

A COMPREHENSIVE URBAN RESILIENCE MASTER PLAN FOR BEIRUT

A roadmap for a resilient future

AT A GLANCE

Country Lebanon

Risks Natural hazards exacerbated by rapid urbanization, climate change, and socioeconomic shocks and stressors

Area of Engagement Scaling up the resilience of cities

The Comprehensive Urban Resilience Master Plan for Beirut will provide city authorities with a strategic plan for addressing the city's shocks and stressors and related vulnerabilities.

A BUSTLING METROPOLIS STRADDLING AN ACTIVE FAULT SYSTEM

Representing 75 percent of Lebanon's gross domestic product, Beirut is both the political center and economic hub of the country. Marked by rapid urbanization over the past few decades, the greater Beirut area has more than two million residents, including nearly 500,000 who live within Beirut proper. Long a safe haven for displaced people, the densely populated capital city is currently home to a large population of refugees fleeing the conflict in neighboring Syria.

Beirut and its growing population face a multitude of hazards, both natural and man-made. The city's seismic risk is considered by many experts to be among the most serious. Located along an active fault system, Beirut has not been hit by a major earthquake since 1759, but the likelihood of another major one is high. Most of Beirut's population live in poorly constructed homes which would be unlikely to withstand a major seismic event. Beirut is also threatened by the prospect of severe weather events and increasing stress on its water resources due to the impacts of climate change. Security incidents and overstretched infrastructure are among the other hazards facing Beirut.

Map of project focus area



BUILDING A ROADMAP FOR A RESILIENT FUTURE

Recognizing these looming hazards, the municipality of Beirut worked with the Global Facility for Disaster Reduction and Recovery (GFDRR) and the World Bank to proactively prepare the bustling metropolis for a resilient future. This joint effort paved the way for Beirut's Comprehensive Urban Resilience Master Plan, which is designed to give decision-makers a clear view of the city's shocks and stressors and the specific actions that are needed to address them. In developing the Resilience Master Plan, which is expected to be released later in the year, Beirut authorities followed a three-stage process to address a wide variety of natural and man-made vulnerabilities:

- ▶ **Resilience Diagnostic.** Data gathering and analysis provided a comprehensive understanding of the city's potential shocks and stresses and related vulnerabilities and key gaps and challenges in building resilience. This process covered data for city conditions, disaster risks, existing resilience measures and governance structures.

- ▶ **Resilience Strategy.** Informed by the resilience diagnostic, a resilience strategy identified three priority areas for actions going forward: enhancing risk governance across the entire resilience cycle from risk assessment to recovery, taking active steps to reduce the risks posed by shocks and stresses and related vulnerabilities, and enhancing preparedness for major disasters through the development of early warning systems and comprehensive response and recovery plans.
- ▶ **Action Plans.** Over a dozen action plans were developed and grouped into three programs of action based on the three priority areas. Each action plan tackled the likely timeframe for implementation, the linkage to other action plans, the likely cost, the potential cost benefit, and their alignment with local, national, and global frameworks such as the Sendai Framework for Disaster Risk Reduction.

LESSONS LEARNED

Engagement with a wide range of stakeholders is critical to getting a full picture of resilience gaps and challenges.

Every stage of the Resilience Master Plan put a heavy emphasis on stakeholder engagement. Beirut authorities sought inputs from a wide range of stakeholders representing the public, private and nongovernmental sectors, providing a rich picture of the city's resilience gaps and challenges. During the first stage of the Resilience Master Plan, an innovative online survey tool was trialed which allowed authorities to glean quantifiable and comparable insights into the city's resilience needs from multiple stakeholders.

Resilience planning must be viewed as a "living framework" that responds to evolving risks and hazards.

Against the backdrop of intensifying climate risk and rapid urbanization, Beirut's vulnerabilities are constantly evolving. Accordingly, the Resilience Master Plan provides for the establishment of a cross-sectoral platform for disaster risk management which will oversee regular updates of the Resilience Master Plan and implementation of the action plans. The platform will be comprised of city-level agencies, national agencies, and nongovernmental organizations, among others.



Nearly
500,000
residents covered by
master plan

DATA FOR RESILIENCE

The development of the Resilience Master Plan has yielded critical data and information for understanding the shocks and stresses facing Beirut, as well as the city's capacity to address its vulnerabilities to these shocks and stresses.

COMPREHENSIVE RESILIENCE STRATEGY

The analysis of this data and information has paved the way for a comprehensive resilience strategy for all of Beirut proper, which has nearly 500,000 residents. The resilience strategy, paired with the action plans also developed as part of the Resilience Master Plan, has provided Beirut authorities with a roadmap for building the city's resilience.

MOBILIZING AND PRIORITIZING INVESTMENT

The Resilience Master Plan is expected to serve as a platform for securing and prioritizing private and public investment to address the city's resilience needs. The cross-sectoral platform for disaster risk management, called for in the Resilience Master Plan, could also act as a coordinating mechanism for investment proposals.

"Beirut is a diverse city with a remarkable ability to overcome challenges and to continuously build its future. Yet, this inherent ability needs to be strengthened and developed into a comprehensive Resilience capacity, with Resilience embedded in all development planning, in order to enable improved preservation, adaptation and sustainable growth."

-- Matilda El-Khoury, Councilor, Municipal Council of Beirut