

URBAN GARDENING GUIDEBOOK

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Commissioned by



URBAN GARDENING GUIDEBOOK

2022



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FOREWORD

Two years into the pandemic, questions about recovery from the multiple intertwined crises that cities are facing remain unanswered. Climate change, unprecedented biodiversity loss and rising inequalities have been further exposed. The pandemic has deepened the entrenched inequalities thus threatening to undermine progress towards climate adaptation and sustainable development goals. Poor and vulnerable communities are disproportionately affected and will require concentrated efforts to recover and build resilience. Unless recovery measures are well-deliberated in terms of their inclusiveness, decades of development gains could be undermined.

It is necessary to pause and ask how an ideal recovery process would look like. The recovery process presents a genuine opportunity to concentrate global, national and local efforts to strive for fair and sustainable development. Rescue packages and international green and climate funding programs are designed to stimulate equitable recovery. Using debt swaps to address debt in parallel to climate and nature loss, for example, presents an opportunity to address these crises simultaneously through a new use of the system of debt for climate and nature programme swaps. Operationalising strategies for achieving cleaner air and water as well as biodiversity conservation in cities calls for breaking the silos, implementing pledges for nature and climate, and innovating for resilience building. Food resilience in cities has been also brought to the fore during the pandemic, which has uncovered blind spots in city planning. The disregard of the multi-functionality of urban agriculture, including its multiple benefits of food provision, biodiversity preservation and social benefits have contributed to the lack of gardening practices in cities. To this end, reviving the culture of community gardens presents one of the basic building blocks in an ideal recovery process.

In an effort to support municipalities that are members of the Connective Cities network in the MENA region, a thematic working group focusing on urban gardening was established as part of Connective Cities programme 'Municipal response and recovery from the pandemic.' Objectives of this working group include promoting practice-oriented knowledge exchange between municipal and urban practitioners, facilitating peer learning on sustainable and innovative approaches of urban gardening to increase resilience in cities, fostering the development of concrete municipal projects ideas, and raising awareness of the importance of biodiversity and the value of ecosystem protection as well as risk factors. Having successfully fulfilled these objectives, this working group has marked a great added value to Connective Cities International Community of Practice by promoting local solutions that are globally relevant to reducing emissions and protecting the environment. This guide provides an overview of the activities conducted and disseminates technical know-how targetting municipal and urban practitioners engaged in urban gardening projects. We hope it provides you with valuable insights- happy reading!

Dr. Ing. Muna Shalan

Coordinator of Connective Cities network in the MENA region

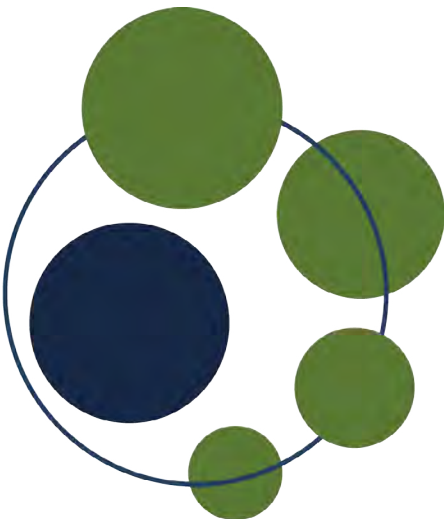




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C **ONNECTIVE**
IT I E S



About Connective Cities Project

Connective Cities is the international city platform with the key objective of promoting practice-oriented knowledge exchange between municipal and urban practitioners to develop and disseminate locally adapted solutions for sustainable urban development. With its Community-of-Practice approach, Connective Cities supports a systematic exchange of information and experience on urban solutions between urban practitioners from politics, administration, business, science and civil society in all regions of the world.

Connective Cities is a cooperation project implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in partnership with Engagement Global-Service Agency Communities in One World and the German Association of Cities. The project is financed by the Federal Ministry for Economic Cooperation and Development (BMZ).

From July to December 2020, an initial intensive global programme on 'municipal response to the pandemic' was conducted by Connective Cities that has been augmented with the programme 'municipal recovery from the pandemic' starting August 2021. The working group "Biodiversity and Environmental Protection" was the first group to be established as part of this programme.

Various activities were held under this component, including practice-oriented knowledge exchange on urban gardening. This incorporated activities focusing on the initial organization, selection of an appropriate site, management and maintenance, and development of ongoing partnerships and programs to support community gardening. Adaptable tools and strategies were developed by the working group members to promote urban green spaces according to the community's needs and contexts, that will in return positively impact the health and well-being of the local community in the participating municipalities. This urban gardening guide thus intends to support municipal and urban practitioners in applying urban gardening activities within their municipalities.





01

INTRODUCTION

What is Urban Gardening?

Urban vegetable gardens provide food and strengthen local community's commitment to the environment.

Urban gardening, also known as urban farming or urban agriculture, is the process of growing plants of all types and varieties in urban and peri-urban areas. It is also the term used for animal husbandry, urban bee-keeping, horticulture, and aquaculture. In other words, urban gardening is the traditional cultivation of crops, but in urban areas.

Growing plants in urban areas may be in several forms. It can be implemented in front and backyards, balconies, leftover lands, land set-back, indoor greenhouses, or rooftops. It is also influenced by various factors including topography, soil type, type of plants, and available budget. Accordingly, urban gardening can be implemented differently and include different aspects such as community gardens, urban farms, and aquaponics or hydroponics programs.

Urban gardening encompasses several concepts, including:

- **Container gardening:** Utilized in small areas such as small patios, yards, or balconies. Materials such as containers, old tires, barrels, unused buckets, or boxes can be utilized to grow food crops, fruits plants, or flowers.
- **Indoor gardening:** When no outdoor area is available, indoor gardening can also be an effective urban gardening method. Plants can be grown in containers similar to the aforementioned ones.
- **Community gardening:** This is the typology where outdoor public or private spaces are used to cultivate gardens for food or beautification of area.
- **Guerilla gardening:** is the practice of gardening and adding plants to public spaces that don't technically belong to the gardener such as a vacant land, median, or beside a highway.
- **Green roofs:** Rooftops used to grow plants food, and trees.

Why Urban Gardening Matters?

With the ascending rate of urbanization, the need for urban gardening and agriculture activities increased tremendously, leading to a shift from the traditional perception that cultivation of crops is limited to rural areas.

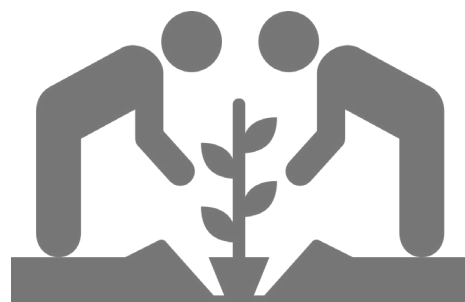
According to the Food and Agriculture Organization of the United Nations (FAO), urban vegetable gardens can be much more efficient and ecological than the traditional gardens. This is because it can produce as much as 20 kg of food per year per square metre. Urban gardening can change the city's landscape. This practice is considered a sustainable movement that many countries still do not recognise. It helps low-income people save money on food purchases, therefore it serves as an effective means of securing a family's food security, and eventually enhances the food security in the area and decreases the rely on imports.

Urban gardening has a positive impact on the economy, the environment, and food security.

Benefits of Urban Gardening

Urban gardening provides many environmental, social, and health benefits as follows:

- Provides a local food source
- Increases access to affordable & healthy food
- Enhances social cohesion
- Educates children about the origins of food
- Increases green spaces at cities
- Helps prevent soil erosion
- Mitigates storm water runoff
- Helps filter air and rain water
- Mitigates the urban heat island effect
- Creates leisure and recreational spaces







02

GUIDING STEPS

How to do Urban Gardening?

This section highlights the guiding steps needed to implement urban gardening activities. It provides the needed guidance for any local municipality that intends to apply the urban gardening concept at vacant lands within their municipal administrative boundaries.

To ease the implementation process, the guiding steps are divided into four main phases as follows:

- **Situational Analysis:** This phase mainly intends to study and analyse the current situation in the study area including reviewing supportive and relevant policies and/or regulations that promote urban agriculture production and processing, in addition to identifying the current challenges that hinder the implementation of urban gardening activities at the municipal area, documenting available opportunities, mapping available municipal lands, and selecting the most suitable site for implementation.
- **Preparatory Phase:** During this phase field visits should be conducted, identify on ground challenges specific to

the selected site, develop the needed solutions, prepare the tool list needed for implementation, develop an action plan and time frame for implementation, and finally create a local committee that consists of local community representatives and neighbourhood residents to administer the urban gardening project from the launch of the project.

- **Implementation Phase:** Throughout this phase, the designed site plan and the budget plan should be prepared, develop a team organogram explaining the rules of every team member, writing a successful funding proposal (in the case, funding is not available), and finally starting with the mobilization of the site and the implementation of planting.
- **Monitoring and Evaluation Phase:** During this phase, a monitoring and evaluation plan should be developed, identify team responsibilities in monitoring and evaluating the situation, document any project bottlenecks, and prepare a biannual report for the project.

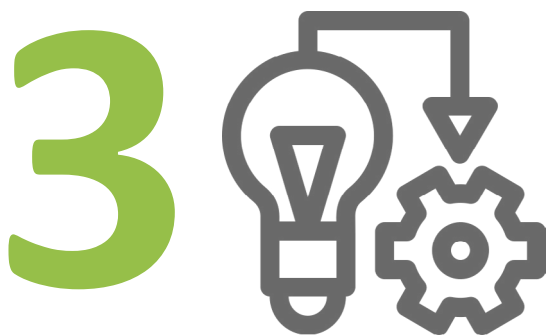
Urban Gardening Phases



Situational Analysis
Phase



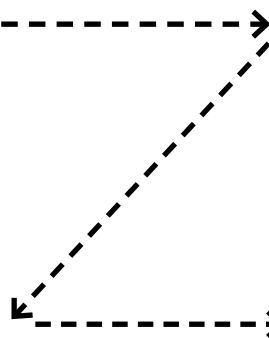
Preparatory
Phase



Implementation
Phase



Monitoring & Evaluation
Phase







SITUATIONAL ANALYSIS PHASE

Situational Phase: Understanding the Context

During this phase, the involved municipal team must develop a deep understanding on the current situation of the municipal area in regard to urban gardening. The following tasks should be fulfilled before moving to the next phase.

- **Reviewing existing urban gardening supportive policies/regulations:** through this step, a deep understanding of the legal background of implementing urban gardening will be formulated.
- **Identification of Challenges and Opportunities:** throughout this step, the current challenges that obstruct the implementation of urban gardening activities in the area should be identified. Additionally, study the potential of transforming these challenges into opportunities and document the opportunities.
- **Mapping of vacant lands:** all vacant lands within the municipal area should be mapped, highlighting the area, main characteristics of the vacant land, and ownership.
- **Selecting the most suitable land for implementation:** to select the most suitable vacant land, a selection criteria must be developed to score and evaluate potential vacant lands.

The vacant land with the highest score should be selected.

As an example, and through the Connective Cities project; specifically, the urban gardening subgroup which is part of the main thematic cluster titled “Green Urban Recovery in Municipalities”; that intends to bring agriculture into urban areas, a virtual workshop was conducted involving ten Jordan municipalities and two Palestine municipalities. Whereby the situational analysis phase was explained, the methodology to identify challenges and opportunities was presented, and the identification of challenges and opportunities was held in a participatory manner. Furthermore, the participating municipalities showed a map indicating the available vacant lands within their municipalities that could be a potential site to implement on the pilot urban gardening activity.

The images on the right show the situational analysis tasks held.



Agenda of the Situational Analysis Phase Workshop (Appendix 1)



Example of a Challenges and Opportunities Presentation (Appendix 2)

Connective Cities Project Example



Image of the situational analysis virtual workshop conducted as part of the connective cities project on the 11th of October, 2021.

Situational Phase: How to Select the Plants?

This section provides a general overview on how to select the plants for the urban gardening activity. However, it is always important to seek help and support from specialized professionals and experts in the fields of landscape architecture, horticulture, irrigation, and agriculture before selecting the plants especially, that are edible or medicinal. Appropriate selection of vegetation in urban planning is an inexpensive, simple, yet an effective measure to transform the way we design green spaces. This is essential for the sustainability and resilience of cities as it helps combat environmental degradation, such as the increase in the Urban Heat Island (UHI) effect, pollution, and soil erosion. Accordingly, we have to be strategic when selecting the certain species to be planted at the selected site. There are four general selection criteria that are recommended when choosing plants for urban open space:

- Climate and Micro-climate
- Public Open Space Type
- Environmental Benefits
- Aesthetics

Climate and Micro Climate: are major factors affecting the survival of the selected plant. Both are characterised by various sets of atmospheric characteristics such as temperature, humidity, sunshine, winds, etc. The term micro climate is related to comfort. Experts aim to create comfortable micro climates when designing urban public open spaces and selecting their plants.

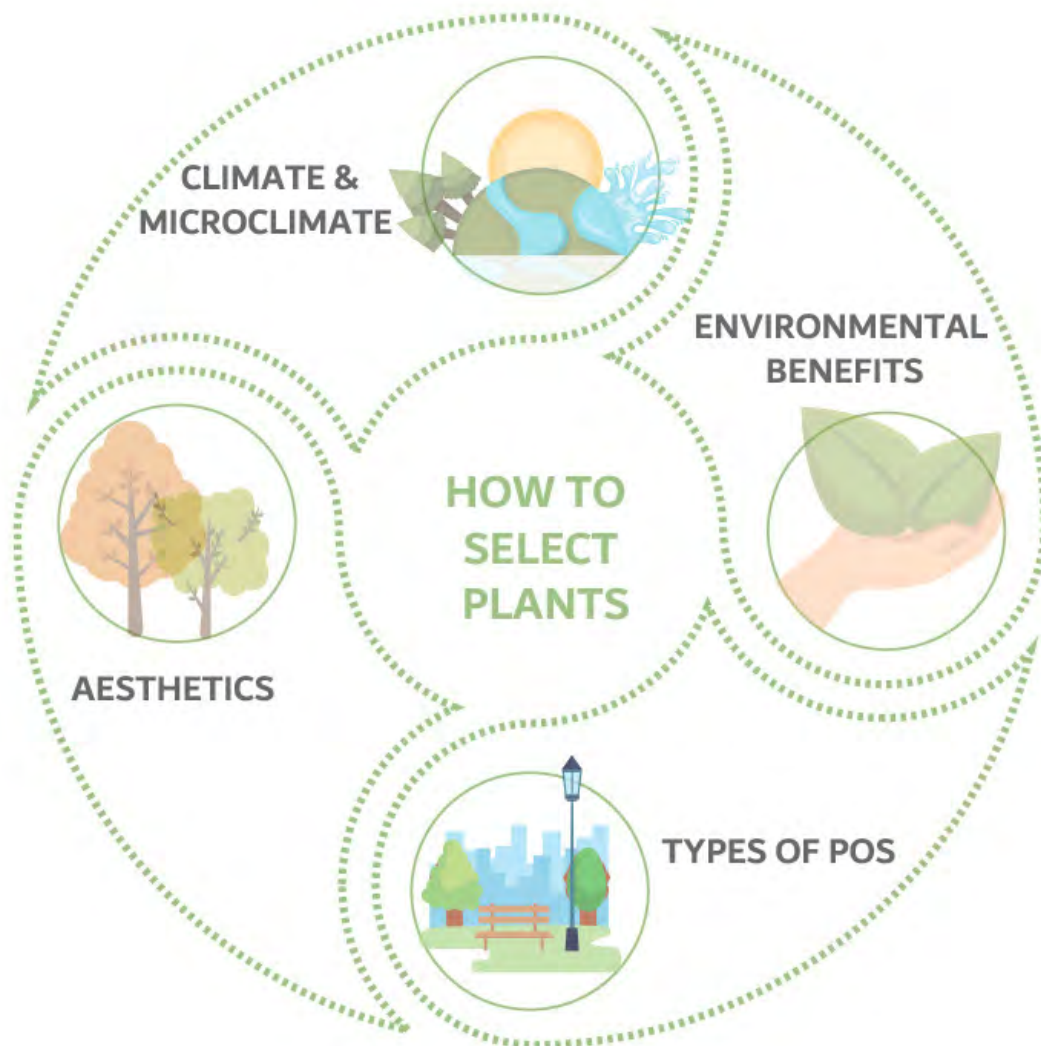
An important factor that affects climate, micro climate, and ecology, including vegetation, is altitude (height above sea level), as it has an impact on temperature, humidity, rainfall, winds, etc.

Public Open Space Type: Understanding the type of open space and intent behind it is essential to select the appropriate plant species and reduce the maintenance cost. Plants can screen harsh winds, direct friendly breeze, add a visual separation, block intense sun rays, direct pedestrian movement, define spaces, etc.

Environmental Benefits: It is vital to understand the context of the space before selecting the plants. Plants can combat and alleviate the negative impacts of climate change and urban sprawl through their many environmental benefits, such as filtering pollutants, holding soil, reducing UHI effect, and introducing shelter for wildlife.

Aesthetic: Plants have physical features, such as colour, texture, size, form, leaf shape, etc. Paying attention to these features helps us set the atmosphere that we want.

Another important factor that should be taken into consideration when selecting the plant species for the urban gardening activity, is the region. For example, in Jordan context, the third most water-scarce country in the world which is characterised by low precipitation, the plants you select must be able to withstand drought.



Plant selection Criteria (GIZ,2020).

A pair of black-rimmed glasses with thin temples is placed diagonally across the left page of an open book. The book has a light-colored, textured cover. To the right of the glasses, on the right page, lies a small, ornate metal key. The background is a light-colored, textured surface, possibly a wooden table. A piece of grey fabric is visible in the top right corner.

Preparation is
Key



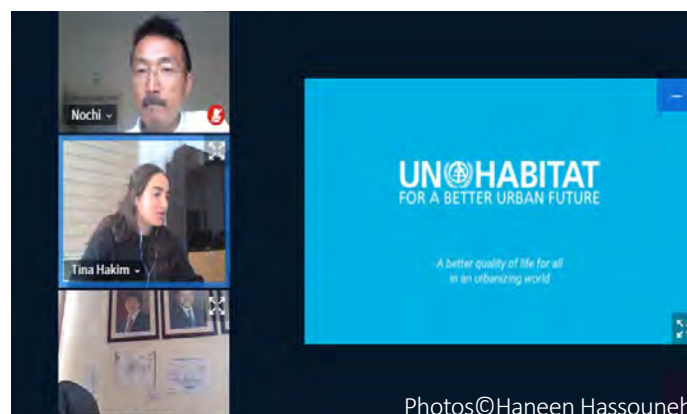
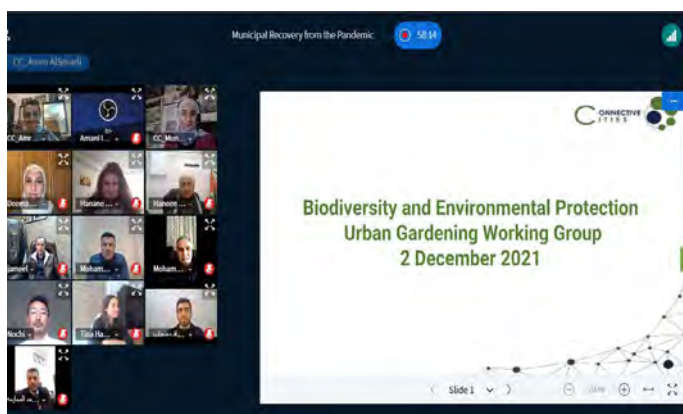
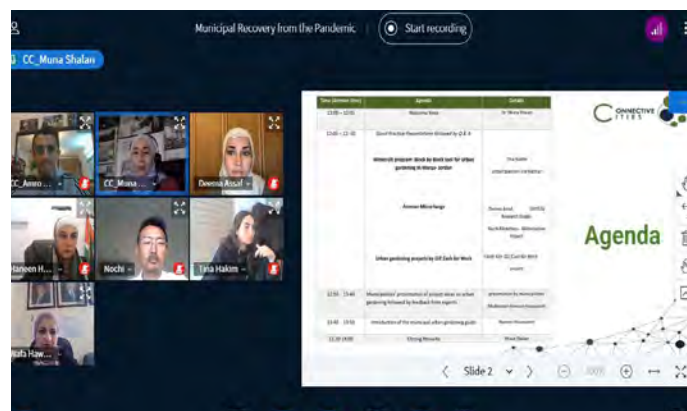
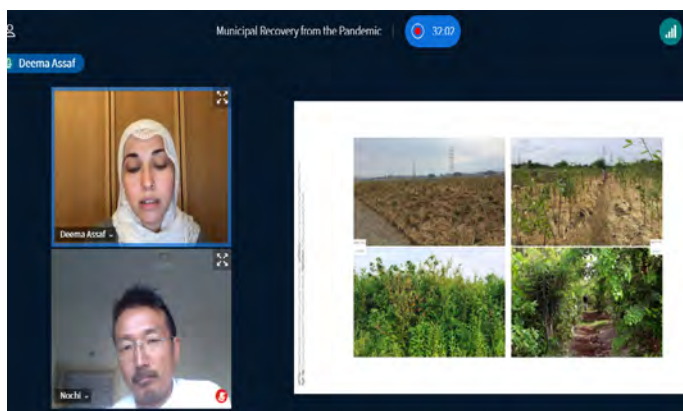
PREPARATORY PHASE

Preparatory Phase: Chart the Path




The main objective behind this phase, is to prepare for the implementation of the urban gardening activity. Accordingly, the following tasks should be undertaken before moving to the next phase.

- **Site Visit:** a site visit should be conducted to identify on ground challenges specific to the selected site.
- **Document current status of the site:** the existing status of the site should be filled out in the first column of the monitoring and evaluation table (see page 36) to set out the project baseline.
- **Document Challenges and Needed Solutions:** develop a report that documents the challenges and highlights the needed solutions. To suggest appropriate solutions, the team should hold a research on best practices in implementing urban gardening activities. For example, as part of the connective cities project, a workshop was held to showcase good practices in implementing urban gardening activities.
- **Identify Innovative Methods:** list the innovative methods that will be utilized throughout the project such as grey water usage, adding sort out waste bins for recycling purposes, creating local job opportunities, using old tires as furniture, etc..
- **Identify Stakeholders:** prepare a list of names of the key stakeholders that should be involved in the implementation and monitoring phases, including municipality representative and local community representatives from the selected neighbourhood.
- **Contact Stakeholders:** contact the identified stakeholders and gain the necessary affirmation on their interest in being part of the project.
- **Create Local Committee:** after gaining a written approval from the identified stakeholder, establish a local committee .
- **Hold an Introductory meeting:** Present throughout this task the project to the committee and explain the required tasks from the committee. Additionally, and in a participatory manner, assign the responsibilities to the stakeholder members.
- **Hold a Preparatory Meeting:** Present the identified site challenges and proposed solutions and innovative methods to the local committee and gather their feedback. This will assist in enhancing the members' sense of belonging and ownership.
- **Update the Solutions and Innovative methods proposed:** based on the findings of the previous meeting, update the proposed solutions and innovative methods.
- **Prepare Tool List:** Based on the proposed solutions, a list of tools needed for implementation should be prepared.
- **Prepare an Action plan:** the action plan should include the steps to be undertaken, the tools needed for every step, and the time frame of each step.

Connective Cities Project Example



Images of the best practices virtual workshop conducted as part of the connective cities project on the 2nd of December, 2021.

-  Agenda of the Best Practices Workshop (Appendix 3)
-  Example of a Good Practices Presentation (Appendix 4)
-  Example of Local Committee Official Letters (Appendix 5)





IMPLEMENTATION PHASE

Implementation Phase: Time to Plant

During this phase, the involved municipal team must do the following:

- **Site plan:** Develop a designed site plan to be implemented. Indicating the exact location of every item in the urban gardening project within the site.
- **Budget Plan:** Prepare a budget plan to identify every step's needed budget.
- **Team Organogram:** Develop a team organogram to explain the role of every team member involved in the project during the implementation phase.
- **Fund:** In case there is no available fund, the municipal team must develop a proposal for a funding entity based on their available fund request form. For example, as part of the connective cities project, a capacity building workshop was held to explain the methodology of developing a proposal for funding agencies, where involved municipalities were requested to fill a fund request form. At-

tached is an example of a fund request proposal developed as part of the connective cities project (Appendix 6).

- **Mobilization:** Start mobilizing the site and planting.



Agenda of the Capacity Building Workshop (Appendix 6)



Example of a developed fund request form (Appendix 7)



Photos©Haneen Hassouneh

Images of the Capacity Building Workshop conducted as part of the connective cities project on the 21th of November, 2021.





MONITORING AND EVALUATION PHASE

Monitoring and Evaluation Phase: How is it Going?

This phase's main objective is to monitor and evaluate the project's progress. The optimal methodology to ensure accurate results is to adopt the participatory approach and include local community members at this phase to meet the needs of all participants and their communities. This is known as participatory monitoring and evaluation (PM&E).

To do so the following steps should be undertaken:

- **Assign team members:** assign members from the technical team in addition to members from the local community, specifically from the residents of the neighbourhood where the project is implemented.
- **Assign Team Responsibilities:** Identify team responsibilities in monitoring and evaluating the situation.
- **A monitoring and evaluation plan:** a monitoring and evaluation plan should be developed, where period assessments should be identified.
- **Develop a data collection work plan and methodology:** to ensure efficient monitoring and evaluation results, it is best to have a work plan that shows the needed data to collect, how to collect the needed data, and the team members assigned to collect and record each item. The data collected should be filled out into the table on page 36.
- **Train team members on data collection:** explain to the team members how to collect data in referral to the **"core outcome indicators"** including quantity of production disaggregated by crops, quality of dietary intake (food consumption score), number of production months per year, number of households who supported and/or benefited from the urban gardening project, income generated from garden sales, and percentage of beneficiary households who practice garden skills for a second year with little or no direct support; in addition to the **"core output indicators"** such as number and type of beneficiaries including trained beneficiaries, number and type of crops, and innovative technology utilized.
- **Record Project Bottlenecks:** Document any project bottlenecks.
- **Assess existing relevant regulations:** assess based on on-ground application and experience the applicability of existing relevant policies/regulations and identify gaps (if any).
- **Identify the synergies and conflicts:** document the synergies and conflicts ; in relation to the dimensions of urban agriculture sustainability that include social, environment, and economic aspects; which may affect the sustainability of the urban gardening projects.
- **Report:** prepare a biannual report for the project.



Photo©unsplash.com

Monitoring and Evaluation Table

- Location Coordinates:
- Block number:
- Area:
- Project Launch Date:
- Planting Activity Start Date:

Date of Evaluation:					
Number of beneficiaries		Plant Uses			Production (Amount)
Local community	Refugees	Beautification such as Greening plants (Ornamental trees)	Food	Others, specify	
Women: Men: Special Needs: Total:	Women: Men: Special Needs: Total:				

Date of Evaluation:					
Number of beneficiaries		Plant Uses			Production (Amount)
Local community	Refugees	Beautification such as Greening plants (Ornamental trees)	Food	Others, specify	
Women: Men: Special Needs: Total:	Women: Men: Special Needs: Total:				

Insert Picture

Insert Picture

Pictures for Site on the Project Launch Date

	Description of current status of plants and corps (Poor, Good, Very good)	Action to be taken	Sustainability	Pictures	Overall Score
			Conflicts: Synergies		
	Description of current status of plants and corps (Poor, Good, Very good)	Action to be taken	Sustainability	Pictures	Overall Score



— Ah, ah...
— Ma non ti...
— No, no, ti prego.
Paul sentì la paura e
venne il momento della sp
angoscioso; ma Paul non la t
— Non vuoi proprio andare p
punto?



03

REFERENCES

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- 2 <https://www.conserve-energy-future.com/urban-gardening-importance-ideas.php>
- 3 <https://www.conserve-energy-future.com/urban-gardening-importance-ideas.php>
- 4 <http://www.ecolife.com/define/urban-gardening.html>
- 5 <https://www.conserve-energy-future.com/urban-gardening-importance-ideas.php>
- 6 <https://www.conserve-energy-future.com/urban-gardening-importance-ideas.php>
- 7 <https://www.conserve-energy-future.com/urban-gardening-importance-ideas.php>
- 8 <https://www.iberdrola.com/social-commitment/what-is-urban-gardening>
- 9 <https://www.ambius.com/blog/urban-gardening-tips/>
- 10 <http://www.ecolife.com/define/urban-gardening.html>
- 11 https://www.giz.de/en/downloads/Guide%20to%20Species%20Selection_EN_2021.pdf
- 12 Ibid
- 13 <https://ruaf.org/assets/2019/11/Profitability-and-Sustainability.pdf>





04

ANNEXES

Appendix 1: Situational Analysis Phase Workshop



CONNECTIVE
CITIES



Connective Cities program on municipal recovery from Covid-19 pandemic
GREEN URBAN RECOVERY "Urban Gardening working group"

Date: 11th October 2021

Time: 11:00 -13:00

Language: Arabic

Platform: https://giz.meet-modular.com/b/cc_-npk-46v

Thematic focus of the event

Connective Cities project aims of promoting environmentally conscious project and creating options for healthy lifestyles for its municipality Network. Recently, MENA Municipalities have shown an interest in developing Urban gardens that can provide citizens with several benefits, such as building a sense of community, increasing food security, and improved health and wellness of residents. Urban gardening, also named urban agriculture, is defined as the practice of growing plants, cultivating, processing, and distributing food in or around urban areas. Although there is not one constant definition of urban gardening, it usually covers gardening activities in small areas and/or rooftops.

Moreover, Local municipal staff in MENA's municipalities in general, have limited capacities on how to benefit from leftover lands within the municipal urban boundary through innovative urban agriculture and gardening activities. In other words, there are gaps in local knowledge on the optimal utilization of vacant lands and rooftops. A high percentage of vacant lands within MENA urban areas are idle for cultivation and remain underutilized.

Objectives of the event

This virtual event is held as part of the "Green Urban Recovery – Urban Gardening working group". Various events will be held, under this component, focusing on different aspects of developing an urban garden. These aspects include initial organization, selection of an appropriate site, management and maintenance, and development of ongoing partnerships and programs to support community gardening. Adaptable tools and strategies will be developed to increase urban green spaces according to the community's needs and contexts, that will in return positively impact the health and wellbeing of the local community in the area.

By participating in this event, municipal and urban practitioners, and community and civil society representatives will:

- Have an increased knowledge on the importance of urban gardening

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- Present and share the current challenges facing the involved municipalities and the available opportunities to utilize urban gardening activities in vacant lands within their administrative municipal boundaries
- Get to know the municipalities participating in the urban gardening working group

Furthermore, a main objective is to present and highlight the potential benefits behind utilizing urban gardening activities in vacant lands within municipalities.

The Agenda

Time (CEST)	Agenda	Details
11:00 – 11:05	Welcome Note	Hanane Haber Team Leader - LOGONET
11:05 – 11:15	CITY LAB overview	Mrs. Fatina Tukan
10:15 – 11:35	<ul style="list-style-type: none"> Municipalities' presentation on the current challenges faced and the opportunities available to implement urban gardening activities 	5mins presentation for each municipality Moderator: Arch. Haneen Hassouneh
10:15 – 11:20	Sahab Municipality presentation	
11:20 – 11:25	Madaba Municipality presentation	
11:25 – 11:30	Al Dhulail Municipality presentation	
11:30 – 11:35	Al Junaid Municipality presentation	
11:35 – 11:40	Jerash Municipality presentation	
11:40 – 11:45	Salt Municipality presentation	
11:45 – 11:50	Al Karak Municipality presentation	
11:50 – 11:55	Maan Municipality presentation	
11:55 – 12:00	Balaama Municipality presentation	
12:00 – 12:05	Zaatari Municipality presentation	
12:05 – 12:50	Open Discussions	
12:50 – 13:15	Utilizing urban gardening activities in vacant lands within municipalities presentation	Arch. Haneen Hassouneh
13:15-13:20	Closing Remarks	Arch. Haneen Hassouneh

Connective Cities at a glance

Connective Cities is a cooperation project between the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the German Association of Cities and Engagement Global with its Service Agency Communities in One World (SKEW)¹. The project promotes international knowledge- exchange among urban practitioners from city administrations, civil society, academia and the private sector since 2013. Connective Cities activities enables joint learning, peer-to-peer advisory and the development of joint projects on topics of sustainable urban development²

¹ Connective Cities is supported by the German Federal Ministry for Economic Cooperation and Development (BMZ).

² Since its launch in 2013, Connective Cities has already held over 30 workshops attended by more than 2000 participants from over 200 cities in 65 countries worldwide. Connective Cities organised a dialogue event on the topic of public health protection in biological emergencies at the local level in Frankfurt in November 2015

Appendix 2: Example of a Challenges and Opportunities Presentation



برنامج المدن المتصلة حول التعافي البلدي من جائحة كوفيد-19
دور البلديات الحضرية والريفية في حماية التنوع البيولوجي والنمو الأخضر
الانتعاش الحضري الأخضر في البلديات
المجموعة الفرعية: الحدائق الحضرية
بلدية جرش الكبرى



التحديات الرئيسية للحدائق الحضرية

• الزيادة السكانية والتوسع العمراني على حساب الاراضي الزراعية

شح المصادر المائية

عدم وجود اماكن مخصصة لنشاطات اجتماعية وبيئية الهدف منها رفع الوعي لدى المواطنين



CONNECTIVE ITIES

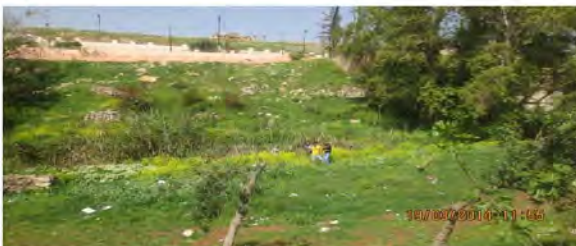
الفرص المتاحة في البلدية للحدائق الحضرية الرئيسية

• توفر قطعة ارض خاصة للمشروع

وجود شبكة من مؤسسات المجتمع المدني تدعم الهدف الاساسي من المشروع

تدخل الحدائق الحضرية المحتمل

اعادة تأهيل المنطقة وجعلها مكان مناسب لكافة النشاطات الثقافية والاجتماعية



Appendix 3: Best Practices Workshop Agenda



Connective Cities program on municipal recovery from Covid-19 pandemic Biodiversity and Environmental Protection: "Urban Gardening working group"

Date: 2nd December 2021

Time: 12:00 -14:00 Amman time

11:00 – 13:00 CET

Language: Arabic - English

Platform: https://giz.meet-modular.com/b/cc_-npk-46v

Thematic focus of the event

Urban gardening, also named urban agriculture, is defined as the practice of growing plants, cultivating, processing, and distributing food in or around urban areas. Although there is not one constant definition of urban gardening, it usually covers gardening activities in small areas and/or rooftops.

Municipalities that are members of Connective Cities network in the MENA region have shown an interest in developing urban gardens that can provide citizens with several benefits, such as building a sense of community, increasing food security, and improved health and wellness of residents. Nevertheless, municipal staff have limited capacities on how to benefit from leftover lands within the municipal urban boundary through innovative urban agriculture and gardening activities. In other words, there are gaps in local knowledge on the optimal utilization of vacant lands and rooftops. A high percentage of vacant lands within MENA urban areas are idle for cultivation and remain underutilized.

Objectives of the event

This virtual event is held as part of the ["Biodiversity and Environmental Protection – Urban Gardening working group"](#). Various events and capacity building activities were held under this component, focusing on different aspects of urban gardening. These aspects include initial organization, selection of an appropriate site, management and maintenance, and development of ongoing partnerships and programs to support community gardening. Adaptable tools and strategies will be developed to increase urban green spaces according to the community needs and contexts, that will in return positively impact the health and wellbeing of the local community in the area.

This final workshop aims at:

- Showcasing good practice examples on the integration of permaculture and Miyawaki forests, in urban gardening
- Presentation and discussing project ideas proposed by the participating municipalities
- Introduction of the municipal urban gardening guide

Partners of Connective Cities:



Commissioned by:



Federal Ministry
for Economic Cooperation
and Development

The Agenda

Time (Amman time)	Agenda	Details
12:00 – 12:05	Welcome Note	Dr. Muna Shalan
12:05 – 12: 50	<i>Good Practice Presentations followed by Q & A:</i> Minecraft program: Block by Block tool for Urban gardening in Marqa- Jordan Amman Micro-lungs Urban gardening projects by GIZ Cash for Work	Tina Hakim Urban planner- UN Habitat Deema Assaf - TAYYÜN Research Studio Nochi Motoharu - Midorization Project Farah Tell- GIZ Cash for Work project
12:50 – 13:40	Municipalities' presentation of project ideas on urban gardening followed by feedback from experts	presentation by municipalities Moderator: Haneen Hassouneh
13:40 – 13:50	Introduction of the municipal urban gardening guide	Haneen Hassouneh
13:50-14:00	Closing Remarks	Muna Shalan

Connective Cities at a glance

Connective Cities is a cooperation project between the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the German Association of Cities and Engagement Global with its Service Agency Communities in One World (SKEW)ⁱ. The project promotes international knowledge- exchange among urban practitioners from city administrations, civil society, academia and the private sector since 2013. Connective Cities activities enables joint learning, peer-to-peer advisory and the development of joint projects on topics of sustainable urban developmentⁱⁱ

ⁱ Connective Cities is supported by the German Federal Ministry for Economic Cooperation and Development (BMZ).

ⁱⁱ Since its launch in 2013, Connective Cities has already held over 30 workshops attended by more than 2000 participants from over 200 cities in 65 countries worldwide. Connective Cities organised a dialogue event on the topic of public health protection in biological emergencies at the local level in Frankfurt in November 2015

Appendix 4: Example of a Good Practices Presentation

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FOR A BETTER URBAN FUTURE

*A better quality of life for all
in an urbanizing world*

Enhancing the
Resilience and
Wellbeing of
Vulnerable
Communities
Through Their
Engagement in
Public Space
and Green
Solution Design



UNHABITAT
FOR A BETTER URBAN FUTURE

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

CONTENT

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UN-Habitat

02 Context

03 UN-Habitat Jordan
Green Projects

04 Testimonials

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Connective Cities Workshop | Thursday 02 December 2021

UN HABITAT
FOR A BETTER URBAN FUTURE

About
UN-Habitat 01

UN HABITAT
FOR A BETTER URBAN FUTURE

UN Habitat Vision & Mission



"A better quality of life for all in an urbanizing world"



"Promote transformative change in cities and human settlements through knowledge, policy advice, technical assistance and collaborative action to leave no one and no place behind"

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DOMAINS OF CHANGE

The UN-Habitat Strategic Plan (2020 - 2023) is centered around **four domains of change**:



1. Reduced spatial inequality and poverty in communities across the urban-rural continuum



2. Enhanced shared prosperity for cities and regions



3. Strengthened climate action and improved urban environment



4. Effective urban crises prevention and response

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SDGs



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SDGs



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Context 02

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Lack of access to green spaces and basic services at the neighborhood level



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2.5 m²

of green areas per inhabitant
in Amman

0.49 m²

of green areas per inhabitant
in Zarqa

0.7 m²

of green areas per inhabitant
in Jerash

minimum
9m²
of green areas per inhabitant

According to WHO health indicator of sustainable cities

The vulnerability of local communities and shelter to climate change disasters
(e.g. flash floods)



Rising unemployment, food insecurity, and household tensions amid the pandemic



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Our Response

Three main forms of implementing green solutions to enhance the resilience and wellbeing of vulnerable communities in Jordan:



Green public space projects as avenues for social cohesion, economic opportunities, and improving mental health.



Vocational training on sustainable agriculture methods and implementing wicking beds and home gardening to improve food security and provide livelihood opportunities.



Green infrastructure to strengthen the resilience of vulnerable communities and shelters against flash floods and to provide fundamental ecological solutions to climate change.

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Our Response



- Raise awareness of the local community on the importance of their participation, educate them on the principles of safe, inclusive and accessible public space
- Communities know their own priorities and needs
- Communities have a wealth of collective experience and knowledge
- When people understand a problem, they will more readily act to solve it
- People solve their own problems best in a participatory group process
- Helps develop a sense of ownership which in return will help sustain the space

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UN-Habitat
Jordan
Green Projects

03

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Green Projects



1 Safe, inclusive and accessible Public Space for Social Cohesion in Marka Neighborhood, Amman



2 Strengthening the Social Stability and Resilience of Vulnerable Jordanian Communities and Syrian Refugees in Amman against Flash Floods

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Community Engagement Methods



Public Meetings

2



Workshops and Vocational Training

3



Focus Groups

4



Questionnaires

5



Design Studios/
Charrettes

6



Technology

7



Observation

8



Sustained Dialogue

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BLOCK BY BLOCK™



BBB Methodology centers on Minecraft as a powerful tool for visualization and collaboration, actively engaging neighborhood residents who don't typically have a voice in public projects.



BBB Outcome is co-created public spaces that serve the needs of all kinds of residents, a deeply ingrained sense of ownership that increases the odds of long-term success, and, ultimately, stronger communities.



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How it works...



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1- Site Analysis and Surveying



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2 – Minecraft Modelling



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3 – Site Visit and Observations with Local Community



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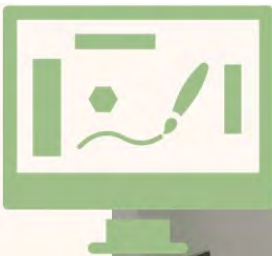
4 – Learning how to use Minecraft



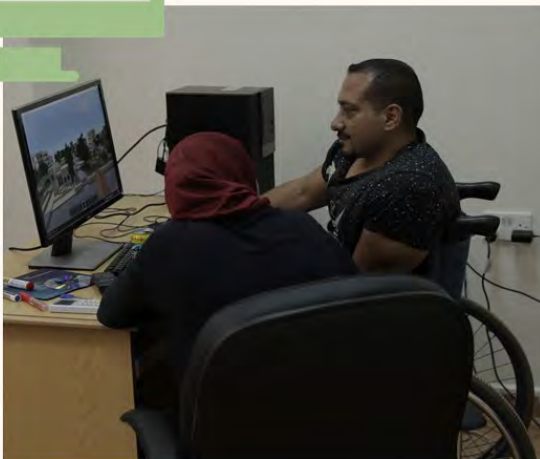
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5 – Co-designing on Minecraft



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6 – Group Presentations



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7 – Prioritization of Ideas



	Amman Priority list	G1 Stars	G2 Pretty	G3 Giants	G4 Excellence	G5 Ha-nover	G6 Eagles	Total
Priorities	Lights							6
	Benches							6
	Swings							6
	Ramp							5
	Football court							5
	Greenery / Grass ground							4
	Flowers							4
	Sidewalk / Pathways							4
	Trees							3
	Trashbins							3
	Resting shaded Area							3
	Kiosks / Food concession / Café / Stores							2
Other Considerations	Fence							2
	Defined Entrance/Gate							2
	Rubber Floor							2
	Fountain/Waterscape							1
	Train/roller coaster							1
	Trampoline							1
	Toilets							1
	Slides							1
	Playground							1
	Cycle Lane							1
	Safe crossings/zebra crossings							1
	Total	8	11	13	10	11	12	-

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8 - Feasibility

INTERVENTION LIST		TECHNICAL FEASIBILITY			BUDGET & MAINTENANCE			PRIORITY LIST			Short term	Medium term	Long term
		Not feasible	Feasible but not recommended	Feasible	Expensive	Affordable but requires high maintenance	Affordable						
Most recurrent solutions from the Minecraft models	Add solution (e.g. Trees)							e.g. Trees				X	
	Add solution (e.g. Lighting)							too expensive					X
	Add solution (e.g. Swimming pool)	X						not feasible					
	Add solution (e.g. Benches)							e.g. Benches			X		
	Add solution												
	Add solution												
	Add solution												
	Add solution												
	Add solution												
	Add solution												
Further solution from the brainstorming session	Add solution												
	Add solution												
	Add solution												
	Add solution												
	Add solution												
	Add solution												
	Add solution												
	Add solution												
	Add solution												
	Add solution												

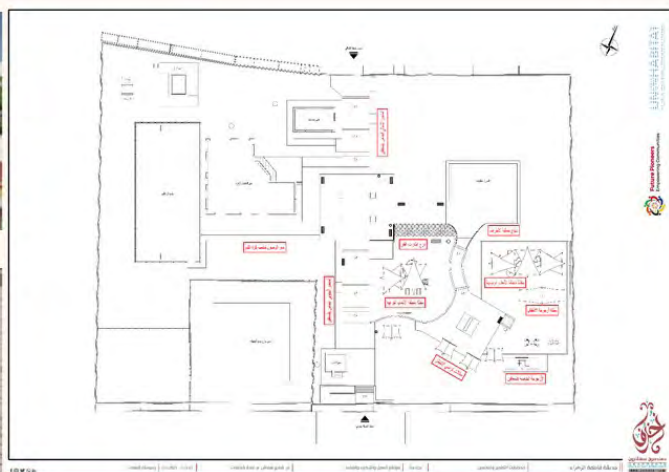
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9- Technical Drawings



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10 - Implementation – Ghweirieh, Zarqa



Launch of project implementation



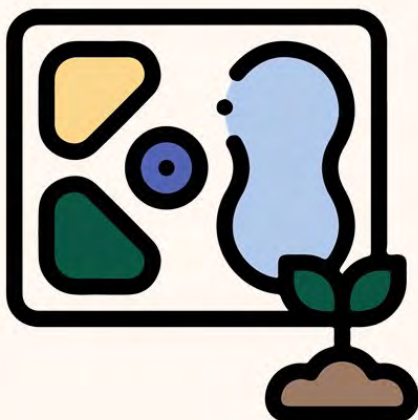
Landscaping element still not implemented

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Permaculture Vocational Training



Permaculture is the development of agricultural ecosystems intended to be sustainable and self-sufficient. It uses rainfall and can be used to produce food. This makes it possible for anyone to implement and sustain.

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How it works...

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1 - Workshop



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2 - Implementation



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“Every woman can plant at her home, and fulfill her needs from herbal and leafy plants...Having a wicking bed at my rooftop would support me in fulfilling my basic needs instead of buying it from the market” (Sawsan participant at Vocational Training, 2021).

Testimonials

04

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من الشعب الياباني
From the People of Japan

تعزيز الاستقرار الاجتماعي وزيادة منعة المجتمعات الأكثر تضرراً من اللاجئين السوريين لمواجهة الفيضانات المفاجئة

**Strengthening the Social Stability and Resilience of Vulnerable Jordanian Communities
and Syrian Refugees in Amman Against Flash Floods**

Ms. Sawsan will explain about her
experience with us further.....

Thank you

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www.unhabitat.org

Appendix 5: Example of a Local Committee Official Letters



المملكة الأردنية الهاشمية
وزارة الإدارة المحلية
بلدية الجنيّد



No.:
Date :

الرقم :
التاريخ :

السادة شبكة المدن الرابطة / مشروع الحدائق الحضرية

ارجو العلم بأن الموظفين التالية اسماؤهم من رئيس واعضاء وحدة التنمية :-

١. جميل حسام محمد المومني
٢. م. ريما صقر المومني
٣. احمد سليمان مهنا مومني

مندوبين من البلدية للمساعدة بتصميم الحدائق الحضرية وتشكيل لجنة من المجتمع المحلي من التالية اسماؤهم :-

١. خالد امين المومني
٢. حسن محمد حسن المومني
٣. خالد راتب المومني

واقبلوا الاحترام

مدير وحدة التنمية

جميل حسام المومني

نسخة/ للملف

Al-Jonaid Municipality

منطقة صخرة - تلفون : ٦٤٤٥٠٠٢ - تليفاكس : ٦٤٤٦٩٥٥ - منطقة عبين عبلين - تلفون : ٦٤٤٤١١٠ - ص.ب : ٣٣ - رمز بريدي ٢٦٨٣٦
Sakhra City - Tel : 6445002 - Telefax : 6446195 - Ebeen Ebleen - Tel : 6441010 - P.O.Box : 33 Code No: 26836



بلدية الكرك الكبرى Greater Al Karak Municipality



No. :
Date : / / 20

الرقم : ٥٢٠ / ٧٩
التاريخ : ٢٠٢٠ / ١٠ / ٢٠

السادة شبكة المدن الرابطة/مشروع الحدائق الحضرية المحترمين

الموضوع: لجنة المجتمع المحلي وبلدية الكرك

بعد التحية:-

أرجو التكرم بانه تم تسمية لجنة المجتمع المحلي وموظفي بلدية الكرك للمشاركة في إختيار وتصميم الحدائق الحضرية.

- ١- م . ساجدة الرهايفة.
 - ٢- م. محمد السحيمات.
 - ٣- م. زيد المعاينة.
 - ٤- م. مجد الحباشنة.
 - ٥- م. عبدالله المداحه.
 - ٦- تيسير الرفاتي.
 - ٧- م. جمال النوايسة/مجتمع محلي.
 - ٨- م. جميل الجعافرة/مجتمع محلي
 - ٩- هناء الصنّاع/مجتمع محلي.
- علماً بان الحدائق المنوي إقامتها ستكون على " القطع/الفضلات " (٦١٧)
قرية الكنار حوض الفج من اراضي الكرك و (٧٣٠) قرية الكرك حوض
المرج من اراضي الكرك.

واقبلوا الاحترام

رئيس لجنة بلدية الكرك الكبرى
فراس ابو الغنم

م. ساجدة الرهايفة
المدير التنفيذي

نسخه/المدير التنفيذي
نسخه/الملف
نسخه/المتسلسل
ر.ج

Appendix 6: Agenda of Capacity Building Workshop



CONNECTIVE
CITIES



Connective Cities program on municipal recovery from Covid-19 pandemic
GREEN URBAN RECOVERY "Urban Gardening working group"

Date: 21st November 2021

Time: 9:00 -14:00

Language: Arabic

Location: Greater Amman Municipality's Library at Downtown Amman

Online meeting: <https://giz.meet-modular.com/b/cc-npk-46v>

Thematic focus of the event

Connective Cities project aims of promoting environmentally conscious project and creating options for healthy lifestyles for its municipality Network. Recently, MENA Municipalities have shown an interest in developing Urban gardens that can provide citizens with several benefits, such as building a sense of community, increasing food security, and improved health and wellness of residents. Urban gardening, also named urban agriculture, is defined as the practice of growing plants, cultivating, processing, and distributing food in or around urban areas. Although there is not one constant definition of urban gardening, it usually covers gardening activities in small areas and/or rooftops.

Moreover, Local municipal staff in MENA's municipalities in general, have limited capacities on how to benefit from leftover lands within the municipal urban boundary through innovative urban agriculture and gardening activities. In other words, there are gaps in local knowledge on the optimal utilization of vacant lands and rooftops. A high percentage of vacant lands within MENA urban areas are idle for cultivation and remain underutilized.

Objectives of the event

This event is held as part of the "Green Urban Recovery – Urban Gardening working group". Various events will be held, under this component, focusing on different aspects of developing an urban garden. These aspects include initial organization, selection of an appropriate site, management and maintenance, and development of ongoing partnerships and programs to support community gardening. Adaptable tools and strategies will be developed to increase urban green spaces according to the community's needs and contexts, that will in return positively impact the health and wellbeing of the local community in the area.

By participating in this event, municipal and urban practitioners, and community and civil society representatives will:

- Have an increased knowledge on the importance of urban gardening and permaculture
- Raised awareness on the potential of permaculture activities potential in drought areas that suffer from limited availability water

Partners of Connective Cities:



Commissioned by:



Federal Ministry
for Economic Cooperation
and Development

- Enhanced knowledge in developing proposals related to urban gardening based on the provided template and learning how to approach donors
- Have the needed skills in preparing a proposal that presents and maps the current challenges facing the involved municipalities and the available opportunities to utilize urban gardening activities in vacant lands within their administrative municipal boundaries

The Agenda

Time (CEST)	Agenda	Details
9:00 – 9:30	Registration	
9:30 – 9:35	Welcome Note	Dr. Muna Shaalan Regional Coordinator
9:35 – 10:30	Presentation about Permaculture	Dr. Majdi Al Odwan Permaculture Expert
10:30 – 11:00	Presentation to highlight the importance of urban gardening activities and explain the template	Arch. Haneen Hassouneh
11:00 – 11:20	Coffee Break	
11:20 – 12:50	Interactive session (Mapping and Template exercise)	
12:50-1:45	Open discussion	Moderator: Arch. Haneen Hassouneh
1:45 – 2:00	Closing remark	Arch. Haneen Hassouneh
Lunch Break		

Connective Cities at a glance

Connective Cities is a cooperation project between the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the German Association of Cities and Engagement Global with its Service Agency Communities in One World (SKEW)¹. The project promotes international knowledge- exchange among urban practitioners from city administrations, civil society, academia and the private sector since 2013. Connective Cities activities enables joint learning, peer-to-peer advisory and the development of joint projects on topics of sustainable urban development²

¹ Connective Cities is supported by the German Federal Ministry for Economic Cooperation and Development (BMZ).

² Since its launch in 2013, Connective Cities has already held over 30 workshops attended by more than 2000 participants from over 200 cities in 65 countries worldwide. Connective Cities organised a dialogue event on the topic of public health protection in biological emergencies at the local level in Frankfurt in November 2015

Appendix 7: Example of a Developed Fund Request Form

Application Form

Title of the Project **Sahab Downtown Urban Garden – Sahab Municipality**

Total Budget (Euro) (1 JOD = 1.19519 EUR)

Thematic Area

Green infrastructure

Cross-cutting topics:

- 1 Psychosocial support and social cohesion
- 1 Entrepreneurship skills
- 1 Career and educational counselling

Municipality Basic Information

Name of Municipality Sahab Municipality

Year of establishment 1962

Location of organisation

(specify if more than one location) Amman-Sahab

Project Description- Executive Summary: *Provide a short description of the proposed project. Outline the following key elements; overall objective, outcomes, activities, beneficiaries, and sustainability (Max 250 words)*

Sahab is considered the oldest and largest commercial center located east of Amman city. The total population of Sahab is 169343 habitants. Sahab Municipality intends to utilize several lands, within the city for urban gardening activities. These lands cover around 5 donums and are located at the downtown of Sahab, near the Sahab Commercial market and the public transportation route.

Sahab suffers from the negative impact of the existing industrial estates within its boundary, specifically the environmental negative impact. Being comprehensive, Sahab has been announced as an Environmental crisis area in 2018, where many residents suffer from cancer as a consequence from environmental pollution. Accordingly, the urban gardening activities will assist in improving the life quality in general in Sahab.

The proposed project is part of the Sahab masterplan development. Sahab municipality hosts 40000 Syrian refugees (35% of local communities), most of which are farmers who have great knowledge and experience in gardening. This will assist the local community members in the planting activities. This project will contribute in providing job opportunities which will help in recovering from the covid 19 pandemic. The contract between municipality Legal Department and the beneficiaries will give the official and sustainable cover. The land is located in a strategic location close to Sahab Mosque (the third biggest mosque in Jordan and the biggest in Sahab) and to the commercial center. The commercial center lacks herb markets which can be fulfilled through this project.

The work will include the following aspects:

- Cultivation of medicinal plants(herbs) in cooperation with Sahab local community and municipality.
- Marketing of the crops and products in cooperation with Sahab Municipality media center. There will be a bazaar to market the products and crops of the garden.
- All groups of the local community including refugees, especially women and people with disabilities, will participate in the agriculture process.
- There will be construction work to build the garden including fences, red soil, benches, etc.

What is the estimated duration of the proposed project? (months)

4 Months

What is the expected start and end date of the proposed project?

1 April, 2022 – 1 August, 2022

Describe what is the overall objective of the proposed project, and what are the expected outcomes? (Max of 150 words)

- Build and adequately maintain urban green spaces
- Provide Job Opportunities for Women
- Increase the community social cohesion between local resident including refugees
- Provide a health local food source which assists in enhancing food security
- Provide an area for medicinal planting
- Raise awareness on the importance of urban gardening, and the potential of local community support and efforts in addressing the environmental concern
- Improve gardening skills

How will your proposed project contribute to food security and community social cohesion (Max of 250 words)

The project will provide Cultivation Areas for 150 families (10 m² per family) with spaces and pathways in between. This will secure food for the 150 families. The project will provide social cohesion between Syrian and Jordanian as those families will be selected based on the criteria where 50% should be Jordanians and 50% Syrian (they will work together which will give them time to talk, get to know each other, and deepen the relationship). Most of the Syrian refugees who reside in Sahab are farmers which will help the local community members throughout the gardening activity and enhance the social cohesion between them.

Since we strongly encourage to use innovative methods in the design of the project, especially due to the current pandemic situation, describe the innovative method that will be utilized in the proposed project. Max of 150 words)

- Grey water irrigation system will be utilized where a pipe will transfer the grey water from the Grand Mosque of Sahab to the proposed land. (the mosque is located in the heart of the city. It is a main landmark at Sahab.
- Recycled benches will be installed to encourage recycling and preserve the environment.

The local communities will participate in decorating the fences of this garden (Similar to a previous project where young girls have done such an activity in cooperation with the municipality).

Explain briefly who your direct/indirect beneficiaries are (e.g refugees, youth, and underprivileged Jordanians) and what is your adopted selection methodology How many people or institutions do you expect to impact directly and indirectly in the short, medium, and long term? What sort of capacity changes would the intervention provide?? (Max of 250 words)

- Sahab Citizens (Jordanian and Syrian refugees)
- Sahab Municipality
- People who have experience in agriculture
- People who want to learn more about agriculture
- People with disabilities
- 150 families will be directly benefit from the project and 2 NGOs will help the beneficiaries to package and sell their products. In addition the NGOs will assist in sustaining the project.
- Patients specially cancer patients which they need fresh food, and an improved air quality.

Explain briefly what the risks are that could prevent the proposed project activities from having the desired effects. What measures will be taken to mitigate these risks? (Max of 150 words)

- In the case of another COVID 19 lock down, this will lead to a cutout of the grey water used for irrigation. The mitigation measure is to construct a well at the land where rain water will be harvested to be used for irrigation purposes.
- Vandalism from local community. This will be mitigated by assigning a security officer at site.

Describe your vision and strategy on how the results will be sustained after the proposed project comes to end. (Max of 150 words)you can say instead : Please describe how the effort will last beyond the life of this grant. What special measures will ensure the continuity of its impact/results in the long term?

To ensure the project's sustainability , official contract between the beneficiaries and the municipality. will be renewed every 6 months, after receiving the report that documents the process and evaluates the results done by the municipality focal point and local NGOs assigned team members.

The selection of the beneficiaries will be by lot after filtration (20% Jordanian, 20% Syrian, 20% handicapped, 30% women and 10% cancer patients). 2 local NGOs will sign a contract with the municipality to help the beneficiaries in marketing issues and the aggregation itself. The garden is located in the heart of the city center and the commercial center which is very important for marketing and sustainability.

Describe how monitoring and evaluation would be accomplished throughout the lifespan of the proposed project and after its end (e.g., follow-up, monitoring and evaluation plan). (Max of 150 words)

The optimal methodology to ensure accurate results is to adopt the participatory approach and include local community members at this phase to meet the needs of all participants and their communities. This is known as participatory monitoring and evaluation (PM&E). To do so the following steps should be undertaken:

- Assign team members: assign members from the technical team from LDU in addition to members from the local community, specifically from the residents of the neighbourhood where the project is implemented.
- Assign Team Responsibilities: Identify team responsibilities in monitoring and evaluating the situation.
- A monitoring and evaluation plan: a monitoring and evaluation plan should be developed, where period assessments should be identified.
- Develop a data collection work plan and methodology: to ensure efficient monitoring and evaluation results, it is best to have a work plan that shows the needed data to collect, how to collect the needed data, and the team members assigned to collect and record each item. The data collected should be filled out into the table Annex 3.
- Train team members on data collection: explain to the team members how to collect data in referral to the "core outcome indicators" including quantity of production disaggregated by crops, quality of dietary intake

(food consumption score), number of production months per year, number of households who supported and/or benefited from the urban gardening project, income generated from garden sales, and percentage of beneficiary households who practice garden skills for a second year with little or no direct support; in addition to the "core output indicators" such as number and type of beneficiaries including trained beneficiaries, number and type of crops, and innovative technology utilized.

- Record Project Bottlenecks: Document any project bottlenecks.
- Assess existing relevant regulations: assess based on on-ground application and experience the applicability of existing relevant policies/regulations and identify gaps (if any).
- Identify the synergies and conflicts: document the synergies and conflicts; in relation to the dimensions of urban agriculture sustainability that include social, environment, and economic aspects; which may affect the sustainability of the urban gardening projects.
- Reporting: prepare a biannual report for the project.



