

BEIRUT URBAN LAB - OCTOBER 2022

AN URBAN RECOVERY STRATEGY FOR POST-BLAST KARANTINA

ACTION PLANS

RESEARCH PROJECT TEAM

Beirut Urban Lab Team:

Lead: Professor Howayda Al-Harithy

Coordinator: Batoul Yassine

Research Team: Mariam Bazzi, Abir Cheaitli, Mohamad El Chamaa, Ali Ghaddar, Wiaam Haddad

GIS Support Team: Chaza El-Jazzar, Sharif Tarhini

Research Interns: Cristina Gosen, Rami Shayya

Citizen Scientists:

*Hasan Al-Aswad, Hala Al-Saeed, Wael Al-Saeed, Yehya Al-Ahmad Al-Saeed,
Mohammad Al-Sattouf, Mohammad Amsha, Watfa El-Cehade, Carmen Jabboury,
Danielle Khadra, Michelle Khadra, George Tatarian*

Editor:

Abir El-Tayeb



AMERICAN
UNIVERSITY
OF BEIRUT



IDRC · CRDI

International Development Research Centre
Centre de recherches pour le développement international

Canada

beirut
urban
lab مختبر
المدن
بيروت

BEIRUT URBAN LAB 2020-2022

AN URBAN RECOVERY STRATEGY FOR POST-BLAST KARANTINA

RESEARCH PROJECT TEAM

Beirut Urban Lab Team:

Lead: Professor Howayda Al-Harithy

Coordinator: Batoul Yassine

Research Team: Mariam Bazzi, Abir Cheaitli, Mohamad El Chamaa, Ali Ghaddar, Wiaam Haddad

GIS Support Team: Chaza El-Jazzar, Sharif Tarhini

Research Interns: Cristina Gosen, Rami Shayya

Citizen Scientists:

Hasan Al-Aswad, Hala Al-Saeed, Wael Al-Saeed, Yehya Al-Ahmad Al-Saeed,

Mohammad Al-Sattouf, Mohammad Amsha, Watfa El-Cehade, Carmen Jabboury,

Danielle Khadra, Michelle Khadra, George Tatarian

Editor:

Abir El-Tayeb

ACKNOWLEDGEMENTS

This study and the proposed urban recovery strategy for Karantina would not have been possible without the support, contribution, and inspiration of many individuals, institutions, and collaborating organizations. We would like to first acknowledge and thank the International Development Research Centre (IDRC) for fully funding the research conducted by The Beirut Urban Lab (BUL). We would also like to thank our collaborators: the United Nations Development Program (UNDP) for coordinating and hosting the thematic focused discussions on the transversal issues, the UCL Institute for Global Prosperity, ACTED, and the Norwegian Refugee Council (NRC) for contributing funds towards the spatial intervention in Al-Khodor sub-neighborhood, and Dr. Itab Shuayb for providing inclusive design guidelines for the intervention. We would also like to extend our thanks to the Municipality of Beirut for donating one of its buildings in Karantina to accommodate the community center for three years, Design for Communities (D4C) and AUB's Di-Lab at the Department of Architecture and Design for designing and renovating the center, and Cités Unies Liban for funding the renovation.

We owe a great deal of gratitude to the people of Karantina who engaged with us at multiple levels. They trusted our methods and research. Their participation in the household and business questionnaires, interviews, and community meetings and workshops shaped the research and the outcomes. We thank, in particular, the eleven Citizen Scientists who were trained by BUL and contributed to the process of the research as well as community engagement. They are Hasan Al Aswad, Hala Al Saeed, Wael Al Saeed, Yehya Al Ahmad Al Saeed, Mohammad Al Sattouf, Mohammad Amsha, Watfa El Chehade, Carmen Jabboury, Danielle Khadra, Michelle Khadra, and George Tatarian. Their dedication to being part of the study and their perseverance in the data collection and the organization of community meetings under the difficult circumstances in Lebanon was remarkable.

Great thanks goes to our colleagues at The Beirut Urban Lab for their continuous support and guidance throughout this research.

Finally, we would like to acknowledge the work of Abir Eltayeb as the editor of the reports and the work of Joyce Abou Dib as the graphic designer of the reports.

TABLE OF
CONTENTS

General
Introduction

01

Descriptive
Memory

02

Strategic
Diagnosis

03

Strategic
Framework

04

Action
Plans

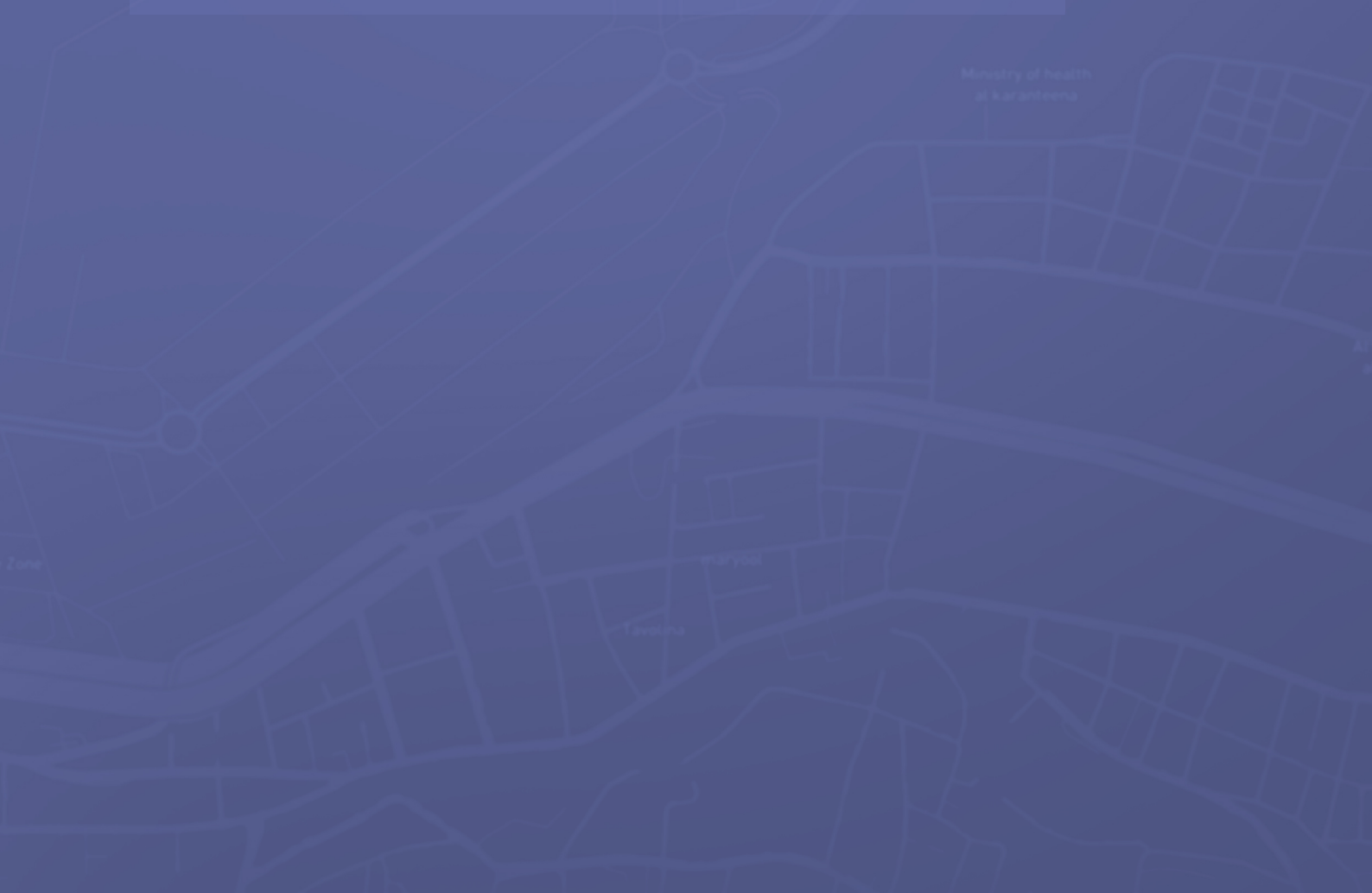
05

Indicator
System

Report 04

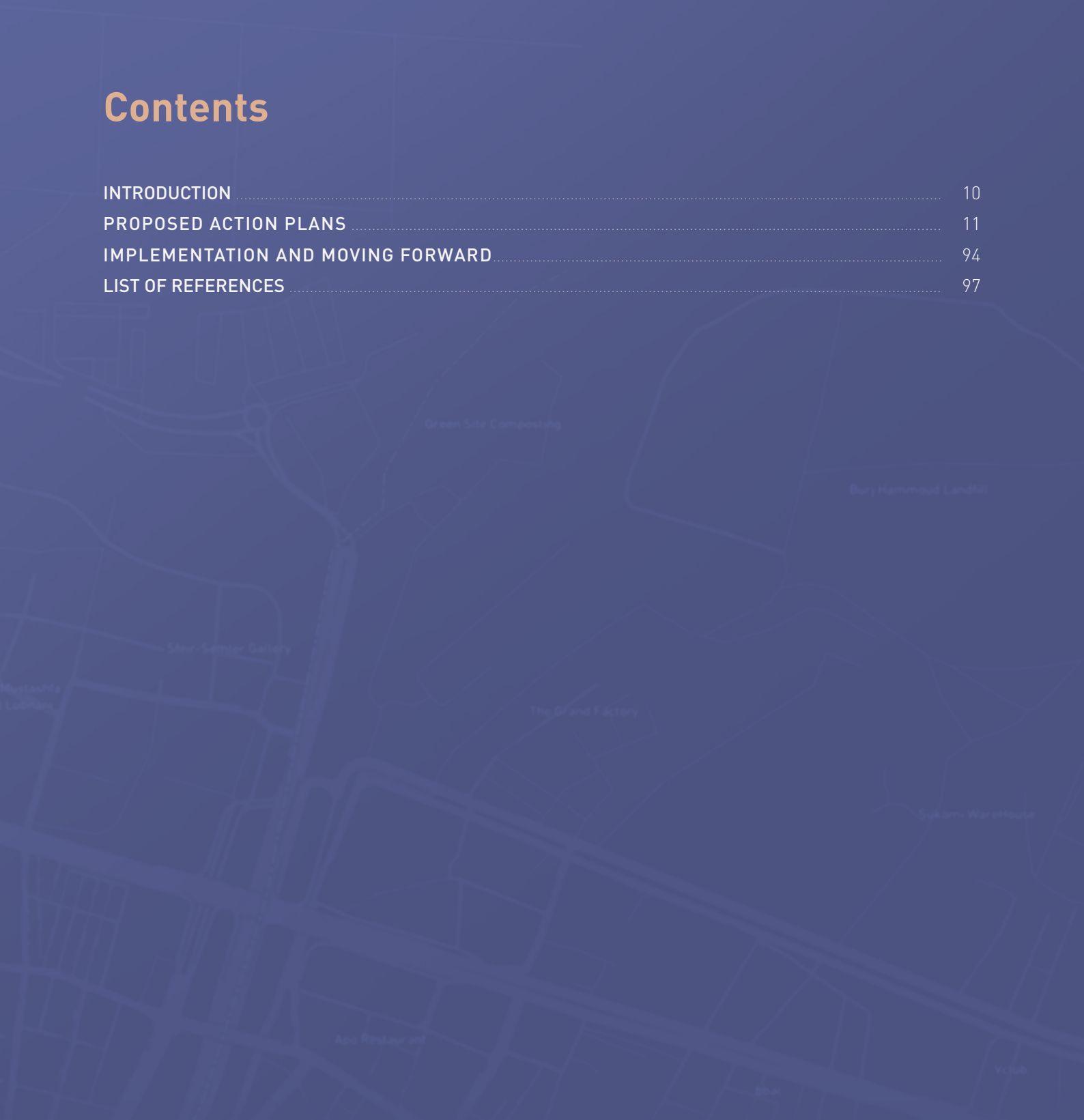
ACTION PLANS

The Action Plans constitute the fourth component of the urban recovery strategy of Karantina. They respond to the requirements of the strategic framework and are aligned with its vision and mission. The action plans targeted the proposed strategies in the Strategic Framework to serve the strategic and general objectives. The report presented 30 action plans with a detailed profiling of each project. The proposed action plans were diverse in nature and included execution projects, regulations and policies, detailed studies, lobbying and advocacy, institutional and committee set-ups, management and operation plans, and capacity building.



Contents

INTRODUCTION	10
PROPOSED ACTION PLANS	11
IMPLEMENTATION AND MOVING FORWARD	94
LIST OF REFERENCES	97



1. INTRODUCTION

This report details the action plans that together constitute the fourth component of the urban recovery strategy for Karantina. There are thirty action plans that respond to the requirements of the strategic framework for urban recovery and are aligned with its vision and mission statements. The action plans targeted the five objectives of the strategic framework:



A. Protect the existing affordable housing units in Karantina and provide a larger stock that is inclusive of a diversity of social and income groups.



B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.



C. Support, increase, and sustain cultural and economic vitality in Karantina.



D. Promote a sustainable development strategy that is participatory and phased over a period of time.



E. Improve the overall quality of the urban environment in Karantina.

The process of devising the action plans was iterative. The action plans were intended to respond to the different challenges and opportunities that were identified in the strategic framework report. The research team at the Beirut Urban Lab started their work by proposing one or two action plans for each strategy. The first draft of the action plans went through several reviews to cross-reference each other and ensure a level of coherence. In line with the transversal multi-sectoral approach, and their adaptation to the scale of the neighborhood of Karantina, similar action plans were grouped together and re-phrased to correspond to the suggested strategies. Therefore, some action plans targeted multiple strategies to serve multiple general and strategic objectives. The research team then prepared elaborate project profiles, including a project brief, a list of the relevant actors in the design and execution phases, cost estimates, potential sources of funding support, and a time schedule for the execution. Subsequently, internal consultation sessions inside the Beirut Urban Lab were conducted on the housing issues, and external consultations with economic and environmental specialists were held to verify the components of the different project profiles.

The research team organized another round of consultations during a town hall meeting at the Karantina Public Park on 19 September 2022. The different community groups provided their feedback on the proposed action plans, and they prioritized these action plans according to their needs.

The project profiles of the proposed action plans were envisioned to be adopted by different operational and funding agencies, to be phased over a period of time, and translated into a common vision of Karantina that can achieve the strategic goals set in the previous phase of the research. Once they are matched with the right donors and funding agencies, the project profiles will be elaborated into fully detailed project proposals that are ready for implementation. An indicator system will be set as the fifth and final phase of the urban recovery strategy to assess, adjust, and monitor the progress of implementation and the operation of the different projects. The proposed action plans were diverse in nature and included execution projects (14), regulations and policies (9), detailed studies (3), lobbying and advocacy (1), institutional and committee set-ups (5), management and operation plans (5), and capacity building (2). They also ranged from soft to hard and short to long-term interventions.

2. PROPOSED ACTION PLANS

01.	Revise the different rent-related laws in Lebanon to introduce price caps, price adjustments, and mitigating measures that can protect vulnerable tenants who currently pay rent prices below the market rates.
02.	Establish a housing monitor for formal and informal tenancy agreements with legal counseling support to protect the rights of the tenants.
03.	Conduct a feasibility study of the LINORD Project by a group of local landlords, academics, and professionals to assess its physical and social impact on the residential sub-neighborhoods in Karantina and advocate for the necessary amendments.
04.	Form a neighborhood committee.
05.	Pool the block of unbuildable lots and develop it through a public-private partnership into an affordable and inclusive housing project that incorporates multiple typologies of residential units and accommodates different family sizes and income groups.
06.	Revoke the policies that exempt the owners of vacant apartments from paying taxes, introduce a vacancy tax, and encourage or mandate the development of mixed-income housing units through building or tax incentives and Inclusionary Housing Ordinance.
07.	Propose a strategy to reform the new system of housing bank loans to enable vulnerable groups of people to own their houses in Karantina.
08.	Establish a Business and Career Training Center in Karantina.
09.	Rehabilitate the slaughterhouse following international environmental standards and construction codes and reform its management and operation systems before it reopens.
10.	Rehabilitate the public and fish markets and reform their operations and management systems before they reopen.
11.	Develop a multi-purpose complex for public services on the municipal lot, which includes a public school, an affordable family clinic, and a sports and recreational facility.
12.	Devise a management plan for reopening and maintaining the public park and open spaces in Karantina.
13.	Design and Implement an open space network that connects, upgrades, and expands on the existing spaces in Karantina.
14.	Devise and implement a parcelization plan that subdivides and reprograms the municipal lot to enhance connectivity and public services in Karantina.

15.	Amend the Building Law to introduce international standards for inclusive design, particularly for people with physical challenges and disabilities.
16.	Propose an addendum to the Planning Law that further guides and regulates existing and future land uses and developments.
17.	Set up a monitoring and municipal taxation system for buildings that are not regularly maintained to ensure public safety and limit overcrowding.
18.	Create a registry platform that matches donors with property owners for building rehabilitation.
19.	Form a local advocacy group that supports donor agencies working on the reconstruction projects of the port to reconnect Karantina with the sea.
20.	Conduct a transportation study in Karantina.
21.	Develop protocols for cooperation, networking, and the transfer of expertise and knowledge between the different businesses in Karantina.
22.	Design and build a community center in a strategic location that is equally accessible to the residents of the three sub-neighborhoods.
23.	Expand financial support opportunities and institute mechanisms to link these opportunities with micro businesses in Karantina.
24.	Set up offices in the Municipality of Beirut to organize and promote cultural events in Karantina, in partnership with the private sector.
25.	Establish a design hub in Karantina with shared resources and facilities for rising young designers to launch their careers and serve as a catalyst for further cultural development.
26.	Design and implement an integrated sewage and wastewater management plan for Karantina.
27.	Design and implement alternative energy and greening solutions.
28.	Design and implement a solid waste management plan.
29.	Conduct a study to revitalize the Beirut River and activate its edges.
30.	Identify elements of landscape heritage in Karantina and propose a law for their protection.

ACTION PLAN 01

Project Title

Revise the different rent-related laws in Lebanon to introduce price caps, price adjustments, and mitigating measures that can protect vulnerable tenants who currently pay rent prices below the market rates.

General Objective(s)

A. Protect the existing affordable housing units and provide a larger stock that is inclusive of a diversity of social and income groups.

Type of Project

- | | |
|---|---|
| <input type="checkbox"/> Execution Project | <input checked="" type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A1. Protect and expand the existing stock of affordable housing units.

Project Objective(s)

The project contributes to the following strategy:

A1.1 Regulate rents in Karantina.

- Protect the old tenants from displacement and forced eviction.
- Regulate the hikes in rent prices according to the socio-economic conditions of the tenants.
- Increase opportunities for vulnerable groups to access affordable housing units, especially the vulnerable groups that are on new rent contracts.

Project Description (concept note)

Lebanon does not have a legal framework to control residential rent prices; rent is regulated by the Law of Contracts and Obligations and its relevant amendments across the years. This means that two different conditions govern two different types of tenants. The first type includes tenants with rent contracts that were signed before 1992, known as the 'old rent' tenants. They benefit from very low rent prices and protection against eviction. Between 1932 and 1992, successive Lebanese governments extended the duration of the rental contracts and, as a result, the existing conditions of the contracts applied for longer periods. This included the rent prices that remained constant in the face of hyperinflation.

The conditions of the rent contract were extended due to the many crises that impacted the country, including the devaluation of the French pound in the 1930s that was pegged to the Lebanese Lira, the events of the Second World War, the 1958 crisis in Lebanon, and the Lebanese Civil War (1975-1990). Slight adjustments were made to the rent prices, but these adjustments did not account for the major hyperinflation that Lebanon witnessed over a prolonged period.¹

A new amendment to the Law of Contract and Obligation was issued in 1992. It liberalized all rent contracts, except for the ones that predated 1992. This law created a new set of tenants: those who signed contracts after 1992, also known as the 'new rent' tenants. They were no longer protected from the increases in rent prices and the duration of their contract was limited between one to three years.

A separate extension was added to the series of extensions in the same year. It stated that rent contracts before 1992 should be adjusted to the market rate within a period of 5 years. However, their tenure and low rent conditions were extended several times over 20 years. Accordingly, the only way to evict old tenants

¹ Multiple prolonged crises prevented any meaningful adjustments.

was through a demolition order and after a compensation payment. The tenants who did not have legal representation were paid at lower compensation rates in comparison to the tenants who filed court cases. The Law of Contract and Obligation does not set the maximum amount compensation, especially in dense areas. Landlords can also evict tenants if one of their adult children needs to move into the house. These conditions resulted in two types of landlords: landlords who were legally obligated to house the existing tenants and others who had the power to set new terms of agreement with the new tenants. In both cases, the government effectively abdicates its responsibility to provide affordable housing units and safeguard the rights of both, the landlords and the tenants. It also treats any disagreement between both parties as a private matter that is delegated to the judicial system to arbitrate, rather than recognizing it as a housing policy concern.

Vulnerabilities that are associated with rent contracts:

The current rent law does not include a mechanism that can determine how much rent can be increased, subject to market dynamics and the ad-hoc decisions of landlords. In 2014 and 2017, the parliament passed laws that stipulated that the old rent price should be stabilized according to market rates in 9 years. This applied to all the rent contracts that were signed before 1992. Under Article number 3 in the 2017 law, a committee should be established to assess if tenants need financial support to adjust to the rent increases and set the compensation rates. However, the government did not provide any funds to finance these adjustments and establish the committees.

Additionally, the law did not offer any protection against the sharp hikes in rent prices or the threats of eviction for new rent tenants once their contract expires. Because of the sharp devaluation in the value of the Lebanese lira against the American dollar, landlords either started demanding to be paid in cash dollars, currently known in Lebanon as the 'fresh dollar', or negotiated conditions for new rent contracts that were adjusted to the current market value of the dollar. This is unusual in most countries since the rent price is paid in the local currency, however, it is regarded in Lebanon as a mode of protection against the volatile currency market. From a legal perspective, a landlord cannot refuse payments in the local currency. This is illegal under Article 319 of the Penal Code. Moreover, as per Article 192 of the Law of Money and Credit, tenants, if charged in dollars, can pay at the official rate of the 1,500 LL², if the payment is deposited at a notary public. This has proved to be a legal gray zone, as some judges have upheld this while others have ruled against it.

The results of the surveys that the Beirut Urban Lab conducted in Karantina showed that most of the rents were still paid in the Lebanese lira, with some in American dollars. However, with the ongoing devaluation of the Lebanese lira, there is a need to protect the rights of the old and new tenants through the law and other meaningful legal frameworks.

This proposal involves empowering the Municipality of Beirut to impose a rent cap to protect vulnerable tenants from sharp increases in the rent prices. The municipality can formalize access to housing units in a more viable and secure manner. The proposal also aims to establish a rent cap that can limit sharp annual increases, as well as properly regulate these increases. There is precedent for this proposal. Successive Lebanese governments implemented rent caps between 1948 and 1954 under three different exceptional laws. The three laws stipulated that the increases in rent prices should be less than 5 to 10% and in some cases decreased rent prices between 20 and 25% depending on the age of the building.

There is also a good example of an equitable rent cap law in 2020 in Berlin. Due to uncontrolled rent increases, a rent cap was introduced. It established an upper ceiling for the increases at 1.3% per year until 2025. The law also set guidelines for how much a landlord can charge per square meter for an apartment, ranging between 3 to 10 euros. The guideline took into consideration the typology of the building, as well as its age and amenities. The law applied retrospectively to existing rent contracts, as well as to new rent contracts that were signed after the passing of the law. This resulted in the deflation of existing rent prices, leading to an average rent reduction by 10%, and it prevented unrealistic rent hikes. However, it decreased the supply of apartments since most landlords were unwilling to accept low prices. This can be fixed in the proposal if a vacancy tax is introduced. Karantina can pilot this proposal since a large percentage of its residents (around 73%) are tenants and there is an even distribution between old rent (n=78) and new

² 15,000 LL starting November, 2022.

formal rent (n=71), with a large percentage of informal rental agreements (n=396)³.

The Municipality of Berlin has significant executive and legal powers, unlike the Municipality of Beirut. Therefore, the Lebanese parliament needs to issue a law that gives certain municipalities in Lebanon the right to regulate trends in certain neighborhoods. This can also empower the residents of the neighborhoods to coordinate their needs with the municipality. The municipality can stipulate the percentage of the annual rent increase and how much the landlord can charge the tenant per square meter based on the typology of the building, its condition, and its age. This can be relatively easy to introduce in Karantina since the research team at the Beirut Urban Lab conducted an extensive survey of the building conditions in the area.

Proposing safeguarding measures in the rent law can also protect the tenants against the sharp increases in rent prices. They can ultimately formalize access to housing units in Karantina due to the additional layer of security. This proposal can help control rent hikes and help the tenants on old rent contracts adapt to the end date of rent control in 2026 through clear guidelines and safeguarding measures.

The Relevant Actors

These actors can include academics and experts such as Bruno Marot and Hisham Achkar, local research and design studios such as Public Works, and local non-profit advocacy organizations such as the Legal Agenda, in collaboration with members of the Lebanese parliament, the Ministry of Social Affairs, the Beirut Bar Association (the Order of Lawyers), and the Municipality of Beirut, and with consultation with landlords and tenants.

Proposed Source of Funding

Authorities involved with possible support from relevant local or international agencies.

Approximate Financial Magnitude

Not applicable.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Secure the conditions of old rent contracts to avoid the displacement of people.
- Help the landlords restore the value of their properties.
- Prevent increases in rent prices that are beyond the means of people in Karantina.
- Control the rent increases and prices through clear guidelines.
- Enable access to affordable housing units to a diversity of household types across income groups.

³ See page 74 of the report

ACTION PLAN 02

Project Title

Establish a housing monitor for formal and informal tenancy agreements with legal counseling support to protect the rights of the tenants.

General Objective(s)

A. Protect the existing affordable housing units and provide a larger stock that is inclusive of a diversity of social and income groups.

Type of Project

- | | |
|--|--|
| <input type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input checked="" type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A1. Protect and expand the existing stock of affordable housing units.

A4: Provide access to new and inclusive housing units across a diversity of social and income groups.

A7: Decrease the vulnerabilities that are associated with informal practices.

Project Objective(s)

The project contributes to the following strategies:

A1.1: Regulate rents in Karantina.

A7.1: Advocate for the rights of tenants to reduce vulnerabilities and improve living conditions.

This requires:

- A housing monitor that can arbitrate between landlords and tenants.
- An informal registry that tracks informal rent agreements.
- Protecting tenants who do not have a formal rent contract from the threats of eviction and displacement.
- Managing an informal registry that records all rent payments to create transparency in the rates of rents and allow potential tenants to compare proposed rent prices with existing ones.

Project Description (concept note)

The rent prices in Karantina are low in comparison to other neighborhoods in Beirut. However, the current increases in rent prices in Karantina, along with high rates of unemployment and limited public services, can lead to the displacement of many of the residents. Out of the 545 households that the Beirut Urban Lab surveyed in Karantina, 73% are tenants. The breakdown of the 73% is as follows: 78 households are on old rent agreements that were not adjusted to the hyperinflation in the country, 71 are on new formal rent contracts, and the remaining 248 are new tenants with informal rent agreements⁴.

All the tenants are susceptible to certain vulnerabilities. The duration of the formal rent contracts for new tenants is one to three years. Their rent increases are not determined by a specific formula. The government does not mediate between the landlords and tenants or protect the existing tenants from eviction. Given the ongoing devaluation of the Lebanese Lira against the US dollar, many tenants face rent hikes beyond their financial means and have little protection against predatory increases.

⁴ See page 74 of the report.

The other group of tenants who are under formal contracts are old rent tenants. Although they may not be affected by the devaluation yet, under the 2017 rent law, this group's rent is set to be adjusted to market prices by 2026. Many of the tenants who cannot afford this increase may become homeless.

The remaining tenants do not have a formal rent contract. Landlords prefer not to issue a contract because it gives them more maneuver to increase the rent prices or terminate the agreement. Additionally, they are not obligated to pay property or municipal taxes since vacant apartments are exempt from these taxes. Moreover, there are some tenants who prefer not to have a contract due to the precarity of their own legal status.

Although this informality has allowed vulnerable people to access housing units in Karantina, a lack of proper oversight and accountability has left room for abuse. After the port blast, for example, incidents of evictions were more prevalent among the residents and households without contracts. Furthermore, this informality encouraged rent pooling, which has led to overcrowding⁵. Out of the 113 apartments that have more than one household, 88% of them are considered overcrowded. This overcrowding increased further since most landlords prefer rent pooling; they can charge more than they can for a single-family apartment. There are instances of single-family households being threatened with eviction to free apartments for rent poolers. This is increasing the tension between the community groups.

It was also evident from the research in Karantina that tenants with informal agreements were more likely to face rent hikes or evictions, especially after the port blast. And many tenants are unaware that they have legal rights against eviction. They are allowed to provide proof of occupancy through utility bills that give them legal rights against eviction. Unfortunately, there is no system to keep track of all the informal rental agreements in Karantina. In the case of formal (notarized) rent contracts, where a landlord has decided to evict a tenant, a complaint must be filed at the Municipality of Beirut. The municipality would then inform the police to take the appropriate actions.

Overall, neither formal nor informal tenants are aware of their legal rights for protection against eviction; they cannot be evicted without a court order. This lack of knowledge shows that there is a need for an advocacy effort (or a housing monitor) to raise awareness levels around housing rights in Lebanon and to provide legal counseling to vulnerable residents.

Housing Monitor:

The proposed project aims to safeguard the rights of the most vulnerable tenants. It proposes the creation of a housing monitor, similar to the one by the local design and research studio, Public Works. The housing monitor by Public Works keeps track of incidents of evictions and rent hikes. It provides some legal advice but is unable to enforce informal agreements. The proposed housing monitor in this project will operate as an institutional tool that keeps track of formal and informal agreements between tenants and landlords. The responsible team will be equipped with legal knowledge. It will also document cases of overcrowding, evictions, and rent hikes, and the team will attempt to mitigate the impacts of these cases.

In order to establish a housing monitor, legal experts are needed to adjudicate and keep track of the relevant paperwork. Although it is costly to hire a lawyer, the Beirut Bar Association had in past cases offered volunteering services to support complicated court cases, such as the families of the victims of the Beirut blast. Involving the BBA would give the housing monitor legal cover. The proposed neighborhood committee in Action Plan 04 will have a key role, and the Municipality of Beirut will have an institutional role to formalize the housing monitor. The aim is to improve the relationship between the residents and public authorities and rebuild trust in the municipality.

Create an Informal Tenure Registry for the Housing Monitor:

An informal tenure registry can ensure protection for vulnerable residents, those who do not have access to formal support. It is mostly used in Palestinian camps in Lebanon to support and record property practices; Palestinians in Lebanon are not allowed to own property, and buildings inside camps are not listed in the land registry.

⁵ See page 89 of the report.

The informal system is managed by a popular committee that is composed of all the political factions in the camp. The registry keeps track of the ownership of residential units within the camp to ensure the right of the residents and a smooth property transfer when this is needed. Additionally, it tracks purchases and inheritances, as well as the construction of additional residential units. The registry is the cornerstone of the informal property market in the camps and preserves the rights of the residents. It can also be useful in Karantina, where informality is also a major part of recent tenure agreements (Ezzedine, D.M., 2019). Accordingly, this project proposes the creation of an informal registry that is modeled after the Palestinian camp model. It will keep track of rental agreements and rent prices.

However, the registry in Karantina will be used to record informal and formal rental agreements. By recording these agreements, the register will keep track of all the rent transactions and advise the residents on the rent prices they should pay based on this information. In the process, the tenant will have a reference point to help them make informed decisions.

This registry can be created in collaboration with key local community members and in line with the conditions of the proposed housing monitor which will be partly managed by volunteering lawyers. It will also record the utility bills and the receipts of rent payments that can be used to prove informal tenancy rights and resolve any legal disputes.

The objectives of the proposed housing monitor and tenure registry are:

- Arbitrate any disputes between the landlord and tenants.
- Preserve the rights of the informal tenants in the absence of a formal mechanism.
- Preserve the rights of the tenants to occupy their apartments and inform the landlords of the legal implications of evictions and their responsibilities toward the tenants.
- Create more transparency on the rent rates through comparative data so that rent prices are not raised in an ad-hoc manner.
- Provide open data on existing rent prices to inform the tenants of current conditions to leverage comparable units when they negotiate new rent contracts or agreements.

The Relevant Actors

The relevant actors include the Municipality of Beirut and non-governmental organizations that are active in Karantina such as Offre Joie and the Norwegian Refugee Council (NRC), community representatives such as the mukhtars and key residents, the Beirut Bar Association, and the Housing Monitor.

Proposed Source of Funding

Public authorities involved with possible support from relevant local or international agencies.

Approximate Financial Magnitude

To be determined by relevant actors.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Less overcrowding in Karantina.
- Residents and community groups who are more knowledgeable of the legal aspects of housing.
- Less tension between the residents of Karantina because of less overcrowding.
- Secure tenure for the residents of Karantina.
- More transparency in the rent prices in Karantina.
- Empowered residents who are more inclined to stay in Karantina.
- Less threats of eviction.
- Secure informal tenure for the residents of Karantina.
- A decrease in the overall vacancy rate in residential units in Beirut.

ACTION PLAN 03

Project Title

Conduct a feasibility study of the LINORD Project by a group of local landlords, academics, and professionals to assess its physical and social impact on the residential sub-neighborhoods in Karantina and advocate for the necessary amendments.

General Objective(s)

- A. Protect the existing affordable housing units in Karantina and provide a larger stock that is inclusive of a diversity of social and income groups.
- D. Promote a sustainable development strategy that is participatory and phased over a period of time.

Type of Project

- | | |
|---|--|
| <input type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input checked="" type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

- A1. Protect and expand the existing stock of affordable housing units.
- A4: Provide access to new and inclusive housing units across a diversity of social and income groups.
- D1: Advance a development program for Karantina and remove existing obstacles to development.

Project Objective(s)

The project contributes to the following strategy:

A1.2/A4.2/D1.1: Release frozen, militarized, and unbuildable privately owned lots, and facilitate the development of new housing units.

A feasibility study of the LINORD Project is also required. If the LINORD Project is deemed feasible, amendments should be implemented to render it more sustainable and sensitive to the existing built fabric in Beirut, especially in Karantina.

Project Description (concept note)

The LINORD Project involves plans for land reclamation and new developments in Beirut's northern suburbs, however, these plans were not fully implemented. The project was presented as a masterplan for the coastal area of the northern side of Beirut between the rivers in Beirut and Antelias. It was first envisioned in 1981 to address the environmental impact of the Bourj Hammoud landfill and the illegal encroachment on the coastal line and provide infrastructural facilities for the surrounding areas.

The Associated Consulting Engineers S.A.L. prepared the masterplan for the LINORD Project to include a transportation network that links the Charles Helou Highway to a new coastal road. Although the project was stopped in 1990, the Directorate General of Urban Planning submitted the masterplan to the Council of Ministers in 1995. The Council of Ministers approved the masterplan in decree number 7309 in 1995 and set up a real estate company in decree number 8937 in 1996 to develop the area. The Council for Development and Reconstruction (CDR) launched the call for tenders in 1997 to initiate the development, but the bidders lost interest since 1999. After the LINORD Project was dormant for some time, the CDR contracted Associated Consulting Engineers S.A.L. to consult on the project titled "Review and Update of the Proposed Concept Masterplan for the Improvement of Beirut Northern Entrance Between Antelias River and Beirut River (LINORD)". This was completed for 38,850 USD between July 2018 and January 2019. The project was proposed again to the Council of Ministers in September 2019. The section of the LINORD Project in municipal Beirut includes a planned highway that has a major impact on the physical fabric of Karantina. It requires a highway extension that cuts across Karantina's residential sub-neighborhoods.

The transportation network also includes a wide interchange to the east which will erase a large section of the Industrial Zone. The execution of the project will inevitably segment Karantina from within and further isolate it from the Port of Beirut, Bourj Hammoud, and Mar Mikhael. As a result, it will cause significant disruptions in the built fabric of Karantina. The LINORD Project will require the Lebanese government to acquire many lots within and around the planned transportation network.



Figure 1. LINORD Project. Source: The Lebanese University, 2016.

Even though the project has been put on hold, future developments are limited to the sections of the lots that are not subject to the acquisition. Developments are also unfavorable due to the uncertainty around the execution of the project, and if this execution will require amendments that will affect these lots.

The objective of this proposal is to hire a professional firm to conduct a feasibility study of the LINORD Project, propose alternatives, and lobby for the necessary changes with the relevant actors. The firm will be required to coordinate efforts with the local and professional stakeholders to consider various options and build consensus on the best course of action. The LINORD Project is currently restricting developments in Karantina, and the proposed large-scale transportation network will have a significant impact on the built fabric. Accordingly, the target of the proposal is to release the impacted lots from the uncertainty around the future of the LINORD Project while reconsidering the necessity of the transportation network or reducing its scope.

Although the Associated Consulting Engineers S.A.L. submitted a revised study of the LINORD Project to the CDR, it is unclear whether the study, which is not public, has addressed issues of sustainability and the social impact of the project. It is important that the study considers the views of local landlords, academics, and professionals to correctly assess the impact of the LINORD Project and propose amendments. It should consider proposals that facilitate private developments on the short term and amend the masterplan. The amendments should focus on Karantina and safeguard the integrity of the physical and social fabrics of the residential sub-neighborhoods. The CDR should also follow up with the relevant agencies to make sure that the necessary changes are implemented.

The Relevant Actors

The relevant actors include the Council for Development and Reconstruction, the Directorate General of Urban Planning, the Municipality of Beirut, the Governor of Beirut, the Municipality of Bourj Hammoud, the Municipality of Jdeide-Boushreih-Sad, the Municipality of Jal El-Dib, the Municipality of Zalqa, the Municipality of Antelias, and the Council of Ministers, in coordination with local stakeholders such as local landowners, the property owners of the local industrial facilities, the residents of Karantina, and actors such as the Order of Engineers and Architects in Beirut.

Proposed Source of Funding

The Council for Development and Reconstruction with possible support from local and international agencies.

Approximate Financial Magnitude

The proposed budget must cover the cost of the study, currently estimated at 40,000 USD.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

A feasibility study with the relevant stakeholders in Karantina. The study will:

1. Assess the impact of the LINORD Project on the residential and industrial developments.
2. Assess the principles of sustainability in the current masterplan.
3. Advocate for short term solutions that can reduce the current barriers to development.
4. Advocate for the necessary amendments to the masterplan to safeguard the integrity of physical and social fabrics of the residential sub-neighborhoods.

ACTION PLAN 04

Project Title

Form a neighborhood committee.

General Objective(s)

- A. Protect the existing affordable housing units in Karantina and provide a larger stock that is inclusive of a diversity of social and income groups.
- B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.
- D. Promote a sustainable development strategy that is participatory and phased over a period of time.
- E. Improve the overall quality of the urban environment in Karantina.

Type of Project

- | | |
|--|--|
| <input type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input checked="" type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

- A1: Protect and expand the existing stock of affordable housing units.
- A4: Provide access to new and inclusive housing units across a diversity of social and income groups.
- B4: Improve accessibility to the different areas within Karantina and between them.
- D1: Advance a development program for Karantina and remove existing obstacles to development.
- D5: Improve connectivity and accessibility to Karantina.
- D6: Engage the residents of Karantina in local development programs and long-term shared visions.
- E5: Improve the quality and safety of the public domain which supports the existing socio-spatial practices across the three sub-neighborhoods.

Project Objective(s)

The project contributes to the following strategies:

A1.2/A4.2/D1.1: Release frozen, militarized, and unbuildable privately owned lots, and facilitate the development of new housing units.

B4.1/ D5.6/E5.2: Remove all access restrictions to the public domain.

D6.1: Empower and strengthen the representation of different community groups in decision-making.

Accordingly, the proposed neighborhood committee will lobby for the interests of the residents of Karantina. Among its many tasks, it will:

- Negotiate with the army in Karantina, and lobby with the government's parliamentary representatives, to propose legal steps to remove the encroachments on private properties and the public domain, including roads and sidewalks.
- Discuss with the Maronite Waqf and other major stakeholders the relevant development projects and provide capacity building workshops and professional support for the different community groups.
- Organize town hall meetings with the community groups and other relevant stakeholders to discuss future plans and projects in Karantina.

Project Description (concept note)

Karantina is home to several marginalized and vulnerable groups in Beirut, including low-income Lebanese families, refugees, and migrant workers. The long history of marginalization within Karantina also limited the capacity of the residents to participate in local decision-making processes and voice their concerns for projects that have a direct impact on their lives. And this is still the case now as Karantina faces several ongoing challenges. The suspended LINORD Project is a top-down and invasive infrastructural intervention that affects Karantina.

It currently restricts development and, if implemented, will have negative impacts on the social and built fabric of the area. Accessibility is also compromised due to the existing transportation infrastructure, encroachments on private properties, and the militarization of many private and public lots. The stock of affordable housing units is also under threat since landlords are more likely to rent out their properties to businesses for higher rates. These challenges are exacerbated by the proximity of Karantina to the port and the industrial activities that negatively impact the safety and quality of the public domain.

Following the port blast, people were further marginalized by the lack of a vision for a people-centered and long-term inclusive urban recovery. Humanitarian aid was distributed without involving the local community groups or through sustainable recovery strategies. The interventions of non-governmental agencies (NGOs) in Karantina after the port blast were limited to sheltering residents and urgent repairs. The Lebanese army was solely responsible for liaising between these NGOs, following up on assessments, and distributing food, supplies, and limited cash compensations. These shortcomings in the post-port blast reconstruction will significantly impact the future of Karantina, thus, necessitating the involvement of the local community groups in the decision-making process.



Figure 2. Residents meeting in Karantina.
Source: Batoul Yassine, 2021.

The involvement of the local community groups is possible through a neighborhood committee that can advocate for their local needs and interests. This is an important incentive to take collective action on local issues with investors and government departments. This goes hand in hand with building communal networks and building local capacities. This committee is central to an urban recovery strategy that goes beyond physical repair to sustain the development of the area and the well-being of the community groups. Neighborhood committees are active associations that are involved in participatory planning initiatives. The neighborhood committee is an intermediate entity that can directly monitor the concerns, capacities, and qualifications of residents, owners, and businesses and employ them in sustainable development projects. A neighborhood committee is a representative group that is elected by the people in Karantina.

The objectives of the committee are:

1. Improve and activate the relationship between the people and the municipal council in Beirut.
2. Strengthen the social relationships between the residents.
3. Utilize the available material resources and local capacities of people for the benefit of Karantina.
4. Activate the civil and private institutions in Karantina to improve living conditions.
5. Support the action plans of the Municipality of Beirut by conveying the needs of the residents, property owners, and businesses.
6. Maintain public properties in Karantina.

The scope of the work of the committee should also include the establishment of community facilities that can decrease social fragmentation, serve as catalysts for communal belonging, and enhance cultural diversity. The sub-neighborhoods need to be better integrated and connected to each other and provided with equal access to resources. The neighborhood committee should collaborate with the Maronite Waqf and other major local stakeholders in the development of projects. It should advocate for land to be released for local development to increase the stock of affordable housing units and accommodate a diversity of social and income groups in Karantina. The committee should also follow up with relevant government agencies on the implementation of the necessary measures to maintain a good quality and safe public domain that can accommodate the existing socio-spatial practices across the three sub-neighborhoods. This includes, but is not limited to, proposing development plans for the sub-neighborhoods (cleanliness, public health, lighting, and sewage) and submitting them to the Municipality of Beirut for their consideration.

The proposal for the committee should be discussed at a general town hall meeting. This town hall meeting can serve as the founding event to create the committee and decide on its role and objectives. The participants in the meeting will be registered at the general assembly which will be responsible for electing the neighborhood committee. Property owners, residents, and long-time business owners have the right to attend the meeting and cast their votes.

An annual town hall meeting will be held to elect a new committee. An existing member of the committee can be re-elected. The neighborhood committee should meet periodically on a monthly basis. The committee can call for town hall meetings whenever necessary to discuss any relevant issues that affect the local community groups. The number of committee members should range between 5 members to a maximum of 9 members. The neighborhood committee should represent the residents, property owners, and businesses across the three sub-neighborhoods, and be inclusive across gender, age, and religious groups. These individuals are involved in community life and can engage in dialogue with all parties.

The committee chooses, by election or by consensus, a chair, and a secretary. A committee meeting is valid if two-thirds of the members are present; these members must include the chair and the secretary. Decisions must be taken unanimously, if possible, and by-election, if necessary, by a simple majority of all members. The members are bound by the decisions of the meetings. Details of the responsibilities of the committee are defined by an internal by-law. The committee should be officially registered as an association at the Ministry of Interior and Municipalities. The committee should represent the interests of the community groups in Karantina to the Municipality of Beirut and other official agencies. It is responsible to coordinate with the municipality and its employees to facilitate their tasks and enable them to perform their duties. The work of the committee should include conducting awareness campaigns for the people on various issues in coordination with public agencies and non-governmental organizations.

The Municipality of Barja, in the Chouf District of the Mount Lebanon Governorate, implemented a similar model of a neighborhood committee (لجنة الحي). This model can serve as a prototype in Karantina.

The Relevant Actors

The relevant actors include the residents of Karantina, the current and former mukhtars, the property owners, and the local businesses. They should work in coordination with the Municipality of Beirut and the Governor of Beirut, and in collaboration with local or international agencies such as the UNDP.

Proposed Source of Funding

Not required.

Approximate Financial Magnitude

Not applicable.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

The neighborhood committee will lobby for the interests of the community groups in Karantina. Among its many tasks, it will:

- Empower the different community groups in Karantina to voice their concerns and pursue common interests.
- Cultivate engagement with public affairs and issues of public good.
- Promote a participatory model of decision making.

ACTION PLAN 05

Project Title

Pool the block of unbuildable lots and develop it through a public-private partnership into an affordable and inclusive housing project that incorporates multiple typologies of residential units and accommodates different family sizes and income groups.

General Objective(s)

- A. Protect the existing affordable housing units and provide a larger stock that is inclusive of a diversity of social and income groups.
- D. Promote a sustainable development strategy that is participatory and phased over a period of time.

Type of Project

- Execution Project
- Regulation - Policy
- Detailed Study
- Lobbying - Advocacy
- Institutional - Committee set up
- Capacity Building
- Management - Operations plan

Strategic Objective(s)

- A1: Protect and expand the existing stock of affordable housing units.
- A4: Provide access to new and inclusive housing units across a diversity of social and income groups.
- D1: Advance a development program for Karantina and remove existing obstacles to development.

Project Objective(s)

The project contributes to the following strategies:

- A1.2/A4.2/D1.1: Release frozen, militarized, and unbuildable privately owned lots, and facilitate the development of new housing units.
- A4.1: Diversify the typologies of housing units from studios to single family and multi-family apartments.

Project Description (concept note)

In Al-Khodr sub-neighborhood, to the west of the main residential cluster, there is an empty undeveloped block of lots with an area above 5000 m². Part of this block is used as car parking, while the bigger section is covered with sand and is used by local children as a playground. The block was not always unbuilt; most of it was built and occupied before the civil war. However, all the buildings were demolished. Initially, the block was divided into 44 lots; 15 lots had an area under 100 m² and were considered unbuildable according to the zoning of Beirut (zone 7). The area of the largest lot is 345 m², while the areas of the other lots range from 100 m² to 150 m².

All these lots have multiple owners which makes any development a costly and tedious process. However, in 2016, Mr. Tawfik Dallal bought 12 lots out of the 44 lots in the same block; 10 of these lots were located at the southern edge of the block. The two other lots are small and unbuildable and are located at the northern edge of the block. 5 of the lots that are located at the southern edge of the block, owned by Mr. Dallal, were partially affected by the highway that is planned in the LINORD Project⁶. Accordingly, Mr. Dallal did not pool the lots together.



Figure 3. Unbuildable lot. Source: Ali Ghaddar, 2021.

⁶ Refer to Action Plan 03.

To complete the required administrative procedures, Mr. Dallal hired a lawyer for five years during the purchasing process. The lawyer managed the negotiations with the shareholders and the process of pooling lots with the relevant public institutions. Many factors, including legal and spatial factors, restrict development. These include the zoning in Beirut that sets the minimum dimensions and areas of buildable lots and the multiple ownership of lots across family generations.

Karantina is one of the few areas in Beirut that provides affordable housing units and responds to the increasing demand in the local affordable housing sector. However, Karantina is becoming less affordable due to the many factors that were mentioned above. These factors limited growth in the stock of housing units and, as a result, prevented former residents who were displaced during the civil war from returning to Karantina. This includes third-generation residents, refugees, and other low-middle-income groups. Unbuilt land must be developed to increase stock of affordable housing units and accommodate a diversity of social and income groups within Karantina and the rest of Beirut. The unbuilt block in Al-Khodr can be a great opportunity to expand the stock of housing units in Karantina. This will require funding and involve an administrative procedure for land acquisition.

Private-public partnerships in Lebanon are regulated by Law number 48/2017. The Higher Council for Privatization and Partnerships (HCPP) is the authority in charge of planning and implementing privatization programs. Proposals can be initiated by the council or the relevant ministry. Proposals that involve the municipality can be put forth to the council by the mayor (as per Article number 4). The council revises the proposal before it approves it with the relevant government agencies and with consultants (as per Articles number 4, 5, and 6). After all the necessary approvals are secured from other government agencies, a bid is open to appoint a partner from the private sector.

The Public Corporation for Housing (PCH), which operates under the Ministry of Social Affairs (MoSA) and the Municipality of Beirut and the Governor of Beirut, can initiate the proposal for the housing project. The main role of the PCH should be to facilitate access to housing units for low-income groups. Its current role involves facilitating housing loans for middle-income groups through partnerships with commercial banks. Yet, its scope of work involves initiating housing projects, processing the necessary paperwork, and ensuring that its success is not tied to uplifts in profit margins in the construction sector.

The housing project will require purchasing and pooling the lots in the block. This can be negotiated with the lot owners by purchasing their ownership shares at an agreed price or substituting their shares in the lots with shares in the project. The project will be led by the private partner agency or corporation that will develop the block into a housing project. The design of the housing project should include a wide variety of apartment typologies that can accommodate a diversity of family sizes and income groups. The timeframe of the design and construction phases, the conditions, rights, and duties of the shareholders, and the profiles of buyers should be specified in the contract; the PCH and the Municipality of Beirut should monitor the content of the contract and its application.

The Relevant Actors

The relevant actors include the Higher Council for Privatization and Partnerships, the Municipality of Beirut, Governor of Beirut, the Public Corporation for Housing, the Council of Ministers, representatives from the banking sector, and prospective private development agencies, in collaboration with the residents of the three sub-neighborhoods in Karantina, the Directorate General of Urban Planning, and the Order of Engineers and Architects in Beirut.

Proposed Source of Funding

Landowners in partnership with private investors, Municipality of Beirut, and the housing authorities.

Approximate Financial Magnitude

The cost of building materials and execution is estimated at 20,000,000 USD⁷.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

A housing project that has between 90 and 120 apartment units with a variety of typologies that can accommodate a diversity of family sizes and income groups.

⁷ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 06

Project Title

Revoke the policies that exempt the owners of vacant apartments from paying taxes, introduce a vacancy tax, and encourage or mandate the development of mixed-income housing units through building or tax incentives and Inclusionary Housing Ordinance⁸.

General Objective(s)

A. Protect the existing housing units and provide a larger stock that is inclusive of a diversity of social and income groups.

Type of Project

- | | |
|---|---|
| <input type="checkbox"/> Execution Project | <input checked="" type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A1. Protect and expand the existing stock of affordable housing units.

A4: Provide access to new and inclusive housing units across a diversity of social and income groups.

A8: Improve the livability and building conditions within the residential clusters.

Project Objective(s)

The project contributes to the following strategies:

A1.2/A4.2/D1.1: Release frozen, militarized, and unbuildable privately owned lots, and facilitate the development of new housing units.

A4.1: Diversify the typologies of housing units from studios to single family and multi-family apartments.

A8.2/E1.1: Offer financial packages and incentives to support the landlords in rehabilitating their residential buildings and maintain the stock of affordable housing units.

The financial packages should include:

- Implementing a vacancy tax.
- Removing Article number 15 from the 1962 Built Property Tax Law.
- Removing Article number 3 from the Municipal Rental Value Fee.
- Supporting the development and implementation of an Inclusionary Housing Ordinance.

Project Description (concept note)

The housing market in Beirut is characterized by high vacancy rates, high rental prices, and a lack of affordable housing units. Karantina is one of the few areas in Beirut that offers a limited number of affordable housing units that are currently under threat. The answers to the household questionnaire conducted by the Beirut Urban Lab showed that most of the residents spend more than 30% of their income on rent.⁹ Additionally, the renovations after the port blast resulted in rent hikes and evictions. Property owners favor tenants who are willing to pay higher prices for the refurbished units.

Although Karantina's vacancy rate is much lower than many areas in the rest of Beirut, there are buildings that are dilapidated and abandoned. Additionally, property owners are converting housing units that are in a good condition into office space to attract tenants who can afford higher rents. Property owners who are unable to find tenants who can afford higher rents are more inclined to leave their residential and commercial units empty for future opportunities, instead of lowering the asking price.

⁸ This should be part of a comprehensive land use plan that addresses both the supply and demand of residential and affordable housing units.

⁹ See page 76 of the report.

The current taxation framework allows property owners to benefit from high vacancy rates due to the tax exemptions in the Built Property Tax Law from 1962 (ضريبة الأملاك المبنية) and the law for the municipal rental value fee (رسم القيمة التأجيرية). The former is an annual tax that property owners must pay when they collect rent while the municipal rental value is the one imposed on tenants to cover the costs of municipal public works. Article number 15 from the 1962 law and Article number 3 from the municipal rental value fee exempt the owners of vacant units from paying taxes when they do not have a property income from rent payments. This decreases the number of housing units on the market and also incentivizes residents to report their apartments as empty because they can benefit from these exceptions. This practice has resulted in a vacancy rate of 23% in municipal Beirut, as per the Beirut Urban Lab. While the reported rate of vacancy stands at 50%, as many residents mis-report their homes as vacant to avoid paying taxes. This comes at a cost to the municipality's coffers.¹⁰

There are very few taxes that the Municipality of Beirut can directly collect to finance public services. The only other source of revenue is from construction permits for high-rise buildings. As a result, the municipality is reluctant to permit the demolition of older buildings. This is the wrong incentive structure for public authorities and residents alike. It will increase rent values and enlarge the gap between the actual housing supply and the demand for affordability, especially in places like Karantina.

Lebanon does not have incentives for developers to build housing units that are sold or rented out below the market rates. According to the 2004 Building Law, property owners can exceptionally build luxury high-rise buildings on pooled lots with a total area that is above 4000 sq. m, as a result, overriding the limitations in the zoning for Beirut. Also, through the Investment Development Authority of Lebanon, major building projects are additionally exempted from permitting fees and taxes. It further encourages property owners to pool adjacent lots and replace low- to mid-rise buildings with high-rise buildings.

Lebanon also lacks policies that facilitate inclusionary practices in the production of housing. Unlike major cities around the world, Beirut does not have an inclusionary zoning ordinance that incentivizes property owners to allow a certain portion of their units to be affordable according to the average local income levels. Affordable housing as a policy agenda and requirement is also absent from Lebanese urban planning.

Accordingly, the proposed project aims to increase the stock of affordable housing units in Karantina and respond to the increasing demand for housing units by facilitating new developments that can cater to a diversity of social and income groups. It proposes financial incentives to landlords and property owners to comply with the requirements of the new vacancy tax and benefit from the incentives in the Inclusionary Housing Ordinance.

This project proposes removing Article number 15 from the 1962 law and Article number 3 from the law for the municipal rental value fee and adding a vacancy tax on empty residential and commercial units. The tax should apply to the units that are vacant for more than one calendar year and should be equivalent to a set percentage of the value of the unit. It will encourage landlords to rent units in their buildings even if at lower prices. It will also reduce the potential for property hoarding that can be put on the market again. However, this is not without challenges. In the country's 2022 budget, the finance and budget committee in the Lebanese parliament rejected a proposal to tax vacant properties at half of what occupied units are taxed.

The project also proposes that the Municipality of Beirut and the Directorate General of Urban Planning introduce incentives such as density bonuses that encourage developers to build affordable residential units that are priced below the market rates. The bonuses allow property owners to increase their total built-up area or surface exploitation depending on the conditions of the lot, or benefit from exemptions in property tax registration. This would allow for the construction of additional units and would offset the cost of adding below-market rate units to the development.

¹⁰ See page 60 of the report.

The Municipality of Beirut should implement an Inclusionary Housing Ordinance, as part of the permitting process, to create developments that can accommodate a diversity of income groups. This will require developers to set aside a percentage of the units in the building for sale or rent at a below-market rate. The percentage varies in cities around the world, in Boston it is set at 13%, for example, whereas in London it is 30%. The value can be calculated according to the average income of people in the area where the building is located. This formula will, to an extent, allow people to feel a sense of belonging to their city. The housing units will be proposed on the brownfields and the pooled lots in Karantina.

The Relevant Actors

The relevant actors include the Municipality of Beirut and the Governor of Beirut, in collaboration with the Ministry of Finance, the Public Corporation for Housing through the Ministry of Social Affairs, the Directorate General of Urban Planning, and members of the Lebanese parliament.

Proposed Source of Funding

Public authorities involved.

Approximate Financial Magnitude

Not applicable.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- An increase in the availability of affordable housing units for a diverse range of household sizes and income levels.
- An increase in the availability and diversity of typologies of housing units.
- A decrease in vacancy rate of residential units in Karantina and the rest of Beirut.
- A decrease in the gap between supply and demand for residential units, in the process, mitigating the increase in the market prices of residential units.
- A residential real estate market that includes low to moderate income housing units.
- Ensuring the inclusion of actors from both the private and public sectors in the provision of affordable housing units.

ACTION PLAN 07

Project Title

Propose a strategy to reform the new system of housing bank loans to enable vulnerable groups of people to own their houses in Karantina.

General Objective(s)

A. Protect the existing housing units and provide a larger stock that is inclusive of a diversity of social and income groups.

Type of Project

- | | |
|---|---|
| <input type="checkbox"/> Execution Project | <input checked="" type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A1: Protect the existing stock of affordable housing units.

A4: Provide access to new and inclusive housing units across a diversity of social and income groups.

Project Objective(s)

The project contributes to the following strategy:

A1.3: Facilitate the ownership of the existing stock of affordable housing units.

- Utilize the funds from the State of Kuwait to help residents in Karantina who were impacted by the port blast to purchase their houses.
- Expand the loan program to the residents of Beirut, especially the ones who were impacted by the port blast.

Project Description (concept note)

The rate of home ownership among the residents of Karantina is low. The answers to the questionnaires by the research team at the Beirut Urban Lab showed that 22.4% of the households own their houses and around 73% are tenants.¹¹ Many of the residents are old tenants on rent control and face rent stabilization by 2026. One of the aims of this proposed project is to increase the stock of affordable housing units and facilitate home ownership for the existing tenants through funding opportunities. Several subsidized loan programs were implemented after the civil war to increase home ownership for Lebanese people, including the Housing Bank loans and the Public Corporation for Housing loans. They limited the role of the government to a facilitator of housing loans rather than a provider of housing units. And, as the result, the loan programs contributed to the rising inflation in the residential market and were stopped in 2018. Fortunately, despite the ongoing economic crisis in Lebanon, funds became available to the government in 2022 to support Lebanese people in buying houses. Earlier in 2022, Banque de l'Habitat (the Housing Bank) announced that they will relaunch one of their loan programs with a credit line from the State of Kuwait for 163 million USD.¹² The loan opportunity is open to low- to middle-income Lebanese people. The repayment schedule is over a period of 30 years at an interest rate of 4.99% (Gemayel, F., 2022).

The loan amount is in the Lebanese currency and is equivalent to up to 80% of the price of the house. The buyers will need to contribute a down payment that is equivalent to 20% of the price of the house.

¹¹ See page 74 of the report.

¹² Part of this fund will be used for solar energy loans.

There are some conditions that restrict the eligibility of the residents of Karantina to the loan program, namely that any purchase cannot occur in an urban area. The Housing Bank adopts the definitions of urban and rural areas by the Ministry of Interior; as such, Karantina is considered an urban area inside the city of Beirut despite its low density and village-like character.

The Lebanese government needs to revise the terms, conditions, and eligibility criteria of the loan program and allocate part of it to the residents of Karantina; residents who, in addition to the severe impact of the port blast, faced multiple traumas since the civil war and were not properly compensated. Additionally, like the Public Corporation for Housing loans, the residents of Karantina should be exempted from paying registration fees. Accordingly, this project proposes to amend the conditions of the loan program to accommodate the residents of Karantina. This program should help facilitate the home ownership of the existing stock of affordable housing units to vulnerable and low-income tenants. Facilitating home ownership for this group protects their tenure rights and safeguards the social fabric of the area where they live. Studies showed that home ownership increases the attachment of residents to their neighborhoods and their engagement in its future. It also helps anchor them to the place.

The following steps are required to turn the proposed amendments of the loan program into an action plan:

- Revise the condition of the loan that currently limits the locations of houses to rural areas to benefit the residents of Karantina.
- Prioritize the victims of the port blast who are threatened with displacement.
- Increase the loan amount from 40,000 USD per person to 75,000 USD per person to reflect the property prices in Beirut.
- Establish a hierarchy of needs to determine the eligibility criteria. The eligibility criteria should include income level, overall level of vulnerability, attachment to the neighborhood, and the likelihood of the household to remain in the neighborhood.
- Utilize the database by the Beirut Urban Lab at the American University of Beirut to establish the hierarchy of needs and support local stakeholders in processing the loan applications.
- Add special provisions that prohibit the reselling or leasing of the house for a period to reduce the risk of real estate speculation and the financialization of housing.¹³
- Use the loan program to finance the refurbishment of houses that are dilapidated and abandoned.

The Relevant Actors

The relevant actors include the Ministry of Finance and Banque du Liban.

Proposed Source of Funding

Authorities involved.

Approximate Financial Magnitude

To be determined by authorities involved.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- An increase in the levels of home ownership among the residents in Karantina.
- A decrease in the rate of displacement among the residents.
- A decrease in the number of problems that are associated with old rent contracts for three residents who are at risk of being evicted by 2026.

¹³ For example, in Latin America, some of the squatters were given ownership of the pieces of land where they lived. However, in some cases, they sold their houses on these pieces of land to developers for real estate speculation.

ACTION PLAN 08

Project Title

Establish a Business and Career Training Center in Karantina.

General Objective(s)

- A. Protect the existing affordable housing units in Karantina and provide a larger stock that is inclusive of a diversity of social and income groups.
- B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.
- C. Support, increase, and sustain cultural and economic vitality in Karantina.

Type of Project

- | | |
|---|---|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input checked="" type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective (s)

- A2/C2: Provide job opportunities for the residents of Karantina.
- B5: Strengthen the role of economic drivers to connect Karantina to the city scale economy.
- B6: Provide access to job opportunities in micro, small, and medium businesses.
- B7: Connect the different businesses within Karantina.
- C3: Support the existing micro businesses and sustain their operations in Karantina.
- C4: Increase the diversity and vitality of the traditional crafts and other manufacturers in Karantina.
- C5: Support the growth of port-related businesses.

Project Objective (s)

The project contributes to the following strategies:

- A2.1/B6.1/ C2.1: Build the capacities of the residents of Karantina and match them with job opportunities.
- A2.2/ B6.2/ C2.2: Match the skilled workforce with the businesses in the area and connect them with the job market at a larger scale.
- B5.2/ B7.1 / C5.1: Network, protect, and strengthen the sustainable agility and capacity of port-related and other industrial businesses.
- C3.2: Connect the micro and specialized businesses with online platforms and services to enhance their operations.
- C4.2: Train a new generation of craftsmen to sustain their crafts by:

- Establishing a facility that offers capacity building workshops.
- Setting up a program that helps businesses improve their operations and management procedures.
- Design a digital platform that links businesses with each other and with people looking for job opportunities.
- Encourage connections between different economic actors.

Project Description (concept note)

Karantina is home to a wide range of economic activities that serve multiple user groups on the local and national scales of Beirut and Lebanon. It also has potential for significant growth given the relatively low rent prices in Karantina and its strategic location close to the port and the Beirut Central District. It has important light industries and government facilities like the slaughterhouse and the public markets that act as key economic drivers. Also, recently, before the port blast, many entertainment and cultural functions like nightclubs, galleries, and ateliers opened in Karantina to attract new user groups.

However, in a context of accumulating traumas and crises - the civil war, the ongoing economic crisis, the 2020 port blast, and the Covid-19 pandemic - many businesses closed, and the unemployment rate in Karantina reached a very high 70%. The surviving businesses are suffering, and many are threatened with closure. Some of the major economic drivers, such as the public market and the slaughterhouse, were already closed before 2019, and the others are facing a drastic loss in clients. Moreover, the port blast did not only cause direct physical destruction to the facilities of the businesses but also disrupted the port's operations, which in turn stifled the activities of the port-related businesses in Karantina. Furthermore, micro-enterprises as well as craft businesses are struggling with the increase in rent and production costs, coupled with a decline in demand. And most of the micro business owners who do not have university degrees rely on conventional tools and methods to trade and manage their businesses, which further limits their ability to adapt to the current dire conditions in Lebanon. As for the trend of new cultural activities coming into Karantina, it has been stalled since the port blast and economic crisis, depriving Karantina of possible economic and cultural benefits.

Given this decline in economic activities, the already high unemployment levels in Karantina were aggravated. Around a third of those who are currently unemployed used to have jobs. 54% of them lost their jobs in the last 3 years as a result of the economic crisis and the pandemic, while 27.5% lost their jobs following the port blast. But even before these problems, Karantina was suffering from high unemployment rates. This could be partly attributed to the fact that a large portion of the labor force in Karantina is low-skilled, which adversely affects their employability. More than two-thirds of workers have received neither higher education nor vocational training. Nonetheless, even the highly educated residents in Karantina who completed bachelor's and master's degrees are struggling to find job opportunities, inside or outside the neighborhood. Here, it must be noted that the larger businesses in Karantina, mostly involving logistics companies, entertainment businesses, and galleries, barely hire people from the Karantina, partly due to their lack of knowledge of the local qualifications and skills. For instance, during one of the town hall meetings, the residents pointed out that "there is a lack of communication between us [the Karantina residents] and these companies."¹⁴

Accordingly, this proposed project mainly aims to support existing businesses and build their capacities. The intent is to establish in Karantina a business and career training center that invests in workforce training programs, offers guidance for business development, and matches workers with job opportunities. This center, requiring an area between 400 and 600 sq. m¹⁵, could be hosted in a new construction on vacant municipal property or in an existing building to be renovated. Its operation could be handled by local or international non-governmental agencies or initiatives that tackle development and training for the workforce and businesses.



Figure 4. A schematic of the proposed business and career training center. Source: The Beirut Urban Lab, 2022.

Firstly, among the services provided would be a career guidance program that aims at supplying individuals with the knowledge and skills that are needed for job hunting: resume assistance, mock-up interviews, assistance with job applications, and job search coaching.

Secondly, the center would foster capacity-building workshops for a wide range of skills and, thus, respond to the needs of the different economic actors in Karantina. Certain workshops would target workers and unemployed individuals, train them, and increase their qualifications. It is recommended to develop skills that are tailored to the needs of the businesses based on a labor force demand survey. This would provide benefit not only to the workers but also to the businesses, namely cultural facilities in the area such as Forum de Beyrouth and FLYP, as well as the port-related businesses, which would benefit from the proximity of a compatible and skilled workforce.

¹⁴ First town hall meeting in Karantina on 11 April 2022.

¹⁵ Two to four 48 sq. m classrooms for 20 people each; one 60 to 80 sq. m workshop for 10 to 20 individuals; one 60 sq. m computer lab for 20 people; one 80 sq. m administrative area (three offices, a reception area, and an administrative utility spaces); one 40 sq. m lunchroom and meeting room; one 20 to 40 sq. m general utility room; and a circulation space that is equivalent to 20% of the total area.

Also, certain workshops would directly target the businesses. Workshops on online marketing tools and strategies, for example, would be particularly useful for micro-businesses as grocery shops, mechanics shops, bakeries, and others. As for older manufacturers and handicraft businesses such as carpentry and steel lathe businesses, workshops on the promotion and sustenance of these threatened crafts would be beneficial. These workshops would not only spread and pass on the craft knowledge to a new generation of craftsmen but also provide an opportunity for the present-day craftsmen to network, share knowledge about techniques and efficient supply chains, and coordinate efforts and resources. For various types of businesses in Karantina, and especially for businesses that provide logistics and shipping services, workshops for business management and commercialization, covering basic market research design and product labeling and packaging would enhance their level of competitiveness and growth potential.

Thirdly, sustainable business planning services could also be offered within the center and supplement the capacity-building workshops. The businesses would also be provided with counseling services on issues like business planning, management, and budgeting and in the use of digital technologies, business record keeping, and legal registration.

Finally, approaches and programs for job matching are important; the center can arrange connections between the workers and businesses within Karantina and beyond, along two tracks. On the one hand, it can facilitate direct, live contact through job fairs. On the other hand, it can establish virtual contact through setting up a digital platform that displays the profiles of the workers and the local businesses and posts for job openings. Furthermore, this platform can help the different businesses discover one another, identify their similarities and complementarities, and engender communication and networking. As a result, the capacities and connections between both businesses and employees can potentially expand, leading to higher levels of productivity and employment rates.

The Relevant Actors in the Design and Execution Phases

The relevant actors include local or international agencies and organizations that engage with similar work such as the Lebanese Training Center within the Chamber of Beirut and Mount Lebanon, trade unions, ESCWA, UNESCO-UNEVOC, Borderless, ACTED, the Center for Social Science Research and Action, Semeurs d'Avenir, and IECD-Maharat Li Loubnan, in collaboration with public actors such as the Ministry of Labor, the Ministry of Economy and Trade, the Ministry of Social Affairs, and the Municipality of Beirut (to provide the lots).

Proposed Source of Funding

They can include the Ministry of Labor, the Ministry of Economy and Trade, and the Ministry of Social Affairs in Lebanon with possible support from international agencies with similar scope of work like the ILO, the UNDP, UNESCO, USAID, CFSI, CIDA; ESCWA, AFD, the EU ERASMUS+ program, and TİKA¹⁶.

Approximate Financial Magnitude

The total annual cost of operating and managing the center is estimated at 160,000 USD. This estimate includes the capacity building workshops, the business support services, support services for people looking for job opportunities, the labor force demand survey, the job matching live activities, and setting up the digital platform.

The proposed area of the center is between 400 and 600 sq. m, estimated¹⁷ to cost between 280,000 and 420,000 USD for new construction and between 180,000 and 270,000 USD for the renovation of an existing building¹⁸.

¹⁶ The Turkish Cooperation and Coordination Agency (TİKA) is a government department that operates under the Turkish Ministry of Culture and Tourism. TİKA provides various types of development assistance, like capacity building programs to developing countries, with a particular focus on Turkic and African countries and communities.

¹⁷ The costs are estimated as follows: 200 USD per 1 sq. m in furnishing costs, 500 USD per 1 sq. m for new constructions, and 250 USD per 1 sq. m for the renovation costs.

¹⁸ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- An increase in the employment rate in Karantina.
- A larger and more active labor force in Karantina, with improved local skills and capacities.
- An increase in the performance of the Karantina businesses in terms of management, administration, capacities, and upscaling potentials.
- A stronger link between local jobseekers and recruiting businesses.
- Better networking opportunities and coordination between the local businesses.
- Local crafts that are preserved through the circulation of knowledge and skills to younger generations.

ACTION PLAN 09

Project Title

Rehabilitate the slaughterhouse following international environmental standards and construction codes and reform its management and operation systems before it reopens.

General Objective(s)

- B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.
- C. Support, increase, and sustain cultural and economic vitality in Karantina.

Type of Project

- | | |
|--|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input checked="" type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A2/C2: Provide job opportunities for the residents of Karantina.

B5: Strengthen the role of economic drivers to connect Karantina to the city-scale economy.

C1: Restore and strengthen the role of the key economic drivers in Karantina.

Project Objective(s)

The project contributes to the following strategies:

A2.3/ B5.1/ C1.1/ C2.3: Revitalize three of the economic drivers: the slaughterhouse, the public market, and the fish market, through:

- Increasing the number of commercial activities in Karantina
- Adopting international standards and regulatory framework for the monitoring and management of the facility. This includes hygiene standards, for example, HACCP, SSOPs, FAO, ISO, and CAC/RCP 58-2005.
- Mitigating the exposure of the residents in Karantina to residual waste from the slaughterhouse and the associated health risks.
- Improving the level of awareness of the employees, especially regarding the tools for managing waste in the slaughterhouse.
- Rebranding the slaughterhouse to reestablish its service in the meat trading market.

Project Description (concept note)

Karantina's slaughterhouse was a key economic driver in Karantina. Located to the northeast of Karantina next to the Beirut River, the slaughterhouse is around 6,000 sq. m and occupies municipal land with an area of 16,000 sq. m.

The first slaughterhouse was established at the turn of the 20th century on the northern edge of Karantina on the Mediterranean Coast. It was the largest slaughterhouse in Lebanon and took advantage of the transportation network that was established for the port. The transportation network linked the slaughterhouse to trade networks in Lebanon and beyond. It attracted traders and other commercial activities to Karantina and was considered a valuable economic asset for many of its residents; it provided them with job opportunities and was a source of income. However, the slaughterhouse was closed during the civil war years (1975-1990) and was occupied by Lebanese militia forces until the army took over. In 1992, the facility reopened after 15 years of closure in its current location to the northeast of Karantina.

However, the Ministry of Public Health, along with the governor of Beirut, officially shut down the new slaughterhouse in 2014 as it did not meet the minimum health requirements and used contaminated water to clean the meat products. The facility was also a subject of an international campaign that reported on the inhumane treatment of animals. The safety and health of employees working in this facility were also at risk since they were exposed to highly contaminated materials. Due to pressures from the residents of Karantina, there were plans to partially re-open this slaughterhouse by 2020 after its rehabilitation. However, the plans were not implemented. In the aftermath of the port blast, the physical structure of the slaughterhouse was heavily damaged, and the land around it was being used to dump piles of debris, rubble, and demolition waste.

This project proposes to reopen the slaughterhouse in its existing location, as it is a valuable economic asset, and to operate it with high environmental and hygienic standards. It should provide job opportunities to the residents of Karantina and once more attract clients from all over the country. It should have adequate basic amenities like proper flooring, water supply, and ventilation. Its administration should also provide guidelines for operations including humane slaughtering, implant control measures, by-product recovery (blood, rumen, fat, and dissolved air flotation), and waste management systems (effluent water, solid waste, and odors).



Figure 5. The dilapidated condition of the current slaughterhouse in Karantina. Source: Abir Cheaitli , 2021.

Additionally, the layout of the facility should provide an opportunity for inspection and evaluation by clients to allow for a level of transparency and reverse, to an extent, the stigma around the slaughterhouse. The overall objective is to produce healthy meat, maintain good hygiene and sanitation, and minimize environmental risks for the slaughterhouse to become a positive economic magnet and contribute to Karantina's economic vitality.

Operation:

The Municipality of Beirut owns the slaughterhouse and manages the operation of its employees. Due to limited financial resources and other complications, the municipality was unable to improve the operation of the slaughterhouse to meet international standards for hygiene. Moreover, an ex-employee mentioned in an interview¹⁹ that the slaughterhouse facility used to house between 50 to 100 cows and 1000 to 1500 sheep and performed about 1000 slaughters per day. However, he claims that the pollution levels in the slaughterhouse were not the result of its management and operations but rather due to its practices, such as improper bone crushing and solid waste disposal in the Beirut River. As a result, he rejects all the allegations made against the slaughterhouse. Hence, it is evident that the slaughterhouse should not only improve its operation towards waste generation but also advocate for the prevention of dumping waste into the Beirut River and finding sustainable methods for bone crushing and the disposal of other solid waste products.

Therefore, it is recommended to create a cooperative or a public-private partnership to manage and operate the slaughterhouse. This proposal requires the evaluation of the institutional set-up in charge of the operation and management of the slaughterhouse and its capacity. This includes roles, responsibilities, functions, regulations, service provisions, monitoring, and financing. The evaluation should also provide capacity building workshops to improve the technical and organizational abilities of the staff and administration. In addition, the collaboration for the implementation of the proposal should include the concerned ministries such as the Ministry of Environment to manage the solid waste generated in a sustainable manner, and the Ministry of Energy and Water which is responsible for the Beirut River and its cleanliness to address the problems of wastewater discharged from the slaughterhouse.

¹⁹ Fakir al-din Shehadeh, interviewed on 27 May 2021 by Ali Ghaddar and Abir Cheaitli.

The Relevant Actors in the Design and Execution Phases

The relevant actors include the Municipality of Beirut and the Governor of Beirut, in coordination with relevant actors, such as meat processors and processing companies, the Butchers Union and Livestock Traders Syndicate, the Lebanese Meat Traders, the Ministry of Environment, the Ministry of Agriculture, the Ministry of Energy and Water, and the Ministry of Public Health, and in consultation with the neighborhood committee in Karantina.

Proposed Source of Funding

Relevant public actors such as the Ministry of Economy and Trade, the Ministry of Agriculture supported by relevant private investors such as Ghanem Frozen Meat Est, Al Taghziah, and Sara Food Group and non-governmental organizations such as KFAED²⁰, LFF²¹, and GIZ²².

Approximate Financial Magnitude

The cost of the rehabilitation of the slaughterhouse is estimated between 4,000,000 and 6,000,000 USD; the cost ranges between 350 USD per 1 sq. m to 600 USD per 1 sq. m.

The cost of the required equipment is estimated between 600,000 and 1,000,000 USD; the cost ranges between 100 USD per 1 sq. m to 150 USD per 1sq. m.

The annual operational cost for the facility, including animal slaughtering and processing, employment services, merchant wholesalers, electricity, water, and maintenance, is estimated between 100,000 to 300,000 USD²³.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- A healthier and more environmentally friendly approach to meat production.
- Improved income for the residents of Karantina and more job opportunities, especially for the residents of Al-Khodor sub-neighborhood.
- Improved infrastructure and waste management in the slaughterhouse.
- Sustainable development and long-term growth in the meat production sector in Lebanon.

²⁰ The Kuwait Fund for Arab Economic Development (KFAED) is the State of Kuwait's agency for the provision and administration of financial and technical assistance to developing countries like Lebanon. In 2015, the Kuwait Fund provided a loan in the amount of 22 million USD for the financing of the Tripoli slaughterhouse.

²¹ Lebanon Financing Facility (LFF) is multilateral donor agency that pooled grant resources and strengthened the coherence and coordination of financial resources for the immediate socio-economic recovery of vulnerable people and businesses that were impacted by the port blast.

²² Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) is a German development agency that provides services in Lebanon in the field of economic development and employment, education and security, reconstruction, and peacebuilding.

²³ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 10

Project Title

Rehabilitate the public and fish markets and reform their operations and management systems before they reopen.

General Objective(s)

- A. Protect the existing affordable housing units and provide a larger stock that is inclusive of a diversity of social and income groups.
- B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.
- C. Support, increase, and sustain the cultural and economic vitality of Karantina.

Type of Project

- | | |
|--|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input checked="" type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A2/C2: Provide job opportunities for the residents of Karantina.

B5: Strengthen the role of economic drivers to connect Karantina to the city-scale economy.

C1: Restore and strengthen the role of the key economic drivers in Karantina

Project Objective(s)

The project contributes to the following strategies:

A2.3/ B5.1/ C1.1/ C2.3: Revitalize three of the key economic drivers: the slaughterhouse, the public market, and the fish market.

B1.3: Create socio-spatial hubs around the economic drivers in relation to the sea.

This requires:

- Rehabilitating and reopening the public market.
- Rehabilitating and enhancing the performance of the fish market.
- Activating the underutilized urban space around the public and fish markets.
- Expanding the commercial and cultural programs in the markets and introducing recreational spaces.
- Reforming the operations and management systems of the markets and assessing the PACM (owning and managing body) in terms of institutional oversight and responsibilities.

Project Description (concept note)

The public or popular market (السوق الشعبي) and central fish market (سوق السمك المركزي) are owned and operated by the Public Authority for Consumer Markets (PACM). They have been among Karantina's main economic drivers and connectors with the city-wide economic network. The markets are on the northeastern side of Karantina and occupy a 45,000 sq. m lot that is bordered by the port and the Beirut River. The public market occupies 3,500 sq. m while the fish market occupies 1,200 sq. m

The public market initially opened in 1996 and operated for four years before its closure. It reopened in 2014 for a short period before closing again. It has a history of employing over 300 workers with many skills and from different backgrounds, providing opportunities to shop owners including women, and bringing people from all over Beirut and beyond to Karantina.

The central wholesale and retail fish market opened in 1995 and continues to provide job opportunities and activate the retail market. It also supplies many restaurants in Beirut with both fresh and frozen fish. While it remains in operation, the fish market is suffering from a major decline in its activities following the economic crisis in Lebanon, which was further exacerbated by the port blast that damaged the structure of the facility.

The proposed project aims to revitalize the markets and reactivate them as economic drivers in Karantina. It further aims to transform the markets, along with the large empty space in front of the markets, into urban nodes. This is possible by expanding the existing program and setting up an efficient management scheme to create a socio-economic hub. Accordingly, the success of the project depends on the proper treatment and resolution of its different yet interdependent components.

Structures of the public and fish markets have a similar design that uses hangar structures. However, their haphazard position does not properly define the in-between outdoor space. A large, underutilized space is left over from the 45,000 sq. m lot. It is partly used as parking and partly left abandoned and littered. This is detrimental to the image, activity, and potential of the markets as economic drivers in Karantina. Accordingly, the project intends to consolidate the markets with the surrounding space into a coherent and synergetic urban hub that is connected to and benefits from the adjacent natural elements. This requires programmatic and volumetric expansion, part of which should include the construction of an annex with a fish restaurant.



Figure 6. Fish market. Source: Rami Shayaa , 2021.

The annex should be positioned northeast of the fish market and to the south of the public market, while remaining distant from both to create porosity and maintain a connection with the Beirut River, its estuary, and the sea. Ideally, when the open space network²⁴ is implemented, it will enhance the connection to the Beirut River, its estuary, and the proposed park in Bourj Hammoud Landfill thus amplifying the experiential and social values of the project. The design of the proposed annex should also contribute to forming a U-shaped configuration that clearly defines a courtyard space in front of the buildings. The courtyard has the potential to become a lively public space, with urban furniture and vegetation, and will be animated with gatherings and events. Play and sports areas should also be integrated into this space, catering to different age groups. The fish restaurant in the annex should be leased to and operated by a private business. The restaurant and fish market can mutually benefit from one another since the restaurant will use the products from the market and, as a result, will not incur any transportation costs. Moreover, it will offer job opportunities for the residents of Karantina, provide space for socialization, and enhance the economy.

Markets Rehabilitation:

A physical rehabilitation of the structures of the public and fish market is necessary to revive their activities. Both buildings are single floor corrugated metal structures with partial glazing, outdoor canopies, and metal entrance gates. The buildings are both raised, and a few steps provide access to the visitors. Both buildings show signs of damage from the port blast such as missing glazing, holes, and dents in the corrugated metal ceilings, damaged canopies, and rusted lighting fixtures. Rehabilitating the structures requires renovating the damaged glazing and fenestration, upgrading the roofs, cleaning the rust off the structures, applying an anti-corrosive layer of coating, and replacing the canopies. The design should also be inclusive and follow guidelines for disability access.

The public market is more deteriorated than the fish market due to many years of abandonment which was exacerbated by the port blast. In certain areas, the corrugated metal ceiling is falling. The ceilings in the offices collapsed and the insulation is damaged. Additionally, the interior requires reconfiguration, new tiles, new paint finishes, and new lighting.

Although the fish market was partly fixed to maintain its operation, this proposed project must improve the storage in the markets, the presentation of products, and waste by-product management to improve levels of hygiene and sanitation and create a more appealing image for the customers. Marketing and branding improvements are required with interior design works to improve the quality of the stations. It is also important to provide the market with new refrigerators to prolong the shelf life of the fish products, increase the storage capacity, and decrease waste. They will require reliable access to electricity.

²⁴ Refer to Action Plan 13

Thus, the introduction of solar panels as a sustainable and more reliable source of electricity for the market is an important element of this proposal. This proposal will contribute to increasing the activities and outputs of the market, elevating the customer experience, and improving working conditions.

Operations and Management:

The Public Authority for Consumer Markets (PACM) is a public institution that operates directly under the authority of the Presidency of the Council of Ministers. It is responsible, among other things, for managing and investing in consumer markets, including the fish and vegetable and fruit sectors. Since its establishment in 1996, the PACM has overseen the markets in Karantina, their management, and operations. However, given the ongoing, years-long closure of the public market and improper conditions of the fish market, it is evident that the PACM was not able to fulfill its responsibilities. It should be noted that some additional factors play a role in hindering the success of the markets in Karantina, such as the polluted urban environment, the remote location, and difficult accessibility to the facilities. These issues are beyond the PACM's scope of work and are the responsibility of other public authorities, including the Municipality of Beirut and the relevant ministries, which suggests the need for more collaborative efforts. As for the closure of the public market specifically, the PACM was seeking the relocation of the Souk El Ahad (a weekly public market) from Sin El Fil to Karantina, yet the vendors' cooperative rejected the proposal (Ghoussain, 2019). The suboptimal hygienic conditions and the insufficient maintenance of the fish market and due to the PACM's underperformance and limited resources. It argues that it has an insufficient budget²⁴, between 871 and 878 million Lebanese Pounds (Gherbal Initiative, n.d), and a shortage in staff (Al-Anbaa News, 2018). The PACM directors assert that the institution's workload requires around 60 employees and cannot be handled adequately with the current number of employees (between 20 and 30). Here, it must be noted that the tasks of the PACM, in addition to setting up public markets, vary in scope and include guiding consumers, protecting them from exploitation and fraud, encouraging them to consume national products, and fighting monopolies and speculative pricing.

Accordingly, the project recommends assessing the institutional set-up of the PACM, the staff size, and its objectives. For example, integrating the PACM into the Ministry of Economy and Trade (MoET) is possible, given that their roles are similar. The MoET is the most suitable ministry to supervise the work of the PACM instead of the Presidency of the Council of Ministers. The scope of the work of the PACM can also be redefined if the assessment shows redundancies and overlaps in functions with other active public agencies. Accordingly, the responsibilities of the PACM can be reduced and its budget and number of employees reworked.

Any proposed model for the operations must be supplemented with capacity building workshops for the employees and management staff at the PACM to enhance their technical and organizational skills. Transparent standards of operations for managing the markets must be adopted, covering issues of on-site management, market rules, budgeting, and marketing. Additionally, guidelines for clear tendering and bidding procedures and the selection of vendors must be set, and priority should be given to vendors that provide local products. These changes can be directly implemented to reopen the public market. As for on-site management, cleaning and waste disposal services must be more frequent throughout the day to guarantee high hygienic standards and positive consumer perceptions. These changes can enhance the collaboration between the relevant public institutions and other market stakeholders, ensure more efficient use of public resources, and create more vibrant and effective markets.

Proper maintenance of the areas around the markets is also important and requires coordination between the Municipality of Beirut, the Governor of Beirut, and the relevant ministries. It requires maintaining the street access to the markets from the Charles Helou Highway and from within Karantina, keeping them clean, providing lighting fixtures, and increasing green areas, while enhancing the walkability of the streets from Karantina.

²⁴ Phone call with PACM official (2022, July 5).

PACM should receive funding support to provide free bus services to ease the movement to and from the markets. Additionally, trucks must not be allowed to circulate in the streets leading to the markets and should be provided with alternative parking spaces in the port²⁵. The improvements to these streets, along with the implementation of the open space network, will potentially strengthen the spatial links into the markets, improve the quality of the surrounding urban environment, and, as a result, allow the markets to properly function as an urban node.

The Relevant Actors in the Design and Execution Phases

The relevant actors include the Public Authority for Consumer Markets (PACM) which directly reports to the Presidency of the Council of Ministers, the Ministry of Economy and Trade, and the Municipality of Beirut, in coordination with the Ministry of Public Health, the Ministry of Agriculture, the Governor of Beirut, the Syndicate of Beirut Fish Vendors, and the local fisherman and vendors.

Proposed Source of Funding

They include actors on the national level such as the PACM, the Ministry of Economy and Trade, the Ministry of Agriculture, the City Unions of Lebanon, supported by private investors and international actors such as UNOPS, KfW, the UNDP, the EU, and French donors including the AFD.

Approximate Financial Magnitude

The overall estimated cost for the rehabilitation of the markets is 5,550,000 USD. The cost of rehabilitating the open space and the landscaping works is estimated at 500,000 USD for an area estimated around 30,000 sq. m area. The cost of renovating the markets is estimated at 4,250,000 USD. The cost of constructing and furnishing the annex restaurant is estimated at 800,000 USD. The annual operation costs for all facilities, including employment services, electricity, water, and maintenance, is estimated at 150,000 USD. The cost of the capacity building for PACM's staff is estimated at 5,000 USD.²⁶

Period and Timing of Execution

Short-term Long-term

Phased (Consultation phase with the stakeholders: four months.
Design and planning phase: nine month. The execution phase: fifteen months)

Expected Results

- A socio-economic hub with coherent facilities and spatial units.
- Enhanced operation of the fish market and public market.
- Higher standards for operation, hygiene, and upkeep for the markets.
- Improved image and public perception of the markets and, as a result, Karantina.
- Increased social connectivity and interest in Karantina from Beirut.
- Increased job opportunities due to the expansion and reactivation of the markets.
- Expanded opportunities for small businesses within Karantina through the public market.
- Improved the economic activities and create a virtuous cycle of income and spending.
- Maximized access to a wide variety of products for the residents of Karantina.
- Reduced duplication and overlaps in the roles of the involved public agencies and institutions.
- A strengthened relationship between the public institutions that are involved in the operation of the markets.
- Increased investment opportunities for the Lebanese public and private sectors in Karantina.

²⁵ Refer to Action Plan 20

²⁶ Is it important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 11

Project Title

Develop a multi-purpose complex for public services on the municipal lot, which includes a public school, an affordable family clinic, and a sports and recreational facility.

General Objective(s)

- A. Protect the existing affordable housing units and provide a larger stock that is inclusive of a diversity of social and income groups.
- B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.
- D. Promote a sustainable development strategy that is participatory and phased over a period of time.

Type of Project

- | | |
|---|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A3: Improve the provision of public services in Karantina.

B8: Enhance the public realm and provide shared facilities and spaces to promote social connection across the three sub-neighborhoods.

D4: Improve the local infrastructural services and amenities.

Project Objective(s)

The project contributes to the following strategies:

A3.1/D4.2: Introduce services and facilities that are lacking in Karantina such as schools, sports facilities, and affordable clinics.

B8.1/ D3.3/ E5.1: Adopt an inclusive and integrated design approach while upgrading and rehabilitating existing public spaces and introducing shared facilities.

Project Description (concept note)

Karantina lacks proper public services. Before the civil war, Karantina used to have a Catholic school, an UNRWA school, and a public school. By the end of the war, the Catholic and UNRWA schools shut down, while the public school closed later in 2014. Currently, there is a small school in Al-Saydeh, built in 2021, that accommodates only 10 to 12% of school-aged children in Karantina. Karantina also hosts one governmental hospital which services patients from across Beirut, but the residents avoid it due to financial strain. There is one clinic that is part of the Maronite church that provides low consultation prices and services for the residents, but many residents prefer other affordable hospitals and clinics in Beirut and its suburbs.

In terms of recreational services, there is only one municipal garden that is often closed to the public. Children and younger people use the streets and empty lots to gather and play without security or adequate lighting. Other leisure spaces are mostly limited to a few coffee shops, one gaming shop, and the FLYP leisure center (indoor urban park) which was heavily damaged by the port blast. The gaming shop and the FLYP leisure center closed after the port blast. Accordingly, this proposed project aims to improve the provision of public services in Karantina, enhance the infrastructure and the public realm, and provide shared facilities and spaces for the residents of Karantina.

To do so, a multi-purpose complex for public services should be established in Karantina. The complex should include the following facilities:

- An elementary public school that caters to around 200 students from Karantina who are between the ages of 10 to 15.
- An affordable family clinic that provides healthcare services for the residents of Karantina.
- A sports center with multi-purpose playgrounds that provide recreational activities for children and younger people.

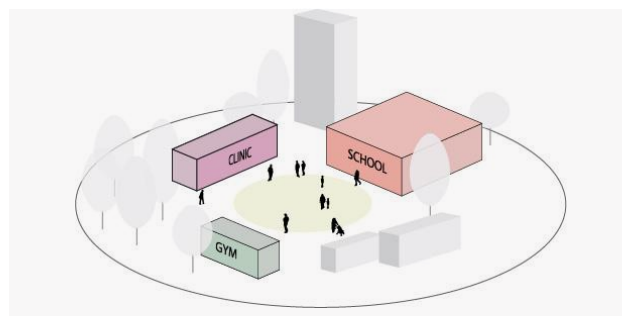


Figure 7. Schematic of the multipurpose complex.
Source: The Beirut Urban Lab, 2022.

This proposal suggests utilizing municipal land since the complex will provide public amenities. Lot number 358 in Medawar is a potential lot that can accommodate this center for three reasons. Firstly, the lot currently hosts an army base which includes play courts that can be reclaimed for public use. Secondly, by occupying a large space at the southern edge of Karantina, this lot is compromising accessibility to the area. Therefore, if accompanied by a subdivision and opening plan of the lot (refer to Action Plan 14), this proposal can enhance accessibility to Karantina. Thirdly, the location of the lot is equidistant from all three sub-neighborhoods, which amplifies its potential to act as a social hinge between them. For this purpose, the design layout should include a connecting public space between three structures that is permeable to the street edge to create cohesion between the residents of the three sub-neighborhoods. The Municipality of Beirut should oversee the governance and maintenance of the complex. A potential non-governmental organization with a scope of work like the program listed above can take the lead in designing and implementing the project. With the establishment of this complex, the residents of Karantina will have access to local affordable services without the need to commute to other areas in Beirut. Additionally, children and younger people will have a destination inside Karantina for education and leisure activities.

The Relevant Actors in the Design and Execution Phases

The relevant actors include the Municipality of Beirut and the Governor of Beirut, in coordination with local actors and non-governmental organizations such as the Beirut Urban Lab at the American University of Beirut, Catalytic Action, D4C, ACTED, Medair, Save the Children, UNDP, UN-Habitat, ESCWA, and the Norwegian Refugee Council and public actors such as the Ministry of Social Affairs, the Ministry of Public Health, the Ministry of Education and Higher Education, the Ministry of Youth and Sports, and the Lebanese Army, and with consultation with the neighborhood committee in Karantina.

Proposed Source of Funding

The Municipality of Beirut supported by international actors such as ESCWA, the World Bank, and KfW Development Bank²⁷.

Approximate Financial Magnitude

The overall estimated cost for the construction of the complex is 1,130,000 USD. The total cost of designing the complex is estimated at 50,000 USD. The cost of the construction of the elementary school is estimated at 300,000 USD. The cost of constructing the family clinic is estimated at 200,000 USD. The cost of constructing the sport facility is estimated at 400,000 USD and cost of renovating the multi-purpose playground is estimated at 50,000 USD. The cost of landscaping and constructing the public spaces is estimated at 30,000 USD. The furniture cost is estimated at 100,000 USD.²⁸

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Increased access to leisure activities.
- Access to elementary education for around 200 school-aged children in Karantina.
- Access to affordable healthcare.
- Increased social cohesion between the residents of Karantina.

²⁷ A German government-owned investment and development bank.

²⁸ It is important to note that these estimates do not account for the fluctuating market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 12

Project Title

Devise a management plan for reopening and maintaining the public park and open spaces in Karantina.

General Objective(s)

- A. Protect the existing affordable housing units and provide a larger stock that is inclusive of a diversity of social and income groups.
- B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.

Type of Project

- Execution Project
- Detailed Study
- Institutional - Committee set up
- Management - Operations plan
- Regulation - Policy
- Lobbying - Advocacy
- Capacity Building

Strategic Objective(s)

A3: Improve the provision of public services in Karantina.

B8: Enhance the public realm and provide shared facilities and spaces to promote social connection across the three sub-neighborhoods.

D3: Improve the overall quality of the built environment.

E5: Improve the quality and safety of the public domain which supports the existing socio-spatial practices across the three sub-neighborhoods.

Project Objective(s)

The project contributes to the following strategies:

A3.2/ B8.2: Facilitate access to existing public spaces, including the public park, and increase their number.

B8.1/ D3.3/ E5.1: Adopt an inclusive and integrated design approach while upgrading and rehabilitating existing public spaces and introducing shared facilities.

And maintain the public parks and open spaces in Karantina to ensure that they are open and accessible to the public.

Project Description (concept note)

The Lebanese law delegates the responsibility of managing the public realm exclusively to public authorities. Accordingly, the Municipality of Beirut oversees the management of public spaces in areas within its boundaries according to legislative decree number 118 from 1977 (called the Municipal Law). However, the municipality has fallen short of adequately managing these spaces in Karantina, as the public parks are almost always closed. There are several reasons for this. According to the residents of Karantina, the municipality is understaffed and lacks the capacities that are needed to manage public spaces. Another reason is the mindset of the public authorities which fear vandalism in public spaces. Currently, the excuse given by the municipality for closing the public park in Karantina is the risk of contamination due to the COVID-19 pandemic. Accordingly, this proposed project aims to devise a management plan for the maintenance of the public realm supported by capacity-building programs for the municipal staff. The plan for the project should amplify the capacity of the municipality to perform its role through a reformed governance scheme. The governance scheme should build on the existing system in the municipality where public spaces are managed by two units - the unit of gardens and the unit of sidewalks - that operate under the authority of the engineering department at the Municipality of Beirut. These reforms should address the problems that result in recurring administrative deadlocks and equip the staff with the required capacities through workshops and training sessions.

The governance scheme should also expand its web of support by employing residents, younger people, and women from Karantina to assist in the monitoring process. This approach can empower the local community groups and increase their sense of ownership of public spaces, thus, leading to better maintenance. The role of the Municipality of Beirut should be supported by building the capacities of the residents, exploring civic engagement tools to complement public authorities, and contribute to safe and inclusive public spaces in Karantina.



Figure 8. Karantina public park. Source Baotul Yassin, 2020.

The Relevant Actors

The relevant actors include the Municipality of Beirut, its engineering department, and the Governor of Beirut, in coordination with local actors and non-governmental organizations such as the Beirut Urban Lab at the American University of Beirut and Catalytic Action, and in consultation with the local residents in Karantina.

Proposed Source of Funding

The Municipality of Beirut with possible aid from international actors such as the UNDP (or other UN agencies), KfW Development Bank²⁹, and United Cities Lebanon³⁰.

Approximate Financial Magnitude

The cost of the training sessions and workshops is estimated between 5,000 and 10,000 USD³¹.

Period and Timing of Execution

Short-term Long-term

Phased (The first phase of the detailed study to develop a masterplan: Six months.
The second phase of implementation and construction works: Two years)

Expected Results

- A team of trained staff members at the Municipality of Beirut who are equipped with the skills to maintain the public spaces in Karantina.
- The public park in Karantina open and accessible to the public.
- Better street lighting, security, and monitoring mechanisms.
- More community involvement in safeguarding shared spaces.

²⁹ A German state-owned investment and development bank.

³⁰ an association in charge of promoting the principles of local democracy, partnership and solidarity between cities, in particular by supporting decentralized cooperation programs and mobilizing funding for the international actions and projects of its members.

³¹ Note: These are estimates that do not take into account the fluctuating market due to the economic and financial crisis and need to be reassessed at the time of design and implementation

ACTION PLAN 13

Project Title

Design and Implement an open space network that connects, upgrades, and expands on the existing spaces in Karantina.

General Objective(s)

B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.

Type of Project

- | | |
|---|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input checked="" type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A3: Improve the provision of public services in Karantina.

B1: Connect Karantina spatially with its surroundings.

B2: Reconnect Karantina with the sea and the Beirut Central District.

B3: Integrate Karantina into the city-wide transportation network.

B8: Enhance the public realm and provide shared facilities and spaces to promote social connection across the three sub-neighborhoods.

D3: Improve the overall quality of the built environment.

D5: Improve connectivity and accessibility to Karantina.

E3: Reduce sound and air pollution.

E5: Improve the quality and safety of the public domain which supports the existing socio-spatial practices across the three sub-neighborhoods.

Project Objective(s)

The project contributes to the following strategies:

A3.2/ B8.2: Facilitate access to the existing public spaces, including to the public park, and increase their number.

B1.1/ D5.1: Re-stitch Mar Mikhael with the southern side of Karantina through a pedestrian network across the highway.

B2.1: Reclaim Karantina's old coastal line as a green promenade and revive it as natural landscape heritage.

B2.2/ B4.3/ D5.3: Extend the sea promenade from the Beirut Central District to Karantina.

B3.1/ D5.5: Establish points of connection with city-scale and wider mobility modes (buses, taxis, etc.).

B8.1/ D3.3/ E5.1: Adopt an inclusive and integrated design approach while upgrading and rehabilitating existing public spaces and introducing shared facilities.

E3.4: Reduce the negative impact of the highway as a source of noise and air pollution.

Also:

- Design a network of public open spaces that are pedestrian-friendly, safe, inclusive, and well-serviced.
- Redesign and activate the Charles Helou Highway as an urban boulevard with multiple pedestrian crossings that connect Karantina with Mar Mikhael.
- Reconfigure the municipal green space on the highway to operate as a connector between the open space network and the mobility networks.
- Design a public space that activates the intersection of the river with the old coastal line and can potentially link Karantina to the proposed garden in Bourj Hammoud.
- Co-design an urban intervention with the different community groups to reclaim the old coastal line and connect it to the sea at the interface with the Beirut River.
- Integrate the landscape heritage into the open space network plan.

Project Description (concept note)

Karantina is located between the Charles Helou highway, the port of Beirut, and the Beirut River. It sits on a coastal cliff that overlooks the Mediterranean Sea. Its geographical location rendered it a historical gate into the city with the construction of the Lazaret in the first half of the 19th century. At that time, the coast was easily accessible by the residents, with many socio-spatial practices that are tied to the sea. Karantina also enjoyed a strong connection with the urban side, especially to Mar Mikhael through Ibrahim Pasha Street and Al-Khodor Street. This physical connection was reflected in the solid social network that connected the two neighborhoods. The Beirut River was also a destination for the people in Karantina when it was reachable from Karantina's eastern side. Therefore, Karantina was strongly anchored in Beirut and formed a strong physical and social connection with its surroundings.

However, the radical urban and landscape transformations that took place during the last century have enclaved Karantina. The expansion of the port isolated Karantina from the sea and the construction of the Charles Helou Highway created a physical rupture between Karantina and Mar Mikhael. Similarly, the concrete embankment of the Beirut River, and the construction of the adjacent highway, disconnected Karantina from the river. These infrastructural ruptures affected the socio-spatial and economic connectivity between Karantina and its surrounding neighborhoods. Therefore, Karantina currently suffers from its enclaved spatial condition which contributes to its marginalization. Similarly, in Karantina's internal urban and social fabric, the civil war resulted in the subdivision of Karantina into three sub-neighborhoods with little social ties between them. Another impact of the civil war is the heavy military presence in Karantina. This militarization led to many inaccessible roads and public spaces and caused fragmentation in the urban fabric. Furthermore, Karantina became largely undesirable for residential use and attracted large industries that cause further fragmentation. In terms of available public spaces, Karantina lacks safe and well-designed spaces for social gatherings and play. Children and adults engage in socio-spatial practices in the streets of Karantina without adequate lighting, urban furniture, landscaping, and safety measures. Karantina has a gated public park that is inaccessible most of the time due to restricted access by the Municipality of Beirut and the COVID-19 measures. In addition to the public park, another inaccessible garden exists at the edge of the Charles Helou Highway. Attempts by non-governmental organizations and international agencies to intervene in the public realm remain fragmented. They require integration, coordination, and informed direction. Accordingly, this project aims to challenge the enclaved spatial condition of Karantina by proposing the design of an open space network that involves connecting, upgrading, and expanding on the existing spaces. The network should amplify the accessibility of people to public spaces and natural and heritage landscapes and enhance pedestrian mobility within Karantina and its surroundings.

The proposed project consists of an overarching vision and scheme that is translated into multiple urban design interventions that are recommended for implementation. The urban design scheme aims to generate a network of public open spaces that are pedestrian-friendly, safe, inclusive, and well-serviced. The network connects the streets in Karantina that are linked to the surrounding urban and landscape fabric. The different interventions in this scheme are integrated and conceived as complementary. Accordingly, they can be implemented in parallel or through a phased process if there is a custodianship of the overall vision and scheme.

An Open Space Network Scheme Integrating the Landscape Heritage:

Shared and open spaces are key to social recovery. With the public park closed and with the limited access to public spaces, the people in Karantina mostly engage in socio-spatial practices on the streets. However, most of these streets are not well-lit or secure. Access to landscape heritage sites is also limited, although they are significant assets in Karantina. These sites include places that are part of the strong collective memories of people, such as the site of the old slaughterhouse and the garden of Al-Saydeh Church. Natural elements are also integral to landscape heritage, such as the natural coastline. The dense vegetative cover that is rich in monumental eucalyptus trees, allegedly planted by the French during the mandate period between 1923 and 1946, also has great value. Most of these landscapes today are subject to neglect, with little public awareness about their importance. Accordingly, this project proposes the design of a 3.6 km network of public open spaces that are pedestrian-friendly, safe, inclusive, and well-serviced. The design integrates landscape heritage sites, upgrades existing public spaces, introduces new public spaces, and provides a soft connection between them. Upgrading the existing spaces will require rehabilitating roads, widening sidewalks, and providing appropriate street lighting, shading, and public seating areas.

Additionally, the heritage landscapes will be repurposed with minimal intervention for public use. Monumental trees must be protected and maintained. The network of open spaces must also be designed to link to other interventions in the area (outside the scope of this project) such as the proposed rehabilitation of the Mar Mikhael train station and the Bourj Hammoud landfill garden through the estuary park that is proposed below.

The following interventions are part of the network of open spaces:

The Charles Helou Highway as an Urban Boulevard:

The Charles Helou Highway was implemented in the late 1950s. The road planning did not consider the physical and social ties between Karantina and its surroundings since the area was planned to serve as an industrial extension of the port. As a result, the highway now causes a physical and social rupture between Karantina and Mar Mikhael. Accordingly, this project aims to address the rupture between Karantina and its southern neighbors and re-stitch the city's two parts together. This requires reconfiguring the 2.5 km Charles Helou Highway, which extends from Beirut River to its terminal point at Al-Kataeb building, as an urban boulevard. It should be redesigned with multiple pedestrian crossings into Mar Mikhael, widened sidewalks, and slow travel lanes. Narrowing traffic from a three-lane to a slow two-lane boulevard will transform a heavy car-oriented and high-speed traffic highway into a more pedestrian-friendly corridor. The canceled lanes should serve as green parklands and urban spaces that can be used by pedestrians and cyclists. The boulevard will then become a green space that enhances urban cohesion and re-stitches Karantina with Mar Mikhael. To ensure the success of this intervention, a transportation solution for diverting the traffic flow or the implementation of an underpass should be considered within a larger urban study.

A Coastline Corridor:

Karantina is situated on a coastal cliff with a wavy shoreline edge that overlooks the Mediterranean Sea. The cliff is a steep vertical coastal bedrock that reaches 16 meters in height with scattered vegetation. These topographic and geomorphological features that shape the Mediterranean character of this natural setting have unique landscape heritage value. The socio-spatial practices that are tied to the seashore add to the uniqueness of the landscape. Manmade stairs and informal pathways used to connect people to the sea. Activities like fishing and promenades along the shore are still present in the collective memory of the elderly people in Karantina, which reflects a strong connection they used to have with the sea.

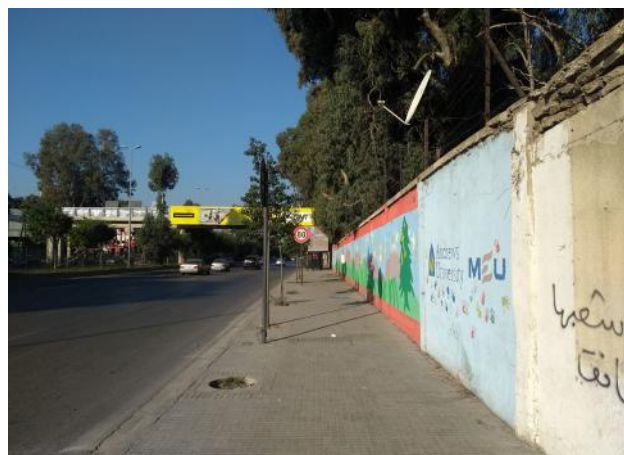


Figure 9. The Charles Helou Highway. Source: Abir Cheaitli, 2021.

However, the gradual extension of the Port of Beirut eastwards, which began in the French mandate period, had completely distanced Karantina from the sea by the turn of this century. Today, the natural landscape has partially disappeared or has been incorporated into the built fabric. Parts of this landscape remain around Karantina and act as a slim green buffer between Karantina and the port. Accordingly, this project aims to reclaim the old coastal line and reconnect Karantina to the sea at the interface with the Beirut River. The 1.7 km corridor along the coastline will be reminiscent of the natural heritage that was embedded in the coastal cliff of Karantina. The corridor should also accentuate the link to the Beirut Central District by connecting to the promenade along the waterfront. In addition to improving connectivity, this corridor can include multifunctional spaces for public recreation. These spaces can range from seaside walks, terraces, cantilevered pier overlooks, and bike lanes. A promenade along the sea will also bring back a visual connection with the sea that was lost with time.

The Estuary Park:

After the concrete channeling of the Beirut River, the city lost a prominent natural landscape that was once a destination for recreation. People in Karantina, being near the western bank of the river, were also affected. The only remaining natural part of the river is its estuary, a 25, 000 sq. m public space, with green vegetation and sand shore. What adds to the potential of this site is its proximity to the fish market and the public market from one side and to the 30,000 sq. m landfill from the other side.

However, this area (northeast of Karantina) is now neglected and highly polluted, with no proper pedestrian or vehicular access from Karantina's side. This project aims to design a public park that activates the intersection of the river with the old coastal line and potentially links to the markets and the proposed garden in the Bourj Hammoud landfill. The estuary area at the mouth of the river is a potential landscape that can provide ecological and social benefits to Karantina and to Beirut at the city scale.

The Garden on the Charles Helou Highway:

After the construction of the Charles Helou Highway in the late 1950s, a small municipal garden was leftover from the expropriated lands. The 750 sq. m lot is shaped like a small triangular green patch that is now abandoned and neglected and hosts some archeological remains that were relocated from the Beirut Central District. The location of this garden on the edge of the highway and its proximity to the bridged intersection with Mar Mikhael magnifies its potential to become an active open space. Accordingly, this project aims to reconfigure this space to act as a green hinge that connects the open space network to the mobility networks. This green space should also host public amenities that could cater to people in Al-Saydeh sub-neighborhood.

The proposed open space network will provide more than one pedestrian connection to Mar Mikhael and a 2.5 km long boulevard. It will also introduce new public spaces that will provide a visual and physical connection to natural landscapes such as the Beirut River and the sea. Additionally, the proposed network will enhance the state of the existing public spaces, improve the quality of the urban environment, and enhance the public image of Karantina. The open space network in Karantina will become a catalyst for re-stitching together the different neighborhoods in Beirut as part of a larger vision for an open space network in Beirut.

The Relevant Actors in the Design and Execution Phases

The relevant actors include the Municipality of Beirut and the Governor of Beirut, in coordination with other public actors such as the Council for Development and Reconstruction, the Directorate General of Urban Planning at the Ministry of Public Works and Transportation, the Ministry of Environment, the Ministry of Public Health, and the Ministry of Energy and Water and academic institutions and non-governmental organizations such as the Beirut Urban Lab at the American University of Beirut, Catalytic Action, Live Love Beirut, and Offre Joie, and in consultation with the local residents in Karantina.

Proposed Source of Funding

They include international actors with similar scope of work as KfW³², Agence française de développement (AFD)³³, the World Bank (3RF), the United Nations Office for Project Services (UNOPS)³⁴, the UNDP, SUGi Project³⁵, UNESCO, The International Union for Conservation of Nature (IUCN)³⁶, the Norwegian Refugee Council (NRC), UN-Habitat, and the International Labor Organization (ILO) that is currently funding the road network in Karantina.

Approximate Financial Magnitude

The cost of the initial design work is estimated at 2,000,000 USD. The cost of the construction is estimated between 13,000,000 and 14,000,000 USD³⁷.

Period and Timing of Execution

Short-term Long-term

Phased (The first phase of the study to develop a masterplan: Six months.
The second phase of implementation and construction works: Two years)

Expected Results

- A network of well-serviced streets and public spaces that connect Karantina to its surroundings.
- A 1 km green strip along the Charles Helou Highway.
- A 1.7 km green corridor along the coastal line that provides recreational facilities.
- A public park at the interface between the Beirut River and the sea and is accessible from Karantina.

³² kfW is a German state-owned investment and development bank.

³³ AFD is a French public financial institution that works to fight poverty and promote sustainable development.

³⁴ UNOPS is a United Nations agency that provides infrastructure, procurement, and project management services.

³⁵ SUGi is a Swiss funding agency that provides support for investments in nature and the restoration of biodiversity.

³⁶ IUCN is an international organization that works in the field of nature conservation and the sustainable use of natural resources.

³⁷ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 14

Project Title

Devise and implement a parcelization plan that subdivides and reprograms the municipal lot to enhance connectivity and public services in Karantina.

General Objective(s)

- A. Protect existing affordable housing units and provide a larger stock that is inclusive of a diversity of social and income groups.
- B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.
- D. Promote a sustainable development strategy that is participatory and phased over a period of time.

Type of Project

- | | |
|---|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input checked="" type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A3: Improve the provision of public services in Karantina.

B1: Connect Karantina spatially with its surroundings.

B4: Improve accessibility to the different areas within Karantina and between them.

D1: Advance a development program for Karantina and remove existing obstacles to development.

D5: Improve connectivity and accessibility to Karantina.

Project Objective(s)

The project contributes to the following strategies:

A3.2/ B8.2: Facilitate access to existing public spaces, including the public park, and increase their number.

B1.2/ D5.2: Increase the permeability of the edges of Karantina with the city.

B4.2/ D1.2: Subdivide the municipal lot and integrate it into plans for the development of Karantina.

- Design and implement a subdivision plan of the municipal lot.
- Repurpose the municipal lot to include additional facilities.

Project Description (concept note)

The construction of the Charles Helou Highway in the late 1950s divided a 20ha municipal lot into two lots. The lot used to host a train station, presently on Mar Mikhael's side, in addition to a French military base. The lot occupies around 15% of the total area of Karantina and is currently utilized for a combination of municipal services such as the fire station, a local department, parking space for the Municipality of Beirut, an office for the Lebanese internal security forces, warehouses, and various private institutions. A military base is also present and occupies around 15% of the lot area. As a result, the municipal lot contributes to the isolation of Karantina from its immediate surroundings, and the rest of Beirut, and causes a spatial fragmentation in the inner fabric. The high walls along its borders act as barriers that prevent pedestrian and vehicular accessibility and disrupt visual connectivity. Accessibility from Al-Rehban Street to the inner edges of the lot is also restricted. Several checkpoints and security elements are present on the sidewalks, including cement blocks and metal obstacles.

To strengthen socio-spatial connectivity and promote sustainable development in Karantina, the municipal lot at the southern edge of Karantina should be more permeable towards the area and should be subdivided into smaller lots. Therefore, this project proposes to design and implement a subdivision plan for the municipal lot. The plan should provide horizontal and vertical crossings across the lot and repurpose the subdivisions to promote sustainable development. To do this, the design of the project should include affordable housing units, open spaces, green areas, offices, and retail facilities. Implementing the development of this subdivision plan requires the involvement of a few public institutions.

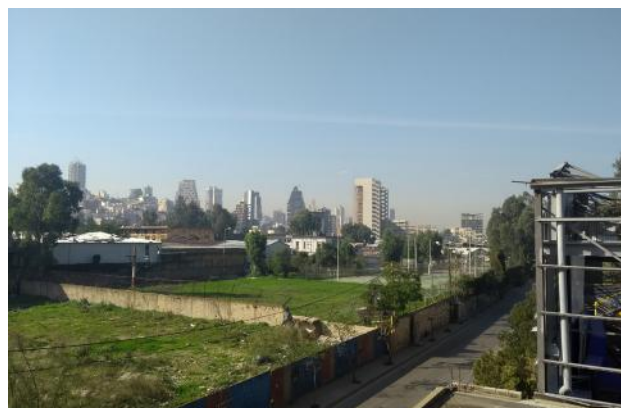


Figure 10. The municipal lot next to the Charles Helou Highway.
Source: Batoul Yassine, 2021.

According to decree number 70 from 1983, the Municipality of Beirut should initiate the process by submitting the subdivision plan to the General Directorate of Urban Planning. The Directorate General of Urban Planning should review and assess the plan and, if approved, propose an implementation decree to the parliament under the name of the Ministry of Public Works and Transportation. A group of local lawyers should also assist the Municipality of Beirut in resolving the encroachments on the lot.

The project will increase the permeability of the edges of the lot for it to become an integral part of Karantina instead of an isolated and peripheral space. A permeable edge will allow people to move freely with little restrictions and choose from a variety of routes to move around Karantina. Once they are accessible, the subdivisions of the lot will catalyze further sustainable development in Karantina. They will boost socio-economic vitality and cater to the needs of the people in Karantina and the surrounding neighborhoods.

The Relevant Actors in the Design and Execution Phases

The relevant actors include the Municipality of Beirut, the Governor of Beirut, and the Directorate General of Urban Planning, in collaboration with other actors in Lebanon such as the Ministry of Public Works and Transportation and Beirut Bar Association, local consultancy offices such as Dar Al-Handasah, and Khatib & Alami, and academic institutions and organizations such as the Beirut Urban Lab at the American University of Beirut, the Legal Agenda, the UNDP, and UN-Habitat, and in consultation with the residents in Karantina.

Proposed Source of Funding

The Municipality of Beirut with possible aid from International organizations such as the UNDP and UN-Habitat.

Approximate Financial Magnitude

The urban planning and design costs of the project are estimated at a total of 30,000 USD³⁸, and the estimate cost of implementation to be determined upon the completion of the plan.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Enhanced accessibility into and within Karantina, with more than one crossing option.
- An increase in the number of affordable housing units.
- Designed open spaces for recreation.
- Enhanced socio-cultural vitality.

³⁸ It is important to note here that these numbers are estimates that do not account for fluctuating market prices due to the ongoing economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 15

Project Title

Amend the Building Law to introduce international standards for inclusive design, particularly for people with physical challenges and disabilities.

General Objective(s)

A. Protect the existing affordable housing units in Karantina and provide a larger stock that is inclusive of a diversity of social and income groups.

Type of Project

- | | |
|---|---|
| <input type="checkbox"/> Execution Project | <input checked="" type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

A5: Ensure that new developments meet inclusivity standards.

Project Objective(s)

The project contributes to the following strategies:

A5.1: Adopt an inclusive design approach when rehabilitating existing buildings or designing new housing units. This includes:

- Rehabilitating existing buildings to accommodate the special needs of elderly people, people with physical challenges or disabilities, and people who are visually impaired.
- Designing new developments according to standards of inclusivity.
- Facilitating the integration of elderly people, people with physical challenges or disabilities, and people who are visually impaired into healthy social environments.

Project Description (concept note)

This project aims to achieve an inclusive environment through inclusive design standards. Inclusive design standards accommodate the diversity of people and challenge construction practices that impose disabling barriers. It accommodates the needs of wheelchair users and mobility-impaired people but can also address barriers experienced by people with learning difficulties, mental illnesses, and visual and hearing impairments. By meeting accessibility needs, inclusive design alleviates the frustrations and hardships that disabled or elderly people and families with young children experience. Karantina has a diversity of mobility-impaired people, children that are below the age of 3, elderly people, and people with disabilities or visual impairment. A considerable percentage of Karantina’s population is physically challenged. They are elderly people, disabled, or face health problems that affect their physical performance.

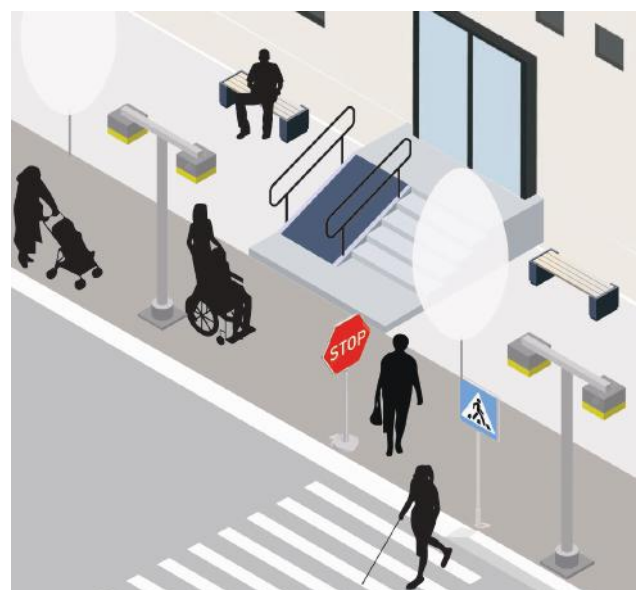


Figure 11. A schematic showing inclusive urban design elements. Source: The Beirut Urban Lab, 2022.

9% of Karantina's population is elderly. It has over 403 reported cases of chronic illnesses and 43 cases of physical disabilities. There is a lack of services that can cater to the needs of wheelchair users, elderly people, and people with physical challenges, disabilities, or impaired vision in buildings and public spaces. Therefore, there is a need to implement developments that are inclusive of the physically challenged groups and other groups such as the visually impaired. The aim is to create healthy and socially friendly environments where these groups do not feel excluded, as well as an environment that protects their right to access housing units and public spaces.

Inclusivity in developments is not protected or embedded as a criterion in the Building Law in Lebanon. Permitting buildings in Lebanon is usually only bound by the requirements of the Building Law and the zoning scheme for Beirut. While the zoning scheme for Beirut specifies built-up ratios, required setbacks, and maximum heights, the Building Law controls the internal configuration and requirements of living spaces. However, the 2004 amendment to the Building Law that is currently in effect does not specify design guidelines for inclusive constructions that can cater to the needs of people with physical challenges. Still, it provides public safety measures for structural stability against earthquakes and fires.

In 2005, decree number 14293 was issued. It added to the Building Law an elaboration on the public safety measures and individual safety measures. The decree explained the role of technical audit offices and their mandatory audit and approval of building plans as a condition to issue construction permits. In principle, and due to the lack of local public and individual safety and inclusivity standards, audit offices rely on international standards to conduct their assessment. These standards are only applied to large-scale constructions, buildings for public use, and residential buildings that exceed 20 meters in height. Individual safety standards within the international standards are limited to requirements for disabled people, including building access through ramps, walkways, and elevators, and particular services with specific dimensions for rooms such as toilets for disabled people.

Therefore, the Building Law needs to be amended to include inclusive design standards and criteria for developments, especially in residential buildings. There are two main amendments, one that applies to new constructions, and another that tackles retrofitting existing buildings. Before the amendment, the Directorate General of Urban Planning should prepare a study following a proposal from the Minister of Public Works and Transportation, in consultation with urban planning and inclusive design specialists in Lebanon. They should review the internal code on inclusive standards and draft the requirements that can cater to the needs of people with physical challenges and disabilities, and with visual impairment. The standards must include the preferred location of the desired floors to accommodate the people with physical challenges and disabilities, and visual impairment, the required dimensions of the shared spaces (staircases, building entrances, and common walkways), and the services that must be provided within them (handrails, benches, elevators, ramps, and recognizable tactile surfaces). The standards must also include public safety measures (escape fire staircases and walkways). Furthermore, in addition to the amendment of the Building Law, inclusive development can be further encouraged by a package of incentives for developers. These incentives can include density bonuses or tax exemptions.

The Relevant Actors

The relevant actors include the Directorate General of Urban Planning at the Ministry of Public Works and Transportation and the Higher Council of Urban Planning, the Ministry of Social Affairs member of the Lebanese parliament, and the Council of Ministers, in coordination with the Order of Engineers and Architects in Beirut and academics, including urban planning and design inclusive design specialists such as the Beirut Urban Lab at the American University of Beirut, and in consultation with residents from Karantina.

Proposed Source of Funding

Public authorities involved with possible aid from local or international agencies.

Approximate Financial Magnitude

The total fee of the required professionals is estimated between 7,000 and 10,000 USD³⁹.

³⁹ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- A diversity of building typologies that can cater to the needs of people with physical challenges, disabilities, and visual impairment.
- A healthy and inclusive environment that does not exclude people with physical challenges, disabilities, and visual impairment but integrates them into existing and new developments.
- New standards for inclusivity in the Building Law that can lead to the formulation of more specialized laws.

ACTION PLAN 16

Project Title

Propose an addendum to the Planning Law that further guides and regulates existing and future land uses and developments.

General Objective(s)

- A. Protect the existing affordable housing units in Karantina and provide a larger stock that is inclusive of a diversity of social and income groups.
- D. Promote a sustainable development strategy that is participatory and phased over a period of time.

Type of Project

- | | |
|---|---|
| <input type="checkbox"/> Execution Project | <input checked="" type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

- A6: Limit the encroachment of the businesses into the residential sub-neighborhoods.
- D2: Safeguard Karantina against the threats of gentrification and displacement.

Project Objective(s)

The project contributes to the following strategies:

- A6.1: Regulate the transformations in the use of residential buildings.
- D2.1: Regulate development in the residential and industrial areas of Karantina.

Project Description (concept note)

Karantina has a complex and diverse land use pattern, with three residential sub-neighborhoods: Al-Saydeh located to the southwest of Karantina, Al-Khodor in the north center, and Al-Senegal in the middle of Karantina. The industrial activities are concentrated to the east, and commercial activities are distributed throughout Karantina. The current zoning scheme for Beirut (municipal decision number 70 from 1954 and decree number 2685 from 1954) is limited to regulations that define a building's permissible envelope (using setbacks, floor-to-area ratios, total exploitation rates, and minimum lot areas and dimensions) but does not set any land use. The southwestern part of Karantina, including all Al-Saydeh sub-neighborhood is in zone 3 of the zoning scheme, while the rest of Karantina is in zone 7.

Since the zoning scheme does not specify functional land uses in Karantina, the area is witnessing the encroachment of several businesses into the residential sub-neighborhoods and the conversion of some residential units into office spaces. Alterations to residential land use are mostly occurring in Al-Saydeh sub-neighborhood. In Al-Saydeh, uses on the ground floors of nine buildings changed from residential to office spaces. Until now, the uses on the ground floors of six buildings in Al-Senegal also changed and two of the six buildings are witnessing similar changes on the upper floors. This land use change were less prevalent in Al-Khodor. This trend is threatening the social fabric and the availability of affordable housing stock in Karantina.

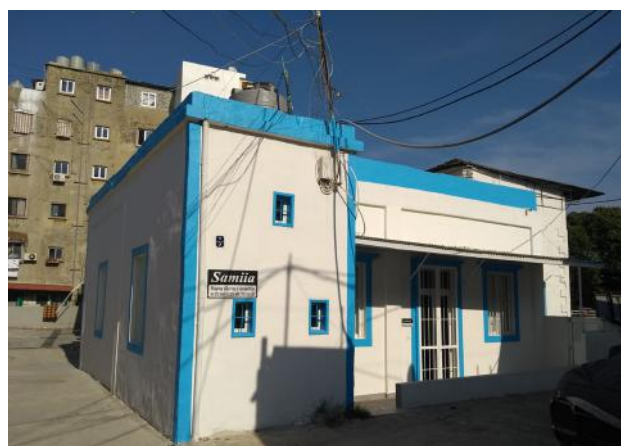


Figure 12. Building which use was transformed from a residential house to a business that serves the port. Source: Ali Ghaddar, 2021.

The 17.4% vacancy rate is increasing due to the changes in land uses. Businesses that rent from the landlords create intense competition with tenants. The rental market is to a great extent based on contractual agreements that can be oral, flexible, and largely unregulated. The incentives for landlords to find a tenant that can provide better returns put the tenants of the residential buildings in a vulnerable position. The encroachment of businesses on the residential buildings results in rent hikes, a looming threat of eviction, and further reduces the stock of housing units. As a result, there is a risk that Karantina will lose its social diversity, social networks, and housing affordability. Furthermore, the unguided and unregulated industrial land uses that create noise and increase levels of air pollution need to be assessed and better regulated since they have adverse effects on the living conditions of the residents.

Accordingly, it is important to regulate land uses and development to protect the integrity of the residential sub-neighborhoods and to produce a healthier environment. The goal is not to prohibit mixed land use within clearly delineated areas, but rather to regulate the ongoing transformations to protect the stock of affordable housing units and the social integrity of the residential clusters. This concern should not be limited to the existing stock of affordable housing units but should also apply to future developments.

Urban planning in Beirut is regulated by the planning law of Beirut (municipal decision number 70 from 1954 and decree number 2685 from 1954). The proposed project to draft and implement a detailed masterplan for Karantina is intended to guide and regulate existing and future land uses and developments. This proposal requires the approval of both the municipality (with its 'engineering department') and the DGU (Directorate General of Urban planning), although the initiative can come from either party.

Legislative decree number 118 from 1977 (called the Municipal Law) tasks municipalities to take the lead in managing their area, determining their capacities, and participating in local planning. Article number 49 in the Municipal Law, and articles number 10 and 11 of the Urban Planning Law (legislative decree number 69 from 1983) detail the planning roles of municipalities and the Directorate General of Urban Planning. The Directorate General of Urban Planning may take the initiative or assist municipalities in creating their masterplans or detailed plans, designs, regulations, and parcellation plans. The Directorate General of Urban Planning ultimately approves the masterplan (التصميم والنظام التوجيهي\التصميم التوجيهي) and the detailed masterplan (التصميم والنظام التفصيلي\النظام التفصيلي العام).

The provisions of the masterplan are legally binding for public authorities. Its role is to advance the public interest by outlining the primary land use trajectories and making key strategic choices (article 7 in legislative decree number 69 from 1983). The detailed masterplan is also legally binding for all people. It defines the zoning regulations (using setbacks, floor-to-area ratios, total exploitation rates, and minimum lot areas and dimensions). This is the case in the current zoning scheme for Beirut (municipal decision number 70 from 1954 and decree number 2685 from 1954) but can also include specifications on land use at the level of the lot (article 8 in legislative decree number 69 from 1983). The directorate General of Urban Planning then submits the results to its Higher Council for Urban Planning for final revisions and approval. The detailed plans become legally binding after they are approved in a decree by the Council of Ministers (article number 12 in legislative decree number 69 from 1983). Proposing an amendment or addendum to the existing regulations follows the same procedure (article 13 in legislative decree number 69 from 1983).

In Karantina, the primary concern is to regulate developments in the residential and industrial areas and regulate the transformation of the use of residential buildings. As a result, non-residential uses such as logistics, service businesses, and offices can be limited to the ground floors and the first floors of the residential buildings. It is also important to regulate heavy industries and their operations and locate them away from the residential sub-neighborhoods. They should be limited to the boundaries of the Industrial Zone in Karantina.

The Relevant Actors

The relevant actors include the Municipality of Beirut, the Governor of Beirut, the Directorate General of Urban Planning and the Higher Council of Urban Planning, and the Council of ministers, in coordination with the Order of Engineers and Architects in Beirut and the residents of Karantina.

Proposed Source of Funding

Public authorities involved with possible support from local or international agencies.

Approximate Financial Magnitude

Consultancy fees to be determined.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Less pressure on the existing stock of affordable housing units from the competition with businesses.
- Limited encroachment of businesses on the residential sub-neighborhoods.
- The protection of tenants from rent hikes and the threats of eviction.
- Residential areas that are safeguarded from the threats of gentrification and displacement.

ACTION PLAN 17

Project Title

Set up a monitoring and municipal taxation system for buildings that are not regularly maintained to ensure public safety and limit overcrowding.

General Objective(s)

- A. Protect the existing affordable housing units in Karantina and provide a larger stock that is inclusive of a diversity of social and income groups.
- D. Promote a sustainable development strategy that is participatory and phased over a period of time.
- E. Improve the overall quality of the urban environment in Karantina.

Type of Project

- | | |
|--|---|
| <input type="checkbox"/> Execution Project | <input checked="" type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input checked="" type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

- A8: Improve the livability and building conditions within the residential clusters.
- D3: Improve the overall quality of the built environment.
- E1: Improve the physical quality of the damaged and degraded buildings.

Project Objective(s)

The project contributes to the following strategies:

- A8.1/E1.4: Regulate the density of people per housing unit to counter overcrowding.
- D3.1/E1.3: Provide a legal enforcement measure for building rehabilitation.

Project Description (concept note)

The diagnosis report counted 364 buildings in Karantina, most of which are aging and dilapidated. Many of these buildings need considerable interior and exterior renovation. Leaking pipes, crumbling facades, ceilings, walls, and columns, old window frames, roofs, and terraces are some of the signs of neglect. The property owners and residents cannot afford to maintain the buildings. The port blast further damaged buildings that were already in a poor condition. Numerous apartments are subject to excessive humidity levels that negatively impact the health and well-being of the occupants. Living conditions become dangerous and hazardous especially when the structural integrity of the building is compromised. Article number 74 of legislative decree number 118 from 1977 (the Municipal Law) states that the governor of Beirut is responsible for "demolishing dilapidated buildings and [or] repair them at the expense of their owners in accordance with the provisions of the Building Law" - "هدم المباني المتداعية وإصلاحها على نفقة أصحابها" - "وفقاً لأحكام قانون البناء".

However, the provisions of this article are rarely applied, and the procedure, standards, and assessment process should be revised. The right of the governor of Beirut to repair buildings at the expense of the owners is not subject to a tax system that is well-defined and standardized. The Municipality of Beirut has a monitoring unit in the engineering department (مصلحة المراقبة، دائرة المراقبة). This monitoring unit, however, has no authority to tax or fine the owner of a building that needs maintenance. The responsibility of the municipality is to survey, assess, manage, and maintain public spaces.



Figure 13. Deteriorating residential building. Source: Abir Cheaitli, 2021.

This unit is also not directly concerned with the heritage value of the building, and its role is limited to maintaining public safety. The responsibilities of this monitoring unit are described in decision number 330 from 1956 and decision number 346 from 1967.

The aim here is to set up a municipal monitoring and taxation system in the engineering department to protect public safety, security, and overcrowding. Buildings that fail routine maintenance and upkeep are taxed based on a fair system that should be developed. The standards to be devised should consider a special clause on how to deal with heritage buildings.

The project proposes to expand the responsibilities of the monitoring unit to include the assessment of buildings and private properties. This is done after developing a relevant tax system and recruiting staff with the necessary expertise. The main concern of this system is to maintain public safety, and the security of the residents, and reduce overcrowding. The taxation system should also be sensitive to buildings with heritage value that are assessed based on set criteria.

The collected taxes will go to the municipality. The stakeholders that will develop the system will determine whether the taxes will feed into the municipal fund or an independent fund that will be used for maintenance projects. In accordance with legal requirements, the Governor of Beirut should approve any taxes which must be directly invested in the maintenance of the relevant system. The taxation system should be led by the monitoring unit at the Municipality of Beirut and follow a clear taxation policy.

The Relevant Actors

The relevant actors include the Municipality of Beirut, the Governor of Beirut, and the Ministry of Interior, in coordination with the Beirut Bar Association, the Directorate General of Antiquities, and the Order of Engineers and Architects in Beirut, and in consultation with residents in Karantina.

Proposed Source of Funding

Public authorities involved with possible aid from local or international agencies.

Approximate Financial Magnitude

Not applicable.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- A monitoring and municipal taxation system that is led by the monitoring unit in the engineering department at the Municipality of Beirut.
- Improved conditions of residential buildings.
- Improved public safety and security measures for private buildings.
- Fewer levels of overcrowding in residential units and improvements in the health and safety of the residents.

ACTION PLAN 18

Project Title

Create a registry platform that matches donors with property owners for building rehabilitation.

General Objective(s)

- A. Protect the existing affordable housing units in Karantina and provide a larger stock that is inclusive of a diversity of social and income groups.
- D. Promote a sustainable development strategy that is participatory and phased over a period of time.
- E. Improve the overall quality of the urban environment in Karantina.

Type of Project

- | | |
|--|--|
| <input type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input checked="" type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

- A8: Improve the livability and building conditions within the residential clusters.
- D3: Improve the overall quality of the built environment.
- E1: Improve the physical quality of the damaged and degraded buildings.

Project Objective(s)

The project contributes to the following strategies:

A8.2/E1.1: Offer financial packages and incentives to support the landlords in rehabilitating their residential buildings and maintain the stock of affordable housing units.

D3.2/E1.2: Channel funds through donors to vulnerable landlords for building renovation.

Also:

- Create an effective network between the different stakeholders and non-governmental organizations.
- Support vulnerable landlords in rehabilitating their buildings.
- Improve the quality of physical repairs after the port blast.

Project Description (concept note)

Karantina witnessed several events that led to damages to its built fabric, especially to its buildings. The two events include the 1976 massacre during the civil war and the port blast in 2020. The latter exacerbated the impact of many years of deterioration due to negligence and the lack of development and restoration plans for the built fabric. As a result, the conditions of many buildings in Karantina deteriorated over time. The research at the Beirut Urban Lab also showed that 73% of the residential units in Karantina are occupied by tenants from low-income groups, 14% of which are on old rent contracts. This condition, along with the limited financial capacities of the landlords, contributed to the degradation and decay of many buildings. After the port blast, many non-governmental agencies mobilized to help in the repair work. However, low-quality repairs by some of the non-governmental agencies further degraded the living conditions in several housing units. While Al-Saydeh sub-neighborhood largely benefited from the repairs, fewer investments, and coordination efforts were put into other sub-neighborhoods.



Figure 14. Renovation of a residential building in process after the port blast. Source: Abir Cheaitli, 2021.

Some buildings were properly repaired while other repair works only covered up the deteriorated condition of some of the buildings. According to some of the interviewees, many of the residents of Al-Khodor sub-neighborhood expressed their displeasure with the poor quality and unfinished repair works. This risks one of Beirut's most affordable stock of affordable housing units.

Therefore, this proposal aims to develop an information system platform that networks, facilitates outreach efforts, registers cases of buildings in need of repairs, and sets eligibility criteria for repairs. The platform will allow the members who were affected by the port blast to report the damage to their households and connect them with the right non-governmental organizations or private investors. The platform needs to be inclusive of a diversity of people, and play an operational role with activities and processes like management, coordination, and development services. The platform should also have an integrated set of components for collecting, storing, and processing data and providing information and knowledge. The objective is to support landlords and tenants in improving the physical conditions of their units. This will not only safeguard the future of the stock of affordable housing units in Karantina but also improve the quality of the built environment and promote growth in the area of sustainable development.

The platform can be created and administered by a group of professionals from Karantina or non-governmental organizations that are active in Karantina. It should be designed as a user-friendly and open-source platform where non-governmental organizations and local individuals can add information and build their profiles. It is important to also identify potential donors early in the registry design process since they might have significant input on the nature and scope of the data that is needed for them to be involved in the building repairs. The initiative to build the platform can be taken by either one of the active non-governmental agencies, local research labs, or by community members who played significant roles in coordinating the efforts with the non-governmental organizations after the port blast. For its management, a team of experts in the field of software, database entry, and information management is needed. The platform experts will prioritize the cases of buildings that need repairs and match them with the right source of funding.

Collaboration with the private sector can help develop an integrated funding model that can also attract interest from other sources of funding. Additionally, to maintain the network of collaborators, it is crucial for the stakeholders to be transparent on their operations, decision-making, and reporting of results. Transparency will further enhance the credibility of the platform and the validity of its actions.

The Relevant Actors

The relevant actor is the Municipality of Beirut, in coordination with IMPACT⁴⁰, non-governmental agencies with similar scope of work as the NRC (Norwegian Refugee Council), the UNDP, and private actors such as Valoores Sarl, Creyasoft Sarl, Soft Solutions Sarl, Netways Sarl, Mideast Data Systems Sarl, and Megatron Software Co. Sarl, and in consultation with the residents in Karantina.

Proposed Source of Funding

Local and international agencies that have a similar scope of work such as NRC and the UNDP.

Approximate Financial Magnitude

The total budget is estimated between 50,000 USD and 100,000 USD⁴¹. This budget includes the costs of the required software and electronic and hardware equipment, the costs of integrating the online registration system into the website of the Municipality of Beirut, marketing the platform, data collection, and the costs of building and updating the system.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- More efficient construction processes and repairs by different stakeholders and non-governmental organizations.
- Improvements in the conditions of buildings and their future maintenance.

⁴⁰ IMPACT is the first e-government platform in Lebanon. It is an open data website with a central Inspection initiative to give access to the data gathered through the most comprehensive, nation-wide, online data collection operation conducted in collaboration with different ministries and local municipalities.

⁴¹ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 19

Project Title

Form a local advocacy group that supports donor agencies working on the reconstruction projects of the port to re-connect Karantina with the sea.

General Objective(s)

B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.

D. Promote a sustainable development strategy that is participatory and phased over a period of time.

Type of Project

- | | |
|---|---|
| <input type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input checked="" type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

B2: Reconnect Karantina with the sea and the Beirut Central District.

D5: Improve connectivity and accessibility to Karantina.

Project Objective(s)

The project contributes to the following strategy:

B2.3/D5.4: Relink Karantina to the sea through the port.

Project Description (concept note)

A solid connection between the city and the port existed before the enlargement of the old port. Networks of alleyways connected people to the shoreline and natural docks and maintained physical permeability. Residents of Karantina still recall social activities that are associated with the sea, such as swimming, walking along the seashore, and fishing. However, the city and port dynamics changed with the rapid expansion of the port since the mid-1950s. As the port expanded, Karantina and its residents were deprived of any direct relation with the sea.



Figure 15. Port of Beirut and the Mediterranean Sea.
Source: Abir Cheaitli, 2021.

Although the port currently acts as a vital economic magnet for Karantina, an adequate spatial connection between Karantina, the port, and the sea is still missing. To enhance the socio-spatial connectivity of Karantina with its surroundings, this proposal intends to reconnect Karantina to the sea through the port. Advocacy efforts are key, in this case, given the currently restricted access to the port, and the complex political circumstances that may obstruct this access. Therefore, this proposal calls for establishing a coordinating body that advocates for public access to the port. A team of urban planners and designers, activists, and politicians with a previous history of advocating for access to public spaces should oversee the negotiations around this issue with the relevant stakeholders. The team should also raise public awareness about the importance of the port in urban life. As the custodian of the port, the Ministry of Public Works and Transportation should be the main actor in this effort, in addition to the donor agencies that are supporting the reconstruction of the port, especially the World Bank. Advocating for public access to the sea through the port is timely and urgent, given that many port reconstruction proposals are under development since the port blast, some of which can potentially exacerbate Karantina's disconnection from the sea.

The proposed team can prepare a counterproposal for the port reconstruction and assign part of the port for public space. This proposal will reinforce the Karantina-port interaction by infusing pedestrian mobility into the port and activating part of its waterfront for public use, in the process, inducing new opportunities such as leisure activities, recreation, and job creation.

The Relevant Actors

The relevant actors include the Beirut Urban Lab, and other urban activists such as the Lebanese Center for Policy Studies, Public Works, Beit El Baraka, legal agenda, and ACTED, in coordination with public actors such as the Ministry of Public Works and Transportation, the Municipality of Beirut, the Governor of Beirut, the Order of Engineers and Architects in Beirut, and the Lebanese Army, and in consultation with residents in Karantina.

Proposed Source of Funding

Not applicable.

Approximate Financial Magnitude

Not applicable.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- A coordinating body that is committed to advocating for public access to the port.

ACTION PLAN 20

Project Title

Conduct a transportation study in Karantina.

General Objective(s)

- B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.
- D. Promote a sustainable development that is participatory and phased over a period of time.
- E. Improve the overall quality of the urban environment in Karantina.

Type of Project

- | | |
|---|--|
| <input type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input checked="" type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

- B3: Integrate Karantina into the city-wide transportation network.
- D5: Improve connectivity and accessibility to Karantina.
- E3: Reduce sound and air pollution.

Project Objective(s)

The project contributes to the following strategies:

- B3.1/ D5.5: Establish points of connection with city-scale and wider mobility modes (buses, taxis, etc.).
- E3.1 Manage the traffic of trucks, their access, and parking in the area.

Also:

- Determine and propose the best points of connection in Karantina to the existing modes of transportation and road networks in Beirut.
- Advocate for the introduction of stations and bus stops in Karantina to further connect the residents to the rest of Beirut.
- Expand the capacity of the existing truck parking spaces in Karantina.
- Design a traffic scheme for Karantina that addresses density concerns, the timing, and the rerouting of trucks away from the residential areas.

Project Description (concept note)

Before the civil war, Karantina used to have a bus stop that was part of an old transportation network that linked several areas in Beirut. However, this transportation network was gradually discontinued after the end of the civil war and was replaced by an informal one. These networks of informal transportation, such as taxis and buses, do not run inside Karantina but operate along its edge. The residents in Karantina reported a low dependence on these transport networks due to difficulty of walking to the bus stops across the highway, or because of a lack of trust in these buses. The residents also reported an undesired movement of trucks in Karantina. The movement of the trucks increases the levels of noise and air pollution from the heavy smell of diesel and smoke and the foul odors from the transported livestock.



Figure 16. The Charles Helou highway. Source: Sami Diab, 2019.

Trucks also utilize the sidewalks, streets, open spaces, and vacant and residual spaces in Karantina for parking because of a shortage of parking spaces that are designated for trucks in the port, which adversely impacts the safety and lives of the residents. Trucks circulate within Karantina with no set schedule and do not follow dedicated routes. They use inner streets to operate during non-working hours and avoid officers when they are present. Therefore, trucks contribute to the deterioration of the physical and environmental quality in Karantina. They wear out the asphalt on the streets, create potholes, and cause physical damage to public spaces, such as roads and vacant lots, and private property such as cars and front gates. They also cause congestion and pose a threat to street users, especially children and elderly people.

To strengthen socio-spatial connectivity between Karantina and its surroundings and enhance its urban environment, it is essential to integrate Karantina into a city-wide transportation network and reduce the pollution that is caused by trucks. Therefore, this proposal requires conducting a thorough transportation study that considers the following recommendations:

- New nodes inside Karantina should be connected to the existing transportation networks in Beirut. Accordingly, the study should determine the best connection points and link them to the city-wide network. Van no. 2 and the van along the airport-Antelias line can divert their route to cut across Karantina and stop at the different proposed nodes. The nodes should be chosen across the three sub-neighborhoods with well-serviced stations and gathering spaces.
- Additional parking spaces for the trucks inside the port to accommodate the existing number of trucks. The study should rethink the programming of the port and explore the different options for the provision of extra parking spaces while considering the port's operation requirements, supply chains, and logistics. The underutilized spaces in the port can be repurposed for parking.
- A traffic scheme for Karantina that addresses density, timing, and rerouting of trucks away from the residential areas. The traffic scheme should keep the heavy trucks out of Karantina's residential clusters. The area between Brazil Street and Sahara-Iben Sarjouon Streets must become off-bounds for the trucks with street signs and barriers, penalties for violations, and possibly designed to narrow down the street entrances (for example, by expanding the sidewalks or providing planted, median street barriers). This step can maintain smooth access for the trucks in and out of the port as well as their free movement throughout the more industrial, eastern part of Karantina. Timing and traffic flow directions for the streets where the trucks are allowed to move must be carefully configured to respond to the port's operational needs and consider the Karantina residents and businesses along these streets.
- New modes of transportation such as trains and sea taxis. The study should explore more time-efficient and sustainable transportation modes and advocate for their integration into the existing network in the long term.

The transportation study will ensure people in Karantina have access to decent transportation modes that are linked to several areas in Beirut. Transportation is vital for improving living standards, especially for marginalized communities like the ones in Karantina. By enhancing their mobility, the residents in Karantina can access better jobs and services, commute to a wide buffer area around Karantina, and engage in public and social life. The study will also ensure a better urban environment and the well-being of residents as it will limit noise and air pollution.

The Relevant Actor

The relevant actor is the Ministry of Public Works and Transportation, in coordination with other public actors such as the Municipality of Beirut, the Governor of Beirut, and the Council for Development and Reconstruction, academic institutions and non-governmental organizations such as the Beirut Urban Lab at the American University of Beirut and TrainTrain⁴², and international actors and non-governmental organizations such as the UNDP, ILO, and CMA CGM⁴³, and in consultation with the residents in Karantina.

⁴² A non-governmental organization that advocates for the rehabilitation of the Lebanese railway rehabilitation and for railway heritage preservation.

⁴³ A French transportation and shipping company that is currently active in the Port of Beirut.

Proposed Source of Funding

Public authorities involved supported by international actors such as the UNDP, the World Bank, the EU, and KfW Development Bank⁴⁴.

Approximate Financial Magnitude

The cost of conducting the study is estimated at 70,000 USD⁴⁵.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Nodes of transportation inside Karantina that are connected to a city-scale network.
- Enhanced mobility and traffic circulation inside Karantina.
- Less noise and reduced levels of pollution in the residential sub-neighborhoods.
- New modes of transportation for the residents of Karantina.

⁴⁴ A German state-owned investment and development bank.

⁴⁵ It is important to note that these estimates do not account for the fluctuations in market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 21

Project Title

Develop protocols of cooperation, networking, and the transfer of expertise and knowledge between the different businesses in Karantina.

General Objective(s)

B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.

C. Support, increase, and sustain cultural and economic vitality in Karantina.

Type of Project

- | | |
|---|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

B5: Strengthen the role of economic drivers to connect Karantina to the city-scale economy.

B7: Connect the different businesses within Karantina.

C5: Support the growth of port-related businesses.

Project Objective(s)

The project contributes to the following strategy:

C5.1/B5.2/ B7.1: Network, protect, and strengthen the sustainable agility and capacity of port-related and other industrial businesses. This requires:

- Increasing communication and the transfer and exchange of knowledge between the different businesses in Karantina.
- Promoting collaboration between the businesses.

Project Description (concept note)

Karantina's economy is characterized by groups of businesses with similar sizes and scope of work. For example, micro businesses account for 82% of the total number of businesses in Karantina. A third of these micro businesses include retail shops and recreational services in the food sector. They include mini markets, butchers, bakeries, juice shops, coffee shops, restaurants, and hookah places. They are spread throughout Al-Khodor, Al-Senegal, and Al-Saydeh sub-neighborhoods. These businesses mostly employ locals from Karantina and cater to the residents of the sub-neighborhood where they are located. Furthermore, several micro businesses, especially smaller ones with 0 to 2 employees, act as gathering places and anchors for social connectivity among the residents of each sub-neighborhood.

Karantina also has several businesses in the cultural sector. Among them are micro businesses for traditional manufacturers and handicraft businesses. They include carpentry and the manufacturing of furniture, metal works, and sewing. They are also spread across Karantina's three sub-neighborhoods. Some of them date back to the pre-civil war period. This proves their vitality and entrenchment in Karantina. Their work conceivably intersects with that of the new cultural functions that opened in Karantina before the port blast. These new functions include ateliers, showrooms, and art venues like Forum de Beyrouth, SMO, and Sfeir-Semler Gallery. These attract different user groups like young people, artists, and other visitors from other areas across Lebanon and abroad.

Additionally, the location next to the Port of Beirut, a vital economic and transportation hub, attracted more port-related businesses to Karantina, including freight and logistics facilities. 70% of these facilities are in the industrial zone. They are mostly small to medium in size and employ skilled professionals from outside Karantina.

Their Karantina branches are mainly dedicated to storing products and barely generate any pedestrian inflow but attract other related businesses such as mechanic shops and garages. Many mechanic shops and garages are located across Karantina and account for 18% of the total number of businesses. They are mostly micro-scale, involve manual labor, and employ people from Karantina.

There is no coordination or cooperation between the businesses despite their similar scope of work. The diagnosis report showed that there is poor communication and networking among the businesses, leaving most of them to operate in isolation. Due to the economic crisis in Lebanon, and the impact of the port blast, the businesses in Karantina are more vulnerable and in need of collaboration and mutual support. For example, many businesses are threatened with significant rent hikes, increases in production costs, and a decrease in demand. The port blast damaged their properties, facilities, equipment, and vehicles. Many of these businesses also lack adequate financial resources and struggle to secure funding to fully recover or sustain their operations. Moreover, the mismanagement or neglect of facilities such as the slaughterhouse, dating back even before the economic crises, disrupted the supply chains of several businesses.

Accordingly, this project proposes to increase communication between the businesses in Karantina and establish networks of cooperation. This requires setting up a public-private partnership or a non-profit initiative that can act as an intermediary between the businesses and promote collaborative plans. The project can be a model that is first implemented in Karantina and adapted to other areas in Beirut.

This project can also rely on support from local or international non-governmental organizations that work in the field of business research and development and the Ministry of Economy and Trade. Their role will be to research the conditions and needs of the Karantina businesses and devise a program for the recruitment and training of intermediaries and networking brokers. The brokers will manage the process of identifying collaborative opportunities for the businesses and acting as mentors or facilitators in the creation of new collaborations. The businesses that will potentially benefit from this project must be incentivized financially to participate in the scheme.

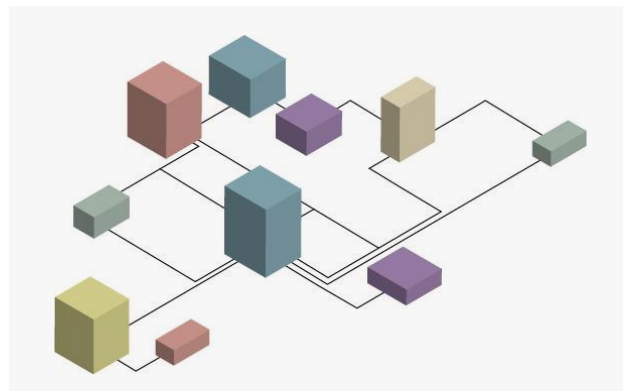


Figure 17. Diagram of business networks. Source: BUL, 2022.

Social events to initiate the partnerships are important after the potential businesses that can participate in the scheme are identified, followed by detailed feasibility studies. The businesses must then commit to the scheme in writing. An operational structure for the partnerships or networks will be developed. The brokers can temporarily oversee these partnerships and networks; however, the target is to ultimately have the participating businesses improve their knowledge and capacities to manage their collaborations independently. There is no clear data on which businesses would be interested in the collaborations and to which extent and the number of required brokers; accordingly, a pilot phase for the project is essential. The data from this pilot will dictate the number and types of businesses that are interested in the scheme. It will also indicate the number of brokers that are required in the next phase and their scope of work.

The resulting collaborations between the businesses in Karantina will vary in type, scale, and size. They can take the shape of a simple development circle for regular meetings to exchange knowledge of business techniques and solutions to overcome problems. This is especially important to businesses in the same sector and with similar activities and size. They can also coordinate collective actions to solve problems; for example, the butchers can advocate for the reopening of the slaughterhouse to improve their products. The businesses can also form strategic partnerships that can help to reduce costs and increase efficiency. These partnerships are particularly relevant to the mechanic shops and the freight and logistics facilities. Local artisans can also benefit from the different forms of collaboration with art galleries and ateliers. Other businesses can also benefit for more loose models of cooperative whereby the involved businesses share common resources and activities. Local artisans and handicraft businesses can also share equipment and transport vehicles. Additionally, stronger forms of collaboration like joint ventures or cooperatives and mergers are important. They can be highly beneficial for the micro businesses in the same sector to upscale their activities and become more resilient.

Accordingly, this project, if implemented, can improve economic connectivity and vitality for businesses in Karantina. Forms of partnerships that are mutually beneficial, timely, and cost-effective can help businesses improve their agility and function more synergistically.

The Relevant Actors

The relevant actors are local businesses and non-governmental organizations such as Daleel Tadamon⁴⁶ and the Lebanese Development Network⁴⁷, and consultancy offices in the private sector such as Beirut Consulting⁴⁸ and legal agenda, and in consultation with the General Directorate of Cooperatives which is under the authority of the Ministry of Agriculture, the Ministry of Economy and Trade.

Proposed Source of Funding

International agencies with similar scope of work such as USAID, KfW, ILO, and the International Development Research Center (IDRC).

Approximate Financial Magnitude

The cost of the initial research, the recruitment and training, and communicating the program to potential participants is estimated between 15,000 and 20,000 USD. The cost of conducting the pilot phase of the project is estimated at 80,000 USD⁴⁹. There are additional costs that depend on the number of participating businesses and the types of collaborations.

Period and Timing of Execution

Short-term Long-term

Phased (Preliminary research phase: Two months. Training and recruitment: Two months. Outreach to potential participants and organizing introductory meetings and events: Three months. Feasibility studies leading to the implementation of businesses collaborations: One month. It is important to note that the duration of each step might change depending on the ratio of staff to the number of participating businesses and the types of collaborations.

Expected Results

- Solidarity and collaboration between the businesses in Karantina.
- Improved economic connectivity to and within Karantina.
- Strengthened communication and coordinated action among the businesses.
- Upscaled and intensified economic activities.
- Increase in business efficiency and reductions in costs.
- Improved business capacities to overcome challenges.
- A pilot model to enhance collaborations between the different businesses on a national scale.

⁴⁶ Daleel Tadamon is an initiative that supports collectives and small to medium enterprises in Lebanon and promotes their co-operation and collaboration to increase the social and economic resilience of local community groups.

⁴⁷ The Lebanese Development Network (LDN) is a national non-profit organization which assists individuals, community groups, and institutions in improving their performance and addressing development challenges. The organization also works to leverage shared resources, expand synergetic capabilities, and develop co-operational processes and joint ventures.

⁴⁸ Beirut Consulting is a financial advisory firm that provides a wide range of services including feasibility studies, business valuations, and planning for alliances, joint ventures, and mergers.

⁴⁹ It is important to note that the estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 22

Project Title

Design and build a community center in a strategic location that is equally accessible to the residents of the three sub-neighborhoods.

General Objective(s)

B. Strengthen the socio-cultural, economic, and spatial connectivity of Karantina internally and externally with its surroundings.

Type of Project

- | | |
|---|---|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input checked="" type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

B8: Enhance the public realm and provide shared facilities and spaces to promote social connection across the three sub-neighborhoods.

Project Objective(s)

The project contributes to the following strategy:

B8.1/ D3.3/ E5.1: Adopt an inclusive and integrated design approach while upgrading and rehabilitating existing public spaces and introducing shared facilities.

Accordingly, the project also aims to:

- Motivate the different community groups in Karantina to understand and change their circumstances by involving them in the design and decision-making process and inspiring them to take ownership and responsibility for their shared spaces by building their capacities.
- Empower vulnerable community groups, primarily women and younger generations, to help promote their skills and specialties through income-generating activities, such as the production and marketing of local crafts. Such skills include self-sufficiency, independence, and resilience.
- Enrich the skills of the different community groups by building their capacities, teaching them life skills such as self-expression, and providing vocational training and workshops.
- Provide therapy support to improve the mental health and self-esteem of the vulnerable groups, primarily, people who were directly or indirectly impacted by the port blast.

Project Description (concept note)

Karantina has a social fabric that is diverse across different nationalities, religions, age groups, and educational backgrounds. However, people tend to aggregate within the sub-neighborhood enclaves - Al-Saydeh, Al-Senegal, and Al-Khodor - based on kinship and religious ties. Although the three sub-neighborhoods and their residents share some common attributes, social segregation is still prevalent between the sub-neighborhoods. The research revealed strong social connections within each sub-neighborhood but not between them. The analysis of the answers to the questionnaires further showed that the sense of belonging to the sub-neighborhoods is at its highest in Al-Khodor at 71%. Al-Saydeh and Al-Senegal sub-neighborhoods had similar results, at 58% and 52% respectively.



Figure 18. A schematic of the proposed community center activities. Source: BUL, 2022.

Therefore, there is a need to have shared public facilities that can enhance social connectivity among the different community groups across the three sub-neighborhoods. One proposed example of these facilities is a community center that can operate as a space of recovery and empowerment for Karantina and its residents.

The center aims to develop community capacities and serve as a place for self-expression and community consultations to foster a strong feeling of belonging. As a result, it can help the different community groups heal collectively from the trauma of the port blast. It can also establish a vibrant relief hub for people in Karantina who are struggling so they can interact and support each other, forge a network of solidarity, and enhance their social cohesiveness. The center can be established in one of the abandoned municipal buildings on lot number 358.

Proposed programs:

The residents of Karantina noted in the answers to the household questionnaire a lack of public spaces, high unemployment rates, the trauma they suffered from the port blast, and the levels of inequality and poverty in Karantina. Therefore, the community center can provide the following proposed services but is also not limited to them:

- Setting up a program for local support called Mouneh for Resilience. The program will provide vocational training for young men and women from vulnerable communities and will aim to develop a sense of attachment and pride toward their food culture so they can become more self-sufficient in marketing their products.
- Provide clinical healthcare and therapy services for individuals and groups. The aim is to support children, younger people, and adults in overcoming the psychological trauma from the port blast and improve the medical and mental health of the residents of Karantina while they recover from the lockdowns of the COVID-19 pandemic.
- Provide vocational, upskilling, and capacity-building workshops to empower women and younger people to engage in income-generating activities.
- Provide a food distribution center to the soup kitchen Leqmet Mariam. Leqmet Mariam is managed by a non-governmental organization - for example, Jouzourouna - and provides hot meals to people facing financial hardship.
- Organize social gatherings and town hall meetings to reinforce a sense of belonging for people and create a sense of unity among the different community groups. Multipurpose spaces will also be used by the different community groups in the sub-neighborhoods in Karantina to discuss the main social issues and propose solutions. They will help build trust among the residents of the sub-neighborhoods and bring them together.

Operation and management:

The community center will be operated and managed by a non-governmental organization that is responsible for running its different activities. In parallel, a neighborhood advisory committee will operate as the link between the different community groups and the non-governmental organizations that are active in Karantina. The committee will identify the needs and demands of the community groups, prioritize them, and match them with the available programs by the non-governmental organizations.

The non-governmental organizations that will manage the community center will work closely with the community advisory committee to set priorities for local needs and monitor and evaluate the impact of the center regularly. It will also work closely with other non-governmental organizations that can provide programs that are relevant to the needs of the community groups and set a time frame for the programs.

The profile of the non-governmental organizations that will manage the community center should include:

- A good reputation and good record of previous work.
- A scope of work that includes similar types of programs like running capacity building and recovery healing workshops and setting up soup kitchens.
- Good connections with the Municipality of Beirut and the community groups.
- A record of similar activities or previous interventions in Karantina.
- An official registration as a non-governmental organization in Lebanon.
- A clear work plan and financial management skills.

The profile of the Community Advisory Committee should:

- Ensure a level of inclusivity and representativeness: the nomination and the selection process of individuals to become members of the committee should ensure diversity, inclusiveness, and representation across the three sub-neighborhoods in Karantina and across gender, age, and religious groups.
- Ensure a level of diversity of backgrounds and occupations: the members of the committee should come from a diversity of educational backgrounds and have previous or current occupational skills that can contribute to the social, economic, and educational missions of the community center.
- Ensure a level of community involvement: the members of the committee should be involved in the social life in Karantina and they should be nominated by other community members.
- Demonstrate the required capabilities: their capabilities should be known to the research team at the Beirut Urban Lab through their prior engagement with the team as local researchers or in the community events (the workshops, town hall meetings, and focus group discussions).

The Community Advisory Committee is composed of representatives of the community groups in Karantina, the Municipality of Beirut, as well as representatives from the Beirut Urban Lab at the American University of Beirut, Design for Communities, and the non-governmental organizations that are active in Karantina.

The Relevant Actors in the Design and Execution Phases

The relevant actors are the Municipality of Beirut, the Governor of Beirut, the Beirut Urban Lab and the DI-Lab at the American University of Beirut, Design for Communities D4C, and non-governmental organizations that are active in Karantina, in coordination with the proposed neighborhood committee.

Proposed Source of Funding

These include local actors such as the Municipality of Beirut and international actors such as Cités Unies Liban, La Guilde, the Norwegian Refugee Council NRC, and UNHCR and other UN agencies.

Approximate Financial Magnitude

The funding must cover the construction and rehabilitation costs estimated at 140,000 USD, the costs of the required equipment and furniture estimated at 20,000 USD, and consultancy fees estimated at 30,000 USD⁵⁰.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- A new social space for people in Karantina where they cultivate a sense of communal belonging.
- Improvements in the local economy in Karantina by building the capacities of the residents and providing them with income-generating activities.
- Restored trust in the local authorities such as the Municipality of Beirut that will establish the community center.

⁵⁰ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 23

Project Title

Expand financial support opportunities and institute mechanisms to link these opportunities with the micro businesses in Karantina.

General Objective(s)

C. Support, increase, and sustain cultural and economic vitality in Karantina.

Type of Project

- | | |
|---|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

C3: Support the existing micro businesses and sustain their operations in Karantina.

C4: Increase the diversity and vitality of the traditional crafts and other manufacturers in Karantina.

Project Objective(s)

The project contributes to the following strategy:

C3.1/C4.1: Offer financial incentives to micro and specialized businesses.

Also:

- Match the micro-enterprises in Karantina with the appropriate funding opportunities to expand their operations.
- Increase the capacities of microfinance institutions and their outreach in Karantina.
- Decrease financial burdens on craft manufacturers and businesses in Karantina.

Project Description (concept note)

52 small and micro businesses account for 63% of the total number of businesses in Karantina. 16 other larger micro businesses account for 19% of total businesses⁵¹. They include retail shops, mini markets, butchers, bakeries, mechanic shops, hookah stores, and carpentry businesses. Micro businesses mostly employ people who live in Karantina. They are also mostly owned by older residents and are their only source of income.

The field observations and answers to the questionnaires also showed patterns of social connectivity that are anchored around these businesses, especially the smaller micro businesses, with residents gathering and socializing around the shops. Hence, micro businesses are pivotal to sustain the livelihoods of the residents of Karantina - including business owners, workers, and their families - while fostering their socio-spatial and socio-economic practices. Additionally, most of the old manufacturers and handicraft businesses in Karantina are micro-scale and include carpentry and the manufacturing of furniture, metal works, and sewing. Their products, along with the associated knowledge and expertise, are regarded as cultural assets. They are spread across Karantina's three sub-neighborhoods, and some of them date back to the pre-civil war period and remained vital in Karantina.



Figure 19. A micro business in Karantina. Source: BUL, 2021.

⁵¹ The strategic diagnosis report defined micro enterprises in Karantina as enterprises with 0 to 2 employees and small to larger micro businesses as businesses with 3 to 10 employees.

However, the activities of these businesses were negatively impacted by the economic crisis in Lebanon, the devaluation of the Lebanese lira, and the port blast. For example, 19 micro businesses that were surveyed in 2021 were partially open and 5 had already closed. They are forced to cope with drastic increases in production and operation costs. With the increase in fuel prices, transportation costs are also increasing, and access to key services like water and electricity is compromised. The micro businesses in Karantina are also facing rent hikes as well as threats of eviction. Also, demand is shrinking with the decrease in the purchasing power of customers. Even with the distribution of aid funds after the port blast, many businesses still had to rely on their savings and loans from their social networks for the repairs. Some of the businesses also did not receive any aid funds. The handicraft businesses are particularly vulnerable to competitive larger-scale businesses that are less impacted by the economic crisis and are relocating to Karantina. Additionally, many micro businesses do not qualify for loans from local banks. On the one hand, many business owners do not have guarantees to apply for loans or knowledge about funding opportunities; on the other hand, financial institutions such as local banks find it difficult and costly to obtain sufficient information on the operation and financial conditions of micro businesses.

Accordingly, this project proposes to develop financial support opportunities for the micro businesses and crafts in Karantina, while matching each business with the appropriate financial opportunity. It aims to decrease the financial burdens on businesses and increase their access to loans and sources of financial support. This will allow them to sustain their operations and even promote their growth.

It is crucial to increase the exposure of the micro businesses in Karantina to financial opportunities that are available to them. A suggestion is to set up business consultancy clinics that can identify the financial opportunities and link them to the businesses. These clinics can be integrated into the Business and Career Training Center that is proposed in action plan number 8. The role of these clinics is to initially map the financial opportunities and financing programs, including microfinance institutions or grant providers like venture philanthropies. Then, businesses in need of funding will have access to sessions with consultants at the clinics to match them with the appropriate financing programs. These clinics will also help the businesses draft business plans and feasibility studies as prerequisites to applying for financial support. It is imperative that the clinics also strictly adhere to promoting responsible financing and lending activities, ensuring their credibility, and that of the relevant financial institutions, and protecting the micro businesses over debt.

In parallel, the scope and sustainability of the financing opportunities that are suitable to the micro businesses need to be expanded; accordingly, the microfinance sector in Beirut needs to be strengthened. Firstly, it is important to mitigate the information asymmetries around financing micro businesses. Accordingly, the outreach and capacities of the existing microfinance institutions (MFIs)⁵² need to be improved. Their programs need to be more widely marketed while maintaining transparency and clarity. In addition to the work of the business consultancy clinics, such outreach efforts will allow the micro businesses to become more informed about the different loan and financing programs that are available to them. Additionally, encouraging coordination and networking between the MFIs will help upscale and sustain their operations. The work and scope of activities of the Lebanese Micro-Finance Association (LMFA), which already brings together nine MFIs, should be strengthened. For example, an important initiative that needs to be implemented collaboratively is the creation of soft infrastructure, like a nationwide micro business credit risk database. This will allow the MFIs to share information with the micro businesses that are requesting funds, facilitating the financing operations, and decreasing the associated risks.

It is also important to design schemes that can override the typical lack of guarantees for micro businesses to apply for loans. Accordingly, groups that provide loans with joint liability can be highly effective, especially in Karantina with its tightly knit sub-neighborhood community groups. It can incentivize the financial programs to rely on social ties to screen, monitor, and enforce loan repayment. Certain loans can also be backed by or facilitated by government institutions. Several funding schemes for businesses are already established through governmental or quasi-governmental bodies like Kafalat⁵³ and the Economic and Social Fund for Development (ESFD)⁵⁴, but these schemes are currently mostly inactive or not inclusive enough to serve the vulnerable businesses in Karantina.

⁵² The total number of micro finance enterprises and providers in Lebanon exceeded 20, and they include ADR, Vitas, Emkan, Al-Majmoua, the Makhzoumi Foundation, CLD, Al-Tamkeen, AEP, and EDF among others.

⁵³ Kafalat S.A.L is a loan guarantee company that the Lebanese government established in 1999 and has the following ownership structure: 75% of its shares are owned by the National Institute for the Guarantee of Deposits and 25% of its shares are owned by fifty Lebanese banks. Kafalat provides financial guarantees for loans from commercial banks to small and medium size enterprises that are engaged in the following economic sectors: industry, agriculture, tourism, traditional crafts, and high-end technology.

⁵⁴ The Economic and Social Fund for Development (ESFD) is part of the Euro-Med Partnership established between the European Commission and the government of Lebanon in 2000. Its objectives are to alleviate levels of poverty and improve living conditions in Lebanon. Among its activities is guaranteeing business loans to small to medium enterprises through a partnership with five commercial banks.

Their scope of work and criteria need to be reactivated and expanded. Micro businesses, especially the ones that have social and cultural value, like the craft businesses, must be prioritized for government-backed loans. In this case, the Kafalat funding scheme can be reassessed for a possible adjustment to accommodate the traditional craft businesses in Karantina. A more encompassing proposition would be for ESFD to initiate a partnership with the MFIs, creating a risk-sharing scheme. The partnership can provide micro-loans for unbanked micro businesses or those with insufficient guarantees. Government institutions, through the ESFD, can support the MFIs and their operational costs, and guarantee the payment of a percentage of their loans.

With this kind of financial support, the micro businesses will potentially be able to sustain and even upscale their operations. They will be able to maintain the diversity of businesses in Karantina and further establish their essential role in providing services that have cultural value and in generating income and job opportunities for people.

The Relevant Actors

The relevant actors include private consultancy offices, Lebanese and international non-governmental organizations like Sanabel⁵⁵ and OXFAM, micro finance institutions in Lebanon, LMFA, Kafalat, and ESFD, in coordination with the Ministry of Economy and Trade, the Ministry of Finance, the Investment Development Authority of Lebanon, the Central Bank of Lebanon, and International Executive Service Corps⁵⁶.

Proposed Source of Funding

They include local actors such as ESFD and Sanabel and international such as the World Bank, the Partnership Council for the Lebanon Financing Facility (LFF)⁵⁷, the EU, the government of the Netherlands⁵⁸, USAID⁵⁹, SANAD⁶⁰, and KfW⁶¹.

Approximate Financial Magnitude

The cost to establish the business clinics for training, mapping, and matching financial opportunities is estimated at 80,000 USD. The cost to support the micro finance enterprises is estimated at 10,000 USD⁶².

Period and Timing of Execution

- Short-term Long-term
- Phased (Establishing the business clinics: One month. Mapping the funding sources: Two months, followed by the needs assessments and sessions with the different enterprises)

Expected Results

- Improved financial inclusion.
- An increase in the financial capacities of the micro enterprises.
- An expansion in the fixed assets of the micro enterprises.
- Upscaled operations of micro enterprises and a larger number of job opportunities.
- Karantina business owners and their families feeling more empowered and supported to ensure their success.
- Sustained socio-spatial practices and social connectivity associated with micro enterprises.
- Sustained craft businesses and their cultural productions.
- Sustained business diversity in Karantina
- Enhanced operations and networks of microfinance institutions.

⁵⁵ Sanabel is a regional institution in the Arab world. Its mission is to support and build capacities in the micro finance sector for the provision of sustainable finance strategies that are inclusive of low-income groups.

⁵⁶ IESC already worked on enhancing the micro finance sector in Lebanon through the Lebanon Investment in Microfinance Program (2009-2015). It worked with the Lebanese MFIs and helped establish the LMFA.

⁵⁷ LFF is a multilateral donor agency that the World Bank established in 2020 in cooperation with the UN and the EU and with support from other key donors. Its objective is to catalyze immediate as well as medium-term socio-economic recovery of vulnerable populations and businesses affected by the Port of Beirut blast.

⁵⁸ The European Union (EU) and the Government of Netherlands fund the ESFD.

⁵⁹ The USAID funded the Lebanon Investment in Microfinance Program (2009-2015).

⁶⁰ The SANAD Fund for MSME is an impact investment fund dedicated to supporting entrepreneurs in the Middle East and North Africa. It channels funding to MSMEs through investing in local partners such as microfinance institutions and other financial intermediaries.

⁶¹ KfW is among the funders of SANAD.

⁶² It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 24

Project Title

Set up offices in the Municipality of Beirut to organize and promote cultural events in Karantina, in partnership with the private sector.

General Objective(s)

C. Support, increase, and sustain cultural and economic vitality in Karantina.

Type of Project

- | | |
|--|--|
| <input type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input checked="" type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

C6: Improve cultural vitality and leisure activities in Karantina.

Project Objective(s)

The project contributes to the following strategy:

C6.1: Activate the open spaces in Karantina to host occasional, weekly, monthly, and annual cultural and economic festivals. This includes:

- Position the Municipality of Beirut as a catalyst of cultural vitality.
- Generate interest in Karantina as a destination for cultural and artistic activities.
- Involve the local community groups in the local cultural development efforts.

Project Description (concept note)

The cultural sector in Karantina has the potential for growth. This potential is evident in the number of new entertainment and cultural businesses in Karantina. Leisure and entertainment venues like BO18, KED, Forum de Beyrouth, and the art galleries attracted younger people, artists, exhibitors, and visitors from areas across Lebanon and from abroad. However, the increase in the number of new entertainment and cultural businesses was disrupted by the port blast, with a few businesses relocating or closing, while the businesses that are still open are struggling with the impact of the economic crisis. Additionally, while these businesses increased the pedestrian flow to Karantina and enhanced its connectivity with the rest of Beirut, their direct impact on the residents of Karantina was minimal. Many of these businesses do not serve the local community due to their expensive services and their relative incompatibility with prevalent local lifestyles. They also do not employ the residents. The number of cultural and recreational venues that serve the residents is small; they include three coffee shops, one computer gaming shop, one hookah store, and one car training workshop. It is important to note, however, that the open public spaces in Karantina do not always accommodate the local cultural practices.

Despite their availability, the open spaces in Karantina are either inaccessible or compromised. Many of the large lots in Karantina are owned by the Municipality of Beirut and central government institutions. Accordingly, open public spaces have significant potential to accommodate social and cultural activities. However, most of these spaces are used by the military or truck drivers and are subject to high levels of pollution and mismanagement. For example, four military bases are located on large pieces of land at the peripheries of Karantina.



Figure 20. Municipal land that has potential to be transformed into a cultural and recreational hub. Source: Batoul Yassin, 2021.

The industrial functions, waste management facilities, and unregulated truck circulation contribute to the levels of pollution and the unwelcoming perception of the urban environment. As a result, and as the diagnosis report demonstrated, 50% of the households in Karantina were not satisfied with the quality of the existing public and shared spaces, and 72% avoided using these spaces in their free time. Hence, most of the socio-spatial practices of people in Karantina are confined to the residential sphere or the workplaces. Therefore, this action plan, with the action plans that propose the rehabilitation of the urban environment and the shared spaces in Karantina such as action plan 13, 20, 29, aims to enhance the economic and cultural potentials of these spaces by bringing people to Karantina while benefiting the locals. It requires establishing a municipal unit that can partner with the businesses in Karantina to promote and organize cultural events.

The municipal council is by law required to establish, manage, or contribute to social, cultural, and artistic practices in Beirut⁶³. Accordingly, the Municipality of Beirut must support community groups in distress, including community groups in Karantina, and enhance their economic and cultural vitality. Accordingly, the Municipality of Beirut should establish a Cultural Activities Department that is entrusted with proactively handling and supporting cultural programs and events. For example, it can promote local cultural assets such as local traditional industries and crafts and the value of historic sites, scenic spots, monuments, and landscapes. More specifically for Karantina, it can offer or rent out the large municipal lot, in coordination with the Governor of Beirut, to host social and cultural events. These events can include festivals, souks, and artistic installations. The souks, for example, can include micro and small businesses and promote their local mouneh products and crafts. Artistic events can encourage and promote local artists and creative initiatives. They can be hosted occasionally, weekly, monthly, seasonally, or annually. The suggested Cultural Activities Department can partner with private institutions that can invest funds in organizing such cultural events.

It is also important to establish a municipal socio-cultural committee that is composed of council members, experts, and other citizens - ideally representative of the local community groups - to aid and bolster the work of the Cultural Activities Department. Through the work of the socio-cultural committee, people in Karantina will be involved in suggesting plans, participating in the organization of events, and communicating their needs. The role of people in Karantina and their relationship with the council must be clear. Also, the Lebanese Municipal Law does not encourage, but it does not forbid community groups from becoming members of municipal committees. This leaves the power relationships and roles within the committees unclear and further discourages community engagement. Accordingly, further detailing and clarifying the requirements of the Municipal Law in terms of the roles of council members and committee members can potentially help induce community engagement and improve levels of trust.

With such institutional arrangements the envisaged cultural activities will likely generate external interest in Karantina while remaining inclusive and catering to the cultural needs and lifestyles of the locals. The social and communal nature of such public activities can also enhance social connectivity and contribute to the local economy by increasing the flow of pedestrians to Karantina.

The Relevant Actors

The relevant actors include the Municipality of Beirut and the Governor of Beirut, in coordination with the Ministry of Culture, the Ministry of Interior and Municipalities, the parliament to implement amendments to the Municipal Law, various local civil society groups and residents and businesses in Karantina.

Proposed Source of Funding

Public authorities involved with possible support from local and international agencies.

Approximate Financial Magnitude

Not applicable.

⁶³ Article number 50 in the Municipal Law - Legislative Decree number 118 (dated 30 June 1977).

Period and Timing of Execution

Short-term Long-term

Phased (The formation of the socio-cultural committee does not require major funding and can be implemented immediately after enhancing the cultural role of the Municipality of Beirut. The second phase includes the establishment of the Cultural Diversity Department that may take time since it requires securing some funds.)

Expected Results

- Increase in the number and diversity of cultural practices in Karantina.
- A Cultural Activities Department that enhances the role of the Municipality of Beirut as a catalyst of cultural vitality.
- An increase in the level of citizen engagement.
- Active open and shared spaces in Karantina for cultural events.
- A more vibrant local economy with an increased pedestrian flow and exposure to local businesses.
- Enhanced social connectivity.
- People not residing in Karantina have a better and more accurate perception of the area as a cultural hub.

ACTION PLAN 25

Project Title

Establish a design hub in Karantina with shared resources and facilities for rising young designers to launch their careers and serve as a catalyst for further cultural development.

General Objective(s)

C. Support, increase, and sustain cultural and economic vitality in Karantina.

Type of Project

- | | |
|---|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

C6: Improve cultural vitality and leisure activities in Karantina.

Project Objective(s)

The project contributes to the following strategy:

C6.2: Engage artists and designers to work, network, and complement the existing crafts and the activities of industries in Karantina. This requires:

- Re-engaging designers and artists in everyday life in Karantina through their work and practices.
- Supporting emerging artists and designers by providing them with shared resources that are affordable such as labs, and workspaces.
- Fostering collaborations between designers and artists for shared cultural production.
- Offering businesses and the residents of Karantina opportunities to interact and collaborate with designers and artists by using the proposed design hub for workshops to advance their work or skill sets.

Project Description (concept note)

The in-depth profile of the distribution of business types and densities in the sub-neighborhoods in Karantina showed that around 10% of the businesses are in the arts, crafts and design (ACD) category. Before the port blast, Karantina was becoming a destination for art and design businesses. The re-expansion and diversification of cultural practices can strengthen Karantina's cultural vitality but is limited by the area's severed ties to the rest of Beirut, the post blast decrease in ACD activities, and the lack of tools that are necessary for artistic and cultural production.



Figure 21. Schematic of a lab hub for innovation and design.
Source: BUL, 2022.

To empower artistic and cultural practices within Karantina, it is imperative to establish a creative hub that facilitates innovation, collaboration, and experimentation within Karantina and the rest of Beirut.

Accordingly, this project aims to establish an art and design hub in Karantina to provide work, production, and exhibition spaces for artists, crafts manufacturers, and designers to work independently or collaboratively. The hub can be implemented and managed by a collective of designers and artists. Given the social and cultural value of the hub, the Municipality of Beirut and the Governor of Beirut should provide support by allocating municipal or governmental land for the building and charging a small symbolic rental fee.

The hub will operate to its full potential if it is integrated within the active urban core of Karantina. It should be located close to the residential clusters and near the public park and the community center that is currently under construction on the municipal lot number 358 to the north of the Charles Helou Highway. A multi-story structure of at least 1000 sq. m in total is envisaged to accommodate the activities of the hub⁶⁴. The activities of the hub will include private studio spaces, private offices, common workspaces, exhibition spaces, makerspaces, and print and production rooms, supported by a kitchen and possibly guest artist accommodation units. The workstations can be rented out for short or long periods and they can share facilities, labs, and tools to make them more affordable. Art workshops and classes can also be organized in the hub. Furthermore, makerspaces can be equipped with tools and machines for experimentation and production such as 3D printers, vinyl cutters, industrial laser, digital garment printing machines, an engraving machine, and a cameo silhouette. Additionally, equipment such as cameras, tripods, and microphones can be available for rent at the hub.

Within such a strategically located and well-equipped hub, the vibrant artistic and cultural practices will broaden interest in Karantina, increase pedestrian inflow and social connectivity, and encourage more cultural and creative engagement from the local community groups.

The Relevant Actors in the Design and Execution Phases

The relevant actors include artists, non-governmental organizations such as Haven for Artists⁶⁵ and Ashkal Alwan⁶⁶, the Ministry of Culture, the Municipality of Beirut, and the Governor of Beirut, in consultation with residents in Karantina.

Proposed Source of Funding

They include international funding agencies such as Sony, the Andrew W. Mellon Foundation, the Puffin Foundation (in collaboration with a non-governmental organization that is registered in the United States), the Awesome Foundation, UNESCO (IFPC), Burning Man Arts, Mondriaan Fund, Trans Arts, the Prince Claus Foundation, Stavros Niarchos Foundation, the Arab Fund for Arts and Culture (AFAC), and Wijhat, Culture Resource.

They also include local non-governmental organizations such as the Arab Resource Center for Popular Arts and philanthropies such as Computeraid.org, computerswithcauses.org, and pcsforpeople.org which donate computer supplies, and Opus Art Supply and Dreaming Zebra which donate art supplies.

Approximate Financial Magnitude

The cost of the construction is estimated at 600,000 USD, ranging between 160 USD per 1 sq. m and 645 USD per 1 sq. m. The cost of equipment and computers is estimated at 200,000 USD and the cost of the needed furniture is estimated at 100,000 USD⁶⁷.

Period and Timing of Execution

Short-term Long-term

Phased: First Phase Consultations with the Public (six months). Design and build (one year)

Expected Results

- A design hub that can facilitate innovation, collaboration, and experimentation.
- Machinery and tools that will encourage young innovators to conduct experiments and build prototypes.
- An expansion in cultural and artistic practices in Karantina.
- An increase in the number of established arts, crafts, and designs that operate outside Karantina.
- An increase in incoming visitors from Beirut to Karantina.
- New job opportunities that prioritize the residents of Karantina.

⁶⁴ The spatial configuration of uses can include: common workspaces with a total area of 100 sq., three makerspaces, each with an area of 60 sq., ten studio spaces, each with an area of 20 sq., three workshop and conference rooms, each with an area of 20 sq., six offices, each with an area of 10 sq., one exhibition space with an area of 100 sq., kitchens and bathrooms, each with an area of 40 sq., accommodations for artists and designs in residence, each with an area of 100 sq., in addition to reception and service facilities.

⁶⁵ Haven for Artists is a local non-governmental organization that creates a shared platform for underground artists in the Middle East and combines art with activism. It currently manages a community center in Achrafieh that also functions as a cultural hub.

⁶⁶ Ashkal Alwan, the Lebanese Association for Plastic Arts, is a local non-governmental organization that is committed to the advancement of contemporary artistic practice, research, and modes of study. It aims to facilitate artistic production, foster critical thinking around contemporary social realities, and engage in community mobilization.

⁶⁷ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 26

Project Title

Design and implement an integrated sewage and wastewater management plan for Karantina.

General Objective(s)

D. Promote a sustainable development strategy that is participatory and phased over a period of time.

E. Improve the overall quality of the urban environment in Karantina.

Type of Project

- | | |
|--|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input checked="" type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

D4: Improve the local infrastructural services and amenities.

E4: Improve the dilapidated water, sewage, and other infrastructural networks.

Project Objective(s)

The project contributes to the following strategy:

D4.1/E4.1: Upgrade and improve the performance and management of the existing infrastructural networks to respond to density demands and adopt emerging technologies. This requires:

- Keeping an inventory of the wastewater management systems.
- Determining the current and future needs of wastewater management.
- Identifying options for addressing these needs and selecting the appropriate approach.
- Repairing the sewage line and the drainage network in Karantina, and redirecting the discharge to the Beirut River and the sea.
- Creating a wastewater treatment station.
- Introducing basic indicators for sewage and wastewater monitoring and evaluation.
- Outlining how the selected approach will be implemented and financed, including the timeline and phasing approach.

Project Description (concept note)

Water supply, sanitation, and waste disposal have all been planned, managed, and developed separately and at different times in Karantina. Karantina is connected to an old and degraded sewage system that channels the wastewater from the residential buildings, commercial, industrial, and other facilities like the hospital, slaughterhouse, and fish market into the Beirut River without any treatment. Stormwater also flows naturally into the sea without control or mitigation techniques like rainwater harvesting or filtering. Impervious surfaces like asphalt are still commonly used in Karantina and elsewhere in Beirut. According to the residents of Al-Saydeh sub-neighborhood, there are many incidents of flooding during the winter season due to the inadequate maintenance of inlets. The dangers that wastewater poses to the environment are known to people in Karantina: 89% of the residents highlighted the importance of a proper sewage network infrastructure. Drainage systems and their maintenance, if neglected, can trigger sewer overflow due to intense rainfall, street blockages, and wastewater precipitate in public spaces. As such, they pose a threat to the community, public health, and the environment by causing rising numbers of infections as well as the emergence of multi-resistant bacteria and repugnant smells. The wastewater issue transcends the scale of Karantina to a pose a national hazard in Lebanon. 90% of Lebanon's wastewater is discharged into the sea directly or through river streams, leading to a serious and ongoing pollution crisis (Moussa, 2018).

There are eight medium wastewater treatment plants (WWTPs) in Lebanon, and seventeen small plants. Therefore, wastewater treatment is almost non-existent in Lebanon and serves only 8% of the total population, while 60% of the population is connected to a sewage collection network” (EBRD, 2019). Many sewage and wastewater outlets in Beirut discharge directly into the Beirut River and the Mediterranean Sea. Accordingly, this project proposes upgrading the performance of the existing sewer infrastructure and planning an integrated wastewater management and treatment plant WWTP, whereby existing and future wastewater demands are addressed in a sustainable and efficient way. A WWTP can impact land development patterns. Because of its significant land use implications, the Municipality of Beirut should lead the wastewater management planning process in collaboration with the Ministry of Environment and the Beirut and Mount Lebanon Water Establishment.



Figure 22. Household wastewater leakage into public property. Source: Batoul Yassine, 2021.

However, the project requires a thorough plan that will control construction, operation, maintenance, and financing of wastewater systems and infrastructures. It should also survey a variety of elements, such as the size of the planning area, the rate of development or population change, the types of land uses, service standards, financial capability, environmental features and influences, connections with neighboring jurisdictions, and water usage.

In addition to enhancing and upgrading the infrastructure, a wastewater treatment plant facility should be established to collect and re-channel the water. One example could be to investigate covered lagoons for wastewater collection and treatment. In addition to reducing odors, this form of wastewater treatment also produces biogas that can be stored. However, it is necessary to secure the consent of the residents who might object to the construction of the facility. Such a facility will need to be operated and maintained by qualified professionals, preferably through a private-public partnership that assigns operational responsibilities to a private actor and secures funding from the government and non-governmental organizations. Also, the private actor should be given the authority to penalize the agent that oversees those operations. The proposal should also investigate other green wastewater innovation projects that are implemented in Lebanon such as MAIA-TAQA⁶⁸ or nature-based solutions such as the NAWAMED project⁶⁹.

The Relevant Actors in the Design and Execution Phases

The relevant actors are the Municipality of Beirut, the Council for Development and Reconstruction, the Ministry of Energy and Water, the Beirut & Mount Lebanon Water Establishment, the Ministry of Environment, and the Ministry of Public Works and Transportation, in collaboration with local water and infrastructural engineers.

Proposed Source of Funding

They include local actors such as the Municipality of Beirut, the Council for Development and Reconstruction, the Ministry of Environment, the Ministry of Public Works and Transportation, private sector funding sources such as LEPAP⁷⁰, and international organizations such as the ILO, KfW, UNOPS, the UNDP; USAID, Die Heinrich-Böll-Stiftung⁷¹, and ENI CBC MED⁷².

⁶⁸ <https://www.enicbcmec.eu/projects/maia-taqa>.

⁶⁹ <https://www.enicbcmec.eu/nawamed-project-stakeholders-perspective-nature-based-solution-waste-water-management-lebanon>.

⁷⁰ LEPAP supports the financing of industrial pollution through interventions in the industry and working with commercial banks to offer zero or minimum interest loans.

⁷¹ The Heinrich Böll Foundation is a German and legally-independent political foundation. It is part of the worldwide green political movement that focuses on ecology and sustainability, democracy and human rights, and self-determination and justice.

⁷² ENI CBC MED is the largest Cross-Border Cooperation initiative implemented by the EU under the European Neighborhood Instrument. They priorities contributions to addressing the main socio-economic and environmental challenges in the Mediterranean region.

Approximate Financial Magnitude

The total cost of the proposed project is estimated between 1,000,000 USD and 1,500,000 USD. The cost is broken down as follows:

- Between 25,000 USD and 30,000 USD for the cost of the survey.
- 500,000 USD for the cost of upgrading and expanding the capacity of the sewage line.
- Between 500,000 USD and 1,000,000 USD⁷³ for the cost of the WWTP. This estimate is inclusive of all the necessary design, engineering, equipment, installation, and startup activities. It also depends on the biochemical oxygen demands and the discharge limits.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Upgraded the sewage infrastructure to accommodate the growing local needs in Karantina.
- Improved and resized culverts and inlets to avoid flooding in the streets.
- The protection of the Beirut River from the pollutants in the sewage water.

⁷³ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 27

Project Title

Design and implement alternative energy and greening solutions.

General Objective(s)

D. Promote a sustainable development strategy that is participatory and phased over a period of time.

E. Improve the overall quality of the urban environment in Karantina.

Type of Project

- | | |
|---|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

D4: Improve the local infrastructural services and amenities.

E3: Reduce sound and air pollution.

E4: Improve the dilapidated water, sewage, and other infrastructural networks.

Project Objective(s)

The project contributes to the following strategies:

D4.1/ E4.1: Upgrade and improve the performance and management of the existing infrastructural networks to respond to density demands and adopt emerging technologies.

E3.2: Regulate private generators, particularly the ones that are placed in proximity to residential buildings.

E3.3: Empower the Municipality of Beirut to monitor and coordinate efforts to protect the environment in Karantina. This includes:

- Improving security and access to sources of energy.
- Building local knowledge of sustainable practices and green technologies.
- Reducing the dependency on the use of fossil fuels.
- Reducing harmful emissions from fossil fuel generators.

Project Description (concept note)

Lebanon's electricity sector collapsed with the start of the economic crisis in 2019, extending the hours of power cuts and increasing the demand for private generators. The provision of electricity was exacerbated by the government's inability to import or subsidize the cost of gasoline, combined with Lebanon's dependency on fossil fuels. Electricité du Liban (EDL), the public institution that provides electricity in Lebanon, has a history of problems with the transmission and distribution of electricity in Beirut and the rest of the country. This is partially due to the civil war, the repeated Israeli attacks on the Lebanese infrastructure, the post-war privatization schemes, and the fragile economic conditions in Lebanon. Furthermore, the percentage of electricity demand that is unmet by EDL increased from 22% in 2008 to 37% in 2018 to a total of around 8.1 terawatt-hours. The shortage grew from 2019 until the present; the electrical supply by EDL no longer exceeds 2 to 3 hours per day. Consequently, there is a massive increase and reliance on private generators, amounting to more than 75% of the electricity demand in Lebanon.

The gap between the electricity that is supplied by EDL and the demand is covered by expensive, polluting, and noisy diesel generators that are dispersed almost everywhere in the country (Ahmad, 2020). Diesel generators are estimated to have contributed to around 39% of the total electricity Greenhouse Gases Inventory in 2018, which is equivalent to 3400 Gg CO₂eq or 11.4% of Lebanon's total estimate of greenhouse gas emissions (Ahmad, 2020). The residents and businesses in Karantina, as is the case in the rest of Lebanon, depend on private diesel generators for electricity. According to the answers to the household questionnaire, 91% of families in Karantina have access to local private diesel generators.

Also, to support the needs of the businesses, there is a projected future use of larger diesel generators in Karantina. Diesel generators are located on sidewalks, streets, inside buildings, on vacant lots, and building entrances, exposing people in Karantina to high levels of noise and air pollution.

Alternatively, this project proposes the use of renewable sources of energy from the sun or the waste that is generated locally. It aims to reduce the reliance on fossil fuels by investing in alternative sources of energy that are clean, accessible, affordable, sustainable, and more reliable. The goal is to share expertise and guide reform proposals that are aimed at assisting efforts to transition from the reliance on private diesel generations to the production and use of alternative sources of energy through more sustainable, cost-effective, and dependable technologies (on-grid or off-grid).



Figure 23. The implementation of solar panels in Al-Khodor sub-neighborhood. Source: Batoul Yassine, 2021.

As an emergency response to the increased shortage of electricity since 2019, many residents across Lebanon started using alternative sources of energy, especially solar energy, on an individual or communal level. At the individual level, households are installing solar panels on rooftops. A successful communal case study was implemented in Baaloul. The residents developed together an electricity supply system based on renewable energy from hybrid photovoltaic and diesel mini-grids. It adopted a community-led model that embodied a cooperative and participatory approach to the provision of local electricity service. Caritas Lebanon implemented the system in 2018 under the BALADI program and with funds from USAID Lebanon. After the port blast, another solar communal project started in Karantina. In 2020, UNOPS was awarded funds from the KfW to implement a central solar plant in Karantina to cover the electricity needs of the residents, businesses and in the public domain. This project is still in the assessment phase; UNOPS is assessing the energy needs in Karantina. However, the project will operate under the Municipality of Beirut which currently does not have a technical center for the management and operation of such a project.

The challenge here is to introduce new techniques and embed the already emerging practices within a framework that is adopted by the central government or local municipalities. In general, there are critical regulatory and infrastructure obstacles to the development of renewable energy, and it requires efficient institutions. Hence, the framework needs to be formed in a way to tackle institutional and policy barriers, market failures and economic barriers, education and training barriers, shortage of data, information, and general awareness, and sociocultural barriers. Accordingly, this project proposes two parallel tracks: the formation of technical offices, and capacity building for the staff members at the Municipality of Beirut and the relevant ministries. Technical offices must be established for the realization of the full potential of the initiatives to oversee the legal, technical, and administrative operations such as net metering in all its categories, peer-to-peer on-site and off-site trading of renewable energy and equipment leasing models. Capacities should be built across all organizations to reduce technical obstacles.

Furthermore, the proposed project should investigate the market for private diesel generators in Lebanon and examine all relevant factors such as market size, value chain, cost of power generation, charged tariffs, profit margins, expected revenues, ownership and organizational structures, and political economy aspects and aim to integrate them in the proposal. There is also a need to regulate the location of private generators close to residential buildings, not only in Karantina but within Greater Beirut. All the generators should include diesel generator air filters to filter emissions of toxic air pollutants such as Particulate Matter and Oxides of Nitrogen that are harmful to humans and the environment. Additionally, soundproofing measures for generators are important to decrease the levels of noise pollution.

Additionally, there is a need to advocate for new laws for renewable energy initiatives. In 2019, a legal framework and administrative protocol were developed to propose a new initiative to enact a distributed renewable energy law that was supported by the European Bank for Reconstruction and Development, the Ministry of Energy and Water, EDL and the Lebanese Center for Energy Conservation. However, the law has not yet been approved.

This project also contributes in implementing action plan number 28 'Design and implement solid waste management plan'. Action plan number 28 proposes to study the possibility of using solid waste from the solid waste management facility and landfill in Karantina to generate energy.

The Relevant Actors

The main actors include Electricité du Liban (EDL), the Municipality of Beirut, and the Ministry of Energy and Water, in coordination with the private sector such as Energy24⁷⁴, and academic institutions such as American University of Beirut and ESMAP⁷⁵.

Proposed Source of Funding

They include local actors such as the Ministry of Energy and Water, NEEREA,⁷⁶ LCEC⁷⁷, LEEREFF⁷⁸, and private developers and international actors with similar scope of work such as UNOPS⁷⁹, Caritas, USAID, CEDRO⁸⁰, UNDP, AFD⁸¹, EIB⁸², EBRD⁸³, GEF⁸⁴, and the NRC.

Approximate Financial Magnitude

The overall cost of the project is estimated between 800,000 USD and 1,400,000 USD. The cost of the capacity-building workshops is estimated at 50,000 USD. The cost of the assessments and surveys is estimated at 50,000 USD. The cost of installing 100 to 80 kWp of photovoltaics to power Karantina is estimated between 200,000 USD and 300,000 USD. The cost of improving the infrastructural networks is estimated between 500,000 USD and 1,000,000 USD⁸⁵.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- A decreased dependency on the use of private generators.
- The use of renewable energy to power new street lights, public facilities, residential buildings, and businesses.
- Upgraded infrastructure and electricity networks.

⁷⁴ E24 is an end-to-end energy solution provider. It offers turnkey energy generation, conversion, storage, transmission, and billing solutions.

⁷⁵ The Energy Sector Management Assistance Program (ESMAP) is a global knowledge and technical assistance program that is administered by the World Bank. It provides analytical and advisory services to low and middle income countries to increase local knowledge and institutional capacities to achieve environmentally sustainable energy solutions.

⁷⁶ The National Energy Efficiency and Renewable Energy Action (NEEREA) is a national financing mechanism that allows private sector entities to get subsidized loans for any type of energy efficiency and renewable energy projects.

⁷⁷ The Lebanese Center for Energy Conservation (LCEC) is the national energy agency in Lebanon. It is a not-for-profit organization that is situated within the Lebanese Ministry of Energy and Water but has financial and administrative independence.

⁷⁸ The Lebanon Energy Efficiency & Renewable Energy Finance Facility (LEEREFF) secured in 2020 an 80 million EUR global loan from EIB (EUR 50 million) and AFD (EUR 30 million). It aims to support small-scale investments in energy efficiency and renewable energies by private companies in Lebanon, with a particular focus on small to medium enterprises.

⁷⁹ The United Nations Office for Project Services (UNOPS) provides infrastructure, procurement, and project management services to advance sustainable practices. After the port blast in Beirut, UNOPS partnered with the government of Germany to restore vital public services such as water, sanitation, and energy. It proposed a three-year project which includes providing solar energy solutions for the most damaged, low-income, and underserved parts of the areas in Beirut that were affected by the port blast. It also provides sustainable energy solutions to two government hospitals in Lebanon to install photovoltaic systems with funding from the government of Japan.

⁸⁰ Country Entrepreneurship for Distributed Renewables Opportunities (CEDRO-UNDP) is a United Nations Development Programme that is co-funded by the European Union. For more than twelve years the CEDRO-UNDP project has been advocating for the inclusion of solar energy technologies in the Lebanese market.

⁸¹ The French Development Agency (AFD) is a public financial institution that implements policies by the French government in other countries. It aims to reduce levels of poverty and promote sustainable development in these countries.

⁸² The European Investment Bank (EIB) is the lending arm of the European Union. It is one of the biggest multilateral financial institutions and one of the largest providers of climate finance.

⁸³ The European Bank for Reconstruction and Development (EBRD) is an international financial institution. It worked in Lebanon to support private sector competitiveness, promote sustainable energy supply, and enhance the quality and efficiency of the delivery of public services. EBRD provides, in collaboration with Bank Audi in Lebanon, a financial package of 100 million USD to support local green projects that create sustainable energy.

⁸⁴ Green Economy Financing Facility (GEFF) supports businesses and homeowners to invest in green technologies.

⁸⁵ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 28

Project Title

Design and implement a solid waste management plan.

General Objective(s)

E. Improve the overall quality of the urban environment in Karantina.

Type of Project

- | | |
|--|--|
| <input checked="" type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input checked="" type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

E2: Reduce and contain hazardous wastes and harmful emissions.

Project Objective(s)

The project contributes to the following strategy:

E2.1: Regulate the management of solid waste. This requires:

- Devising a waste management plan that aims to reduce pollution levels and integrates green technologies.
- Develop green technologies for waste management.
- Adopt the following principles of sustainable production and consumption: reuse, reduce, and recycle.

Project Description (concept note)

In 1997, the Council for Development and Reconstruction (CDR) planned an integrated national solid waste management system for Lebanon. It constructed two sorting facilities in Karantina and Amroussieh with a combined sorting capacity of 4,200 tons per day and a composting capacity of 750 tons per day. With the implementation of these projects, the CDR aimed at controlling the chaotic waste management in Beirut after the end of the civil war. However, the planned national solid waste management system was limited to temporary solutions rather than long-term and sustainable ones. The outcomes of the temporary solutions, the lack of coordination between the relevant ministries, the inefficiency in networking between public and private initiatives, conflicting political leadership, and the absence of a strategic management system and information flow led to a garbage crisis in Beirut in 2015.

The garbage crisis was triggered by the closure of one of the country's largest landfills in Naameh and, as a result, garbage accumulated in streets and public areas in Beirut and Mount Lebanon. To control the crisis, the Governor of Beirut instructed the company SUKLEEN to temporarily store garbage in Karantina on a site across the Bakalian Flour Mill. In 2018, the Ministry of Environment was also charged under law number 80 from 2018 to develop an integrated solid waste management plan at a national scale; however, despite multiple efforts, the law was not approved. The landfill in Karantina is still open today with accumulated garbage even though the Governor of Beirut assured the residents of Karantina that the landfill will be closed as soon as another location is identified.



Figure 24. Karantina's waste management landfill.
Source: Abir Cheaitli, 2021.

SUKLEEN operated and managed the waste management facility in Karantina under a contract with the CDR since 1994. However, SUKLEEN was replaced with the company Ramco in 2018, and this change negatively impacted Karantina. Around 165 households complained about the repugnant smells from the waste management facility after 2018 and they mentioned that it became unbearable after the port blast. This is partially due to the serious damage to the waste management facility from the port blast. Its roof and walls collapsed and most of the machines were damaged. As a result, the facility is currently not operating. As for the landfill, 70% of the residents asked the Municipality of Beirut to relocate the temporary garbage landfill somewhere else due to the strong smells in Karantina, especially at night. They noted that each night smoke comes out of the landfill, indicating that the waste is being burnt instead of being treated. Furthermore, piles of rubble from the port blast and the reconstruction works accumulated in the landfill. The Municipality of Beirut, along with the port authority, granted permission for the debris to be collected on the landfill to support the clearing of the port. The debris posed additional environmental risks to public health in Karantina. The UNDP (2020) report explained that asbestos, which is a known carcinogen was found in damaged structures and piles of rubble. The residents expressed their concerns about the debris even though UN-Habitat co-lunched an initiative called Rubble to Mountains⁸⁶ directly after the port blast to properly manage the contamination from the debris in the landfill.

Therefore, this project proposes options to introduce green and clean technologies (renewable energy and information technology), in addition to the traditional form of waste management (sorting, recycling, landfilling, and composting) to mitigate the impact of the dumping and burning of the contaminated debris. The objective is to encourage innovative solutions and strategies that intersect with different sectors to widen their impact and alleviate the gravity of waste mismanagement while benefiting the environment, economy, and society. Clean technologies as such smart waste bins⁸⁷, waste-to-energy facilities⁸⁸, and economic models such as the "closed-loop"⁸⁹ or the "circular economy"⁹⁰ can support this goal if they are contextualized in Karantina. Therefore, with the Municipality of Beirut as the main stakeholder, an Environmental Impact Assessment for the implementation of green and clean technologies are important according to EIA studies⁹¹ and the World Bank's O.P. 4.01⁹².

Also, the project should assess the closure and rehabilitation of landfill that should incorporate the proposed mode of Biogas capitation and treatment as well as the transfer of waste. In addition, strict guidelines should emphasize the importance of monitoring and evaluating the technical, environmental, and economic aspects of waste management. Furthermore, this project needs to be linked into a comprehensive vision for Beirut and its surroundings, based on close cooperation and coordination between municipalities, the relevant ministries, stakeholders, and the civic society groups. The relevant strategies should maintain engagement between the relevant actors and the residents of Karantina to raise awareness of ways to reduce the production of waste at source and offer incentives to encourage sustainable practices. The strategies should advocate for reducing waste and recycling at schools, universities, households, businesses, and public facilities. This can be achieved by networking with local non-governmental organizations such as FabricAid, Live Love Recycle, Chemrec, Compost Baladi and CubeX or align efforts with initiatives such as the Rubble to Mountains.

Furthermore, the project should contribute to action plan number 13⁹³ which aims to link the proposed garden in the landfill with a network of open spaces. The proposed garden reclaims the land as public open space, thus, increasing the quality and number of open green areas in Karantina and Beirut in general.

⁸⁶ The proposals aim to enhance the sorting, storing, and crushing of waste in a safe and contained environment. They aim to convert the construction and demolition waste into multipurpose material, rebuild quarries, and rehabilitate mountains. Retrieved from: <https://unhabitat.org/node/145271>.

⁸⁷ The smart waste bin is designed for public places to simplify the recycling process for people. The bin is used to sort and compress the waste automatically, and it controls the capacity to hold waste and processes data for convenient waste management.

⁸⁸ Waste-to-energy plants burn municipal solid waste, often called garbage or trash, to produce steam in a boiler that is used to generate electricity.

⁸⁹ Closed-loop recycling is the process by which a product or material can be used and then turned into a new product indefinitely without losing its properties during the recycling process.

⁹⁰ The circular economy is a sustainable alternative to the traditional linear (take-make-dispose) economic model. It aims to reduce the production of waste to a minimum by reusing, repairing, refurbishing, and recycling existing materials and products.

⁹¹ EIA is a principal agency in the United States that is responsible for collecting, analyzing, and disseminating energy information to promote sounder policymaking, making markets more efficient, and enhancing the public understanding of energy and its interaction with the economy and the environment.

⁹² O.P.4.01 requires stakeholders to conduct an environmental assessment of projects that are proposed for bank financing to help ensure that they are environmentally sound and sustainable and, thus, to improve decision making. Retrieved from: http://web.worldbank.org/archive/website01541/WEB/0__-2097.HTM.

⁹³ Propose an open space network that requires connecting, upgrading, and expanding on the existing spaces.

The Relevant Actors in the Design and Execution Phases

The relevant actors include the Municipality of Beirut, the Ministry of Environment, the Ministry of Public Health, OMSAR⁹⁴, and the Council for Development and Reconstruction, in coordination with the German Co. Passavant Roedinger, LibanConcult AGM, and local civil society groups and academic institutions such as the AUB, WMC⁹⁵, LEM⁹⁶, and LEF⁹⁷.

Proposed Source of Funding

They include local and national actors in Lebanon such as the Municipality of Beirut, the Ministry of Environment, and the Council for Development and Reconstruction, with the support of international actors such as the UNDP; LFF⁹⁸, KfW, Die Heinrich-Böll-Stiftung⁹⁹, and KFAED¹⁰⁰.

Approximate Financial Magnitude

The cost of the rehabilitation of the waste management facility is estimated between 7,000,000 USD and 8,000,000 USD. The total operating costs are estimated between 400,000 USD and 600,000 USD. The total cost of conducting the assessments and the surveys is estimated between 25,000 USD and 30,000 USD. The cost of rehabilitating the landfill is estimated between 20,000 USD and 30,000 USD¹⁰¹ per 1 cubic meter.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Better environmental quality.
- Less dumping of solid waste into the Beirut River.
- Controlled capacities of waste in the landfill.
- More awareness of the importance of recycling and reducing the production of waste at the source.
- Better cooperation and coordination between the organizers of waste management initiatives, including the Municipality of Beirut and different civil society groups.

⁹⁴ The Office of Minister of State for Administrative Reform (OMSAR) is a government entity that leads the transformation to a citizen-centric and performance-oriented public sector. With funding from the European Commission, OMSAR developed a Solid Waste Management Program for Lebanon which aimed at improving the overall efficiency and effectiveness of solid waste management.

⁹⁵ The Waste Management Coalition (WMC) is a group of civil society organizations, independent experts, and environmental activists in Lebanon. It includes Cedar Environmental, Green Area, Greenpeace, the AUB Nature Conservation Center, Recycle Lebanon, TERRE Liban, Badna Nhaseb, Choueifat Madinati, Sohet Wladna Khatt Ahmar, and Muntada Insan.

⁹⁶ The Lebanon Eco Movement (LEM) is a large network of environmental organizations and associations. It is composed of around sixty non-governmental organizations from all Lebanon working to face Lebanon's environmental challenges, preserve its natural and cultural heritage, and create a healthier and sustainable environment.

⁹⁷ The Lebanese Environment Forum (LEF) is a non-profit organization, working towards the protection of environment in Lebanon. Its activities include protecting natural sites and reserves, launching climate projects and coastal conservation campaigns, and publishing urban planning and environmental reports.

⁹⁸ The Lebanon Financing Facility (LFF) is a multi-donor trust fund that the World Bank established. It works closely with the United Nations and the European Union and with support from key donors.

⁹⁹ The Heinrich Böll Foundation is a German and legally independent political foundation. It is part of the worldwide Green political movement that focuses on ecology and sustainability, democracy and human rights, and self-determination and justice.

¹⁰⁰ In 2021, the Kuwait Fund for Arab Economic Development (KFAED) provided the UNDP in Lebanon with 2.5 million USD to support its efforts at strengthening solid waste management. The aim was to improve social and environmental health across the country.

¹⁰¹ It is important to note that these estimates do not account for the fluctuations in the market prices due to the economic crisis in Lebanon, and they need to be reassessed at the time of design and implementation.

ACTION PLAN 29

Project Title

Conduct a study to revitalize the Beirut River and activate its edges.

General Objective(s)

E. Improve the overall quality of the urban environment in Karantina.

Type of Project

- | | |
|---|--|
| <input type="checkbox"/> Execution Project | <input type="checkbox"/> Regulation - Policy |
| <input checked="" type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

E2: Reduce and contain hazardous wastes and harmful emissions.

Project Objective(s)

The project contributes to the following strategy:

E2.2: Clean and green the Beirut River corridor. This requires:

- Conducting a detailed study on the rehabilitation of the Beirut River that proposes design tools for cleaning and greening the river.
- Advocating for the enactment of the penalty taxation system on major pollutants that are channeled to the river, including pollutants from nearby factories and industrial facilities.

Project Description (concept note)

The Beirut River is a coastal river that extends from its headwaters on the western slopes of Mount Lebanon to the Mediterranean Sea. The river flows around 20 km westwards before it changes its flow direction in the last 5 km. In this segment, the river flows north in a highly urbanized area passing through the eastern edge of Karantina. The river had a meandering typology before anthropogenic disturbances modified the natural riparian system. To overcome the problem of flooding and regulate discharge, the river was channeled with large reinforced concrete walls built along its floodplain. This approach to river channel management, prevalent during the functionalist modernist period, led to a shrinkage in the floodplain and the isolation of the river from the city of Beirut. It also led to a disturbance to the natural ecosystem and shrinkage in green spaces. Road infrastructure, which expanded in the late 1960s, further separated the river from the surrounding neighborhoods which include Karantina. In addition to the physical disturbance to the riparian system, heavy pollution caused damage to the river ecology. As the river diverges to the urban area, it becomes subjected to pollution and abuse. Domestic wastewater discharge, industrial effluents discharge, and solid waste dumping contribute to the deteriorated state of the river. Water pollution also compromises air quality and produces a disturbing odor in the vicinity.

To improve the quality of the urban environment in Karantina, it is essential to limit pollution in the Beirut River. Accordingly, this project proposes to conduct a comprehensive rehabilitation study of the Beirut River. The study should build on existing academic studies on the revitalization of the river, and consider the hydrological, ecological, and cultural dimensions of the riparian system. To that end, the study should re-question the engineering approach to river management by considering alternatives for flood mitigation.



Figure 25. Beirut River. Source: Wiaam Haddad, 2022.

It should also reconsider the river as a green corridor that can serve as an amenity landscape for Karantina and its surrounding areas. As a prerequisite, a cleaning campaign should be designed to improve the water quality and restore the riparian natural habitat. In parallel, advocacy is pivotal to enforce the enactment of penalty taxation on the use of major pollutants and removing encroachments on the floodplain. Rivers are protected by the Lebanese Law number 221 from 2000, which states that rivers are national resources that should be protected. Law number 444 from 2002 protects rivers from pollution by requiring industries to treat their water on-site and imposes legal actions against violators. Beirut River is an essential ecological, urban, and landscape asset for Beirut and, as such, for Karantina. Implementing the study recommendations will improve the quality of the urban environment and bring back the cultural and natural vibrancy of the river.

The Relevant Actors

The relevant actors include the Ministry of Energy and Water and the Ministry of Environment, in collaboration with other local and national public actors such as the Municipality of Beirut, the Governor of Beirut, the Ministry of Public Health, the Council for Development and Reconstruction, and the Ministry of Industry, academic institutions and non-governmental organizations such as the Beirut Urban Lab at the American University of Beirut, Public Works, theOtherDada, and Nahnoo, and international actors such as the UNDP.

Proposed Source of Funding

Public authorities involved with possible support from local or international agencies such as the UNDP.

Approximate Financial Magnitude

The cost of conducting the rehabilitation study is estimated at 100,000 USD¹⁰².

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Improvements in water and air quality in the areas that are close to the Beirut River.
- The Beirut River operating as a cultural destination with green spaces.
- Restored riparian habitat along the Beirut River.

¹⁰² It is important to note that this estimate does not account for the fluctuations in market prices due to the economic crisis in Lebanon, and it needs to be reassessed at the time of design and implementation.

ACTION PLAN 30

Project Title

Identify elements of landscape heritage in Karantina and propose a law for their protection.

General Objective(s)

E. Improve the overall quality of the urban environment in Karantina.

Type of Project

- | | |
|---|---|
| <input type="checkbox"/> Execution Project | <input checked="" type="checkbox"/> Regulation - Policy |
| <input checked="" type="checkbox"/> Detailed Study | <input type="checkbox"/> Lobbying - Advocacy |
| <input type="checkbox"/> Institutional - Committee set up | <input type="checkbox"/> Capacity Building |
| <input type="checkbox"/> Management - Operations plan | |

Strategic Objective(s)

E6: Protect and maintain the layers of landscape heritage in Karantina.

Project Objective(s)

The project contributes to the following strategy:

E6.1: Develop a legal framework for the identification and protection of landscape heritage.

This requires:

- Applying the UNESCO study guidelines to identify the layers of landscape heritage.
- Proposing a law that formalizes the requirement to protect the landscape heritage.

Project Description (concept note)

Landscape heritage sites are significant assets for Karantina. They include places with a strong sense of collective memory, like the location of the former slaughterhouse or institutional green and open spaces like the garden of Al-Saydeh Church. Natural components are also essential to landscape heritage since their topographic and geomorphological characteristics contribute to the distinctive character of the setting. The historic coastline is the most noticeable feature that embodies a unique Mediterranean landscape. Hardly much of this landscape is left since construction activities encroached on the area. Due to military bases blocking access to a significant part of the coastal edge, this landscape is currently inaccessible. Therefore, the coastline is currently abandoned, and little is documented about its value. Another significant component of landscape heritage is the dense vegetative layer. Large eucalyptus and ficus trees, likely planted by the French during the mandate period between 1923 and 1946, can be seen scattered throughout Karantina in groups or standing alone. Their canopies offer sufficient shading and attract social gatherings and public interactions. They are under the custody of the Municipality of Beirut that manages the public domain. Even though this vegetative layer is an essential environmental resource that offers a wide range of ecosystem services, it is currently neglected and misused. A case of unauthorized tree-cutting took place on a private property without prior notification or approval from the relevant authorities. Another case took place in a public area, where the Municipality of Beirut cut a huge eucalyptus tree on a sidewalk due to the damage it was causing to the underground infrastructure.

Protecting and maintaining the landscape heritage layer is pivotal to improve the overall quality of the urban environment in Karantina. Therefore, this proposed project aims to identify the landscape heritage in Karantina based on the UNESCO study for identifying cultural heritage attributes in Beirut as the first step towards its protection and valorization. The study titled "Identifying Cultural Heritage Attributes in Beirut Blast Damaged Areas" was commissioned by UNESCO and submitted by



Figure 26. Greenery and trees in Karantina. Source: Abir Cheaitli, 2021.

BUL to the benefit of the Directorate General of Antiquities (DGA). It set the framework for identifying these landscapes considering their spatial, urban, cultural, and environmental values. It classified cultural and natural landscapes under heritage, including residential gardens, green and open spaces, and monumental trees. After the identification phase, a team of legal experts should draft a law that protects these landscapes and mitigates the shortcomings of the existing laws. While several laws were issued for heritage conservation and environmental protection, there are no current precedents for a legal setup in Lebanon that recognizes landscape as heritage in a comprehensive manner. These laws fail to acknowledge artificial landscapes as heritage and to protect trees in urban settings.

The Protected Areas Law number 130 from 2019 recognizes the importance of natural landscape heritage and classifies them into four categories: natural reserves, natural parks, natural sites and monuments, and "Hima." A Hima is a site of ecological biodiversity and cultural value. The law does not acknowledge the heritage value of landscapes that are introduced by human beings, such as parks and gardens. The Landscape Protection Law, issued during the French mandate period, also recognizes the importance of protecting natural landscapes but also disregards manmade heritage. Law number 0 from 1939 assumes that man-made heritage is classified and protected by the Antiquities Law number 166 from 1933. However, it is only concerned with buildings, artifacts, and natural sites that are modified by human intervention. Law number 0 from 1939 also includes trees or tree species that need protection for their age, aesthetic value, and historical value. The National Physical Masterplan of the Lebanese Territories, approved in decree number 2366 from 2009, recognizes the value of physical features of the environment, including ecological heritage, geological heritage, and major landscapes. These landscapes include river valleys, rocks, and remarkable natural sites. Ramlet El Bayda and the Pigeon's rock are two of the identified landscapes in Beirut. In conclusion, the proposed law in this action plan should enforce the protection of trees in urban settings, recognize man-made landscapes such as gardens and open spaces, and allow the repurposing of these landscapes for public use with minimal intervention.

The Relevant Actor

The relevant actors include the Directorate General of Antiquities and the Ministry of Environment, in coordination with other local and national public actors such as the Municipality of Beirut and the Governor of Beirut, academic institutions and non-governmental organizations such as the Beirut Urban Lab at the American University of Beirut, Beit al Barakah, and the Beirut Heritage Initiative, and international actors such as the UNESCO, and in consultation with the residents in Karantina.

Proposed Source of Funding

Public authorities involved with possible support from relevant local and international actors such as the UNESCO.

Approximate Financial Magnitude

The total cost of identifying the layers of landscape heritage and conducting workshops with the relevant experts to draft the heritage law is estimated between 40,000 USD and 50,000 USD¹⁰³.

Period and Timing of Execution

Short-term Long-term Phased

Expected Results

- Identified landscape heritage sites in Karantina that are properly mapped and documented.
- A draft of a law that aims to protect the landscape heritage in Karantina pending the approval of the parliament.

¹⁰³ It is important to note that this estimate does not account for the fluctuations in the market prices due the economic crisis in Lebanon, and it needs to be reassessed at the time of design and implementation.

3. IMPLEMENTATION AND MOVING FORWARD

As was mentioned earlier in the report, the action plans and proposed projects adopted a participatory approach. Accordingly, a town hall meeting was held on 29 September 2022 with the local community groups to collect their feedback and validate and prioritize the action plans according to the needs of the residents.

After the team of researchers at the Beirut Urban Lab presented the objectives and action plans, the residents and local researchers prioritized 18 projects. The team sensed the dire need for job opportunities in Karantina since many of the attendees strongly welcomed the idea of creating a career and training center and the rehabilitation of the slaughterhouse and the public and fish markets. "نحن اللهي بهمنا أكثر شي" "إعادة مسلخ بيروت وفتح فرص عمل للشباب القاعدين"، said a father in his 70s. Another group of attendees stressed the need for reopening and maintaining the public gardens to operate as recreational spaces for the different community groups. "بدنا تتساوى الحديقة عنا عشان الولاد تتطور أكثر." The residents also stressed the importance of a transportation plan that will improve their connection to the city and limit the movement of trucks in Karantina. Other attendees prioritized the action plans for the improvement of the local environment, housing and building rehabilitation, and urban services.



Figure 27. A town hall meeting held on 29 September 2022 to discuss the different action plans with the community groups. Source: Abir Cheaitli, 2022.

The concept notes that were developed in the action plans will be presented to the relevant stakeholders to initiate a process of implementation. The research team at the Beirut Urban Lab will approach the different public actors, local and international non-governmental organizations, and donor agencies to share with them the action plans and to advocate for their implementation however incremental. The research team will continue to engage the community members in these projects. The community members were already engaged in the implementation of a small design intervention in Al-Khodor.

In parallel with the process of developing the strategic plan and the action plans, and to build trust with the community groups and test the participatory method, the team implemented a pilot design intervention in Al-Khodor sub-neighborhood. The pilot design intervention was a community public space that is inclusive, safe, and well-serviced.

Al-Khodor was a priority for the research team since it is considered the most deprived sub-neighborhood in Karantina. It received the least amount of aid after the port blast. Additionally, Al-Khodor hosts a diversity of low-income groups, mostly Lebanese and Syrian families. To select the site, the research team conducted an exhaustive mapping of the socio-spatial practices that were concentrated in the heart of Al-Khodor. These practices were diverse and involved a diversity of user groups, and they involved spaces where women spent their afternoons, children rode their bicycles and played, and men gathered to play cards and smoke hookah.

The research team further conducted consultation sessions and co-designing workshops with the community groups in Al-Khodor to identify the best location for the intervention and co-design the intervention. The residents and business owners described the space along Mashghara Street as the heart of Al-Khodor and the 'Square of Affinity' or 'Sahat Al Elfa' in Arabic "ساحة الألفة". They also shared their aspirations with the research team and sketched on paper their important social practices and their visions for the space.



Figure 28. Some of the socio-spatial practices on the streets.
Source: Batoul Yassine, 2022.



Figure 29. The residents drawing their visions of the street.
Source: Batoul Yassine, 2021.

The early consultation sessions paved the way for initiating the design process that included a series of co-design workshops with the community groups. Three main co-design workshops took place in Al-Khodor, on 2, 7, and 25 June 2021. The research team used different design and representational tools to simplify the reading of the design proposals for the residents and the business owners, help them interact with the research team, and comfortably share their concerns and needs.



Figure 30. Pictures from the three co-design workshops. Source: Yehya Al-Said, 2021.

The final design was set for implementation after many revisions during the workshops and in consultation with the Municipality of Beirut. The implementation was launched on the first anniversary of the port blast in a public event titled *الألفة تجمعتنا*. The event was organized jointly with the funding agencies - including University College London which funded the design and ACTED and the Norwegian Refugee Council which funded the design implementation. The actual implementation of the design started in December 2021 after the research team secured a construction permit from the Municipality of Beirut.

Building further on the position of the Beirut Urban Lab to promote participation, the community groups were also engaged in the multiple stages of the implementation of the intervention. Firstly, two of the previously trained citizen scientists supervised the implementation. They were also trained to read engineering and construction details and played a major role in resolving any disputes between the residents during the implementation. They also acted as a bridge between the contractor and the Beirut Urban Lab research team, and they reported on the progress of the work.

Secondly, the community groups were engaged in the implementation of the intervention as part of the skilled and non-skilled labor force. A quota of local workers was imposed on the contractor. The members of the community groups also assisted in cleaning the site before and after the implementation of the intervention, securing the equipment at night, tiling the sidewalks, planting the trees, and painting the building facades.



Figure 31. The current conditions of the streets after the completion of the design intervention. Source: Postray, 2022.

The design of the project was funded by University College London and the implementation was funded by ACTED and the Norwegian Refugee Council. The intervention included the introduction of a sidewalk, the installation of bollards, solar streetlights, trash bins, benches, and tree grates, planting trees, and asphaltting. The building facades around the space were also renovated, plastered, and painted. The implementation of the design was completed in May 2022.

The research team at the Beirut Urban Lab hopes that the participatory efforts that brought together academic intuitions, funding agencies, the Municipality of Beirut, and local community groups will be used as a model in other areas in Beirut. They also hope that the implementation of the action plans over time will result in the translation of the vision and the strategic plan for the sustainable recovery of Karantina.



Figure 32. The space after the completion of the design intervention. The pictures depict how they are used by different community groups. Source: To the left, Postray, 2022; to the right, Hasan Al-Aswad, 2022.

LIST OF REFERENCES

Ahmad, A. (2020). Distributed power generation for Lebanon: market assessment and policy pathways. The World Bank.

Al-Anbaa News. (2018). Available at: <https://archive.anbaaonline.com/?p=675085>.

EBRD, (2019) IPPF SIW - Lebanon Daoura/Bourj Hammoud Wastewater Treatment Plant. Retrieved from <http://www.ebrd.com/documents/procurement/rfc-78839.pdf>.

Ezzedine, D. M. (2019). Shelter in urban displacement: a case study of Syrian refugees in the Shatila Palestinian refugee camp, Beirut (Lebanon).

Gemayel, F. (2022). "Subsidized housing loans to be relaunched 'in 40 days'", L'Orient Today.

Gherbal Initiative. (n.d.). Lebanese Administrations' Directory - Gherbal Initiative. [online] Available at: <https://elgherbal.org/administrations/d8tU5bG2ndPtZmc9cIQD/stateBudget>

Ghoussain, I. (2019). . Al-Akhbar News. Retrieved from: <https://al-akhbar.com/Community/273774/>.

Moussa, Z. (2018) Dumping Untreated Sewage into the Sea, A Serious Hazard. By the East Online.

