public Space Programme has selected observable and measurable indicators that offer valuable information about public space quality and help identify performance targets for the future. The indicators were then classified into five key dimensions that guide the user on how to turn selected sites into more safe, inclusive, accessible and green public spaces. Drawing upon the experiences in 75 cities, the Programme identified a number of activities and existing tools that proved to be successful in gathering data, engaging different stakeholders and influencing design.

The assessment exercise is shaped incrementally, while some activities are mandatory, others are not, which gives the user the freedom to select whichever activity and tool best fits their context. A tailored package could be defined considering the objective of the assessment, the context and the capacities in place. For instance, to upgrade an existing public space, the activities should focus on how to improve the current conditions and add programming activities, while to create a new space, activities should focus on people's needs and feasible interventions.





#### **BLOCK BY BLOCK**

The Block by Block methodology uses the video game Minecraft as a public participation tool to co-design public spaces. Block by Block is a partnership between UN-Habitat, Mojang and Microsoft that promotes digital participation and community engagement in the planning and design process. The methodology ensures that the voices of the community are heard throughout the process and their needs are reflected in the design.

Minecraft is best described as "digital Lego" where participants can get creative and build structures in a three-dimensional world. The actual public space and its surroundings are transformed into a Minecraft model and participants can easily recognise their neighbourhood area. The ideation process is triggered by a site visit and brainstorming sessions allowing participants to innovate and design solutions inside the game. The final designs from the community are then prioritised and translated by experts into technical drawings for construction.

The Block by Block methodology ensures a bottom-up approach to public space design and fosters users' ownership. One of the strengths of Minecraft is that it is very easy to learn - even by people with no previous digital skills. Minecraft gives people a visual language to communicate their needs thus having an equal dialogue between experts and non-experts and understanding the different perspectives.

"Minecraft is a very suitable tool for community participation. People of all ages can work together to build creative designs and express their ideas." **Nguyen Manh Cuong, Vietnam** 

"In my project I wanted to see a skatepark. Now something I made is being built in real life!" **Lian Loxha, Kosovo** 

"I was glad to be part of this experience and that I was given the opportunity to express what I want and how I want to change the public space. Usually adults forget to ask about our opinion or they take them lightly. This workshop made sure we are included in the design process." **Rohyan Sakr, Lebanon** 



Through our work we engage the community in designing their own public spaces contributing as such to many of the Sustainable Developments goals, in particular goal 11.



achieving

# Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable Among the specific Target of SDGS the project expected to contribute to

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

11.7: 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

11.7.1: Average share of the built-up area of cities that is open space for public use for all, by sex, age, and persons with disabilities

11.7.2: Proportion of person victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months

Linkage to other SDGs:



#### Goal 5 Achieve gender equality and empower all women and girls

5.B Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life



#### Goal 16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

16.7: Ensure responsive, inclusive, participatory and representative decisionmaking at all levels









Implementation with the community



**UN-Habitat proposal | Bydel Alna, Oslo** Digital technology as participatory tools to co-design public spaces

## THE BLOCK BY BLOCK METHODOLOGY



## **INCLUDING THE 'SILENT VOICES'**



"We got worried at first when we were put in a group with a hearing person but Minecraft gave us a common language and we were able to talk through the game" **Nama and Rida Ismail during the Dialogue on Tradition and Modernity.** 

"People without any knowledge of design came from the neighborhoods, even street boys and girls. But they all have a stake in having a green public space this is the only thing they have." **Almaz Mekonnen, State Minister, Ministry of Peace** 

"It felt I was being heard, and being heard and listenned to is one of the best feelings that we can feel." **Vesa, neighbourhood resident; Kosovo** 

"It is unbelievable that we were able to make reality what was only an idea in our computer screen. Finally, decision-makers have change their perspective, because they realized that we can make a change." **Rrita, resident 12 years old** 

"I am a disable person and after learning Minecraft I feel empowered as I can see through this workshop I can contribute to decision making process. I can win my dream and can have a chance to work with host community to build something better." **Refugee, Dabali workshop** 



Digital technology as participatory tools to co-design public spaces

## **BLOCK BY BLOCK TRAINING OF TRAINERS**

The Training of Trainers workshop provides the partners the tools to develop their own Block by Block workshops in their respective district. The Training has three main components that will be taught over a period of three to four days:

#### A. Pre-workshop preparation

#### A.1. Site Selection

A.1.2. Modelling the site on Minecraft (how to gather information, take pictures and georeferenced the site)

#### A.2. Data collection

A.2.3. Community sampling size: participants in the workshop

#### A.3. Operational and Technical Prerequisites (for online and offline workshops):

A.3.1. Technical and computer requirements

A.3.2. Materials required during the workshop

A.3.3. Venue, logistics and others

A.3.4. Installing Minecraft and loading models

#### B. The Block by Block workshop

#### **B.1. Introduction to Block by Block Workshop**

B.1.1. Participant introduction

B.1.2. Public Spaces

B.1.3. Digital participation

#### B.3. Site visit observation (what information to look at, how to take pictures)

#### **B.4. Teaching Minecraft**

B.4.1. Basic commands and training: public space furniture, landscape, troubleshooting

B.4.2. Technical support

B.4.3. Login to the UN-Habitat Minecraft server

#### **B.6. Presentations and Prioritization phase**

#### C. Post-workshop

#### C.1. Block by Block report

- B.1.1. Needs prioritisation and Block by Block results
- B.1.2. Final Minecraft model
- C.2. Expert design studio: from Minecraft to technical drawings (Optional)
- C.3. Inclusive implementation (Optional)
- C.4. Agreement of operational use (Optional)
- C.5. Maintenance, Monitoring and evaluation (Optional)



It is advisable that the partner select a public space in their city prior the Training session in order to have the Minecraft ready during the course. This means UN-Habitat should receive pictures and the geolocation of the site (X and Y coordinated) 1 month in advance so that the Minecraft expert can create the model. This process can take from three weeks up to five weeks depending on the size of the public space selected.

Requirements (to be provided by partners):

- Room with projector/screen (HMDI cable or connection)
- Extension cables
- Internet connection
- Notepads/pen for trainees

• One computer/laptop per trainee | One mouse per computer (easier to manoeuvre)

## Tentative agenda (to be revised later)

#### Internal meeting

Meeting with partner:

- Presentation to UN-Habitat by the partner (previous project, district vision, etc)
- Site visits to some public spaces including the selected site (virtually)
- Final preparation for the Training

#### Site-specific assessment | Training of Trainers day 1

#### Full day training on the site-assessment tool and activities

Introduction to the 20 indicators and five dimension

Digital tools to gather data (Kobo Toolbox, counting, etc)

BBB   Training o	of Trainers day 1						
	Welcoming: Introduction of the trainees						
9h00 - 9h20	Agenda of the day						
	Objective of the training workshop and expected outcomes						
9h20 - 9h40	UN-Habitat Public Space Programme						
	Presentation about the Programme						
9h40 - 10h00	Introduction to Block by Block Methodology						
10h00 - 11h30	Component 1: A. Preparation of the workshop						
11h30 - 13h00	Component 2: B. The Block by Block workshop						
13h00 - 14h00	Lunch						
14h00 - 16h30	Component 2: B. The Block by Block workshop (including practicing online)						
16h30 - 16h45	Closing of Day One						
BBB   Training o	of Trainers: day 2						
9h00 - 9h10	Agenda of the day						
9h10 - 13h00	Component 2: B. The Block by Block workshop (including practicing online)						
13h00 - 14h00	Closing of Day two						
14h00 - 16h00	Free to practice						
BBB   Training o	of Trainers: day 3						
9h00 - 9h10	Agenda of the day						
9h10 - 13h00	Component 3: C. Post-workshop (to select which component)						

14



**UN-Habitat proposal** Digital technology as participatory tools to co-design public spaces

13h00 - 14h00	Lunch
14h00 - 16h00	<b>Preparation for the Block by Block workshops with the trainees</b> Sending instructions to participants on how to download Minecraft
16h00 - 16h15	Closing of Day three

BBB   Workshop	day 1:
9:00 - 9:30	Welcoming Session
	Introduction of participants
	Objective of the workshop and expected outcomes
	UN-Habitat Public Space Programme/ Bydel Alna
10:00 - 10:30	Presentation about the Programme and Minecraft Presentation about the project
	Brainstorming session (using Miro, Mural or others)
10:30 - 11:00	Current state and issues Identifying challenges Issues related to public space design and management
	Doing a virtual walking tour on google street views or using images
11:00 - 11:15	Break
11:15 - 13:00	Training in Minecraft building
	Basic functions and how does it work on the online server The facilitator will show participants how to build structures on Minecraft
13:00 - 14:00	Lunch
14:00 - 16:45	Practice / building on the model
	Note: when groups feel confident, they write on the main group and can start on the actual model
16:45 - 17:00	Closing of Day One
BBB   Workshop	day 2:
9:00 - 11:00	Minecraft building
11:00 - 11:15	Break
11:15 - 13:00	Finalizing the model
13:00 - 14:00	Lunch
14:00 - 15:30	Preparation of key elements to address in the presentation
	Group presentation of the Minecraft models
15:00 - 16:30	Groups will present their work (This can be recorded). Listing the priorities based





### Timeline

Weeks/ Activities	1	2	3	4	5	6	7	8	9	10	11	12
Signature of the agreement												
Minecraft Modelling												
Preparation of ToT package												
Site-specific Training												
Block by Block Training												
Block by Block facilitation												
Follow up and support												

#### For more information contact: Christelle Lahoud

Programme Management Officer UN-Habitat Global Public Space Programme Planning Finance and Economy Section, Urban Practices Branch christelle.lahoud@un.org

Regular updates on UN-Habitat's work are available on www.unhabitat.org



UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME P.O. Box 30030, Nairobi 00100, Kenya www.unhabitat.org