



# The Block by Block playbook

Using Minecraft as a participatory design tool in urban design and governance

# ACKNOWLEDGEMENTS

## **THE BLOCK BY BLOCK PLAYBOOK** USING MINECRAFT AS A PARTICIPATORY DESIGN TOOL IN URBAN DESIGN AND GOVERNANCE

Copyright © United Nations Human Settlements Programme (UN-Habitat), 2021.  
This project is funded by: Block by Block foundation

The playbook has been developed by UN-Habitat's Global Public Space Programme, Urban Planning, Finance and Economy Section, Global Solutions Division.

**Project supervision:** Cecilia Andersson, Pontus Westerberg

**Project coordination:** Christelle Lahoud

**Principal authors:** Amna Imam, Christelle Lahoud

**Contributors UN-Habitat:** Chiara Martinuzzi, Eugenio Gastelum

**Contributors Block by Block:** James Delaney

**Design and layout:** Christelle Lahoud

**Cover illustration:** Christelle Lahoud © UN-Habitat

### **Disclaimer:**

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the secretariat of the United Nations concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries regarding its economic system or degree of development. Excerpts may be reproduced without authorization, on condition that the source is indicated. Views expressed in this publication do not necessarily reflect those of the United Nations Human Settlements Programme, the United Nations and its member states.

# **The Block by Block playbook**

Using Minecraft as a participatory design tool in urban design and governance



**BLOCK BY BLOCK™**

**UNHABITAT**  
FOR A BETTER URBAN FUTURE

# Contents

|  |           |
|--|-----------|
| <b>INTRODUCTION</b>                          | <b>8</b>  |
| Minecraft as participatory tool              | 10        |
| Why public spaces?                           | 12        |
| Block by Block projects around the world     | 16        |
| The Block by Block process                   | 18        |
| Overview of the methodology                  | 20        |
| User guide                                   | 21        |
| <b>BLOCK BY BLOCK METHODOLOGY</b>            | <b>22</b> |
| <b>PHASE 1: PLANNING</b>                     | <b>24</b> |
| Activity 1   SITE SELECTION                  | 25        |
| Activity 2   FINANCIAL PLANNING              | 26        |
| Activity 3   TECHNICAL PREREQUISITES         | 27        |
| Activity 4   OPERATIONAL REQUIREMENTS        | 28        |
| <b>PHASE 2: MINECRAFT CO-DESIGN WORKSHOP</b> | <b>30</b> |
| Activity 5   OPENING SESSION                 | 32        |
| Activity 6   EXPLORATORY VISIT AND WALK      | 33        |
| Activity 7   SETTING A SHARED VISION         | 36        |
| Activity 8   LEARNING MINECRAFT              | 38        |
| Activity 9   CO-CREATING AND DESIGNING       | 40        |
| Activity 10   GROUP PRESENTATIONS            | 42        |
| Activity 11   PRIORITIZATION OF IDEAS        | 44        |
| Activity 12   CLOSING OF THE WORKSHOP        | 46        |
| <b>PHASE 3: IMPLEMENTATION</b>               | <b>48</b> |
| Activity 13   EXPERT DESIGN STUDIO           | 49        |
| Activity 14   VALIDATION MEETING             | 50        |
| Activity 15   INCLUSIVE IMPLEMENTATION       | 52        |
| Activity 16   MONITORING AND EVALUATION      | 54        |
| <b>CONCLUSION</b>                            | <b>56</b> |



## TOOLS .....56

|   |    |
|---|----|
| Budgeting excel sheet example .....             | 58 |
| 3D minecraft modelling .....                    | 59 |
| How to document a public space .....            | 60 |
| How to upload the 3D Minecraft Model .....      | 62 |
| Hardware and Software Requirements .....        | 63 |
| Stakeholders mapping .....                      | 64 |
| Representative sample of participants .....     | 66 |
| Participants list - registration template ..... | 67 |
| Consent form .....                              | 68 |
| Sexual harassment and rules of civility .....   | 69 |
| Powerpoint presentations sample .....           | 70 |
| Agenda sample .....                             | 71 |
| Site base map template .....                    | 72 |
| Site visit questionnaire .....                  | 73 |
| Certificates of completion .....                | 74 |
| Pre-workshop survey template .....              | 75 |
| Brainstorming session .....                     | 76 |
| Minecraft Troubleshooting .....                 | 78 |
| Create an empty Minecraft world .....           | 79 |
| Minecraft commands and controls .....           | 80 |
| Cards of values .....                           | 82 |
| Post-workshop survey sample .....               | 84 |
| Intervention list sheet .....                   | 85 |
| Priority list sheet .....                       | 86 |
| Expert design studio agenda .....               | 88 |
| Budget - Bill of quantities .....               | 89 |



*Block by Block board members during the annual board meeting in Adama, Ethiopia © KATLA Studios*

## 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 with the objective to promote public spaces as a keystone for sustainable cities in order to ensure good quality of life for all. Over the years, the Programme has 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 safe, inclusive, accessible and green. This includes public space assessments digital tool, policy guides, strategies and design principles, participatory tools, technology and innovation projects and carrying out advocacy work and implementation. Block by Block uses Minecraft as a community participation and engagement tool, with UN-Habitat facilitating and overseeing implementation of projects. UN-Habitat's Global Public Space Programme pioneered the Block by Block methodology in 2012 and oversees the implementation of the funded projects.

## ABOUT THE BLOCK BY BLOCK FOUNDATION

The Block by Block Foundation is a registered 501(c)(3) non-profit, officially formed in 2015 to amplify the program's impact after Microsoft acquired Mojang. Block by Block actively supports the New Urban Agenda and the UN's Sustainable Development Goals, and is one of only a handful of non-profit organizations whose work directly supports Goal 11, Sustainable Cities and Communities. The Block by Block Foundation has contributed more than US\$ 6 million to UN-Habitat to help make the UN Sustainable Development Goals a reality.

### **Mojang**

Mojang is the maker of Minecraft. Mojang licenses the use of Minecraft for Block by Block Workshops and provides ongoing financial support from the sale of licensed Minecraft merchandise. To date, Mojang has mobilized more than US\$ 5 million from the Minecraft community to make Block by Block Workshops and projects possible worldwide.

### **Microsoft**

Microsoft is the corporate parent of Mojang. Microsoft provides additional financial and technical support as well as organizational oversight for the Block by Block methodology.



# INTRODUCTION

The purpose of this playbook is to outline UN-Habitat's approach to using Minecraft as an enabler to encourage community participation in urban design and governance.

UN-Habitat has integrated the Block by Block methodology in its Global Public Space Programme, a programme launched in 2012 to develop local policies, plans and designs for safe, inclusive, and accessible public spaces for all to support cities to become more compact, integrated, connected, socially inclusive, and resilient to climate change. The Programme provides technical support in developing city-wide public space strategies, conducting participatory design/visioning workshops, setting up public space management frameworks, conducting city-wide public space assessments, developing indicators to monitor implementation and assess impact, amongst others.

Central to Block by Block is the notion that in order to make urban planning and design processes more participatory, people without design or architectural skills need easy ways to use tools to effectively describe their ideas and desires to professionals. The lack of such tools makes it difficult for non-professionals to engage in dialogue with professionals because they lack the technical skills, confidence and language to adequately communicate their ideas. This creates an engagement gap which is particularly prevalent among marginalized communities with fewer resources and lower levels of education, for example, with youth, people living in informal settlements and disabled, and, as a result, when deliberation occurs it is often biased towards more powerful stakeholders with greater resources.

Participatory outcomes are often aspired to, but hard to implement in practice. Involving multiple stakeholders is challenging and requires considerable planning and preparation. Involving people who are not trained in spatial thinking, reading maps or drawing, likely to be the case in marginalized communities, can also be particularly challenging. Using different communications and engagement methods can be a useful way of lowering barriers to entry, particularly for under-represented segments of a population.

UN-Habitat believes that Information, Communication and Technologies (ICT) can be a catalyst to improve governance in towns and cities and help increase levels of participation, efficiency, and accountability in public urban policies, provided that the tools are appropriately used, accessible, inclusive and affordable. Research shows that ICT use can have a direct impact on increasing civic engagement, giving them new avenues through which to become informed, shape opinions, get organized, collaborate and take action (Ben-Attar & Campbell, 2015). UN-Habitat's experiences of using the video game Minecraft as a community participation tool for public space design confirms this view and shows that providing the community with ICT tools can promote improved civic engagement.

The Block by Block methodology employs community meetings, presentations, site visits, and, very importantly, the site design workshop using the video game of Minecraft as a tool, to help the community visualize the site planning and design. The local communities (1) plan, (2) design, (3) develop, (4) operate, (5) monitor, and (6) evaluate their public spaces. The Block by Block methodology gives voice to those who are not usually heard, but who are most impacted by the planning decisions.

## MINECRAFT AS PARTICIPATORY TOOL

Minecraft is a 'sandbox' computer game originally launched in 2011. The game has sold nearly 200 million copies worldwide, making it one of the world's best-selling computer games. The gameplay of Minecraft is best imagined as a complex 'digital Lego'. In Minecraft, players are able to collect, break and place blocks in order to shape the virtual world around them.

Creative mode enables gamers to easily create buildings similar to those produced by 3D modelling software, with the additional benefit of being able to construct structures together through the multiplayer setting. As a result, the building process is more similar to real-life construction projects with multiple workers carrying out different roles simultaneously, than traditional digital 3D model-making with only one designer.

The novel idea that the video game Minecraft can be used for public participation was created in 2012 by UN-Habitat, the UN programme for sustainable urbanization and the Swedish gaming studio Mojang. Today, with the support of the Block by Block Foundation including Mojang and Microsoft, UN-Habitat has over the years developed Block by Block into a robust public participation methodology which has been used in urban projects in more than 75 cities.

One of the strengths of Minecraft is that it is very easy to learn - even by people with no previous digital skills. Our experiences from projects all over the world, including in informal settlements, show that almost anyone - young, old, educated or not educated - can use Minecraft to start sketching digitally within a few hours. We see the use of a simple 3D design tools such as Minecraft as one way of breaking down the digital divide and the skills gap, thus facilitating a more equal dialogue between experts and non-experts. Our evaluations show that it increases understanding of different perspectives, builds social capital and trust and gives people a visual language to communicate with others in a more informed way.

The participatory workshops, using Minecraft, bring people together to visualize their urban design ideas and needs in Minecraft, and present these to city authorities and local government officials. Minecraft designs are then used as part of the process of implementing real public space improvement projects. Building in Minecraft allows people to explore the merits of various alternatives and visualize their ideas, providing a way to explore and question new perspectives. The process also encourages people to develop a broader understanding of the urban environment, speak in public with greater confidence and improve social relations.

Minecraft is a surprisingly effective way to visualize and re-shape the built environment. The workshop is designed in a format that uses storytelling, rapid iteration and idea sharing, and makes sure that diverse community members, local governments, and relevant stakeholders are not left behind in the design process.





## Why public spaces?

Public space has often been overlooked and undervalued by urban authorities but is increasingly being considered the backbone of the city and sustainable living. Public spaces are places that are accessible and enjoyable by all without a profit motive and take on various spatial forms, including parks, streets, sidewalks, markets and playgrounds. Good public spaces enhance community cohesion and promote health, happiness, and well-being for all citizens.

The Global Public Space Programme has adopted the definition from the Charter on Public Space which defines public spaces as **“places that are publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive”**.

Inclusively designed, well-managed and properly maintained public spaces can have a great impact on the social, economic, health and environmental life of cities and communities. Public spaces build social cohesion and improve the quality of human interactions. Public spaces provide opportunities for people to earn a living, boost economies by increasing the land value of the surrounding area and, sometimes, by attracting new businesses. Also, public spaces improve the physical and mental health of inhabitants by providing clean green areas, sidewalks and bike lanes as well as encouraging outdoor activities. Additionally, public green areas can make a substantial contribution towards adapting to and mitigating climate change. They provide the most appropriate and effective ways to improve the micro-climate, in particular reducing the Urban Heat Island (UHI) effect.

Public space is acknowledged widely in global agendas. It can support urban centres to meet the targets set by the Sustainable Development Goals (SDGs); especially **Goal SDG11 – “Make cities and human settlements inclusive, safe, resilient and sustainable.”**

***“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 also places an emphasis on public spaces with 10 separate paragraphs mentioning its importance, for example paragraph 37: **“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, 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.”**

**UN-Habitat has developed an integrated approach to public space that covers cities and neighbourhoods and individual sites and applies a targeted approach to each scale.**

The iterative approach includes normative and operational tools, methodologies and practices to support governments and other organizations to make public spaces more safe, inclusive, accessible and green. The guidelines include public space city-wide and site-specific assessments, design principles, strategies and policies, digital participation and action planning and monitoring.



## ***Creating and promoting socially inclusive, integrated, connected, environmentally sustainable and safe streets and public spaces, especially for the most vulnerable.***

### **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, ensuring inclusion and a 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, in terms of the early integration and involvement of the various actors of government, administration and non-government players involved in urban development. Horizontal, in terms of integrating the various sectorial policies, and actions of the public and also private sector for sustainable development. Integration links the spatial aspect with other dimensions of urban life, social, economic and political, cultural and others.

### **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 that 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 open public space system can create green and blue networks to regenerate ecological systems, restore environmental connectivity (wildlife, sanctuaries and watercourses) and support biodiversity in urban areas. This can, in turn, create ample benefits for citizens and attract visitors. The role that public spaces can play in the provision of ecological services is extremely important in the mitigation and adaptation strategies to climate change.

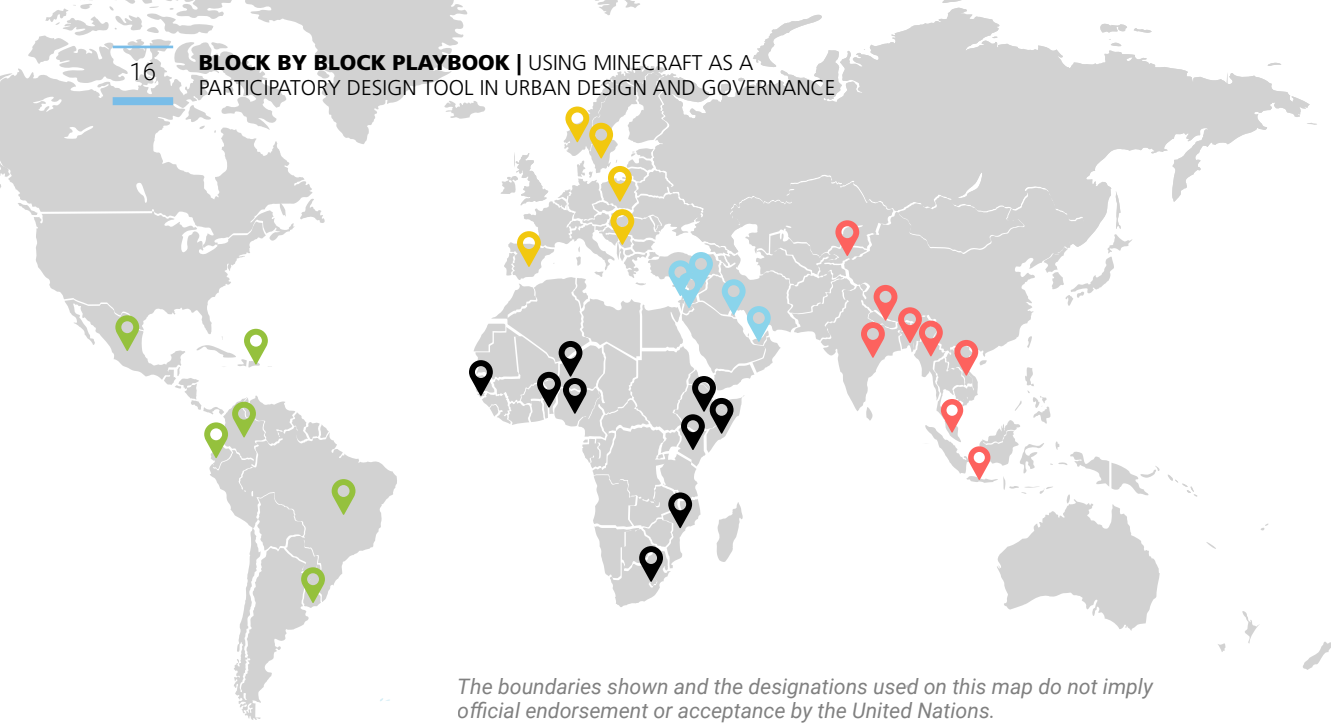
### **Safe**

A mixed and diverse public space provides a place that is vibrant and busy and automatically reduces feelings of insecurity. Fear of crime and crime itself can deter 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 perceptions of insecurity by attracting a large cross section of people at all times of day.









*The boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.*

## Block by Block projects around the world

The Block by Block methodology has been applied widely across the world in 87 cities impacting the lives of more than 1.8 million inhabitants. After using Block by Block in nearly 134 projects, we can safely say that the results speak for themselves. We have seen girls and boys collaborating to build inclusive public spaces in Gaza, an elderly woman in Lima realizing one of her dreams to create a new neighbourhood park, girls in Hanoi inspired to consider architecture as a future profession, people from different groups coming together in Kosovo and homeless people learning about urban design skills in Addis Ababa.

In order to reach scale, we would like to see the methodology adopted by hundreds of other organizations, including local governments, civil society and the private sector. To make this possible we have created this playbook to support public space advocates through a step-by-step approach on how to use Minecraft as a participatory tool to co-design urban spaces.

The approach has been very effective in including the marginalized voices in the city. In United Arab Emirates (UAE) we worked with the hard of hearing and deaf community, in Kenya and Lebanon we brought refugees, migrants and the host communities together, in South Africa we engaged with wheelchair users and in Ecuador we involved the LGBTQI+ community into the planning discussion.

**Completed**  
**135**  
 public space interventions

**Engaged**  
**30,000**  
 citizens in digital participation workshops

## Learn more about Block by Block

[An Introduction to Block by Block](#)

[Block by Block Kosovo: Five years after implementation](#)

[Meet a Minecrafter: Urban Girls Movement](#)

[Meet a Minecrafter: Ethiopian Park Project](#)

[Pontus Westerberg: How Video Games Can Push Community-Led Urban Planning](#)

[Tactical interventions with Bakai-Ata neighbourhood residents in Bishkek, Kyrgyzstan](#)

## The Block by Block process

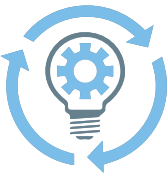


Organising the planning process and the Minecraft workshop, from site selection, identifying the financial strategies and preparing requirements (Operational and technical)



Co-design the public space with the community, using Minecraft and matching the common vision with design solutions

Transforming the Minecraft proposal into an architectural design proposal, ensuring feasibility and implementability of the project





## Overview of the methodology

The Block by Block process can be used for public participation in a wide variety of urban design, regeneration and improvement projects. Over the years, UN-Habitat has focused on public spaces, including playgrounds, streets, waterfronts, public markets and many more, but the process could be useful for almost any kind of construction project that could benefit from improved participation.

The purpose of this playbook is to provide an overview and a step-by-step methodology for local governments and urban professionals to develop and implement public space projects, using Minecraft as a community participation tool. Through participatory workshops, the methodology brings people together to shape their urban design ideas in Minecraft and present them to decision-makers. The proposed urban solutions are then integrated in the final technical proposal and later implemented.

Each phase contains a series of easy to understand activities that together make up the Block by Block methodology. Considering that the approach can be used in many different settings and situations we have made the modules flexible, enabling you to pick and choose the ones that are most relevant for your context.

### **3 phases: Planning, Minecraft co-design workshop and implementation**

Initiated in 2012, the Block by Block methodology was incrementally refined, learning from the experience in multiple cities and countries. Currently, the toolbox consists of 3 phases and 16 activities, supported by innovative tools and are linked with complementary materials produced by UN-Habitat. Various activities could be conducted independently or simultaneously with others, depending on the expertise of the technical team and the availability of time and resources.

Firstly, the technical team plan the overall process, selecting the site, inviting a representative sample of population and key stakeholders, assessing the current condition of the site, preparing the required equipment, and checking the technical and operational requirements are ensured.

During the co-design workshop, the technical team and community visit and identify existing challenges and opportunities, define a vision for the future public space and propose urban solutions through Minecraft. Then, the outcomes of the workshop are presented to the local authorities and the urban professionals that will consolidate the final urban design proposal, including the needs expressed by the participants.

Technical details, budgets and materials are further elaborated during the expert design studio and ultimately validated during a consultation meeting open to the entire community. Finally, an inclusive implementation process is developed, giving an active role to the community in terms of construction, management, maintenance and monitoring of the public space.



# USER GUIDE

**PHASE**

**ACTIVITY TITLE**

**DESCRIPTION:**

A brief description guides the users and provides key concepts.

**REQUIREMENTS:**

Time, participants and materials

**STEPS:**

A list of simple steps to follow linking with specific tools to facilitate the activity execution.

**GUIDANCE TIPS:**

A useful piece of information or advice about how to do something or about how to deal with problems connected with your activity.

**TOOLS:**

User-friendly tools are attached at the end of the publication. Not all the tools are mandatory and some tools support different activities. The technical team can select which are the most adequate tools to use.

# PLANNING

## Activity 1 | SITE SELECTION



Time required:



Participants:



Materials:

### Steps

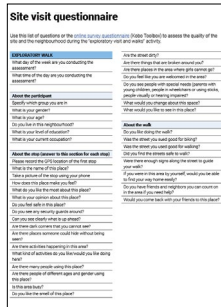
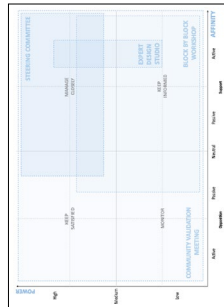
- 01.
- 02.
- 03.
- 04.
- 05.
- 06.
- 07.

**GUIDANCE TIPS:**

- 
- 
- 
- 

**TOOLS:**

- 
- 
- 



# BLOCK BY BLOCK METHODOLOGY

## ACTIVITIES

## TOOLS



### ■ Activity 1 | SITE SELECTION

### ■ Activity 2 | FINANCIAL PLANNING

### ■ Activity 3 | TECHNICAL PREREQUISITES

### ■ Activity 4 | OPERATIONAL REQUIREMENTS

- Budgeting excel sheet example
- 3D minecraft modelling
- How to document a public space
- How to upload the 3D Minecraft Model
- Hardware and Software Requirements
- Stakeholders mapping
- Representative sample of participants
- Agenda sample
- Powerpoint presentations sample
- Certificates of completion



### ■ Activity 5 | OPENING SESSION

### ■ Activity 6 | EXPLORATORY VISIT AND WALK

### ■ Activity 7 | SETTING A SHARED VISION

### ■ Activity 8 | LEARNING MINECRAFT

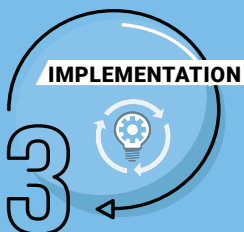
### ■ Activity 9 | CO-CREATING AND DESIGNING

### ■ Activity 10 | GROUP PRESENTATIONS

### ■ Activity 11 | PRIORITIZATION OF IDEAS

### ■ Activity 12 | CLOSING OF THE WORKSHOP

- Participants list - registration template
- Consent form
- Sexual harassment and rules of civility
- Powerpoint presentations sample
- Agenda sample
- Site base map template
- Site visit questionnaire
- Brainstorming session
- Cards of values
- Create an empty Minecraft world
- Minecraft Troubleshooting
- Minecraft commands and controls
- Intervention list sheet
- Priority list sheet
- Post-workshop survey sample
- Certificates of completion



### ■ Activity 13 | EXPERT DESIGN STUDIO

### ■ Activity 14 | VALIDATION MEETING

### ■ Activity 15 | INCLUSIVE IMPLEMENTATION

### ■ Activity 16 | MONITORING AND EVALUATION

- Expert design studio agenda
- Budget - Bill of quantities



# PHASE 1: PLANNING

## ACTIVITIES:

Activity 1 | SITE SELECTION

Activity 2 | FINANCIAL PLANNING

Activity 3 | TECHNICAL PREREQUISITES

Activity 4 | OPERATIONAL REQUIREMENTS

# PLANNING

## Activity 1 | SITE SELECTION

Select a site to develop or upgrade, based on cities' priorities and capacities. This can be an existing public space that needs upgrading and improvement or a vacant land for public space development. It is important to make sure that construction permission is granted from the onset.



**Time required:**  
2 weeks



**Participants:**  
Organizing team  
Technical team  
Local government



**Materials:**  
Title documents

### Steps

01. Review political agenda, future development plans, and cities' priorities
02. Understand the gaps and the distribution of public spaces at the city level
03. Shortlist and select two to three potential sites
04. Make sure the site(s) is for public use and review legal restrictions and zoning laws
05. Consult with local authorities to secure political willingness to transform the site
06. Select a site that has a clean title and secure a letter of commitment from local authorities and/or construction permit
07. Collect relevant information about the site and assess its current quality using UN-Habitat Public Space site-specific assessment guidelines

### GUIDANCE TIPS:

- Ensure that the site's location and entry points allow for safe physical access to the site.
- Avoid a site that has serious and/or substantive political disagreements/challenges.
- Select a challenging site, with issues like safety, accessibility, under-used, social segregation, to increase impact of the project.
- If applicable, ensure that the site is strategically distanced (at least five minutes walking distance) from other spaces to ensure a good network of public spaces.

### TOOLS:

- [City-wide public space assessment](#)
- [City-Wide Public Space Strategies: A Guidebook for City Leaders](#)
- [Public Space Site-Specific Assessment Guidelines](#)

# PLANNING

## Activity 2 | FINANCIAL PLANNING

Define a financial plan and ensure the availability of resources for the entire process. The budgeting and financial planning is important to make sure that the organised activities will lead to implementation. Engaging the community in participatory approaches without serious commitment of implementation can raise the community's hopes and may risk their future participation.



### Time required:

2 weeks to  
1 month



### Participants:

Organizing team  
Local government



### Materials:

Budget plan

## Steps

01. List all the activities that require funds for the entire process
02. Set a tentative budget for each of the selected activities
03. Understand what can be implemented within available resources
04. Determine how much additional funding is required
05. Reach out to potential donors and co-funders to secure extra resources
06. If needed, remove unnecessary activities
07. Validate the budget with a larger group of experts and sign off

## GUIDANCE TIPS:

The costs may include resources needed for:

- Advocacy materials (e.g. notes, briefs, brochures, flyers, etc.)
- Data collection and development of the Minecraft Model for the site
- Personnel and experts' time
- Technical requirements like hardware (computers, projectors, etc.), software (including Minecraft), cables, internet, etc.
- The operational requirements/prerequisites, e.g. stationery, meals and water, etc.
- Post-workshop consultations, site design by the experts and validation meetings
- Construction and recurring expenses of operations, maintenance, monitoring and evaluation of the site

## TOOLS:

- Budgeting excel sheet example (page 58)

# PLANNING

## Activity 3 | TECHNICAL PREREQUISITES

Gather data and prepare technical and substantial materials to conduct the Block by Block workshop. This includes transforming the selected site into 3D Minecraft model, which will help the participants to digitally view the site, design according to the urban surrounding and unleash their creativity.



**Time required:**  
1 month



**Participants:**  
Organizing team  
Minecraft developer



**Materials:**  
Minecraft licenses  
Computers + mouse  
Wi-Fi connection

### Steps

01. Document the public space and gather pictures
02. Develop the 3D Minecraft model or hire a Block by Block Minecraft developer
03. Secure laptops and relevant equipment for the workshop
04. Install the Minecraft software on each laptop and make sure it runs properly
05. Upload the 3D Minecraft model on the computers

### GUIDANCE TIPS:

- Double check that all the commands on the installed Minecraft software are working properly. If there are any issues, those may be resolved well ahead of the workshop.
- Minecraft licenses may be purchased directly from the official [Minecraft website](#).

### TOOLS:

- 3D minecraft modelling (page 59)
- How to document a public space (page 60)
- How to upload the 3D Minecraft Model (page 62)
- Hardware and Software Requirements (page 63)

# PLANNING

## Activity 4 | OPERATIONAL REQUIREMENTS

The Block by Block methodology requires a series of operational requirements to enhance its outcomes and ensure an inclusive process. This includes considerations related to venues, scheduling, invitations, participants selection and preparing the logistics.



**Time required:**  
2 weeks



**Participants:**  
Organizing team



**Materials:**  
PowerPoint

### Steps

01. Establish a team for project coordination and assign roles
02. Set the population target, make a stakeholder map, and select 20-50 participants
03. Schedule activities according to participants' availability and create an agenda
04. Book a comfortable venue close to the site, adequate for the number of participants, with toilets, internet connection and all the technical requirements
05. Organize transportation ahead of time and prepare all stationery and other supplies needed
06. Prepare the PowerPoint presentations and the certificates of completion for the participants
07. Send out the official invitations to the participants

### GUIDANCE TIPS:

- Participants need to represent the larger population in terms of age, gender, ethnicity, and persons with disabilities and older persons. In some cases, it is possible to have a focus group depending on your priorities (working only with kids, women, etc).
- Venues should meet accessibility standards/requirements to allow for convenient use of all groups.
- The number of participants is linked to the number of computers available (3-4 people per computer).
- Make sure decisions such as location, date and time schedule do not limit participant attendance.

### TOOLS:

- Stakeholders mapping (page 65)
- Representative sample of participants (page 66)
- Agenda sample (page 71)
- Powerpoint presentations sample (page 70)
- Certificates of completion (page 74)







# PHASE 2:

## MINECRAFT CO-DESIGN WORKSHOP

### ACTIVITIES:

Activity 5 | OPENING SESSION

Activity 6 | EXPLORATORY VISIT AND WALK

Activity 7 | SETTING A SHARED VISION

Activity 8 | LEARNING MINECRAFT

Activity 9 | CO-CREATING AND DESIGNING

Activity 10 | GROUP PRESENTATIONS

Activity 11 | PRIORITIZATION OF IDEAS

Activity 12 | CLOSING OF THE WORKSHOP

## PHASE 2 requirements:


**Time required:**

2 to 3 days


**Materials:**

- Projector
- Flash drives
- HDMI cable
- Computers
- Mouse
- Extension cables
- Minecraft model of the site
- Notebooks and pen
- Flipchart/board
- Pre-prepared sheets (List of participants, list of command)
- Printed cards of values


**Participants:**

Organizing team  
Community members  
Experts  
Decision-makers (desirable)

## Agenda sample:

| BBB   Workshop day 1: |   |
|-----------------------|---|
| 10 mins               | <b>Welcoming Session</b><br>Introduction of participants<br>Objective of the workshop and expected outcomes   |
| 10 mins               | <b>Introduction to public space and citizen engagement</b><br>Presentation about public space and Minecraft as a participatory tools<br>Presentation about the project  |
| 1 hour                | <b>Exploratory walks and site visit</b><br>Current state and issues<br>Identifying challenges<br>Issues related to public space design and management<br><i>This activity could also be done prior the workshop</i> |
| 15 mins               | Break   |
| 1 hour                | <b>Setting a shared vision</b><br>Defining core values and goals for the public space   |
| 1 hour                | <b>Training in Minecraft building (Empty Minecraft model)</b><br>Basic functions and how does it work on an empty model   |
| 1 hour                | Lunch   |
| 2 hours               | <b>Practice / building on the model</b><br>Participants continue practicing. When participants feel confident, they can start working on the actual model of the project.   |
| 5 mins                | Closing of Day One  |
| BBB   Workshop day 2: |   |
| 2 hours               | <b>Minecraft building - construction on the project model</b><br>Participants continue to co-design their ideas using Minecraft   |
| 15 mins               | Break   |
| 1.5 hours or 2 hours  | <b>Finalizing the model</b> and preparing key elements to address in the presentation   |
| 1 hour                | Lunch   |
| 1 hour                | <b>Group presentation</b><br>Groups will present their work (This can be recorded).<br>** Architects must be present * decision makers (desirable)  |
| 1 hour                | <b>Prioritisation of ideas</b><br>The ideas of each group will be prioritised to come up with a final list of interventions   |
| 10 mins               | Closing remarks, and evaluation   |

# WORKSHOP

## Activity 5 | OPENING SESSION

The opening session's objective is to welcome and register the participants and provide them with information about the activities of the workshop.

### Steps

01. Request all participants to register once they arrive at the venue and sign the consent form
02. Give some space for official opening remarks by decision-makers or local authorities
03. Do a round of introduction or organise an ice-breaking session to facilitate social interaction
04. Present the overall agenda of the workshop and the activities of the day
05. Explain rules of courtesy and prevention of sexual harassment
06. Give a presentation providing basic information about the importance of public space and participation, the Block by Block approach as well as the case study that will be designed

### GUIDANCE TIPS:

- Make sure participants sign their attendance every day
- During the session, the facilitator should be highly interactive with the participants, encouraging dialogue and horizontal communication
- If needed or if the group is particularly large, distribute name tags

### TOOLS:

- Participants list - registration template (page 67)
- Consent form (page 68)
- Sexual harassment and rules of civility (page 69)
- Powerpoint presentations sample (page 70)
- Agenda sample (page 71)

# WORKSHOP

## Activity 6 | EXPLORATORY VISIT AND WALK

Visiting the site and conducting exploratory walks are important to capture concerning design and social aspects with the community. The participants will get the chance to examine and observe the current conditions and start identifying challenges and opportunities.

### Steps

#### Preparation:

01. Decide on the walking route to be taken (starting point, direction, and crossings)
02. Prepare a list of question to ask (or distribute) to the participants covering aspects of accessibility, diversity of use and users, comfort and safety, social life, quality and availability of amenities, environmental component, and resilience.
03. Define 3-5 stops during the walk to allow deeper observation and note taking

#### The walk exploratory visit:

04. Gather the participants and ensure an adequate transport option to the physical site
05. Distribute the map and the key questions to the participants
06. Walk with the participants and give time for reflection and observation of their surroundings
07. Capture pictures of the activities and the public space itself

### GUIDANCE TIPS:

- Try selecting a venue close to the site that can be reached by walking
- The questions can be digitally sent to the participants
- Have at least two facilitators walking with the group; one leading the walk and one at the end making sure nobody is lost. Be mindful when crossing roads; especially with children.

### TOOLS:

- Site base map template (page 72)
- Site visit questionnaire (page 73)









# WORKSHOP

## Activity 7 | SETTING A SHARED VISION

Once the participants have explored and experienced the public space, it is crucial to collaboratively define a shared vision for the space. By agreeing on the core values and goals of site development, the participants develop a clear collective direction to address challenges later in Minecraft.

### Steps

01. Divide participants in smaller groups of 5-8 people
02. Assign topics and roles to each group and allow them to discuss concerns and possible solutions
03. Open the discussion and allow groups to present their observations for everyone
04. Summarize the talking points on one flip-chart titled “challenges” and “solutions”.
05. Invite participants to propose a vision and set of goals to be achieved
06. Agree collaboratively on the preferred vision and goals

### GUIDANCE TIPS:

- Smaller groups of discussion help individuals to express their honest opinion about an issue. Stimulate the discussion walking around the room, listening to the different discussion and asking on-point questions.
- If needed, distribute coloured post-it to allow even the shiest to share their thoughts.
- Participants are encouraged to discuss around different topics related to the public space, such as quality of the amenities, climate conditions, gender perspective, governance of the space, accessibility barriers hindering the equal use of the space, etc.

### TOOLS:

- Brainstorming session (page 77)
- Cards of values (page 83)





Participants discussing a common vision for the public space in Vukuhamba, South Africa © UN-Habitat

# WORKSHOP

## Activity 8 | LEARNING MINECRAFT

This activity aims to provide to the participants with the basic commands needed to use Minecraft. It is important that participants feel comfortable with the video game, to enable them to address the challenges at a later stage.

### Steps

01. Assign a computer to 2-3 participants
02. Distribute the basic command sheet
03. Show the participants how to play Minecraft on a projector or big screen, in particular:
  - Open an empty world to practice.
  - Moving commands W (Forward), A (left), S (Backwards), D (right)
  - Flying (double tap and hold space bar), fly up (space bar), fly down (left shift key) and deactivate flying-mode (double tap space bar)
  - Open the inventory with (E) and how to select, drag and drop blocks to the toolbelt.
  - Destroy (left click) and Build (right click) by selecting the pre-selected blocks
  - Extra commands for changing time and weather in the game

### GUIDANCE TIPS:

- While teaching the different commands, keep checking with the participants if they are managing and understanding
- Check-in with each group and assist participants on their individual computers to make sure that they have acquired the relevant skills
- Give the participants enough time to practice. The time may vary depending on the skill level of the participants.

### TOOLS:

- Minecraft commands and controls (page 80)
- Minecraft Troubleshooting (page 78)
- Create an empty Minecraft world (page 79)





Participant learning how to play on Minecraft during a Block by Block workshop in Amman, Jordan © UN-Habitat

# WORKSHOP

## Activity 9 | CO-CREATING AND DESIGNING

The participants work on the Minecraft 3D model for the selected site to address the challenges highlighted during the previous sessions. This is the core activity of the of Block by Block methodology where Minecraft acts as an architectural tool to propose design solutions.

### Steps

01. Introduce the groups to the scope of the activity
02. Help the participants to open the Minecraft model of the selected site and give them enough time to explore it
03. Invite the participants to design and propose ideas by building inside the model
04. Visit each computer every 20 minutes and make sure participants are not stuck or having problems, if everything is fine you can use this time to ask them questions to boost their creativity
05. Remind the participants to include elements they previously mentioned during the brainstorming session

### GUIDANCE TIPS:

- Take picture of the working session for record-keeping
- Keep the challenges, the shared vision, and the goals visible at all times
- The participants may not know all the tools and blocks in Minecraft, the trainer should keep watch and see if the participants have doubts or need help.
- If the participants have questions about their designs try not to give them a straight answer, it is better to ask them about what they think of the elements they are incorporating, their uses and how helpful they can be in reality

### TOOLS:

- Minecraft commands and controls (page 80)
- Minecraft Troubleshooting (page 78)





# WORKSHOP

## Activity 10 | GROUP PRESENTATIONS

The participants present their design proposal to the wider audience. This activity gives the participants the voice to address their needs in front of local authorities and architects in order to make them aware of their aspirations and how they envision their urban environment.

### Steps

01. Ask the participants to prepare a presentation by:
  - a) making a list of the elements to showcase
  - b) linking each element with a goal and a challenge addressed
  - c) compiling a slideshow in power point including screenshots (optional)
02. Collect all the models on a flash drive
03. Make sure local authorities, decision-makers and architects attend the session
04. Invite each group to present their design proposal in front of the audience
05. Moderate any question and clarification from the audience
06. Take notes while the groups present their ideas
07. Document the activities by taking pictures

### GUIDANCE TIPS:

- Give 5 to 10 minutes for each group to present
- Summarize the key points proposed by each group when they finish presenting to maintain a high level of attention

### TOOLS:

- Intervention list sheet (page 85)





Participants presenting their ideas to the wider audience in Izmir, Turkey © UN-Habitat



# WORKSHOP

## Activity 11 | PRIORITIZATION OF IDEAS

Collaboratively prioritise the design solutions of the participants, based on majority of consensus, and technical and financial feasibility. The facilitator should also make sure that essential elements for basic human needs are also included in the priority list.

### Steps

01. Present the prioritisation list of ideas based on the workshop outcomes
02. Validate each point with the community
03. Explain clearly why certain elements cannot be implemented due to technical or financial feasibility and agree on alternative solutions
04. Highlight any missing components to ensure an inclusive and sustainable public space (waste bins, toilets, lighting, ramps, etc.)
05. Discuss about which interventions will be for the short, medium and long-term based on community priorities

### GUIDANCE TIPS:

- Make sure the representative of the community agrees on the changes based on the technical and financial feasibility.
- Stimulate dialogue and provide alternative solutions.

### TOOLS:

- Priority list sheet (page 86)



# WORKSHOP

## Activity 12 | CLOSING OF THE WORKSHOP

Close the workshop by summarizing the outputs and briefing the participants on the next steps and hand out the certificates of completion.

### Steps

01. Summarise the key highlights of the workshop
02. Ask participants to compile the post-workshop survey to monitor the quality and the results of the workshop
03. Invite local authorities to close the session with official closing remarks
04. Explain way forward of the project and invite the participants to engage in the next steps
05. Hand out the Block by Block workshop certificate, signed by the local authority or the organizing entity
06. Take a group picture

### GUIDANCE TIPS:

- Thank all participants and make sure everyone is satisfied with the outcomes of the workshop

### TOOLS:

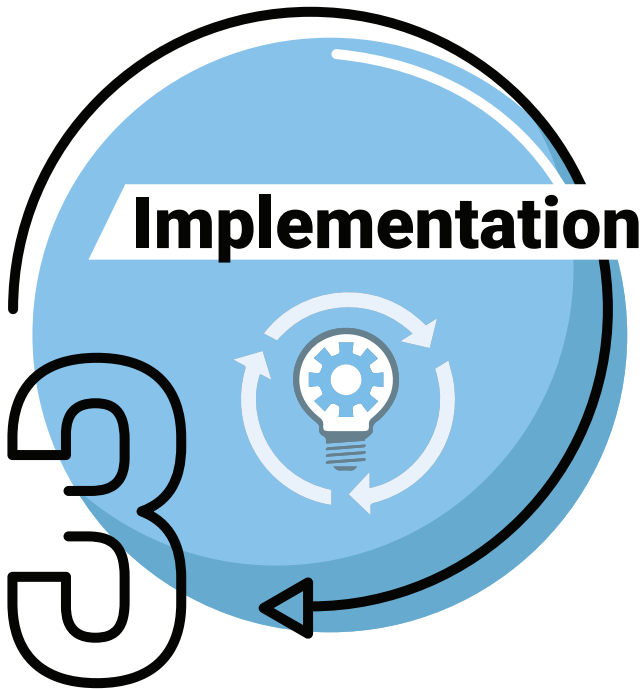
- Post-workshop survey sample (page 84)
- Certificates of completion (page 74)





Group photos with the participants and their certificate of completion in Wuhan, China © UN-Habitat





# PHASE 3:

# IMPLEMENTATION

## ACTIVITIES:

Activity 13 | EXPERT DESIGN STUDIO

Activity 14 | VALIDATION MEETING

Activity 15 | INCLUSIVE IMPLEMENTATION

Activity 16 | MONITORING AND EVALUATION

# IMPLEMENTATION

## Activity 13 | EXPERT DESIGN STUDIO

Consolidate professionally and collaboratively the outcomes of the Block by Block workshop into a technical design proposal, detailing materials, construction techniques and costs.


**Time required:**

2-3 weeks (1-2 days workshop + 2-3 weeks drawings elaboration)


**Participants:**

Organizing team  
Experts


**Materials:**

Computers  
Projector  
Papers

### Steps

01. Invite technical stakeholders, including local authority representatives, architects, urban planners and relevant community leaders with a background in architecture, urban planning and design
02. Share a detailed agenda of the workshop
03. Present the outcomes of the Block by Block workshop and the communities priorities
04. Discuss technical and financial feasibility and amend the design proposal accordingly
05. Discuss the public space layout, construction details and materials
06. Consolidate technical drawings (plans, masterplan, sections, 3D visualisations) with any digital software
07. Elaborate a tentative budget for the design proposal
08. Propose an action plan for the short-, medium- and long-term implementation.
09. Prepare a report of the Block by Block workshop, including outcomes of the Expert Design Studio

### GUIDANCE TIPS:

- Treat the community representatives as experts of knowledge and value their ideas.
- Book a comfortable room with large tables to discuss the designs and sketch collaboratively.

### TOOLS:

- Expert design studio agenda (page 88)
- Budget - Bill of Quantities

# IMPLEMENTATION

## Activity 14 | VALIDATION MEETING

Present and validate with a larger audience the final design proposal and set the next steps for the implementation. The community validation meeting is a crucial step to ensure the buy-in of the project from the community and avoid any future disagreement. Through the community consultation, residents are involved in the decision-making process and can suggest improvements to the design.



**Time required:**  
2 hours



**Participants:**  
Technical team  
Local government  
Community



**Materials:**  
Projector  
Computers  
Papers

### Steps

01. Invite the community and the local authorities
02. Prepare a clear Power Point presentation, showing the participatory activities, the final outputs and the next steps towards implementation
03. Describe the final design proposal supported with 3D visualisation if possible
04. Open a discussion and answer any question raised by the audience
05. Collect inputs from the community and agree on how to improve the design
06. Discuss co-management and co-construction of the space and define the role of the community in the implementation phase
07. Explain the next steps and collect contact information of people who are interested to engage in the implementation process
08. After the meeting, review the final proposal and share it on digital platforms

### GUIDANCE TIPS:

- Book a room that host a large audience
- Co-construction in collaboration with private companies and volunteers reduces implementation costs and empower citizens
- Community feels ownership of the space if they are part of the implementation
- Creating a public space committee/association that can organise activities, keep the space clean and vibrant.





Validation workshop with the local authorities and the decision makers in Hanoi, Vietnam © Healthbridge



# IMPLEMENTATION

## Activity 15 | INCLUSIVE IMPLEMENTATION

Implement and activate the final design of the public space. To ensure qualitative and liveable public spaces, it is crucial to actively involve the community during the implementation phase and give them certain responsibilities in the construction, surveillance, and management of the site.

**Time required:**

2-6 months

**Participants:**

Technical team

Local government

Community committee

Private companies

### Steps

01. Hire a construction company
02. Establish a committee that supports the implementation process formed by active community members and define tasks and responsibilities with the committee
03. Set a clear workplan for construction
04. Schedule regular visits to the construction site to monitor quality of works
05. Communicate ongoing work and the development progress on social media
06. Organise biweekly meetings with the committee and the local authorities to address any emerging challenges
07. Define with the committee and the local authorities a programme of activities for the public space
08. Organise an opening ceremony/inauguration of the public space

### GUIDANCE TIPS:

- The committee should be officially recognised by the local authorities
- Activities such as cleaning, painting, gardening, furniture removal, do not require technical skills and could be done by citizens
- A programme of activities should respond to the interests of the overall community, including children, youth, women and elderly people



# IMPLEMENTATION

## Activity 16 | MONITORING AND EVALUATION

Monitor the quality of the space after implementation and evaluate the overall participatory design process. Qualitative public spaces need care and monitoring to ensure good level of maintenance and conservation. Revisit the site after one year to see how the space is performing and if there is a need for upscaling.

**Time required:**

1 week

**Participants:**Organizing team  
Experts  
Civil Society**Materials:**

Evaluation form

### Steps

01. Review goals set during the Block by Block workshop and assess their accomplishment
02. Share broadly a digital evaluation form and evaluate the overall design process
03. Meet with the committee to discuss upscaling opportunities
04. Assess the quality of the public space after 1 year of its implementation using the Site-specific public space assessment
05. Measure the impact of the public space by conducting a comparative analysis of before and after implementation
06. Compile a final report highlighting benefits, challenges and lessons learnt from the Block by Block process

### GUIDANCE TIPS:

- Monitor the social and environmental impact of the project by taking pictures and gathering quotes from the users
- Organise activities with the committee to keep the public space active
- Update social media pages with the current activities of the site
- Scale up the work by considering other pilot projects





Refugees enjoying the public space in Kalobeyei, Kenya © UN-Habitat

# CONCLUSION

The aim of this playbook is to support any urban actor that wishes to plan, design and implement more sustainable and inclusive cities through the active participation of community members. The playbook is providing an overview of the entire process that can be followed to use Minecraft as an engagement tool.

UN-Habitat and partners have adopted this methodology for community participation since 2012. Observations from projects together with the formal study of the process in Kirtipur, Nepal, indicate that using technology as a tool for participatory urban planning and design can be a powerful way to include non-traditional stakeholders in decision-making processes. The lessons and experiences from using Minecraft indicates clearly how this can also have a strong effect on communities' participation. The game has the potential to increase youth's interest and engagement in urban planning and design, help encourage dialogue between different groups and opinions and contribute to the development of important skills such as collaboration, public speaking and negotiation as well as giving participants a more powerful voice.

The use of technology presents clear opportunities for governments – on local, regional and national level – to engage youth in participatory processes. Games, such as Minecraft, offer a clear possibility of engaging with young people on their own terms and presents new ways of involving them in political deliberation. Visualization is crucial in how people perceive reality and Minecraft is therefore useful for agreeing joint policy positions and solutions. Gaming and technologies can bring opportunities to open up new ways of working that break down the barriers for youth participation. ICT can be

used to communicate technical information to enhance understanding, provide public access to information that was previously only available to experts and officials, to crowdsource information from citizens and make it publicly available. ICT is also useful for visualizing ideas, thus promoting shared understanding, and facilitating interaction between citizens and government.

It is nevertheless important to consider issues such as gender and accessibility when using Minecraft as a participation tool. Differences in digital skills can have a significant impact on group dynamics and participants' ability to contribute to the design and visualization process. Often women and girls, persons with disabilities and older people have fewer opportunities for learning about and using ICT because of deeply entrenched gender roles. Thus, there is a need to consider how power dynamics associated with, for example, gender, ability and digital knowledge influence participants' engagement in design and decision making. Without such consideration the use of ICT risks reproducing or even strengthening the position of more powerful groups.

Taking part in the process encourages young people to develop a better understanding of the surrounding environment and build new social networks, while at the same time cultivating skills such as eloquence and imagination. Mastering such skills is necessary for individuals to engage in critical thinking and contribute to social and political change, thus having a positive impact on community cohesion and further civic engagement.

We encourage local governments and international development cooperation to continuously practice and support urban development as a measure for more inclusive cities in a broader sense.





|   |    |
|---|----|
| Budgeting excel sheet example             | 58 |
| 3D minecraft modelling                    | 59 |
| How to document a public space            | 60 |
| How to upload the 3D Minecraft Model      | 62 |
| Hardware and Software Requirements        | 63 |
| Stakeholders mapping                      | 64 |
| Representative sample of participants     | 66 |
| Participants list - registration template | 67 |
| Consent form                              | 68 |
| Sexual harassment and rules of civility   | 69 |
| Powerpoint presentations sample           | 70 |
| Agenda sample                             | 71 |
| Site base map template                    | 72 |
| Site visit questionnaire                  | 73 |
| Certificates of completion                | 74 |
| Pre-workshop survey template              | 75 |
| Brainstorming session                     | 76 |
| Minecraft Troubleshooting                 | 78 |
| Create an empty Minecraft world           | 79 |
| Minecraft commands and controls           | 80 |
| Cards of values                           | 82 |
| Post-workshop survey sample               | 84 |
| Intervention list sheet                   | 85 |
| Priority list sheet                       | 86 |
| Expert design studio agenda               | 88 |
| Budget - Bill of quantities               | 89 |

# TOOL

## Budgeting excel sheet example

Calculate the project budget, using the following table or duplicate this excel spreadsheet ([link](#)). Below are items and categories that could be considered.

| Expenses categories and items                                 |     | Unit of measure | Unit cost | Quantity | Budget (currency) |
|---|-----|-----------------|-----------|----------|-------------------|
| 1. Staff and other personnel                                  | 1.1 |                 |           |          |                   |
|   | 1.2 |                 |           |          |                   |
|   | 1.3 |                 |           |          |                   |
| Total for Staff and other personnel                           |     |                 |           |          |                   |
| 2. Supplies, commodities, materials                           | 2.1 |                 |           |          |                   |
|   | 2.2 |                 |           |          |                   |
|   | 2.3 |                 |           |          |                   |
| Total for supplies, commodities and materials                 |     |                 |           |          |                   |
| 3. Equipment, vehicles and furniture (including depreciation) | 3.1 |                 |           |          |                   |
|   | 3.2 |                 |           |          |                   |
|   | 3.3 |                 |           |          |                   |
| Sub-total for equipments, vehicles and furniture              |     |                 |           |          |                   |
| 4. Contractual service  | 4.1 |                 |           |          |                   |
|   | 4.2 |                 |           |          |                   |
|   | 4.3 |                 |           |          |                   |
| Sub-total for contractual services                            |     |                 |           |          |                   |
| 5. Travel   | 5.1 |                 |           |          |                   |
|   | 5.2 |                 |           |          |                   |
| Sub-total for Travel  |     |                 |           |          |                   |
| 6. Transfer and grants to counterparts                        | 6.1 |                 |           |          |                   |
|   | 6.2 |                 |           |          |                   |
| Sub-total for transfer and grants to counterparts             |     |                 |           |          |                   |
| 7. General operating and other direct costs                   | 7.1 |                 |           |          |                   |
|   | 7.2 |                 |           |          |                   |
| Sub-total for General operating and other direct costs        |     |                 |           |          |                   |
| <b>TOTAL BUDGET</b>   |     |                 |           |          |                   |



# TOOL

## 3D minecraft modelling

The digital Minecraft model of the site allows the participants to unleash their creativity and design skills during the process. There are many Minecraft build teams that can help you build the 3D model for a fee including Block by Block developers. You can also explore your local Minecraft community online to find people who may be able to help.

UN-Habitat has over the years worked with FyreUK, Blockworks and Minecraft MX Builders. If funds are not available for acquiring the services of a build team, an empty Minecraft model can be used, but it is not recommended.

If you want to learn how to develop the model in-house, you will need to install additional software to Minecraft. The software used to develop models is called World Edit. Documentation on how to install and use the software can be found on the website: <https://worldedit.enginehub.org/en/latest/>

Some of those external resources:

[Minecraft Communities](#)

[Official Minecraft wiki community](#)

[Builder's Refuge](#)

[Planet Minecraft](#)

[Commercial services, e.g. as Fiverr](#)

[Unity's Minecraft Forum](#)

[MC Market](#)

Minecraft Developers on  
Freelance Job sites, e.g.  
[UpWork, Gigster, Arc](#)

[Minecraft Partner Program](#)

# TOOL

## How to document a public space

This section will help you to better understand how to collect relevant information about the site to create a detailed 3D Minecraft model of the site, that closely resembles the reality of the site. Sometimes the model builders are based in different countries, so it is very difficult for them to envision the site remotely.

A Minecraft Model is like an architectural model but in a 3D virtual environment. It must show the right dimensions, points of interest and the correct scale so that the users can fully understand the public space and the relations of the different services in the space. The model must contain all the features of the public space, such as walkways, small bridges, shades, vegetation, and street furniture. It is also advised that the model includes some of the surrounding buildings.

### Google Maps and Street View:

If the selected public space is updated and very accurate on Google Maps or Google Earth and the location has Street View (Google, Baidu), the builder team will have 90% of the information they need. For that, you would need a google pin (coordinates or URL) that shows the location of the space and the area you want to model.

### Pictures and videos:

In some cases, Google maps and street view are not available or updated, so collecting pictures will be the best resource you can provide to the builders. The more pictures you submit, the better understanding the builder team will have of the public space.



# TOOL

## How to document a public space



- 01.** It is possible to use both a camera and a smartphone with a good resolution. Make sure the battery is charged.



- 02.** Request permission before taking pictures of people, especially if children. Photography in some contexts might be an intrusive practice, try to build a good level of familiarity with the public before.



- 03.** Take landscape pictures without up close obstacles.



- 04.** Pin the pictures on the map and give them a number. This will be helpful during for the builder team to spatially locate them.



- 05.** Video may also be very useful. Do steady and slow shoots and move slowly so the video is not shaky. A slow 360° video is also recommended



before

after

- 06.** Take few pictures from an elevated point. Later, these will help to compare the current conditions with the design proposals and the final implementation.



- 07.** Organise the collection and submit to the builder team

### Example of good and bad pictures:



The car is blocking the view



Public space with shading facilities



Image is blurry and not informative



Clear view with a landmark







# TOOL

## How to upload the 3D Minecraft Model

Once you receive the Minecraft model folder from the builder team, you would need to upload it into the right folder to open it inside the game. To do so, please follow the following steps:

### 01. Locate the Minecraft folder on your computer:


For Windows users:

Press windows key + press R  + 

In the command box type **%appdata%** and press Enter  
Double click and open **.minecraft folder**

For Mac users:

Use Finder's 'Go' menu

Use the '**Go to folder**' command  +  + G

Copy and paste the following: **~/Library/Application Support/minecraft.**

### 02. Load the map

Inside the Minecraft folder, open **saves folder** and paste the model folder sent by the builder team.

### 03. Launch the Minecraft Game application

Launch the game in single player mode and locate the model you just uploaded.

### 04. Collect, duplicate, rename or delete models

In the **saves folder**, each folder represents a model, you can rename the folders, copy, duplicate or delete as you see necessary. You can also copy the model folders from one computer to another, make backups, collect and organize group models before and after the workshop.

# TOOL

## Hardware and Software Requirements

It is important to make sure all the necessary hardware and software requirements are met prior conducting the block by block workshop.

### 01. System Requirements:

#### Minimum Requirements:

CPU: Intel Pentium D or AMD Athlon 64 (K8) 2.6 GHz

RAM: 2GB

GPU (Integrated): Intel HD Graphics or AMD (formerly ATI) Radeon HD Graphics with OpenGL 2.1

GPU (Discrete): Nvidia GeForce 9600 GT or AMD Radeon HD 2400 with OpenGL 3.1

HDD: At least 200MB for Game Core and Other Files

Java 6 Release 45

#### Recommended Requirements:

CPU: Intel Core i3 or AMD Athlon II (K10) 2.8 GHz

RAM: 4GB

GPU: GeForce 2xx Series or AMD Radeon HD 5xxx Series (Excluding Integrated Chipsets) with OpenGL 3.3

HDD: 1GB

Latest release of Java 8 from java.com

### 02. Software Requirements:

The latest Minecraft Release is version 1.16

Consult with the team builder which version you need to install to run the model properly

Please note that some users experience issues playing Minecraft while using a mismatched version of Java for their operating system (32 or 64 bit)

Starting from Minecraft 1.12, Java 8 will be required to run Minecraft. If you don't know whether you have Java 8, don't worry - our installers supply Minecraft with its own version of Java by default.

#### Also keep in mind:

- 1 computer mouse per computer is required.
- Graphics card driver should be updated.
- It is recommended to have 1 computer for every 3 participants, maximum of 4
- 1 Projector is very useful.
- 1 UPS backup power is recommended for each computer
- Wifi connection

# TOOL

## Stakeholders mapping

This tool helps to understand the existing social network and dynamics, to identify the key stakeholders of the project and suggest how to engage them during the process. It generates a graphic representation of the social and institutional structure of a context, considering two variables: power and affinity.



### Power

The term refers to the institutional, financial and/or social influence of an entity on the decision-making process of the project.



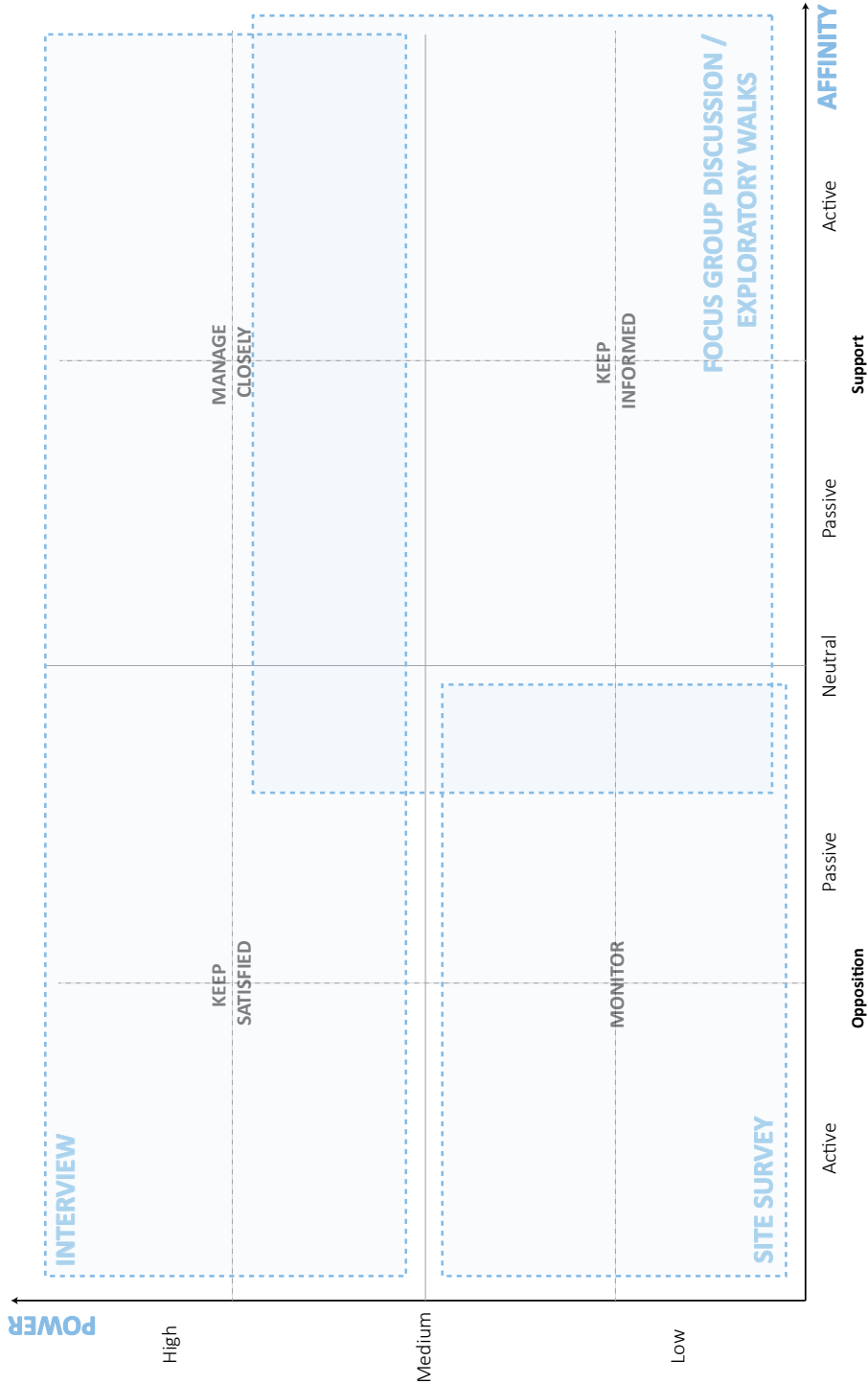
### Affinity

The term affinity refers to the interest and the commitment of an entity on the project and its scope.

- 01.** Make a list of all the stakeholders connected to the project. Ensure that all the different actors are mapped and vulnerable groups and minorities are represented.
- 02.** Use the matrix template to position each stakeholder considering their level of power and affinity in relation to the project.
- 03.** Draw lines and arrows to represent the relation between stakeholders (collaborative, partially, conflictive, neutral, etc.).
- 04.** Discuss which stakeholders should be engaged among the process, considering project constraints and opportunities.
- 05.** Depending on the level of power and affinity, different activities are proposed to engage stakeholders. For instance, actors with high affinity levels but limited power should be involved during the workshop and the discussion groups. Use the template to identify your engagement strategy.

# TOOL

## Stakeholders mapping





# TOOL

## Representative sample of participants

When doing participatory activities, it is important to define a representative sample of the neighbourhood to ensure a good representation of the community. This will guarantee that different voices are heard; especially the most vulnerable. Diversity is the guiding principle for a good sampling exercise.

Population sampling requires scientifically accurate methodologies based on probabilistic and statistical approaches. Basic and simplified guidelines are presented below:

01. Define the target group focusing on the population within the five-minutes-walking radius. One can choose to keep it general or if needed choose a specific target group (women, children, etc.). In that case, the sample is composed only by the selected target category
02. Gather information about the population of the neighbourhood in terms of size and composition
03. Define the sample group size, using open source platforms such as:
  - [Survey Monkey](#)
  - [Qualtrics](#)
  - [Survey System](#)
  - [Check Market](#)
04. To define the sample composition, choose one of the following randomization methods, depending on the availability of demographic data



### Simple systematic sampling method

(If the demographic data is not available)

- Pick one house unit every 10 house bells. This number could change depending on the sample size.
- Identify one candidate for each household, ensuring that every group is equally represented (women, children, youth, elderly people, etc.).



### Stratified sampling method

(If the demographic data is available)

- Divide the population target into its sub-demographic groups based on one criterion which could be age, gender, education level, sector (private sector, public sector, NGOs, student, etc.)
- Select randomly from each sub-stratification a proportionate number of candidates.

### Tips:

- Large samples can be very inefficient, while small samples can result in inaccurate representation of the population.
- Pay attention to the population composition: If 60% of your neighbourhood is composed by elderly male persons, then also your sample should have this proportion.

# TOOL

## Participants list - registration template

Use this template or duplicate the spreadsheet using this [link](#) to register participants attendance at the workshop.

| Signature    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Email        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Organisation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Age          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Surname      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Name         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

# TOOL

## Consent form

Use the following template to request consent for pictures or quotes.

### CONSENT FORM TO USE PERSONAL QUOTES, TESTIMONIALS, PHOTOS AND STORIES FROM PARTICIPANTS

To be filled by [name of project lead]

Name of the project

Location

Date

---

**[Name of project lead]** produces a range of communications resources to share publicly the experiences of the partners, participants and beneficiaries who are using our services. This helps to demonstrate the changes and the impact of **[Name of project lead]**'s work on the ground. By completing this form, you give the **[Name of project lead]** the permission to use your story in our communications.

[To be filled by the participant]

Full Name 

---

Address 

---

Telephone 

---

Email 

---

Signature 

---

# TOOL

## Sexual harassment and rules of civility

### Harassment

- Harassment: to irritate or torment persistently or to wear out and exhaust
- An act of aggression at any stage to keeping victim subordinate to the harasser
- Harassment is an unwelcome, individual or group level, act or series of acts, that have the effect of unreasonably interfering with an individual's work performance.
- A deliberate or repeated, unsolicited and unwelcome behaviour that asserts commodification and objectification of a person, over the person's role as a worker.
- Remember that "unwelcome" is decided by the recipient of the behaviour, not the person doing the act. Unwelcome behaviour is conduct for which consent of all those who are involved, is NOT present.
- Intent to commit harassment is not considered as a factor when deciding whether harassment has indeed happened or not. It is sufficient that the acts are (1) unwelcome by the recipient i.e. without the recipient's consent, and (ii) unreasonably interfere with the recipient's work performance.
- Retaliation by a person accused of harassment against the complainant or witnesses is also considered as harassment

### Examples

- Any unwelcome sexual advances, request or demand for a sexual favour, indirect request or demand for a sexual favour, e.g., standing or sitting very close to a person, inappropriate comments, inappropriate gestures, statements or actions indirectly implying sexual advances, etc.
- Creating an intimidating, hostile, or offensive working environment, e.g., general routine incivility
- When the individual and/or group of accused are categorically informed that she/he feels uncomfortable by a certain behaviour, act(s), words, phrases, etc. and such acts then later continue to be repeated in her/his presence

### Consent

- Consent is an affirmative decision to engage in mutually acceptable activity freely given by clear actions or words. Consent is an informed decision made freely and actively by all parties, not relying solely upon non-verbal communication.
- Conduct is considered "without consent" if no clear consent, verbal or non-verbal, is given.
- Consent cannot be inferred from silence, passivity, or lack of active resistance alone.
- Consent cannot be assumed as given. It is important not to make assumptions.

### Intent

The intent of the person accused of committing acts of harassment does not matter. It is the impact of behaviour, not the intent of the person who did the act, that determines if sexual harassment has occurred. Impact is determined by whether the act had consent of the recipient/victim or not.



# TOOL

## Powerpoint presentations sample

Use this template ([link](#)) and prepare a PowerPoint presentation to introduce the workshop and describe the following:

- Workshop objective and agenda
- The importance of quality public spaces
- Public spaces and Sustainable Development Goals (SDGs)
- Challenges of public spaces
- What is Block by Block?
- Minecraft for participatory public space planning
- The Block by Block methodology
- The case study

To prepare a clear and good presentation, consider some of the following aspects:

- 01.** Use images, icons and pictures with high resolution (300 dpi)
- 02.** Be concise and reduce the text as much as possible, using only heading and key words
- 03.** Use the local language or the most spoken among the participants
- 04.** Use the logo of Block by Block and any relevant partners
- 05.** During the presentation, be clear and use simple language
- 06.** Interact with the participants and stimulate dialogue (e.g. ask why are quality public spaces important, which are the main challenges of public space, etc.)

# TOOL

## Agenda sample

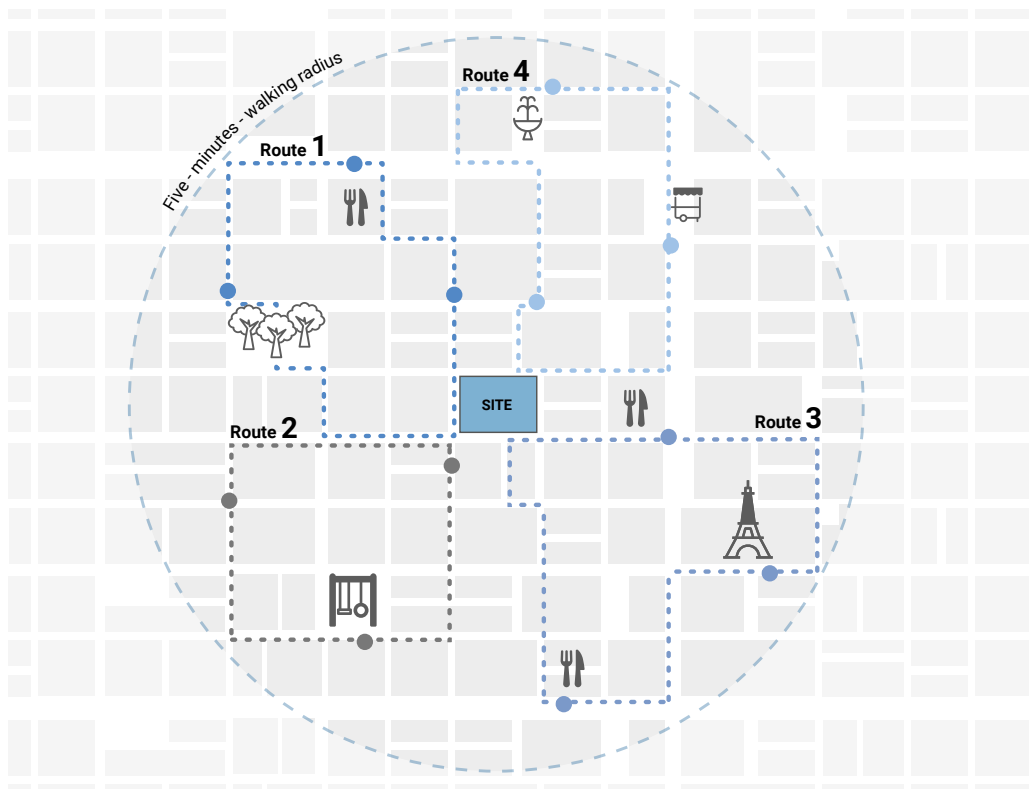
| Time   | Activity  | Materials  |
|--|---|--|
| <b>Preparation Day</b>   |   |  |
| Half day   | Installing Minecraft and room setup   | Internet, laptops, licenses                              |
| <b>BBB   Workshop day 1:</b>   |   |  |
| 10 mins  | <b>Welcoming Session</b><br>Introduction of participants<br>Objective of the workshop and expected outcomes   | Projector, list of participants                          |
| 10 mins  | <b>Introduction to public space and citizen engagement</b><br>Presentation about public space and Minecraft as a participatory tools<br>Presentation about the project    | Projector, PPT presentation                              |
| 1 hour<br><i>This activity could also be done prior the workshop</i> | <b>Exploratory walks and site visit</b><br>Current state and issues<br>Identifying challenges<br>Issues related to public space design and management                     | Questionnaire, map, transport                            |
| 15 mins  | Break   |  |
| 1 hour   | <b>Setting a shared vision</b><br>Defining core values and goals for the public space   | Whiteboard, cards of values                              |
| 1 hour   | <b>Training in Minecraft building (Empty Minecraft model)</b><br>Basic functions and how does it work on an empty model   | Laptops, mouse, screen, keyboard, projector              |
| 1 hour   | Lunch   |  |
| 2 hours  | <b>Practice / building on the model</b><br>Participants continue practicing. When participants feel confident, they can start working on the actual model of the project. | Laptops, mouse, screen, keyboard, projector              |
| 5 mins   | Closing of Day One  |  |
| <b>BBB   Workshop day 2:</b>   |   |  |
| 2 hours  | <b>Minecraft building - construction on the project model</b><br>Participants continue to co-design their ideas using Minecraft   | Laptops, mouse, screen, keyboard, projector              |
| 15 mins  | Break   |  |
| 1.5 hours or 2 hours   | <b>Finalizing the model</b> and preparing key elements to address in the presentation   | Laptops, mouse, screen, keyboard, pen, notebook          |
| 1 hour   | Lunch   |  |
| 1 hour   | <b>Group presentation</b><br>Groups will present their work (This can be recorded).<br>** Architects must be present * decision makers (desirable)                        | Laptops, projector, list of interventions, pen, notebook |
| 1 hour   | <b>Prioritisation of ideas</b><br>The ideas of each group will be prioritised to come up with a final list of interventions   | Prioritisation sheet                                     |
| 10 mins  | Closing remarks, and evaluation   |  |

# TOOL

## Site base map template

The walking routes map are used during the “exploratory visit and walks” activity, to assess the quality of the selected site and the surrounding area. It is important to select ahead the routes of the exercise, following some basic guidelines.

01. Analyse the neighbourhood and identify specific elements, functions and landmarks, which strongly represent the area.
02. Draw five possible walking routes, ensuring that they cover a radius of five-minutes-walking as well as a variety of elements, specifically the most iconic of the area.
03. Define 3-5 stops for each route, to facilitate participants observation and the questionnaire compilation (see following site visit questionnaire). Possibly, the stops should be located in a shaded area and safe from vehicular flow and traffic.
04. As the overall activity lasts 2 hours, note that the walk should take no more than 45 minutes, including the stops.



Example of walking routes map for the ‘exploratory visit and walks’ activity

# TOOL

## Site visit questionnaire

Use this list of questions or upload this **XLS file** ([online survey questionnaire](#)) into Kobo Toolbox to assess the quality of the site and the neighbourhood during the “exploratory visit and walks” activity.

### EXPLORATORY WALK

What day of the week are you conducting the assessment?

What time of the day are you conducting the assessment?

### About the participant

Specify which group you are in

What is your gender?

What is your age?

Do you live in this neighbourhood?

What is your level of education?

What is your current occupation?

### About the stop (answer to this section for each stop)

Please record the GPS location of the first stop

What is the name of this place?

Take a picture of the stop using your phone

How does this place make you feel?

What do you like the most about this place?

What is your opinion about this place?

Do you feel safe in this place?

Do you see any security guards around?

Can you see clearly what is up ahead?

Are there dark corners that you cannot see?

Are there places someone could hide without being seen?

Are there activities happening in this area?

What kind of activities do you like/would you like doing here?

Are there many people using this place?

Are there people of different ages and gender using this place?

Is this area busy?

Do you like the smell of this place?

Are the street dirty?

Are there things that are broken around you?

Are there places in the area where girls cannot go?

Do you feel like you are welcomed in the area?

Do you see people with special needs (parents with young children, people in wheelchairs or using sticks, people visually or hearing impaired)?

What would you change about this space?

What would you like to see in this place?

### About the walk

Do you like doing the walk?

Was the street you used good for biking?

Was the street you used good for walking?

Did you find the streets safe to walk?

Were there enough signs along the street to guide your walk?

If you were in this area by yourself, would you be able to find your way home easily?

Do you have friends and neighbours you can count on in the area if you need help?

Would you come back with your friends to this place?



# TOOL

## Certificates of completion

Create your own template and hand out the certificates of completion to the participants once the workshop has concluded.



## TOOL

## Pre-workshop survey template

Duplicate the [online pre-workshop survey](#) or use this sheet to understand who the participants are, how familiar they are with Minecraft and participatory processes, and whether there are any specific needs that should be considered during the workshop.

### About the participant

My gender is:

My age is:

My ethnic origin is:

My highest level of education is:

My current occupation is:

### About computer skills

How often do you use the computer?

Every day  Often  Sometimes  Rarely  Never used

For which purpose do you usually use the computer?

Working  Studying  Casual research  Videogaming  Connecting with friends and family

Do you feel confident using the computer?

Yes  Sometimes  No

Have you ever played with Minecraft before this workshop?

Yes  No  Not sure

If yes, for which purpose did you use Minecraft?

Entertainment  Education  Work

How would you score your capacities with Minecraft?

Almost zero  Low  Moderate  Good  Advanced

### About participatory processes

Have you ever engaged in participatory planning processes?

Yes  No  Not sure

If yes, could you specify what was the occasion and what was your role?

Do you have any suggestions on how to conduct the workshop or specific comments that we should take into consideration?

# TOOL

## Brainstorming session

The brainstorming session could be conducted in different ways: dividing participants in smaller groups, in a plenary and collaborative session, using cards or whiteboards, etc.

01. Print or draw on a board the brainstorming scheme here proposed
02. Explain clearly the definitions of Challenges, Vision, Goals and Solutions
03. Encourage individuals, groups and collective thinking and discussion, asking inspiration questions such as:
  - What have you perceived as a problem or a challenge while walking around the site and the neighbourhood?
  - Which are the elements that you don't like, and you want to change?
  - How would you imagine your ideal city and public space?
  - What are the most important values that a public space should consider?
  - How is the community you would like to live in?
  - Which are the objectives you would like to achieve with this project?
  - What can you do for your city and your neighbourhood?
  - Which solutions could be easily implemented to improve the neighbourhood and the public space?
  - How would you solve the challenges identified?
04. Walk around the groups and make sure everyone is participating to the exercise
05. Write down on the board the final outcomes and validate them with the participants



### Challenges

The difficulties and the barriers, obstructing the success of a project or reducing the quality of the public space.



### Goals

The objectives that the project should achieve to reach the ideal scenario of the city.



### Vision

The ideal scenario that the community imagines for their city and that the project should focus on.



### Solutions

The interventions that should be implemented to solve a challenge, achieve a goal and reach the ideal vision.

# TOOL

## Brainstorming session

**CHALLENGES**

|                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|
| 1.<br>_____<br>_____ | 1.<br>_____<br>_____ | 1.<br>_____<br>_____ | 1.<br>_____<br>_____ |
| 2.<br>_____<br>_____ | 2.<br>_____<br>_____ | 2.<br>_____<br>_____ | 2.<br>_____<br>_____ |
| 3.<br>_____<br>_____ | 3.<br>_____<br>_____ | 3.<br>_____<br>_____ | 3.<br>_____<br>_____ |
| 4.<br>_____<br>_____ | 4.<br>_____<br>_____ | 4.<br>_____<br>_____ | 4.<br>_____<br>_____ |
| 5.<br>_____<br>_____ | 5.<br>_____<br>_____ | 5.<br>_____<br>_____ | 5.<br>_____<br>_____ |
| 6.<br>_____<br>_____ | 6.<br>_____<br>_____ | 6.<br>_____<br>_____ | 6.<br>_____<br>_____ |
| 7.<br>_____<br>_____ | 7.<br>_____<br>_____ | 7.<br>_____<br>_____ | 7.<br>_____<br>_____ |

**VISION**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GOAL**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GOAL**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GOAL**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**GOAL**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1.  
\_\_\_\_\_  
\_\_\_\_\_

2.  
\_\_\_\_\_  
\_\_\_\_\_

3.  
\_\_\_\_\_  
\_\_\_\_\_

4.  
\_\_\_\_\_  
\_\_\_\_\_

5.  
\_\_\_\_\_  
\_\_\_\_\_

6.  
\_\_\_\_\_  
\_\_\_\_\_

7.  
\_\_\_\_\_  
\_\_\_\_\_

1.  
\_\_\_\_\_  
\_\_\_\_\_

2.  
\_\_\_\_\_  
\_\_\_\_\_

3.  
\_\_\_\_\_  
\_\_\_\_\_

4.  
\_\_\_\_\_  
\_\_\_\_\_

5.  
\_\_\_\_\_  
\_\_\_\_\_

6.  
\_\_\_\_\_  
\_\_\_\_\_

7.  
\_\_\_\_\_  
\_\_\_\_\_

1.  
\_\_\_\_\_  
\_\_\_\_\_

2.  
\_\_\_\_\_  
\_\_\_\_\_

3.  
\_\_\_\_\_  
\_\_\_\_\_

4.  
\_\_\_\_\_  
\_\_\_\_\_

5.  
\_\_\_\_\_  
\_\_\_\_\_

6.  
\_\_\_\_\_  
\_\_\_\_\_

7.  
\_\_\_\_\_  
\_\_\_\_\_

1.  
\_\_\_\_\_  
\_\_\_\_\_

2.  
\_\_\_\_\_  
\_\_\_\_\_

3.  
\_\_\_\_\_  
\_\_\_\_\_

4.  
\_\_\_\_\_  
\_\_\_\_\_

5.  
\_\_\_\_\_  
\_\_\_\_\_

6.  
\_\_\_\_\_  
\_\_\_\_\_

7.  
\_\_\_\_\_  
\_\_\_\_\_

**SOLUTIONS**



# TOOL

## Minecraft Troubleshooting

### Launching Minecraft

If you are having problems launching Minecraft follow the next steps:

01. Read the system requirements.
02. Check if your computer can run Minecraft, online you can find tools that will check all the components of your computer and tell you if it meets the requirements. One of those useful tools is **Can You Run It (CYRI)**.
  - Open the website
  - Select **Can You Run It** button
  - Download the **Detector**
  - Launch the **Detector**
  - Follow the instructions of the Detector and at the end it will give you a report that says if your computer can run the game, barely run it or if it can't run in your computer.
03. If the problem continues, try updating Java from java.com
04. If the problem continues, try updating your video driver, refer to the website of the manufacturer for instructions.

### Minecraft running slow

If your game is running slow you can optimize the video settings to increase its performance.



01. Go to **Options** and select **Video Settings**
02. Set **Graphics: Fast**
03. Select a lower setting for **Render Distance**, each chunk is 16 blocks, so 4 chunks are 64 blocks away you will be able to see. For slower computers a setting of 4 to 8 chunks is optimal. For faster computers you can go up to 32 chunks.
04. Set the **Particles: Minimal**
05. Turn the **Clouds OFF** as each cloud needs to be rendered as a 3D object it might take a considerable amount of resources in a slow computer.

# TOOL

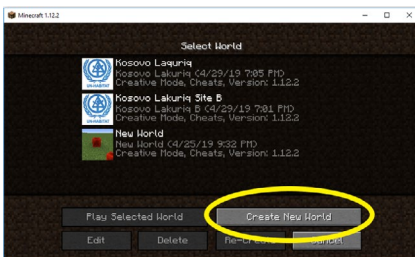
## Create an empty Minecraft world

To learn how to play with Minecraft, it is recommended to work on a new empty Minecraft world with simple setting, to help you exploring the different commands useful for the workshop. In this empty model, the participants may express their ideas painting in a blank canvas.



01. Open Minecraft in the version you want to run

02. Select **"Single player"**



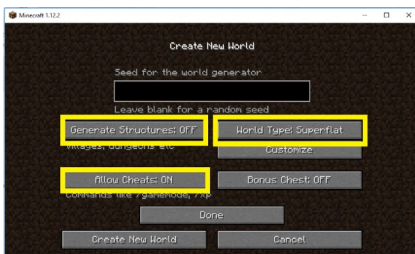
03. Click on **"Create New World"**



04. Add a name to the world

05. Make sure that the **Game Mode** is set to **"Creative"**, you can change the option by clicking that button.

06. Click on **"More World Options..."**



07. Set **Generate Structures: OFF**

08. Select the **World Type: Super flat**

09. Set allow **Cheats: ON** (this allows commands)

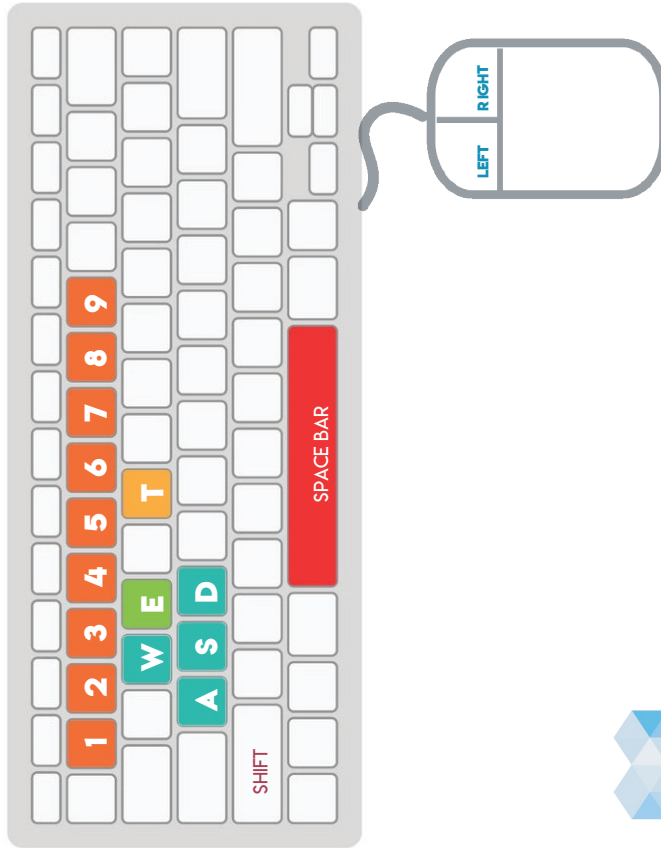
10. Click Done and start playing

# TOOL

## Minecraft commands and controls

Hand out the Minecraft's list of commands to help the participants learning about the videogame.

### HOW TO PLAY?



#### LIST OF COMMANDS

**LEFT CLICK:** DESTROY

**RIGHT CLICK:** BUILD

**W:** GO FORWARD

**S:** GO BACKWARDS

**D:** TO THE RIGHT

**A:** TO THE LEFT

**SPACE BAR:**

**ONE CLICK:** JUMP

**TWO TIMES (HOLD):** FLY

**SHIFT:** GO TO GROUND SLOWLY

**E:** OPEN INVENTORY

**1,2,3,4,5,6,7,8,9 Or Scroll:** CHOOSE BLOCKS

**T:** OPEN CHAT / CONVERSATION

**/time set day:** SET THE HOUR TO DAYLIGHT

**/weather clear:** STOP RAIN



**BLOCK BY BLOCK**

**UN HABITAT**  
 FOR A BETTER URBAN FUTURE

# TOOL

## Minecraft commands and controls

Here below you can learn about other useful commands in Minecraft. Generally, you can change the controls setting can be reconfigured in Options, selecting the Controls menu.

| Keyboards controls              |  |
|---------------------------------|--|
| Q                               | Drop the item in your hand on the floor  |
| Ctrl Q                          | Drop a whole stack of items on the floor   |
| F                               | Swap the items in your Main Hand and Off Hand  |
| Esc                             | Show the menu (this pauses a single-player game)   |
| F1                              | Hide the interface (useful to take cleaner screen shots)   |
| F2                              | Take a screenshot  |
| F3                              | Open the debug screen  |
| F4                              | Change the view to one from behind or in front of you  |
| F5                              | Change the view to one from behind or in front of you  |
| F8                              | Toggle mouse smoothing   |
| F11                             | Full screen mode   |
| T                               | Open the chat window   |
| /                               | Type / to begin all the commands in the chat window  |
| TAB                             | See list of players (Multiplayer only) or suggest commands in chat window  |
| /weather clear 999999           | No rain for 240 hours  |
| /time set day                   | Set daytime  |
| /time set night                 | Set nighttime  |
| /kill                           | Minecraft worlds are infinite in size,if you get lost and don't know how to go back to the beginning you can die and will respawn at the starting position             |
| /gamerule doDaylightCycle false | To stop the time so it is always day or night  |
| /gamerule doDaylightCycle true  | To start the time again  |
| Mouse controls                  |  |
| Left button                     | Destroy  |
| Right button                    | Build / locate<br>Switch / open (if the crosshair is pointing at doors, switch or levers)<br>Holding SHIFT, build a block against a container (otherwise it will open) |
| Middle button (if any)          | Pick a block dropped before (if you are pointing with the crosshair)   |
| Mouse wheel (if any)            | Select items in your Toolbar   |

### Tips:

- Open the inventory (E) if you want to click outside the Minecraft window without pausing the game (e.g. reading instructions, searching something in the Browser).
- **Main Hand and Off Hand:** Your Main Hand is the right hand, controlled by the Left Mouse Button. If you prefer to be left-handed you can change this in the Options screen. You can place an item in your Main Hand using keys 1–9 to select it from the toolbar. Your Off Hand is your other hand.
- On some laptops, the F-keys are set up to do other things such as control volume and brightness. To turn off the Minecraft F-keys, click on **fn** or **function**



# TOOL

## Cards of values

The cards of values help to identify the Basic Human Needs that should be addressed while planning public spaces, and to focus on specific topics correlated to those needs.

Divide the participants into smaller groups and assign one Basic Human Need to each group, together with a deck of cards. The group will identify a vision, goals and solutions considering the assigned Basic Need. The outcomes of each group will then be presented and merged with the other groups, to define a shared plan for the public space.

### Handout of Basic Human Needs Corresponding to Planning and Design of Public Spaces



**Physical Needs:** What can be done at the site to help with the basic human physical needs of food, water, shelter, clothing, fuel/warmth, health, sanitation, equity and equality for all in provision of services, mobility, safety, etc.?



**Psychological Needs:** What can be done at the site to help with the psychological needs of the people, e.g. relaxation, leisure, aesthetics, dignity, learning/curiosity, exploration, joy, laughter, humour, creativity, privacy, ethical and moral standards, inclusiveness, diversity, equity, etc.?



**Ecological Needs:** What can be done at the site to help provide for the ecological needs, e.g. energy efficiency, sustainability, pollution control (pollution of air, water, noise, garbage, etc.), rainwater harvesting, mitigation for climate change, etc.?



**Economic Needs:** What can be done at the site to help fulfil some of the economic needs of the community and its members, e.g. income generation, availability of market, availability of skills and labour, economic development, skills training for employment, availability of clients for locally owned businesses, etc.?



**Social Needs:** What can be done at the site to help achieve some of the social needs, e.g. inclusiveness and equity (gender, handicapped, elderly, ethnic/racial/religious minorities, refugees, etc.), friendship, trust, sense of community, socialization, gathering place, community events, event planning, etc.?

# TOOL

## Cards of values

Shelter



PHYSICAL NEED

Health



PHYSICAL NEED

Safety



PHYSICAL NEED

Creativity



PSYCHOLOGICAL NEED

Diversity



PSYCHOLOGICAL NEED

Privacy



PSYCHOLOGICAL NEED

Mitigation to Climate Change



ECOLOGICAL NEED

Energy Efficiency



ECOLOGICAL NEED

Pollution



ECOLOGICAL NEED

Employment



ECONOMIC NEED

Career



ECONOMIC NEED

Market



ECONOMIC NEED

Sense of community



SOCIAL NEED

Equality



SOCIAL NEED

Trust



SOCIAL NEED

# TOOL

## Post-workshop survey sample

Duplicate the [online post-workshop survey](#) or use this sheet to monitor the results of the workshop and its impact on the participants. It also enables the workshop organiser to learn from this experience how to do it better and guide the next steps considering the feedback received.

### About the participant

My gender is:

My age is:

My ethnic origin is:

My highest level of education is:

My current occupation is:

### About the workshop and Minecraft

Overall, how do you rate this workshop? [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

The workshop was well-organised [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

The workshop was well-facilitated and clearly explained [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

The length of the workshop was adequate [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

The location and the equipment provided were adequate [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

Minecraft is a user-friendly and easy-to-learn software [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

Minecraft is suitable for the purpose of the workshop [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

Did you ever played with Minecraft before this workshop? [ ] Yes [ ] No [ ] Not sure

How would you score your capacities with Minecraft after the workshop?

[ ] Almost zero [ ] Low [ ] Moderate [ ] Good [ ] Advanced

### About participatory processes

Do you think this workshop has increased the community participation in the planning process?

[ ] Yes [ ] Partially [ ] No [ ] Not sure

Do you think the participation of the community has increased the quality of the project?

[ ] Yes [ ] Partially [ ] No [ ] Not sure

Would you recommend to someone to join the workshop next time?

[ ] Yes [ ] Maybe [ ] No

What did you enjoyed the most?

What did you enjoyed the least?

Do you have any suggestion or recommendations on how to improve the workshop and the Block by Block methodology?





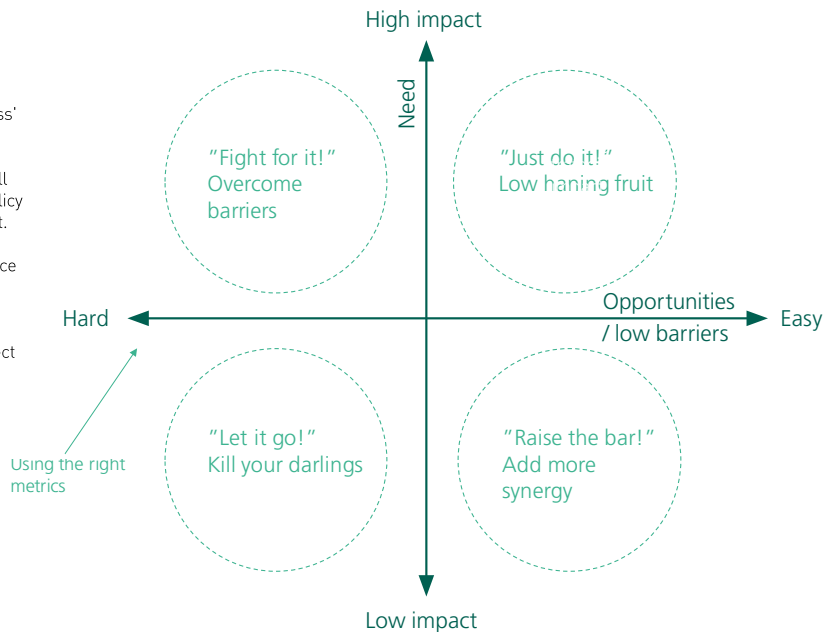
# TOOL

## Priority list sheet

This sheet enables to define priorities, considering the list of interventions proposed by the community during the Minecraft modelling and the brainstorming session. Follow the next steps or duplicate the online [Block by Block - list of priority \(sheet 2\)](#).

01. Use the following template and insert the 10 -15 most recurrent solution proposed in the Minecraft model, as identified in the intervention list.
02. Insert also any further relevant solutions from the brainstorming session that has not been included in the Minecraft model.
03. Consider the technical feasibility of the solution proposed and define whether it is feasible, not feasible or not recommended.
04. If the solution is feasible, then consider the budget and the maintenance required and define whether it is expensive, affordable requiring high maintenance or affordable.
05. If the solution is feasible and affordable, then this solution could be implemented: write it down in the priority list.
06. Make priorities in your work plan, defining whether a solution is a short-, medium- or long-term intervention.

To select the right type of pilot project is also a question of prioritization. This simple tool helps to prioritize based on 'feasibility & likelihood of success' and 'impact'. To determine the impact requires that a project is assessed in relation to an overall strategy for the city/city area/policy and how it can contribute to that. Possible barriers may include costs, time, complexity, resistance to the idea. For inspiration in assessing resources and the larger perspective and possible impact see below of how a project at Gehl is conceived.



*Example of a different prioritisation method, considering feasibility & likelihood of success and impact.*



# TOOL

## Expert design studio agenda

### Day 1

| Time    | Activity  | Description   | Material required  |
|---------|---|---|--|
| 30 mins | Welcome and open remarks                              | The technical team welcome the expert consultants and brief them on the agenda and the objectives of the workshop           | Coffee and snacks, list of participants                          |
| 30 mins | Site visit  | All the participants visit the site   | Transport  |
| 1 hour  | Review of suitability map and list of recommendations | Review the outputs of the previous activities and add any relevant aspects emerged during the site visit.                   | Hard copy of outputs   |
| 30 mins | Presentation of case studies and good practices       | A focal point presents some national and international case studies and good practices that might inspire the design studio | Powerpoint presentation, computer, projector                     |
| 1 hour  | Design studio - defining solutions                    | Define a set of possible solutions and interventions that tackle the current challenges of the public space                 | Tacking paper, sketching paper, colour pens, computer, projector |
| 1 hour  | Lunch break   |   |  |
| 3 hours | Design studio - defining layout                       | Define the new public space layout, by accommodating the interventions and solution previously identified                   | Tacking paper, sketching paper, colour pens, computer, projector |

### Day 2

| Time    | Activity                                       | Description  | Material required  |
|---------|--|--|--|
| 1 hour  | Review and discussion about the layout         | Discuss and review the layout proposed during day 1.   | Computer, projector  |
| 3 hours | Design studio - defining materials and details | Focus on the details of the public space and define materials and constructive details to ensure a good quality public space | Tacking paper, sketching paper, colour pens, computer, projector |
| 1 hour  | Lunch break                                    |  |  |
| 2 hours | Design studio - defining timeline              | Develop a timeline to implement the project incrementally, prioritizing the most urgent actions and assign tasks to the team | Tacking paper, sketching paper, colour pens, computer, projector |
| 1 hour  | Discussion on next steps and roles             | Identify the output of the design studio, elaborating a comprehensive map and, possibly, some 3D visualisations              | Computer, projector  |









The aim of this playbook is to support any urban actor that wishes to plan, design and implement more sustainable and inclusive cities through the active participation of community members. The playbook is providing an overview of the entire process that can be followed to use Minecraft as an engagement tool.

UN-Habitat has integrated the Block by Block methodology in its Global Public Space Programme, a programme launched in 2012 to develop local policies, plans and designs for safe, inclusive, and accessible public spaces for all to support cities to become more compact, integrated, connected, socially inclusive, and resilient to climate change.

Through participatory workshops, the methodology brings people together to shape their urban design ideas in Minecraft and present them to decision-makers. The proposed urban solutions are then integrated in the final technical proposal and later implemented.

The Block by Block process can be used for public participation in a wide variety of urban design, regeneration and improvement projects. Over the years, UN-Habitat has focused on public spaces, including playgrounds, streets, waterfronts, public markets and many more, but the process could be useful for almost any kind of construction project that could benefit from improved participation.

The lessons and experiences from using Minecraft indicates clearly how this can also have a strong effect on communities' participation. The game has the potential to increase youth's interest and engagement in urban planning and design, promote creativity, innovation and visual learning, help encourage dialogue between different groups and opinions and contribute to the development of important skills such as collaboration, public speaking and negotiation as well as giving participants a more powerful voice.

**UN**  **HABITAT**

United Nations Human Settlements Programme  
P.O. Box 30030, Nairobi, 00100 KENYA



[www.unhabitat.org](http://www.unhabitat.org)