



Arts and Humanities Research Council



UNIVERSITY OF BIRMINGHAM



Disability Hub



Mapping the Inclusivity of Needs Assessment and Reconstruction Initiatives During Beirut Blast Recovery Response

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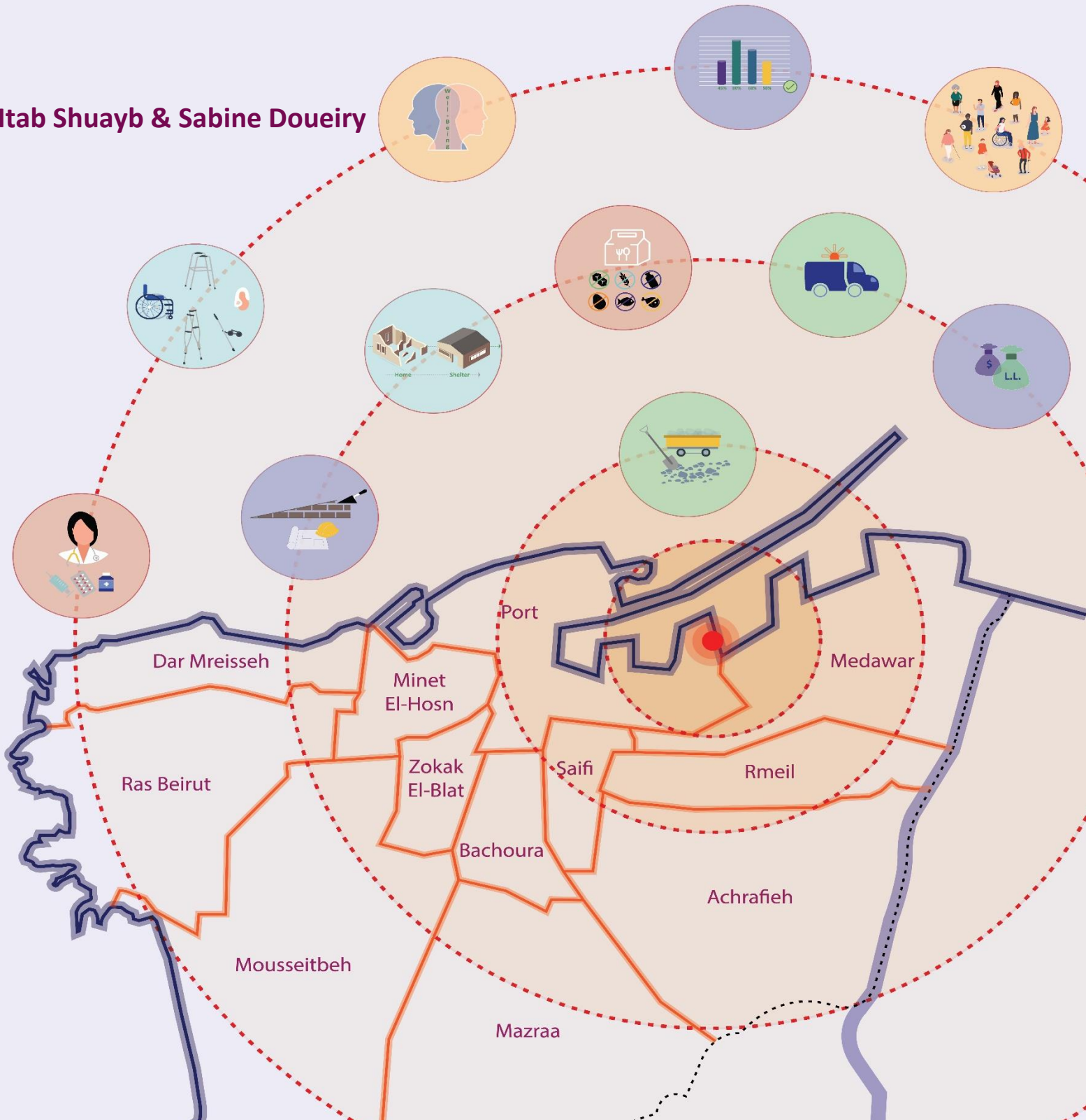


Table of Contents

Acknowledgments.....	4
About the Disability Hub.....	5
Definitions and Terminology	6
Executive Summary	9
Methodology	9
Key Findings.....	10
Gaps in Emergency and Recovery Preparedness	10
Lack of Inclusive Assessment of Needs and Rapid Damage Data	13
Flaws in the Rapid Damage Building Assessments and Reconstruction Initiatives	15
Beirut Recovery Response and Limitations of Law 220/2000	16
Recommendations for Inclusive Emergency & Disaster Management Plan	17
Introduction.....	18
Chapter One	19
Emergency and Disaster Preparedness in Lebanon	19
Background	19
Aims and Objectives	24
Government	24
Needs	24
Assurance	24
Gaps	24
Recommendations	24
Chapter Two	25
Methodology for Mapping the Inclusivity of Beirut Blast Recovery Responses.....	25
Methodology	25
A Desk Review.....	25
Secondary Data Analysis	25
Virtual Personal Interviews	25
Limitations	26
Research Ethics Statement	26
Chapter 3.....	27
Mapping Beirut Blast Recovery Response Initiatives Findings.....	27
Emergency Aid Initiatives.....	27

Pre-Blast Emergency Plans.....	27
Emergency Response on August 4	29
.....	31
Beneficiaries and Covered Areas.....	31
Data Quality Assurance	34
Infrastructure Assessment and Construction.....	38
.....	40
Accessibility Building Standards and Guidelines.....	40
Disability, Accessibility, and Inclusive Notions and Approaches.....	41
Disability Law 220/2000 and the Definition of Disability	41
Accessibility Knowledge and Evaluation.....	43
Inclusive Approach.....	45
Chapter 4.....	47
Beirut Blast Recovery Interventions	47
Gaps in Emergency and Recovery Preparedness	47
The Lack of Inclusive Needs and Rapid Damage Assessment Data Collection	49
Flaws in the Rapid Damage Building Assessments and Reconstruction Initiatives	50
Beirut Recovery Response and Limitations of Law 220/2000	51
Chapter Five: Conclusion.....	54
Inclusive Procedures for Developing a Lebanese Emergency & Disaster Management Plan.....	54
Recommendations.....	56
Drafting a national inclusive emergency and recovery plan.....	57
Adopting the participatory approach/ consultations with diverse people.....	57
Amending Law 220/2000	58
Mandating Inclusive design/ accessibility guidelines in reconstruction.....	58
Establishing a central governance and endorsing legal policy and framework	58
Allocating government financial protection schemes.....	59
Training and capacity building	59
Developing academic programs, research, and awareness campaigns	60
References	61

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About the Disability Hub

The Disability Hub (DH) provides people with disabilities (PwDs), their families, caregivers, organizations, researchers, and academic institutions with updated information about disability in the Arab world. Through research-based advocacy and a comprehensive database of all available and ongoing research, the DH seeks to make the Arab world more accessible and inclusive. With its donors and partners, the DH works to increase opportunities for education, employment, and advancing legislation and policies in favor of people with disabilities.

Since its inception and even more so after the August 4 Blast, the DH has been working to be (i) a watchtower covering all activities related to the decision-making role of PwDs in shaping an inclusive and sustainable environment in Lebanon and neighboring countries; (ii) a directory of all international agencies, NGOs, advocacy groups, associations, publications, laws, initiatives, and campaigns directed towards the role and rights of PwDs; (iii) an advocate for a people-centered approach to inclusivity through campaigns about Inclusive Design for the Built Environment, PwDs during the COVID-19 pandemic, and inclusive emergency response and longer-term recovery in the post-Beirut Port Blast.



Image i: Disability Hub Team

Definitions and Terminology

Medical Model of Disability

Origin: The medical model of disability was first adopted by the World Health Organization (WHO) in 1980

The medical model defines disability in terms of impairment, disability, and handicap. Impairment means a loss of or abnormality in structure or function.

Disability is the inability to perform a daily life activity due to a specific impairment. Handicap describes a person incapable of carrying out normal social activities because of an impairment or disability. Although the World Health Organization (WHO) has shifted towards adopting the social model of disability, yet the medical model of disability is still adopted by some institutions, organizations and countries.



Image ii: Illustration of the medical model of disability

Social Model of Disability

Origin: The social model of disability was developed in the late 1970s by UK activists in the Union of the Physically Impaired Against Segregation (UPIAS)

The social model of disability defines disability as something imposed on top of people's impairments by how attitudes and barriers limit their full participation in society.

Impairment means lacking all or part of a limb or having a defective limb, organism, or body mechanism.

Disability is the disadvantage or restriction of activity caused by a contemporary social organization that takes little or no account of people with physical impairments and excludes them from participation in the mainstream of social movements.



Image iii: Illustration of the social model of disability

Lebanese Law 220/2000 Definition of Disability

The Disability Discrimination Lebanese Law 220/ 2000 which was endorsed in 2000 distinguishes between a disability and impairment. Disability is the inability to perform a particular activity or a reduced ability to carry out one or more essential daily functions. Impairment is the loss or abnormality of a psychological, physiological, or anatomical structure or function that limits or prevents the fulfillment of normal daily activities.

UN Convention on the Rights of Persons with Disabilities Definition of Disability

The UN Convention on the Rights of Persons with Disabilities (CRPD) defines disability based on the social model of disability. People experience a disability when they cannot fully participate in society on an equal basis as someone with no impairment.

Article 1: Persons with disabilities include those who have long-term physical, mental, intellectual, or sensory impairments (includes visual, speech, and hearing impairments), which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

Inclusive Design

Inclusive Design¹ is a process that takes into account the diverse human, cultural, and life-cycle factors to improve human interaction, social participation, health, and wellbeing by involving the user in all aspects of design and development.

First Responders

They are individuals or group of people from local and international organizations who provide support, assistance, and directions on how to get to safety during an emergency crisis or disaster.

Vulnerable/Marginalized groups

Vulnerable and marginalized groups are socioeconomically disadvantaged children, teenagers, elderly, migrants, refugees, and people with disabilities.



Image iv: Illustration of vulnerable and marginalized groups

¹ Shuayb, I. (2020). Inclusive university built environments: The impact of approved document M for architects, designers, and educators. Springer International Publishing.

Executive Summary

On August 4, 2020, a blast in Beirut's port area caused immense damage to the city, killing approximately 200 people, and leaving 6,500²injured and over 300,000 displaced.

This study examines the inclusivity of the emergency response and reconstruction efforts carried out by both governmental and non-governmental agencies after the Beirut Blast and their response to different groups affected by the Blast. While the study unpacks the rationale for inclusion, it aims to examine the current recovery and reconstruction initiatives and identify existing challenges and opportunities for an inclusive emergency response.



Methodology

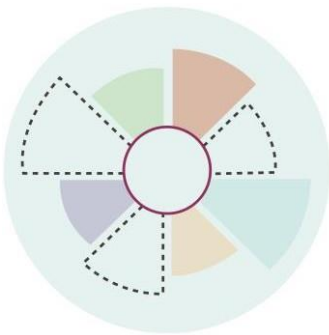
The study adopted a qualitative research methodology comprising a desk review, secondary data analysis, and individual interviews, all of which aimed at identifying the inclusivity of the needs assessments, as well as the recovery and reconstruction plans for everyone, including vulnerable and marginalized groups, such as persons with disabilities.

² CARE, ESCWA, & UN Women (2020, October 28). *Rapid Gender Analysis of the August Beirut Port Explosion: An Intersectional Examination – Lebanon*. ReliefWeb. Retrieved February/March 2021 from: <https://reliefweb.int/report/lebanon/rapid-gender-analysis-august-beirut-port-explosion-intersectional-examination>



Key Findings

To understand how the post-Blast response attended to the needs of people with disabilities, the existing crisis and emergency plans pre-Blast were examined. Although several emergency and recovery initiatives emerged immediately after the August 4 Beirut Blast to assist and provide support for the Blast victims, much more remains to be done to cover the most vulnerable and marginalized groups, including people with disabilities.



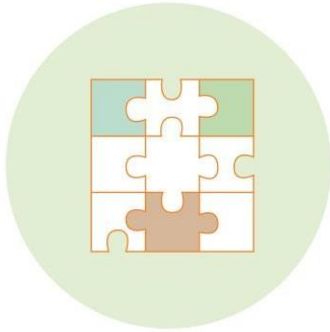
Gaps in Emergency and Recovery Preparedness

- The gaps in the response existed prior to the Blast due to the lack of inclusive emergency and response plans. While the Lebanese government, with the UNDP, developed a “Lebanon Crisis Response Plan” in 2018 that was intended to provide humanitarian assistance and to protect the most vulnerable, including people with disabilities, it did not specify how, neither in disaster risk events nor their management.
- This study revealed that the 2018 Lebanon Crisis Response Plan was not implemented at all during the Beirut Blast.
- Most emergency and recovery initiatives were organized after the Beirut Blast by young civil community groups who rushed to assist people affected by the Blast. Their involvement in providing support for people in need has significantly grown after the October 17 uprising.

-
- The lack of organization, coordination, and preparedness for emergencies has made recovery support out of reach for many disadvantaged and vulnerable/marginalized groups, including people with disabilities whose needs were neglected.
 - Participants primary services did not recognize that social exclusion of people with disabilities was exacerbated during the Blast. Many of the participants did not pay attention to identifying people with disabilities affected by the Blast, and they did not target their services to support PwD needs.



Image v: Illustration of emergency and recovery preparedness



Lack of Inclusive Assessment of Needs and Rapid Damage Data

- First responders and participants lacked the inclusive training and data collection tools to obtain accurate figures and statistics about the total number of people affected by the Blast.
- In the absence of open access information and disseminating risk information about the number of people with disabilities residing in the affected area before the Blast, participants could not manage to map all the vulnerable and marginalized groups, including people with disabilities, exposed to the Blast who could not receive any support or assistance.
- Many of the recovery interventions focused on repairing damage to provide safety and security and did not address the accessibility of residential buildings.
- Local and international organizations targeted their services to serve people affected by the Blast and helped within their organizational scope and their familiarity with people's needs and conditions without differentiating between nationality, age group, and socioeconomic background.
- While disability organization participants aimed their services at people with disabilities, they focused primarily on providing wheelchairs, walkers, and mobility devices, while overlooking other disabilities.
- Participants involved in needs assessment had to produce their own surveys and questionnaires that included different sections to identify their beneficiaries' needs. Most surveys included a section about disability; however, many surveys did not include questions about age groups, disability types, and the required assistive devices and auxiliary aids.

- Accessibility was not addressed in the rapid damage assessment surveys carried out by most (I)NGOs who were interviewed.
- The needs assessment was inaccessible for people with hearing impairments. Many faced difficulty completing the needs assessment survey over the phone since they could not communicate properly with the surveyors.

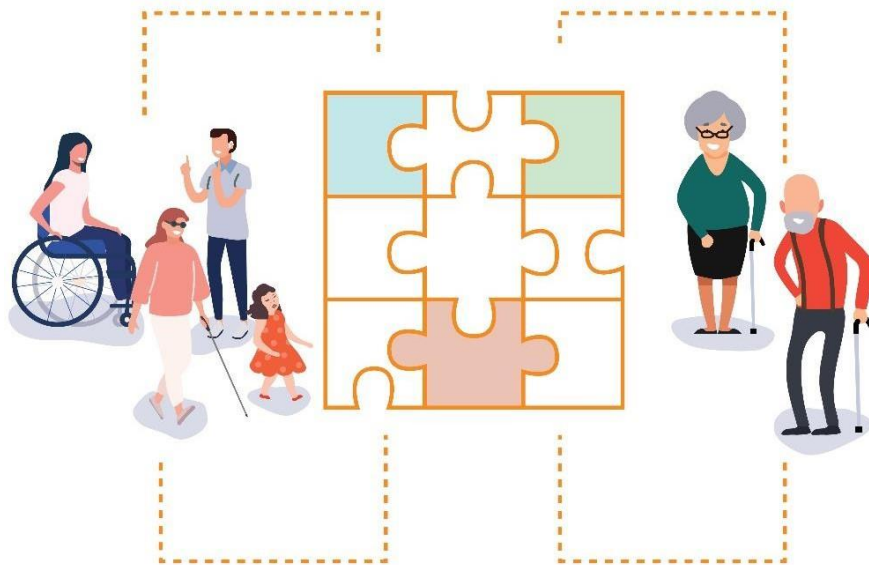


Image vi: Illustration of groups to be included in assessment of needs



Flaws in the Rapid Damage Building Assessments and Reconstruction Initiatives

- The absence of coordination, management, and leadership amongst organizations limited inclusivity in mapping and rebuilding of the damaged built environment in the Beirut Port area.
- The Order of Engineers and Architects (OEA) was slow in producing a unified building damage assessment. Their building damage assessments were generic and focused on evaluating buildings' stability and safety structures without addressing accessibility needs for people with disabilities, the elderly, and children.
- Many rebuilding and reconstruction participants faced legal obstacles in obtaining permission from municipalities to complete repair and reconstruction work on rented and owned buildings. Many owners and renters did not accept a third party to carry out the construction work at their premises or buildings.
- Some participants had to offer homeowners and tenants cash payments to complete repairs without addressing accessibility provisions and potential additional costs for inclusive reconstruction.



Beirut Recovery Response and Limitations of Law 220/2000

- Most participants are familiar with the Lebanese Disability Law 220/2000 and its definition of disability. However, some of them adopt the medical definition of disability that leads to providing PwD special services.
- Accessibility knowledge differed from one organization to another. Some institutions considered accessibility when enhancing buildings and carrying out renovations; they mainly focused on wheelchair users' needs. A few included mobility and visual impairment needs.
- Different accessibility standards were used, such as the UN accessibility standard, Order of Engineers accessibility booklet, and Apave accessibility standard.
- Some construction participants to the Beirut Blast are keen on reconstructing Beirut inclusively, while many still consider inclusive design as a means of enhancing accessibility for various disability types. They did not address other population groups such as children, the elderly, and people with different body shapes and sizes.



Recommendations for Inclusive Emergency & Disaster Management Plan

Proactive procedures must be taken in Lebanon to incorporate inclusive emergency and disaster risk analysis and management that addresses minority and socioeconomically disadvantaged children, teenagers, elderly migrants, and refugees, in addition to people with disabilities and those who have injuries that resulted in permanent disabilities. Adopting a holistic inclusive approach and including people with disabilities and those residing near the Beirut Blast area during the stages of rebuilding and reconstructing Beirut is vital in guaranteeing their needs are fully addressed and implemented.

One recommendation includes drafting national accessibility and inclusive design guidelines, coordinating with accessibility specialists, disability NGO groups, and giving small to medium enterprises (SMEs) incentives to adopt inclusion by making their premises accessible and employing people from different age groups, gender, and disabilities. Moreover, establishing potential partners from other disciplines to draft a national emergency preparedness plan and policy sets the prominent roles and duties for each sector to assure that all needs are met during any recovery and response emergency event. Finally, allocating a central unit or body to produce needs assessment surveys and coordinate with various municipalities and organizations to collect information and exchange and disseminate risk information on one central platform is crucial in responding to vulnerable groups' needs during emergencies and disasters.

Introduction

On August 4, 2020, a blast in Beirut's port area caused immense damage to the city, killing approximately 200 people, and leaving 6,500 injured and over 300,000 displaced.³ The vibrant Lebanese capital that lived in people's memories is now a shattered, terrified, and helpless city. More than 640 historical buildings and cultural centers were destroyed or damaged.⁴ While Lebanese are still beginning to grasp the intensity of the damage caused by the Beirut Blast, efforts to map the damage and plan for another reconstruction of the city have already started.

This is not the first time Beirut is rebuilt. In 1993, a huge reconstruction effort led by late Prime Minister Rafik Hariri took place. However, Beirut's reconstruction, following the Lebanese Civil War, marginalized and excluded many groups. In addition to gentrification and uprooting of locals in favor of big and international companies and businesses, the city remains widely inaccessible to many groups, one of which is people with disabilities. This segment of Lebanese society has been widely forgotten in reconstruction efforts. Beirut, post-Civil War, denied people with disabilities their basic rights such as access to educational institutions and health and leisure centers to name but a few.

The solidarity Beirut received post-explosion conjured hope. However, there is a risk that these huge efforts that are currently being invested in rebuilding the city will again exclude people with disabilities. Therefore, it is pivotal that the voices of people with disabilities are heard now, and the city is rebuilt to include everyone.

This study aims to shed light on the reconstruction efforts and the extent to which they are inclusive of the needs of the various segments of society, in particular the needs of people with disabilities. The study commenced at the beginning of November 2020, three months after the Blast.

As the study unpacks the rationale for inclusion, the objectives aim to examine the current reconstruction initiatives and identify existing challenges and opportunities for having an inclusive emergency response.

³CARE, ESCWA, & UN Women (2020, October 28). *Rapid Gender Analysis of the August Beirut Port Explosion: An Intersectional Examination – Lebanon*. ReliefWeb. Retrieved February/March 2021 from: <https://reliefweb.int/report/lebanon/rapid-gender-analysis-august-beirut-port-explosion-intersectional-examination>

⁴CARE, ESCWA, & UN Women (2020, October 28). *Rapid Gender Analysis of the August Beirut Port Explosion: An Intersectional Examination – Lebanon*. ReliefWeb. Retrieved February/March 2021 from: <https://reliefweb.int/report/lebanon/rapid-gender-analysis-august-beirut-port-explosion-intersectional-examination>

To this end, we interviewed 19 participants from different disciplines and analyzed 62 reports and needs response and damage building assessments. In addition to providing a set of recommendations for inclusive emergency response, this report also provides a tool to support good practice. This report comprises five chapters.

Chapter One provides contextual background on emergency and disaster preparedness in Lebanon. The first part introduces Lebanon and its preparedness in managing emergency and disaster events for vulnerable groups, including people with disabilities. It demands adopting an inclusive emergency and disaster plan based on pre-existing war crises and natural disaster recovery responses. Preparation for crises overlooked the needs of vulnerable groups and people with disabilities thereby excluded them from receiving resources during disasters.

Chapter Two outlines the main aims and objectives for mapping inclusivity of Beirut Blast recovery initiatives. In addition, it outlines the various methods used to identify the Beirut Blast recovery response initiatives' framework. The chapter identifies the inclusivity of the various responses and the extent to which these initiatives address the needs of vulnerable and marginalized groups – including people with disabilities receiving utmost attention and care.

Chapter Three highlights the gaps in the recovery interventions in achieving inclusive responses. It presents several key factors and limitations in the needs assessment and infrastructure and building damage assessments that restricted participants from providing inclusive recovery services to their various beneficiaries.

Chapter Four identifies four main shortcomings of providing inclusive recovery interventions generated from analyzing the mapping recovery initiatives during the Beirut Blast.

Chapter Five concludes that inclusive recovery needs assessment and reconstruction initiatives during the Beirut Blast were minimal. It proposes recommendations and an action framework as well as guidance for a national inclusive emergency and recovery management plan that cuts across all disasters. This plan needs to serve and include vulnerable groups and people with disabilities in both the planning and implementation phases.

Chapter One

Emergency and Disaster Preparedness in Lebanon

Background

Located on the eastern shore of the Mediterranean Sea, Lebanon, with an area of 10452 km², is a small country in the Levant and the Middle East. Accurate data about Lebanon's population does not exist. However, population estimates range around six million, which includes Syrian refugees, Palestinians, and migrants from different countries.



Image 1.1: The Map of Lebanon

Throughout history, Beirut has faced many natural disasters, wars and events that have left a large number of casualties and wounded people, in addition to severe damage and destruction to the city's infrastructure. The government reconstructed the city twice; the first time was after the Lebanese Civil War ended in 1993, and the second time was after an Israeli war in the summer of 2006. While the city had two huge construction plans in 1993 and 2006, Beirut was never designed inclusively to accommodate its diverse users' needs. With gentrification and the uprooting of locals in favor of big and international companies and businesses who were subcontracted to reconstruct Beirut, the city remains widely inaccessible to many groups, including people with disabilities. The government overlooks this segment of Lebanese society in its reconstruction efforts. Beirut, post-civil war and Israeli wars, reconstruction was regarded as an economic and financial opportunity to generate profits for the contractors, many of whom were politically affiliated.

With a lack of transparency in the selection criteria for contracting construction companies to take part in the reconstruction of Beirut, many organizations doubt the procedure and believe that corruption and abuse of power occurred during reconstruction efforts. While the government focused on business investment in the reconstruction of Beirut, it overlooked accessibility and denied vulnerable/marginalized groups, including persons with disabilities, their fundamental rights to access mainstream services.

While natural disasters, wars, and hazardous events can be life-threatening to everyone, vulnerable/marginalized groups can be severely affected by these hazards' immediate and long-term effects. War crises, political or socioeconomic crises, poverty, pandemics, and diseases have severely impacted vulnerable/marginalized groups residing in Lebanon. Many of them cannot anticipate, cope with, resist, or recover from these disasters' impacts. They are also made vulnerable by the policies and practices they experience when attempting to access public and private services. Additionally, people are made vulnerable by their political and social status, such as being labeled as a “refugee,” which carries significant social and political implications on the kind of future people are entitled to.



Image 1.2 and 1.3: Beirut Port before and after the Blast. Source: EPA, April 2017 and 5 August 2020

The response to the August 4 Beirut Blast was quick and multi-sourced. Local and international NGOs, UN agencies, and civil society groups rushed to assess people's needs, while others rushed to provide recovery services. While the solidarity Beirut received after the explosion was quick, the challenge remains that the recovery, needs assessments, and reconstruction efforts include people from diverse backgrounds, including vulnerable/marginalized groups. Therefore, it is pivotal that emergency needs and reconstruction planning are enhanced to adopt inclusive policies, practices, and designs for marginalized and vulnerable people.

The Lebanese Law 220/2000 and international laws and conventions recognize that people with disabilities gain equal rights in accessing mainstream services. Article 11 of the UN Convention on the Rights of Persons with Disabilities (UNCRPD) states the right to protection and safety in the event of a disaster. Although Lebanon signed the UN Optional Protocol, it never ratified the Protocol. People with disabilities constitute a large portion of Lebanese society; however, they are not granted equal participation. There are no accurate statistics or official data about the total number of people with disabilities, since the Ministry of Social Affairs (MoSA) only documents persons who registered for a disability card. To qualify for a disability card, people must provide medical reports to identify their impairments based on the Lebanese Disability Law 220/2000 disability definition. Law 220/2000 adopts the same 1980s World Health Organization (WHO) definition based on the medical model of disability. It defines disability in medical terms and legitimizes prejudice and discrimination against people with disabilities. Accordingly, it defines disability as the lack of ability to perform a particular activity or reduced ability to carry out one or more essential daily functions.

At the same time, impairment is the loss or abnormality of a psychological, physiological, or anatomical structure or function. This definition implies that special rehabilitation centers, services, and schools need to be provided for people with disabilities, which promotes exclusion from gaining equal and full access to mainstream education, employment, and services in Lebanon.

Based on this definition, only 80,703 people with disabilities have registered and received disability cards from the Ministry of Social Affairs (MoSA). The registration count shows that disability types are distributed as follows:

<i>Mobility impairments 53.76%</i>	<i>Visual: 7.67%</i>
<i>Mental conditions 27.45%</i>	<i>Learning 2.43%</i>
<i>Hearing 8.65%</i>	

However, many UN and local and international disability NGOs have stated that these figures are inaccurate and do not represent all the disability cases. They estimate that around 15% of the total population have disabilities but are not included in the MoSA's statistical data.

According to a [UNESCO](#)⁵ report, the percentage of people with disabilities exceeds 15% of the total population. This counts to a minimum of 600,000 persons and four percent (160,000 people) have permanent disabilities if we consider the total population to be four million as the study was done in 2013 and excluded Syrian Refugee population.

The registration count also shows that 7% of the 80,703 registered people with disabilities reside in Beirut. In other words, a minimum of 6,059 people with disabilities were subjected to the dangers and the aftermath of the Blast. More precisely, [UN](#) studies estimate that around 12,000 people with disabilities have been affected by the Blast ⁶. It is also important to note that in 2012, 94.77% of people with disabilities who are between 18 and 64 were unemployed.

⁵UNESCO (2013). Social Inclusion of Young Persons with Disabilities (PWD) in Lebanon: Where do we stand and what should be done to promote their rights? Retrieved from http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Beirut/images/SHS/Social_Inclusion_Young_Persons_with_Disabilities_Lebanon.pdf

⁶ UN News. (2020). Lebanon: Working on the ground to meet basic needs of Beirut's women and girls. Retrieved from <https://news.un.org/en/story/2020/09/1072232>

During the Lebanese Civil War (1975-1989), the government ignored vulnerable groups and people with disabilities' (PwD) needs. Authorities deprived PwD of their equal human rights, resources, and services, including quality healthcare. In Lebanon, disaster response rarely meets the needs and rights of people with disabilities. Most of the resources, shelters, and vital services such as food distribution, medical aid, and mental health support are inaccessible to people with disabilities.

People with disabilities are among the extremely vulnerable groups in disasters. The interaction between their impairments and their physical environment severely affects them. They are particularly at risk when disasters strike, and many may not receive food supplies or support from response initiatives. Some might be at a higher risk of catching a disease due to poor hygiene and sanitation. Many reports and studies on natural hazards highlighted that people with different disability types were the most affected in terms of their physical safety, evacuation and relief, and their ability to access medical first aid and shelter. Natural hazards may cause damage in the built environment and create numerous physical and social barriers or deepen existing challenges for people with different impairments.⁷ People with visual and hearing impairments may not recognize early warning messages about an occurring disaster.⁸ In contrast, people with intellectual or mental impairments may not understand hazardous events or what warning messages mean, and they may not know how to appropriately react to them.⁹ On the other hand, people with mobility impairments may not evacuate quickly enough because they require assistance. They may be overlooked or ignored by rescue and evacuation teams. Moreover, the lack of training and inappropriate carrying practices during rescue and evacuation may cause additional injuries or make existing impairments worse.

⁷ Hemingway, L. & Priestly, M. (1970, January 01). *Natural Hazards, Human Vulnerability and Disabling Societies: A Disaster for Disabled People?* Review of Disability Studies: An International Journal. Retrieved February 28, 2021 from <https://www.rdsjournal.org/index.php/journal/article/view/337>

⁸ ID4D. (2014). Persons with Disabilities: Among the First Victims of Natural Disasters. Retrieved from <https://scholarspace.manoa.hawaii.edu/handle/10125/58270>

⁹ ID4D. (2014). Persons with Disabilities: Among the First Victims of Natural Disasters. Retrieved from <https://scholarspace.manoa.hawaii.edu/handle/10125/58270>

As crises continue to overlap in Lebanon, vulnerable/marginalized groups and people with disabilities continue to face discrimination and exclusion and require additional care. In the past three years, Lebanon has faced political unrest, a refugee crisis, a severe economic crisis, the COVID-19 pandemic, and the August 4 Beirut Blast. The Blast had an impact on everyone residing in Lebanon, including vulnerable and marginalized groups. It restricted many of them from accessing emergency healthcare and securing their medication, life-saving equipment, and assistive devices, in addition to restricting them from being fully integrated into society.

Aims and Objectives

Against this background, this study aims to examine the inclusivity of the emergency response and reconstruction efforts carried out by both governmental and non-governmental agencies during the Beirut Blast and their response to different groups affected by the Blast.

The main aim behind mapping and analyzing the current response following the Beirut Blast is to examine to what extent the needs assessment, response, and recovery plans are responsive to the diverse needs of people and vulnerable and marginalized groups, including persons with disabilities. More specifically, the mapping aims to:

Government

Highlight the potential roles of the government, local and international NGOs, and civil society in developing inclusive emergency response and disaster management policies and practices to ensure that these vulnerable and marginalized groups receive utmost attention and care.

Needs

Examine the inclusivity of the needs assessment and infrastructure and building damage surveys.

Assurance

Analyze the data quality assurance and statistical information shared by Lebanese officials and stakeholders.

Gaps

Highlight the critical gaps in disability, accessibility, and inclusive knowledge and practice.

Recommendations

Propose recommendations and actions to develop a national inclusive emergency and recovery management and preparedness plan

Chapter Two

Methodology for Mapping the Inclusivity of Beirut Blast Recovery Responses

Different qualitative methods are used to identify the needs assessments, recovery, and reconstruction plans. Following the Beirut Blast, the qualitative methods also need to make sure they are inclusive and responsive to everyone including vulnerable and marginalized groups and people with disabilities.



Methodology

A Desk Review

This study reviewed 39 available reports, policies, procedures, notes, and checklists conducted by governmental authorities, civil society, local and international NGOs, UN agencies, Order of Engineers and Architects, and architectural firms related to the Beirut's recovery.



Secondary Data Analysis

In addition, this study analyzed 23 needs assessments and rapid building damage assessments, surveys and statistical data, and excel sheets conducted by governmental authorities, local and international NGOs, UN agencies, and architectural firms and organizations involved in the Blast recovery response.



Virtual Personal Interviews

This report also conducted 19 personal (virtual) interviews with key stakeholders to identify their involvement in the recovery needs assessment, and reconstruction initiatives and services they are providing after the Blast. Four local NGOs, five International NGOs, five disability organizations/special educational needs institutions, two UN agencies, and three governmental institutions took part in virtual meetings. Due to the lockdown, the Lebanese Army - Beirut Forward Emergency Room - could not take part in the data collection. Researchers conducted open-ended questions covering the following sections:

1. Recovery needs assessment mapping
2. Infrastructure damage assessment mapping
3. Protection from abuse or neglect
4. Medical health assistance
5. Mental health and psychological assistance
6. Disability, accessibility, and inclusion

Limitations

Several limitations restricted researchers from conducting a full evaluation of the recovery needs assessment and reconstruction initiatives. This report generates recommendations from analyzing and evaluating 19 recovery initiatives to ensure that vulnerable groups, including people with disabilities and the elderly, are included in any emergency and crisis operations and responses.

The three limitations are:

- The duration of the mapping and producing the final report was restricted to three months. This period included obtaining IRB approval, reviewing the literature, and conducting interviews with different stakeholders and first aid respondents. However, the research was limited to 19 interviews with different government representatives, local and international nongovernmental organizations, UN agencies, and disability organizations in one month.
- The COVID-19 lockdown restrictions limited research site visits of damaged commercial buildings, offices, and essential services such as hospitals. The lockdown restrictions and the limited time to conduct the research affected the analysis of the differential response and coverage to the different regions to investigate if the response is proportionate to damage and if there are other factors involved.
- Essential stakeholders such as the Lebanese Army representative and hospital managers could not take part in virtual interviews due to COVID-19 lockdown restrictions.

Research Ethics Statement

The research project with Protocol Title: Mapping the Needs Assessment and Reconstruction Initiatives during the Beirut Blast Reconstruction, has been approved by the Lebanese American University, Institutional Review Board (LAU IRB). IRB #: LAU.STF.MS1.18/Feb/2021

Chapter 3

Mapping Beirut Blast Recovery Response Initiatives Findings

This chapter examines the inclusivity of the emergency services following the Beirut Blast. To this end, the research investigated emergency aid initiatives, the beneficiaries and areas covered, data quality assurance, infrastructure assessment, reconstruction, accessibility building standards and guidelines, in addition to disability, accessibility, and inclusive knowledge.



Emergency Aid Initiatives

To understand Lebanon's emergency response to the Blast, it is important to shed light on emergency response plans developed by the government before the explosion.

Pre-Blast Emergency Plans

On November 3, 2015, the Lebanese government under its former prime minister Tammam Salam signed an agreement with the UNDP to complete a project to strengthen Disaster Risk Management Capacities¹⁰ project should have completed Phase III by 31 December 2018. The outcome of the project aims to develop good governance reforms and practices, with a specific focus on national dialogue and inclusive participation; in addition, government effectiveness and accountability are institutionalized at different levels. However, the project did not include practices for responding to

¹⁰ Strengthening Disaster Risk Management Capacities in Lebanon Phase III. (2015, November 3).

Retrieved February 28, 2021, from

<http://www.lb.undp.org/content/dam/lebanon/docs/CrisisPreventionRecovery/Publications/Signed%20PD%20-%20DRM.pdf>

people with disabilities and the elderly during disaster risk management.

The overall objective of Phase III of the project was to “Help the Government of Lebanon in establishing effective national institutions, including disaster risk information and disaster risk management systems to increase societal resilience against disasters, especially in refugee-hosting high risk within major local authorities.”

In November 2015, the UNDP was commissioned to achieve the four main output(s): (a) draft a final national governance for disaster risk reduction document, (b) increase the capacity of stakeholders to undertake risk-sensitive development planning based on advanced risk information systems; (c) resilience in refugee-hosting by empowering high-risk, local authorities against risks of disasters and civic conflicts; (d) support the development of the national recovery strategy and the development of capacities to implement a post-crisis recovery program. Once all these deliverables are met, the Lebanese government, who is regarded as the implementing partner, would be commissioned to implement the Disaster Risk Management capacities.

In January 2017, former Prime Minister Saad Hariri and Mr. Phillipe Lazzarini, the UNDP Head Representative in Lebanon, signed the Lebanon Crisis Response Plan 2017-2021¹¹. Although various stakeholders were involved in developing the plan, few disability organizations were consulted. Arcenciel and Handicap International represented the physical disability groups; however, different types of disabilities were not included in consultations. The plan aims to protect and provide humanitarian assistance to the most vulnerable – including displaced Syrians, Palestinian refugees, and Lebanese. It aims to support the delivery of public services and to reinforce Lebanon’s stability. The plan is also in line with commitments made at the 2016 London and 2017 Brussels Conferences – expanding investments, partnerships, and delivery models towards longer-term recovery and development strategies. The 2018 version of the Lebanon Crisis Response Plan represents a renewed commitment by the Lebanese government and a wide array of national and international partners to support Lebanon’s efforts to provide for the most vulnerable, to alleviate the immense burden of the crisis on Lebanon’s economy and services, and to preserve Lebanon’s stability. It includes a section (p.

¹¹ Government of Lebanon and the United Nations.). *Lebanon Crisis Response Report 2017-2020* (2018 update). Retrieved February/March 2021, from <https://www.unhcr.org/lb/wp-content/uploads/sites/16/2018/04/LCRP-EN-2018.pdf>

13) about protecting people with disabilities against the high risk of violence, discrimination, and exclusion.

Moreover, it includes a section (p. 16) that highlights the need to cover people with disabilities, the elderly, and single women with children in the protection plan.

However, it does not include recommendations and action plans to protect people with disabilities and enhance accessibility in disaster risk events and management.

Emergency Response on August 4

Following the August 4 Blast, several initiatives were established by civil society organizations, local and international NGOs, and municipalities to provide support and assistance to people affected by the explosion. The outcome from mapping the recovery and response needs assessment during the Beirut Blast revealed that the so-called “National Disaster Risk Reduction and Management” and the Lebanon Crisis Response plans were not implemented at all.

There was a lack of coordination among the various initiatives. While some NGOs and community groups immediately rushed to provide aid and support, many governmental institutions, municipalities, and local and international NGOs got involved with the recovery support and needs assessments a few days and weeks after the Blast. The lack of organization, coordination, preparedness for emergencies, and the absence of a national emergency and disaster plan implementation has made recovery support out of reach for many disadvantaged and vulnerable/marginalized groups whose needs were neglected.

One interviewee described the recovery response as “The recovery response was chaotic!!!”

Another interviewee added: “Three days after the Blast, volunteers came from universities, NGOs, municipalities, but the challenge was to organize their work.”

One local Ngo interviewee mentioned that “One of our partners created a mobile unit so they can locate and identify people with disabilities who require assistance and support...it was not a very successful initiative because it was hard to locate them especially since our partners do not operate in Beirut.”

Another interviewee described the communication with MoSA as “things were slow! We were not able to [depend on] a quick way to locate the elderly and people with disabilities.”



Recovery support and aid differed from one first responder to another. Some participants and local interviewed organizations provided healthcare and medical aid support; others distributed hot meals and allocated shelters for those who lost their homes. The eight primary response initiatives are medical support, food distribution, reconstruction, shelter allocation, rubble removal, financial support, auxiliary aid support, and mental health support.

Findings reveal that 12 recovery responders mainly focused on providing and securing shelter for people who lost their homes. Their priority was to rebuild and fix the damaged housing units to allow people to reside in their own homes. Healthcare and medical aid support were the second priority, where eight participant organizations provided medical care and medical aid support. On the other hand, six participant organizations provided cash payment support to the most disadvantaged people and families, while five other local participant NGOs focused on distributing food and hot meals. Four participant local organizations provided wheelchairs, medical beds, diapers, and personal hygiene supplies for people with disabilities and the elderly. Three participant organizations offered mental health and psychosocial support for people affected by the Blast, while three other participant organizations took part in removing and cleaning rubble.



Beneficiaries and Covered Areas

Local and international organizations aimed their services to serve people affected by the Blast and helped within their organizational scope and their familiarity with people's needs and conditions. Three participants organizations offered their services to everyone affected by the Blast without differentiating between nationality, age group, physical and cognitive abilities, and socioeconomic background. Three organizations focused on serving Palestinian refugees and Lebanese affected by the Blast, focusing on children, women, the elderly, and wheelchair users. Disability organizations channeled their services to serve people with disabilities according to the disability types they cover. Two local disability organizations offered their services to people with mobility impairments, mainly wheelchair users. Four special educational institutions provided psychosocial support and food distribution to families with children who have learning disabilities, down syndrome, and are on the autism spectrum. Two UN agencies continued to serve their same beneficiaries before and after the Blast. They aimed their services at assisting families and their children who have disabilities, pregnant women, and people with disabilities. On the other hand, two local organizations focused their services on assisting small to medium business enterprises (SMEs) affected by the Blast so that they can reopen and run their businesses. The Order of Engineers and Architects (OEA) evaluated the infrastructural damage.

Some areas (Mar Mkhayel, Karantina, Gemmayze) were covered by different participants and received various recovery services. In contrast, other regions (Getawi, Bachoura, Zokak El Blat) had less response in the recovery response.



Figure 3.1 Areas covered by interviewed first responders

According to Figure 3.1, the Karantina area was the most served area where a total number of seven interviewed organizations provided extra support for families residing there. Aid included shelter allocation, removing and cleaning rubble, food distribution, medical and mental health support, auxiliary aids for people with disabilities and the elderly, and cash support. Some UN agencies provided cash support as a safety net for people affected by the Blast, and their recovery intervention did not include any kind of support service for people in need.

Mar Mkhayel was the second most served area where five participant organizations provided shelter allocation, food distribution, medical and mental health support, auxiliary aids for people with disabilities and elderly, and financial support.

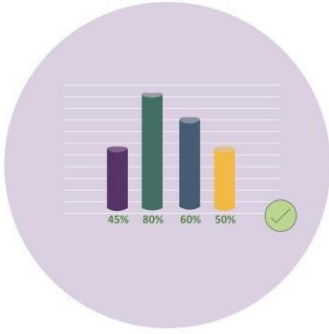
On the other hand, four organizations offered shelter allocation, medical and mental health support, auxiliary aids for people with disabilities and elderly, financial support, and mapping the damage in buildings.

Bourj Hammoud and Rmeil had three participant organizations that worked on cleaning and removing rubble, shelter allocation, auxiliary aids for people with disabilities and the elderly, and cash payment support. The Lebanese government allocated LBP 400,000 of financial support for each disadvantaged family.

It delegated the Lebanese Army to distribute this amount to people who match their vulnerable groups

criteria. Since 2019, Lebanon has been facing a harsh economic crisis that has severely affected people's purchasing power. While the LBP 400,000 used to have a value of USD 266 in early 2020, it is currently worth USD 30, which is insufficient support given the hyperinflation witnessed between 2019-2021.

The Achrafieh area had two organizations that offered shelter allocation, medical and mental health support, and food distribution. Sassine, Zkak el Blatt, and Bachoura were the least served areas, according to the interviewed respondents. One organization provided medical aid support and allocated shelter for those in need as part of its intervention. This organization also worked on repairing damaged buildings. Another local organization covered the Getawi area and worked on removing rubble and repairing damage in buildings, in addition to providing medical aid for those in need. Finally, the Spears area had one organization that distributed hot meals for people residing in the area.



Data Quality Assurance

Findings from the desk analysis and interviews with first responders revealed that organizations provided different numbers and statistics about people and buildings affected by the Blast. According to the Lebanese government, it is estimated that 6,500 people were injured, and around 200 people were killed. It is important to note that there was no unified data collection method used among different first responder groups. Local NGOs, international NGOs, and UN agencies distributed their questionnaires to collect data about their beneficiaries' needs. One local organization reviewed the various surveys distributed by the different agencies and piled them in one form to cover various beneficiaries.

Several participants doubted the number given by an official spokesperson who estimated that around 2000 people became disabled after the Blast. Several participants documented the injuries that caused permanent disabilities. Findings reveal that there is a discrepancy between the number reported and the number of documented people with disabilities. One interviewed disability NGO estimated that the total number of people with disabilities is around 500. The figure includes children and people who have disabilities before the Blast, in addition to around 100 people whose permanent injuries came as a result of the Blast. Another participant who provides rehabilitation services confirmed that from the 100 people they surveyed, 10 people have spinal cord injuries and body part amputations that caused permanent impairments; 25 are still in need of medical operations and physical rehabilitation, and 65 recovered completely.

One NGO stated that excessive and overlapping needs assessment surveys among various recovery

organizations prevented some people from receiving assistance. Many refused to complete the needs assessments; they were concerned that their personal information was not protected and might be shared with a third-party.

According to one local NGO interviewee "People were annoyed that many NGOs were visiting them to collect information about their needs, and many did not come back to offer a service or to provide assistance. Others reported being exploited by NGO volunteers. They did not know if the volunteers were being sent from trusted NGOs".

Most participants highlighted the urgent need to establish a trustworthy central data platform to enter, validate, and exchange accurate data. Many local and international organizations noted that with the absence of a central or main body in charge of the recovery and needs assessment data collection, many affected areas, and vulnerable groups, were ignored and never surveyed or covered.

One interviewee

Stressed out that *"Coordination and communication were the main challenges. There was no central or main lead for exchanging data..."*

Another interviewee

found it hard *"to identify accurate numbers because it was an emergency,*

Although infrastructural assessments were carried out by different organizations, architectural and engineering surveyors surveyed affected areas to evaluate the infrastructural damage level. Moreover, findings from the desk review of the mapping assessments and interviews revealed that there is a discrepancy in the number of buildings and institutions damaged by the Blast. According to the rapid damage and needs assessment prepared by World Bank Group in cooperation with the European Union and the United Nations around 171,887 residential units were assessed, 87,600 units were damaged, of which 22,000 belonged to low-income households¹². . On the other hand, findings from

¹² World Bank Group in cooperation with the European Union and the United Nations. (2020). Retrieved February 28, 2021 from <http://documents1.worldbank.org/curated/en/650091598854062180/Beirut-Rapid-Damage-and-Needs-Assessment.pdf>.

analyzing the UN-Habitat damage assessment revealed that 5,367 buildings of all types, located within a two- kilometer radius of the Blast, were damaged; however, the damage level ranges from uninhabitable/requires evacuation to habitable/does not require evacuation.

One participant involved in damage assessments within the Blast area of Mar Mkhayel, Rmeil, and Medawar reported that around 2,600 residential units are damaged. Other local organizations stated that more than 16,000 residential units are damaged within the same area.

The Blast also impacted heritage and cultural buildings. According to the World Bank and the European Union, the following damage were incurred: 240 of 381 assets of religious significance; 652 of 755 heritage buildings (public and private); 11 of 25 national monuments; 9 of 16 theaters and cinemas; 6 of 8 museums; 24 of 25 libraries and archives; 64 of 88 galleries and cultural spaces; and 713 of 850 CCI businesses.



Image 3.3: Souks shopping district before the blast : taken on 1 Nov 2009, [photo credit Getty Images](#)



Image 3.4: Souks shopping district damaged by the blast: taken 6 August 2020, [photo credit Getty Images](#)

According to the World Bank Group, the European Union, United Nations, and the Ministry of Education damage assessment, it is estimated that around 80% of educational institutions located within 2km of the Blast site had light to moderate damage. In comparison, 20% have been severely damaged. Around 90 public and 73 private schools and 20 technical and vocational education and training institutions were destroyed. According to UNICEF Lebanon Beirut Explosion Report¹³ Lebanon Beirut Explosion Report, 179 schools, and educational centers were damaged, however, there is no accurate data or information about the damage levels that affected early childhood development institutions, universities, and educational administrative offices.

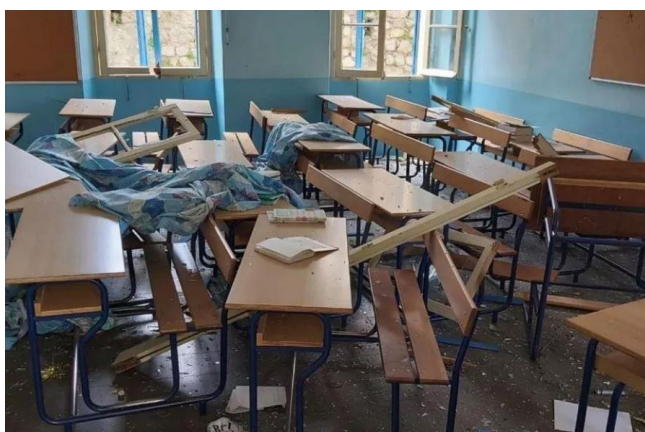


Image 3.5: Beirut Catholic school damage



Image 3.6: Beirut Baptist School damage

¹³UNICEF LEBANON - BEIRUT EXPLOSION RESPONSE IN NUMBERS. (2020, August 26). Retrieved February/March 2021, from UNICEF - <https://www.unicef.org/media/76816/file/Lebanon-SitRep-26-August-2020.pdf>



Infrastructure Assessment and Construction

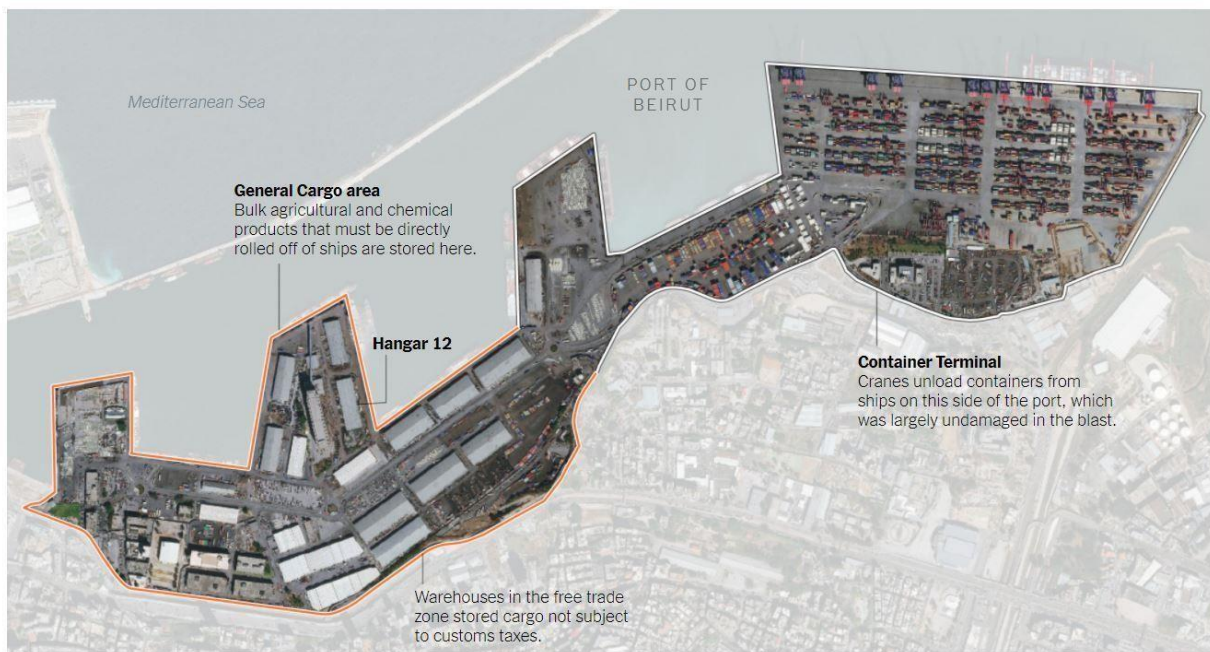


Image 3.7: The General Cargo area and Hangar 12. Source The New York Times: Satellite Image via Bing

Before August 4, 2020, Beirut Port was considered one of the top 10 seaports in the Mediterranean Sea; it played the role of a commercial gate that served as an entry point to more than 70% of Lebanon's imports. The General Cargo Area in Beirut Port had several hangars that were used to store off-loaded merchandise from ships. Among these hangars, Hangar 12 was loaded with tons of ammonium nitrate, jugs of oil, kerosene, hydrochloric acid, wood, and 15 tons of fireworks. It is stated that on August 4, 2020, a fire was triggered in the hangar activating the fireworks and all the stored explosive material, including the ammonium nitrate, which in turn produced a massive flash, followed by a hemispherical shock wave.

The Blast was so powerful that it caused enormous destruction to residential and commercial areas surrounding the port within a 5km radius. Residential areas such as Bachoura, Marfaa, Saifeh, Rmeil, Achrafieh, Bourj Hammoud, Sin El-Fil, Dekouaneh, Baouchriyye, Jdaidet El Metn, Mazraa, Zkak El Blat, Minet El Hosn, Msaitbe, Ras Beirut, and Ein El Mraisse were all affected by the Blast.

The Blast's impact caused infrastructural damage to many residential, cultural, and educational buildings, in addition to hospitals within the five-kilometer radius. Findings from document analysis and interviews with first responders who assessed the infrastructural damage revealed that land transport, energy, water supply, sanitation, and municipal services were all affected by the Blast.

Seven months have passed since the Beirut Blast, and the Lebanese government has yet to provide a reconstruction strategy to rebuild Beirut. Findings reveal that most responders are still working on repair works and maintenance; however, the overall reconstruction work of Beirut has yet to begin.

Participants involved in infrastructure and building damage assessment developed their assessments. Some assessments were detailed and itemized to be easily exported and saved on statistical data programs. Other NGOs used generic assessments to evaluate and identify buildings that need partial and severe construction work. Four local organizations overlooked accessibility components in their building damage assessment. Their primary concern was to document building locations, damage, and the extent of construction work.

While most residential buildings in Beirut have a minimum of two to three-levels that can either be reached by stairs or elevators, they were not included in most building damage assessments. The primary documented damage assessments were doors, windows, and curtains since these features provide residents with security and safety. Kitchen and toilet damage were reported more than bedrooms and living rooms. Most building damage assessments included kitchen appliances and furniture damage as part of the assessed items. Interior walls, ceilings, flooring, electrical switches, and lighting were not included in the assessment.

According to the four damage building assessments, buildings that were severely damaged had three alternative listed options: temporary home replacement, urgent evacuation, and critical renovation work, without providing a section about the estimated reconstruction/renovation cost and time.

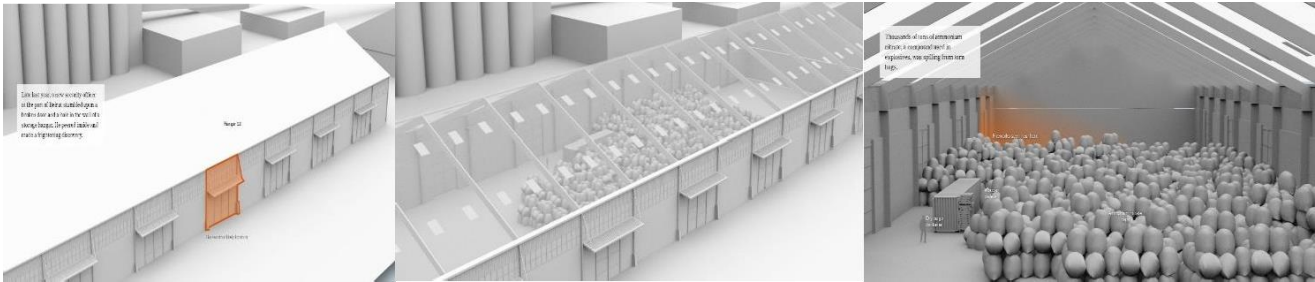


Image 3.8: A 3d drawing of Hanger 12 exterior and interior piled with ammonium nitrate bags.



Accessibility Building Standards and Guidelines

While Law 220/2000 states that people with disabilities have the right to access education, employment, healthcare, and public services, it did not provide an accessibility code of practice or a national accessibility standard. In 2011, a decree with six accessibility provisions was introduced to remove physical barriers. It put duties on architects and designers constructing new buildings to enhance accessibility and remove barriers by providing an accessible parking bay, level main entrance, passenger lift, ramp, wide corridors, and accessible toilets. Although the decree aims to enhance accessibility for mobility impairments, enforcing the decree's implementation was challenging to maintain since there is no governmental body or unit to monitor accessibility compliance.

Findings from document analysis and interviews with local and international organizations involved in rebuilding/construction work revealed that accessibility knowledge differed from one organization to another. While some institutions took accessibility into consideration while enhancing buildings that were undergoing renovations, they mainly focused on wheelchair user needs. Few include visual impairment needs. Some institutions used different accessibility standards, such as the UN accessibility standard, Order of Engineers accessibility booklet, and Apave accessibility standard.

Most local organizations used their building damage assessment to assess infrastructure damage, but they overlooked accessibility in their assessment and repair works. The main repair works included fixing structure damage, aluminum window frames and glass, wooden doors, and kitchen repairs. The maintenance work included painting walls, repairing and replacing home furniture, curtains, and light bulbs.



Disability, Accessibility, and Inclusive Notions and Approaches

Disability Law 220/2000 and the Definition of Disability

Findings from interviews with local and international disability NGOs revealed that some of them use Law 220's medical definition of disability, while others used the social model of disability definition. Many disability organizations highlighted several limitations to relying on disability cards to proclaim disability rights. One limitation is the disability card which allows people with disabilities to access special rehabilitation centers, services, and schools, and only covers specific age groups. Another limitation with the disability card lies in its bureaucracy; it has never been updated or developed since it was introduced. One disability NGO stated that the bureaucracy for obtaining a disability card is

complicated and requires a long process to assess the case and validate the medical documentation before being approved.

A key finding from interviews revealed that many response and recovery needs initiatives overlooked people with disabilities' needs from Beirut Blast's in the first few days. While some NGOs used a survey to collect data about people's age, gender, and medical health condition, few NGOs included a section about disability. Four NGOs included a question about disability but did not specify the different disability types. Two NGOs documented different disability types and chronic diseases.

All the nineteen participants highlighted the necessity to broaden the definition of disability, so Law 220/2000 can cover other groups, which are not currently covered by the Law.

One participant stated that Law 220/2000, with its narrow definition of disability, has excluded mental health conditions and hidden disabilities that need to be covered by the Act:

One interviewee said:

“Disability needs to be broadened because every person encounters barriers at a specific point in time, which could be permanent, or not. It doesn't only need to be related to the medical definition.”

One local NGO spokesperson added:

“Most NGOs noted that the government failed to enforce and implement Law 220/2000. The absence of government enforcement and the lack of governmental resources restricted people with disabilities from equal access to mainstream services

Another interview stated:

“The weakest link lies in its application. It is never taken seriously, and there is no enforcement from the government's side.”

Accessibility Knowledge and Evaluation

Accessibility plays a significant role in integrating people with disabilities to gain access to services. According to the social model of disability, disability barriers are imposed on top of people's impairments by people's attitudes, which limit their full participation in society. People with disabilities can experience full participation in society once services and built environments are accessible to their needs. Findings from interviews with first responders involved in the Beirut Blast recovery and needs assessments revealed that their primary definition of accessibility is removing physical barriers for people with mobility impairments. According to them, accessibility is about being able to navigate and reach a designated place or service through wider doors, ramps, and elevators for wheelchair users. Most rebuilding and damage repair initiatives covered repair works and accessibility enhancements for the physical environment inside buildings without attending to the external environment. Rebuilding and reconstruction initiatives never considered damage repairs and accessibility enhancements for streets, pedestrian crossings, sidewalks, and accessible parking bays in Beirut Blast areas. One NGO involved in shelter damage repairs relied on accessibility standards to provide accessible sanitary fixtures and counters within reach for wheelchair users inside buildings.



Image 3.9: Accessible seating and musical instruments at Karantina playground park

At the same time, another architectural NGO worked on repairing damage to an accessible children's playground park in Karantina affected by the Blast. The park has an accessible path that allows children with different disabilities to access the play area. Musical games such as the bell clappers, xylophones, and speaking pipes are games that were implemented at the Karantina park to allow people with visual and hearing impairments to be more engaged in playing.

Findings from interviews with recovery and needs assessment initiatives revealed that most buildings in areas they served were inaccessible to people with disabilities. One NGO stated that the government can enforce removing barriers by providing accessibility standards and by monitoring architects, designers, and real estate developers making sure that they are creating accessible services. Another two NGOs noted that access to information is also another vital factor that many organizations overlook. During the Beirut Blast emergency response, many organizations used different methods to provide information about their recovery and need assessment services. Some posted their information on various social media platforms, others circulated infographics on the WhatsApp application, while a few others provided emergency hotline services.

A key finding from different recovery NGO feedback revealed that information was not accessible for people with visual and hearing impairments.

“Our hotline was not accessible to everyone. I had to answer one emergency call from someone with a hearing impairment and had difficulties in communicating with him.”

“Our leaflets or social media were not accessible to people with visual impairments.”

Inclusive Approach

Most participants note that inclusion is partially adopted in organizations. One interviewer highlighted that enforcing inclusion by requesting a certain quota or number of people with disabilities does not lead to full inclusion in society. According to the same interviewer, inclusion is about providing equal opportunities and rights for people to access services, including people with disabilities.

Two participants defined inclusion as responding to the needs of marginalized and vulnerable groups in society. These marginalized and vulnerable include people with disabilities, migrant workers, different races, ages, gender, nationalities, and refugees.

Although “age” was a common question in the needs assessments, one NGO included a question about elderly people, and two NGOs included newborns in their assessment. On the other hand, two other NGOs had a section about pregnant women/lactating women, while two other organizations focused on identifying female-headed households in their needs assessment.

Some local and international organizations included a section about food sources and cooking tools in their needs assessment, but they did not address the various food allergies and specific diet preferences.

While most recovery and disability NGOs highlighted the necessity for reconstructing Beirut so it can become more accessible to people with disabilities, few noted that services should be more inclusive and target other groups such as children, and the elderly. Three NGOs believe that inclusion should be a mainstream principle that values diversity and differences among people by considering their needs. These differences refer to age groups, gender, nationality, ability, and disability.

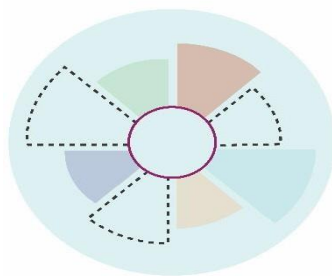
Of the participants who implemented the inclusive approach, they shared a common vision in implementing the inclusive approach in the reconstruction of Beirut after the Blast. However, most of them doubt that inclusion will be achieved under the current government since it has already overlooked accessibility and inclusion in previous Beirut reconstruction efforts.

Many local organizations accuse the current government of demolishing Beirut and its port, and some respondents have no trust in the Lebanese government since it failed to take the lead in the recovery initiatives. Many participants state that the government and its politicians are primarily concerned with the economic and financial opportunities the reconstruction of Beirut can generate without addressing people's rights and their social protection. Hence, most of them reject the idea of the current government being involved in the reconstruction phase since they doubt the procedures. They believe that corruption and abuse of power will recur during this reconstruction. Most participants conclude that a holistic approach must be adopted in the reconstruction of Beirut and its port. They suggest that reconstruction procedures include a review of the Beirut master plan to enhance accessibility and infrastructure. Some of the participants highlighted the necessity to address improving the infrastructure so it can withstand disaster events and earthquakes. Others proposed enhancing accessibility in the built environment to include street design, accessible parking bays, and sidewalks, in addition to improving accessibility in buildings.

Chapter 4

Beirut Blast Recovery Interventions

Several recovery interventions were involved in supporting people affected by the Beirut Blast. The findings from mapping 19 interventions revealed that inclusive recovery assessment and reconstruction remain minimal. Four main themes are generated to show how these initiatives have fallen short of providing inclusive recovery, needs assessments, and inclusive reconstruction of Beirut after the August 4 Blast.



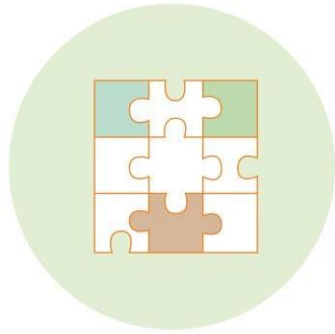
Gaps in Emergency and Recovery Preparedness

Few governmental institutions and municipalities took part in the recovery actions. They commenced work a few days or weeks after the Blast, even though the Lebanese government had developed a national crisis response plan in 2018. One governmental representative confirmed that many governmental institutions relied on local and international NGOs to lead the recovery and needs assessments with their lack of emergency preparedness and experience in dealing with emergencies. Governmental institutions shadowed away and let other local and international NGOs and UN agencies lead the recovery and needs assessments, claiming that they did not want to duplicate the emergency and recovery work offered by local and international organizations.

Many emergency and recovery initiatives were organized after the Beirut Blast by young civil community groups who rushed to assist people. Their involvement in providing support for people in need has significantly grown after the October 17 uprising. The lack of trust in the Lebanese government and the absence of a clear governmental emergency strategy have forced civil society, local and international NGOs, and UN agencies to be the leading players in providing different emergency and recovery needs assessments after the August 4 Blast. Since there was no central

leading body in charge of coordinating the emergency and recovery needs assessments, the different response and recovery initiatives were chaotic and disorganized during the first week after the Blast. Vulnerable people, including people with disabilities, the elderly, women and children, refugees, and migrants residing in the area affected by the Blast were not all served equally during the recovery and needs assessment response. While relevant experience in needs assessment and recovery enabled some NGOs to prepare their needs assessment surveys and provide for their beneficiaries' needs, others were slow in conducting humanitarian needs and building damage assessments.

Findings from analyzing participants primary services revealed that local and international NGOs' primary services focused on providing people's basic needs and their security and safety, such as shelter, medical aid, and food distribution. In contrast, the psychological needs were not a priority service since few organizations offered mental health support for people with disabilities. Self-fulfillment and self-actualization needs remain a real challenge; however, they are beyond reach in Lebanon since many vulnerable/marginalized groups' needs are ignored. People with disabilities receive minimum support from the Lebanese government, and many of them are deprived of their human (equal) rights, resources, and basic services. As crises continue to overlap in Lebanon, vulnerable/marginalized groups continue to face discrimination and exclusion, and their needs are not yet reached. Consequently, it is pivotal that emergency needs and reconstruction planning are enhanced to adopt inclusive policies, practices, and designs that promote inclusion for people with diverse needs, including people with disabilities.



The Lack of Inclusive Needs and Rapid Damage Assessment Data Collection

Participants often lacked the inclusive training and data collection tools to obtain accurate figures and statistics about the total number of people affected by the Blast. Findings from reviewing published statistical data of various first responders revealed a discrepancy in the number of people with disabilities and the number of damaged infrastructure and building types that were severely affected after the Blast.

In the absence of open access information and without disseminating risk information about the number of people with disabilities residing in the affected area before the Blast, participants could not map vulnerable groups and people with disabilities exposed to the Blast, thereby preventing first responders from attending to their needs.

Since there was no official central body leading the needs and rapid damage assessment data collection, first responders had to produce their surveys and questionnaires that included different sections to identify their beneficiaries' needs. While most surveys included a section about disability, many did not include questions about age groups, disability types, and the assistive devices and auxiliary aids needed. Moreover, they did not address accessibility in the rapid damage assessment surveys. The absence of a unified needs and rapid damage assessment survey, the lack of protection of personal information, and the lack of a trusted body in charge of conducting surveys restricted many people from taking part in the needs assessment collection.

Furthermore, people with hearing impairments had difficulty completing the needs assessment survey over the phone since many of them could not communicate well with surveyors.



Flaws in the Rapid Damage Building Assessments and Reconstruction Initiatives

Since participants were involved in assessing the rapid infrastructure and building damage, many did not focus on accessibility provisions in their damaged building assessments. The absence of a leading organization or institution to lead and manage the rapid damage building assessment has reduced inclusivity during the mapping and rebuilding work for the damaged built environment in the Beirut Port area.

Participants involved in documenting infrastructure and building damage had high expectations from the Lebanese Order of Engineers to lead, coordinate, and manage the rapid building damage assessments. However, many local and international NGOs were not satisfied with the Order of Engineers' involvement. Many interviewees stated that the Order of Engineers was slow in producing a unified building damage assessment that local and international organizations could have used instead of drafting their own damaged building assessments. In contrast, other areas were excluded and were never surveyed.

On the other hand, the building damage assessments were generic. They focused on evaluating the building's stability and safety structure without addressing accessibility needs for people with disabilities, the elderly, and children. Furthermore, many rebuilding and reconstruction participants faced legal obstacles in obtaining permission from their respective municipalities to complete the repair and reconstruction work for both rented and owned buildings. Many owners and renters were refused a permit for reconstruction. Some participants had to offer cash payments to homeowners and tenants to complete their essential repair work without addressing accessibility provisions to overcome such constraints. Recovery interventions that do not address accessibility during the building damage

assessments can leave people with disabilities and vulnerable groups excluded from securing accessible shelter and benefiting from different recovery initiatives. Another challenge that could limit creating an accessible built environment in the Beirut Port area lies with the lack of national accessibility standards or guidelines that developers, architects, and contractors can abide by during the planning and reconstruction phase.

Most damaged building assessments focused on assessing features that provide safety and security inside residential buildings. While most residential buildings in the Beirut Blast area are composed of a minimum of two to three floors that can either be reached by stairs or elevators, assessing elevator and staircase damage were never addressed. Most reconstruction participants focused on rapid residential repairs to allow residents to swiftly return to their apartments. Moreover, urgent evacuation and renovation work was proposed for severely damaged residential and heritage buildings without addressing the reconstruction cost and schedule to complete the work.



Beirut Recovery Response and Limitations of Law 220/2000

While most participants involved in Beirut Blast Recovery are familiar with the Lebanese Disability Law 220/2000 and its definition of disability, some of them adopt the medical definition of disability. This model promotes special services. Others refer to the social model and work on enhancing their services to be accessible to people with disabilities. Accessibility plays a significant role in integrating people with disabilities and gaining access to services. The social model of disability defines it as something imposed on top of people's impairments by attitudes and barriers limiting their full participation in society. People with disabilities can fully participate in society once services and built environments are

accessible. For many organizations and architecture firms involved in repairing and reconstructing buildings affected by the Blast, removing physical barriers and enhancing the reach and circulation of people with mobility impairments in buildings is their primary focus without addressing other disability types. They did not address other population groups such as children, the elderly, and people with different body shapes and sizes. The lack of accessibility guidelines for various disabilities and the scarcity of inclusive design knowledge, in addition to the limited resources during the implementation phase, are the main constraints that can restrict reconstructing Beirut inclusively after the Blast.

Access to information is another essential factor that many organizations look at during the Beirut Blast emergency response. Several methods were used to provide information about the various recovery and needs assessment services that first responders offered to beneficiaries. Some used different social media platforms, while others circulated infographics over WhatsApp with the various response initiatives. Others provided emergency hotline services that were inaccessible for people with visual and hearing impairments.

Many disability organizations and activists involved in Beirut Blast recovery and needs assessments pressured the government to equally include people with disabilities affected by the Blast in its social protection plans, just like the government did with Lebanese Army soldiers who had disabilities. Such pressure and demand led the government to endorse Decree 196-2020 on December 3, 2020. The decree gives compensation and pensions to the first category (the families who lost family members or what the Lebanese government considers as martyrs) where it equates between those who lost their lives in the Beirut Blast with Lebanese Army martyrs. On the other hand, the decree includes in its second category people with temporary or permanent disabilities. They can now benefit from the health coverage plan under the National Social Security Fund as stated in Law 220 and Decree 13955-1963.¹⁴

¹⁴ Arafat, N. (2021, February 26). *Those whose bodies were bombed, remain uncompensated*

أجسادهم. Retrieved February/March 2021, from [agenda.com](https://www.legal-agenda.com)

من سكن التفجير يبقون بلا تعويض | Legal Agenda (legal-agenda.com)

Decree 196-2020 excludes wounded and injured people from benefiting from compensation or medical treatment; it did not specify whether people with severe injuries can be covered during their medical and rehabilitation phase. The Lebanese government includes an article in its 2021 budget, article 35, that exempts any staff and employees who have disabilities from the Beirut Blast from paying any taxes on their salaries and wages. However, it does not exempt people with disabilities who lost their jobs after the explosion, caregivers, and elderly people. People with injuries that resulted in permanent disabilities after the Blast must obtain disability cards from the Ministry of Social Affairs (MoSA) to claim their entitlements. People with permanent disabilities must provide medical documentation and this process takes a while before they are approved. While Law 220/2000 states in its article 27 that people with disabilities having disability cards are entitled to full healthcare coverage from the Ministry of Public Health for medical operations, physiotherapy, speech therapy, and assistive devices costs are not covered.

Few private hospitals cover urgent medical operations for people with disability cards; additionally, remaining healthcare services also do not cover these costs. The Lebanese government is failing to comply with and implement Law 220/2000. It prohibited people with disabilities from exercising their equal rights in gaining access to mainstream services since it did not secure the financial resources to cover healthcare, education, employment, and access to services.

To support the most disadvantaged group affected by the Beirut Blast, the Lebanese government allocated a cash payment fund of LL400,000 and assigned the Lebanese Army to give this stipend to people who qualify for receiving it. However, this financial support is insufficient to cover auxiliary aids and assistive devices that people with disabilities may need.

With the absence of commitment from the Lebanese government, people with disabilities affected by the Blast are again excluded from having their equal right to gain access to mainstream education, employment, and services and are therefore restricted from being fully integrated into society.

Chapter Five: Conclusion

Inclusive Procedures for Developing a Lebanese Emergency & Disaster Management Plan

Although several emergency and recovery initiatives emerged immediately after the August 4 Blast to assist and provide support for the victims, much more remains to be done to cover the most vulnerable and marginalized groups.



Figure 5.1: Inclusive Disaster Management

The outcome findings from analyzing the emergency and recovery response after the Blast revealed that many participants did not recognize the social exclusion of people with disabilities exacerbated during the Blast. Such exclusion had a negative outcome on vulnerable groups, including people with disabilities whose different needs were ignored during the recovery phase. Figure 5.1 highlights that with the lack of inclusive disaster management, absence of a leading body, lack of open access to information, training, failure to implement law 220/2000, limited cash resources, shortage in accessibility assessment and knowledge, and legal framework have all influenced the social inclusion of people with disabilities during the Beirut Blast recovery interventions. Although the Lebanese government developed a crisis response plan from 2017-2020, the plan did not include the perspectives and inputs of people with disabilities and different disability organizations. Since the Lebanese crisis

response plan was not implemented during the Beirut Blast, civil society, local and international NGOs, and UN agencies had to lead the recovery initiatives. However, many lacked the training and tools to obtain accurate figures and statistics about the total number of people affected by the Blast. With the absence of open access to information and the absence of disseminating risk information about the number of people with disabilities residing in the affected area before the Blast, participants could not map the vulnerable groups; people with disabilities exposed to the Blast could not receive any support or assistance. Many of the recovery interventions focused on repairing damage to provide safety and security and did not address accessibility of residential buildings. The absence of a leading organization or institution to lead and to manage the rapid damage building assessment has reduced the inclusivity interventions during the mapping and rebuilding work for the Beirut Port area's damaged built environment. Legal obstacles in obtaining permission from municipalities to repair and reconstruct forced participants to offer homeowners and tenants cash payments without addressing accessibility provisions. The Lebanese government's failure to comply with and implement Law 220/2000 has led to excluding people with disabilities affected by the Blast from the benefits of recovery interventions.



Recommendations

Proactive procedures must be taken in Lebanon to incorporate inclusive emergency and disaster risk analysis and management that addresses minority and socioeconomically disadvantaged children, teenagers, elderly, migrants, and refugees, in addition to people with disabilities and those who have injuries that resulted in permanent disabilities. Adopting a holistic inclusive approach and attending to people with disabilities and those residing near the Blast area during all the stages of rebuilding and reconstructing Beirut is vital in guaranteeing that their needs are fully addressed and implemented.

The first recommendation includes establishing potential partners from other disciplines to draft a national emergency preparedness plan and policy that sets the prominent roles and duties for each sector to assure that all needs are met during any recovery and response emergency event. Another recommendation is drafting a national accessibility and inclusive design guidelines that can enforce the implementation of law 220/2000. Moreover, coordinating with accessibility specialists, disability NGO groups, and giving small and medium enterprises (SMEs) incentives to adopt inclusion by making their premises accessible and employing people from different age groups, gender, and disability types. Finally, allocating a central unit or body to produce needs assessment surveys and coordinate with various municipalities and organizations and allocating cash resources to enable municipalities and disability organizations to collect information and exchange and disseminate risk information on one central platform is crucial in responding to vulnerable groups' needs during emergencies and disasters.



Inclusive Action Plan

The following action plan and guidelines reflect a Conceptual Framework's calls for a holistic approach, cutting across all disaster reduction and recovery initiatives generated from mapping the recovery and needs assessments and response during the Beirut Blast.

Drafting a national inclusive emergency and recovery plan

- **Inclusive emergency and recovery plans** should have a full scope that supports and addresses access to the physical infrastructure, rehabilitation services, mental health support, independent living, and it should support decision-making for vulnerable groups, including people with disabilities.
- **Assistive devices, rehabilitation services, accessible shelter and housing, and basic needs supplies**, such as food and water, should be addressed as part of the damage and impact assessments.

Adopting the participatory approach/ consultations with diverse people

- **Vulnerable groups and people with disabilities and specialized disability organizations (DPO)** should be included as stakeholders to support the development, implementation, monitoring, and evaluation of an inclusive national emergency preparedness plan.
- **Potential partners should be identified to address inclusive guidelines and accessibility standards** at the national level where all provisions are covered, including external and internal environments, transportation, and evacuation emergency plans.
- **Potential partners should collaborate to create a central body** to improve the quality of data and statistics and facilitate the use of any existing and new data collection tools to address disability data needs, mainly risk information.

Amending Law 220/2000

- **Law 220/2000 definition of disability** should be amended and include people with mental health conditions, intellectual disabilities, and people with chronic diseases.
- The Law should be enforced, and compliance must be monitored to ensure that people with disabilities have their equal rights in accessing healthcare, education, employment, and basic services, and it should include emergency and disaster events.

Mandating Inclusive design/ accessibility guidelines in reconstruction

- **Accessibility and inclusive design should be included in Beirut construction policy reforms** to ensure that all services, information, and communication are accessible for diverse people and vulnerable groups, including people with various disabilities.
- **Highly qualified experts and specialists in implementing inclusive construction and communication should** monitor and guide the rebuilding and reconstruction of Beirut inclusively.
- **A historic preservation committee should be established to draft inclusive policies for preserving and enhancing** accessibility for historic and heritage buildings.
- **Order of Engineers and Architects (OEA)** should enforce Law 220/2000 by monitoring the implementation of the accessibility / inclusive design standards and guidelines during the planning and reconstruction phases.

Establishing a central governance and endorsing legal policy and framework

- **Central governance** should be established to coordinate the recovery work with various ministries, municipalities, NGOs, and disability organizations to avoid duplication of activities and to guarantee that all groups and geographical areas are covered.
- **A new decree or legal policy and framework** should be endorsed that permits repair and construction work and accessibility enhancements to go ahead at rented and owned buildings.

Allocating government financial protection schemes

- **The government should allocate financial protection schemes** to safeguard the inclusion of vulnerable groups and people with disabilities.
- **A qualifying criterion should be identified to promote opportunities for people with disabilities** to contribute to their social protection and poverty mitigation programs such as cash-for-work and cash-for accessibility enhancement schemes.
- **Government emergency funds should be allocated** for scaling up social protection schemes of vulnerable groups and people with disabilities in emergencies and disaster events to cover financial resources and funds for the implementation of inclusive initiatives, accessibility enhancements, and rebuilding inclusive built environments.
- **Governmental incentives** such as exemption from taxes for stakeholders and small and medium enterprises (SMEs) should be endorsed to promote the full integration of people with disabilities in mainstream services.

Training and capacity building

- **Cross-sector learning, training, and capacity building** should be facilitated to ensure that first responders, community members, and organizations can identify risks and barriers, and these should cover the diverse needs of people, including vulnerable groups and people with disabilities.
- **Government officials such as municipality members should be trained on post-emergency needs assessments and recovery** planning to strengthen the response capacity, coordinate and support post-emergency assistance with other stakeholders.
- **Civil society and youth generation should be advocated and involved in humanitarian services** that prepare and train them to deal with emergency evacuation of people with disabilities and respond to their needs during any future disaster and emergency events.

Developing academic programs, research, and awareness campaigns

- **Universities should develop their programs and curriculum to teach and adopt inclusion in different multi-disciplines** (inclusive design for architecture, design, and engineering, inclusive education, inclusive healthcare, inclusive business services, and SMEs, etc.).
- **More research should be carried out** to study the benefits of adopting the inclusive approach and its impact on supporting the identification of investments benefitting not only persons with disabilities, but also their families and communities.
- **Media awareness campaigns about inclusive emergency and disaster management** should be produced for the public and private sectors.

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