MISCELLANEA GEOGRAPHICA – REGIONAL STUDIES ON DEVELOPMENT
Vol. 29 • No. 4 • 2025 • pp. 213-220 • ISSN: 2084-6118 • DOI: 10.2478/mgrsd-2025-0015

From top-down to people-centred urban recovery: a Beirut case study

Abstract
Urban recovery which follows structural devastation presents a multitude of challenges. While top-down recovery approaches are relatively common, there is a growing emphasis on people-centred design, which prioritises the needs and visions of the primary users of the structures involved in recovery. This article identifies the shift from top-down to bottom-up approaches in urban recovery through three case studies from Beirut: the Beirut Central District, Al-Masar Al-Akhdar, and the Karantina neighbourhood. Based on in-situ research, case studies were selected to highlight the contrasting outcomes of top-down versus people-centred recovery efforts. These efforts are particularly evident after the explosion at the port in 2020. Unlike the post-war recovery, the post-blast recovery underscores the complexity and sustainability of people-centred recovery. The article concludes that people-centred approaches to recovery more effectively meet the needs of local communities while fostering the long-term sustainability of the recovered neighbourhoods.

Keywords
Urban recovery • top-down approach • people-centred design • participatory planning • public spaces • neighbourhood plans

Dominika Verešová

Faculty of Architecture, Department of Urban and Regional Planning, Silesian University of Technology, Gliwice, Poland
e-mail: Dominika.Veresova@polsl.pl

Received: 28 October 2024
Accepted: 25 February 2025

Introduction

Post-disaster urban recovery is a complex and multifaceted challenge which extends beyond mere physical and socio-economic reconstruction. As Armina Pilav (2018) notes, disaster-induced urban change is often rapid, unpredictable, and difficult to control, which leads to the failure of top-down renewal approaches. Conversely, bottom-up approaches have demonstrated greater effectiveness in such contexts, likely due to a greater resilience of the population, solidarity, and community cohesion following collective traumatic experiences (eds Piplas et al. 2019). This underscores the importance of prioritising people-centred recovery approaches, which empower citizens in the design and implementation of recovery plans. Schilderman (2010) corroborates this through his research on various reconstruction models, namely donor-driven, owner-driven, and people-driven approaches. While donor-driven reconstruction, predominantly applied in developing countries, often fails due to a lack of understanding of local conditions, people-driven reconstruction encompasses all individuals affected by disasters, not just property owners.

Recent literature reveals a noticeable paradigm shift in urban planning—moving away from traditional land-centred approaches toward more inclusive, people-oriented strategies which prioritise the needs and assets of local communities (Hadžimuhamedović 2018; Khodor & Mrad 2022; Sanderson 2023). This shift is particularly evident in Beirut, the capital of Lebanon. After the civil war (1975–1990), conventional Lebanese top-down approaches to reconstruction resulted in an inhibited recovery, increased dependency, wasted resources, the production of unsuitable housing units, and negative impacts on the socioeconomic conditions of the victims (Kellett & El-Masri 2001; Beacker 2013; Badescu 2017). Following the ammonium nitrate explosion at Beirut's port (4 August 2020), the literature shows a clear movement away from traditional top-down planning toward people-centred recovery (Fawaz & Harb 2020; Khodor & Mrad 2022; Al-Harithy & Yassine 2024).

The focus of this article is the effectiveness of the implementation of urban structural recovery projects following both the civil war and the port explosion in Beirut. The aim is to identify the social, political, and local context of top-down and bottom-up approaches to urban recovery which characterise these post-war and post-disaster periods. Additionally, the article discusses the shift from top-down recovery to people-centred urban recovery, while also debating the success of implemented neighbourhood recovery plans.

Research questions

- How do the top-down and bottom-up urban recovery approaches differ in post-war and post-disaster Beirut?
- How has the inclusion or exclusion of the people-centred approach impacted the long-term sustainability and community acceptance of urban recovery projects in Beirut?
- How successful has the people-centred, urban recovery approach been in post-disaster and post-war Beirut?

Methodology

Semi-structured interviews were used for data collection, which allowed for the flexible adaptation of questions based on the respondents' answers. Respondents were selected based on their direct experience with urban development in the city of Beirut. The sample consisted of seven experts in the urban development and history of Beirut. The interviews also included members of the general public. One of the interviews was

© 2025 Author, published by Sciendo. This work is licensed under the Creative Commons Attribution 4.0 License.

Vol. 29 • No. 4 • 2025 • pp. 213-220 • ISSN: 2084-6118 • DOI: 10.2478/mgrsd-2025-0015

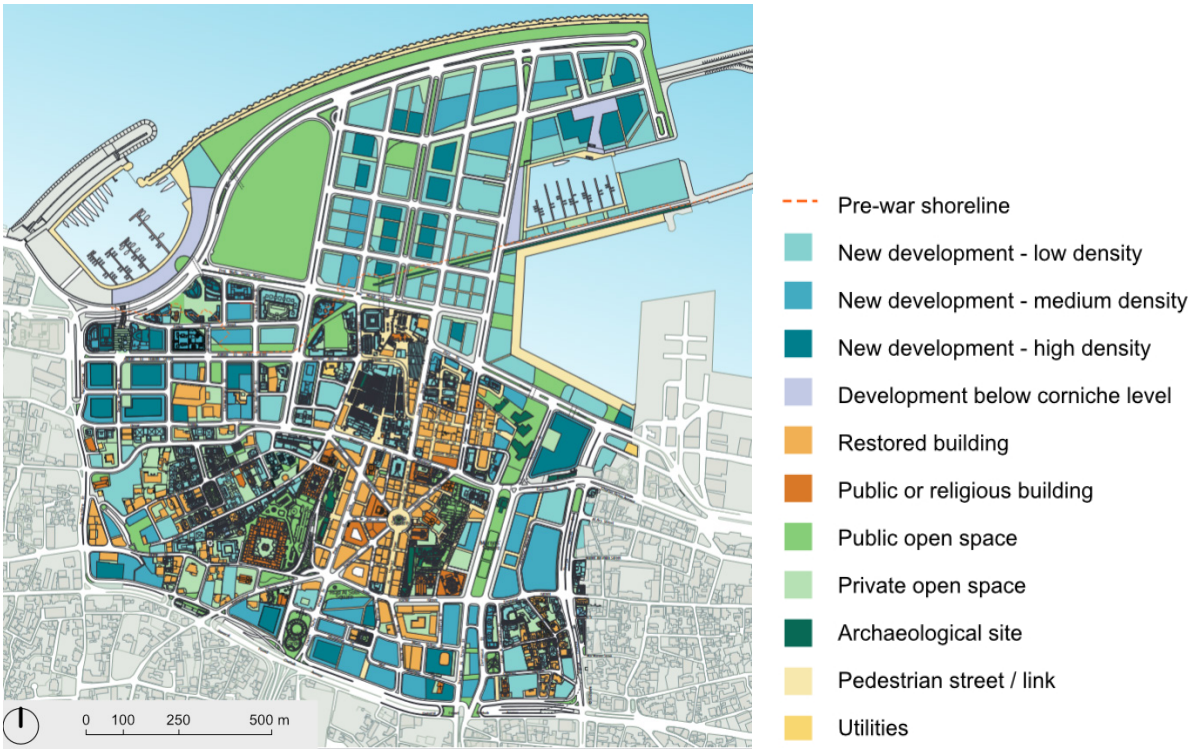

Figure 1. Beirut Central District Master Plan created by Solidere's architects and urbanists in 2014
Source: Solidere Annual Report

conducted online via video call and lasted nearly 60 minutes. The remaining interviews took place in Beirut during the author's in-situ research.

Case studies for this research were selected through in-situ research conducted at the end of July and the beginning of August 2023. The selection of case studies was made with the aim of identifying and analysing both the top-down and people-centred recovery of physical infrastructure at the neighbourhood level. This selection reflected diverse neighbourhood recovery strategies and the subsequent implementation of smaller urban projects, aimed at recovering public space within the quarter chosen for the study. Each case study was analysed through the following three steps:

1. A description of the situation which led up to the need for structural recovery.
2. An overview of the project's progression.
3. Presentation of the findings from the visit, and project conclusions.

Research

Beirut Central District: case study I

The 15-year civil war resulted in extensive destruction of the city's physical structures, particularly in its historic centre. What was once a vibrant, shared space became a buffer zone during the war. This area was traversed by the demarcation line between the two combatants, which over time turned into an overgrown strip containing dense vegetation, earning the name the 'Green Line'. This line starkly divided the city centre into a predominantly Christian east and a largely Muslim west (Khalaf & Khoury 1993). After the war, there were calls to preserve this area and create a linear park as a unifying element between the two sides of the city (Interview A 2023). However, the voices of professionals, activists, and residents were ignored, as the government had different plans for the historic centre.

In 1994, a joint-stock real estate company named Solidere was established. Approved by the government under the prime minister, the billionaire Rafik Al-Hariri, the company was tasked with the reconstruction of the city's devastated centre (Baecker 2013; El Khoury & Ardizzola 2021). Its mission was to restore the historic city centre to its pre-war condition and to create a new Central District for all Lebanese citizens. The company was granted the authority to purchase land within the designated central area, offering compensation to the original owners in the form of shares in the company (Ragab 2011; Badescu 2017; Interview A 2023). The Beirut Central District reconstruction and development project (Fig. 1) currently covers 191 hectares, of which 118 hectares initially constituted the traditional city centre, and 73 hectares are an expanded area reclaimed from the sea (Solidere 2004). Despite the wealth of historical structures within this area, Solidere adopted to use the *tabula rasa* method—many buildings were destroyed, even though they could have been reconstructed (Ragab 2011; Interview A 2023). Professionals, academics, and local residents attempted to oppose the reconstruction strategy adopted for the Beirut Central District, drafting alternative strategies (Khalaf & Khoury 1993; Rageb 2011; Interview B 2023); however, their objections were largely ignored. Consequently, a significant number of residents vacated the area, as they were unable to afford the costs associated with rebuilding according to the newly imposed standards. They sold their properties to Solidere, a transaction widely perceived as coerced expropriation (Mango 2004; Van der Krabben at al. 2020). When the former owners sought to repurchase their properties, they faced prohibitively high prices, making reacquisition impossible. This situation led to a predominance of luxury real estate ownership by affluent foreign investors (Badescu 2017; Interview A 2023). Although periods of economic stability attracted world-class retail establishments, these remained inaccessible to the local population, who could not afford to shop at these

Vol. 29 • No. 4 • 2025 • pp. 213-220 • ISSN: 2084-6118 • DOI: 10.2478/mgrsd-2025-0015

Figure 2. Empty Beirut Central District, 2 August 2023
Source: photo by author

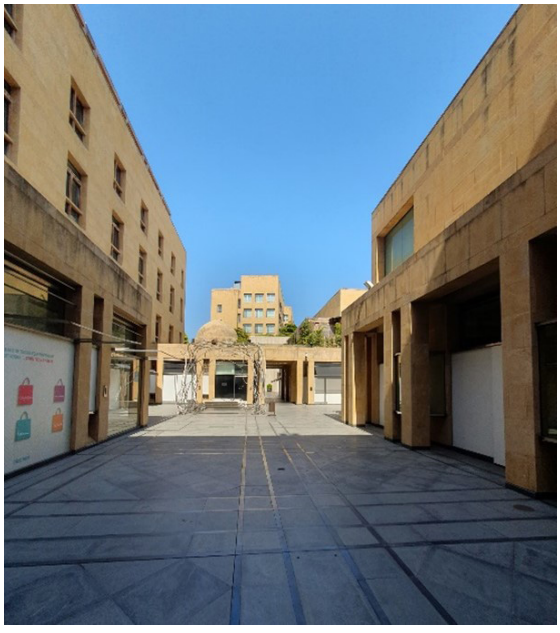

Figure 3. Empty Beirut Central District, 2 August 2023
Source: photo by author

places. Additionally, the wealthy foreign owners seldom actually visited Beirut.

Despite bold claims by Solidere of a place 'bustling with residents, daily visitors, and tourists', the reality is quite the opposite. The centre remains largely empty, and its infrastructure does not offer the functional diversity which Solidere advertises on its website (Fig. 2, 3). Once a vibrant area, it has been left unoccupied by, and unpopular with, Lebanese people (Ragab 2011; Interview C 2023), and is devoid of active life. The originally proposed operational period for the company of 25 years was extended to 75 years just four years after its establishment (Solidere Annual Report 2014), which has allowed it to continue functioning to this day. As such, the company still has the opportunity to return the city centre back to its glory and to benefit all Lebanese citizens, as was originally intended. According to Respondent B, discussions with professionals regarding a shift in the development strategy, are currently underway (Interview B 2023). Whether a people-centred approach will be included in the new strategy, remains unknown.

Mar Mikhael Square: case study II

The Hekmeh-Turk highway project, also known as the Fouad Boutros Highway, was proposed in the 1950s as part of the Ecochard master plan. A key component of the plan was the construction of urban highways which traversed or bypassed the city of Beirut (Verdeil 2005; Stop the Highway 2014a). While many of these roads were completed, some were delayed by the onset of the civil war, including the Fouad Boutros Highway. This was intended to pass through three neighbourhoods in east Beirut (Achrafieh, Rmeil, and Medawar) which contained significant architectural heritage. Prior to the war, the municipality had already expropriated land from the owners for the purpose of building this highway (Interview D 2023). However, when the municipality revived the project in May 2012, it faced strong opposition from professionals, civil society groups, and residents (Jabri 2023). This resistance led to civil mobilisation against the Fouad Boutros Highway, which sought to unite NGOs, associations, and groups, alongside experts, professionals, and academics from various urban-related fields, as well as the general public. They expressed their clear opposition to the project through a petition with a proposal for a green linear park (Stop the Highway 2014b). As a result, the project was halted.

A new project called Al-Masar Al-Akhdar (Fig. 4) was proposed, aiming to use the acquired municipal land for the development of a green linear park known as The Green Spine (this is similar to the concept of the Green Line proposed after the civil war instead of the demarcation line). The project was envisioned by the renowned Lebanese urban planner Habib Debs with support from Jad Tabet, and it was designed in collaboration with Francis Landscapes (Beirut Urban Lab 2023; Interview D 2023). Unfortunately, on 4 August 2020, a massive explosion at the port devastated a significant portion of the project area. But this did not deter the architects and urban planners from Beirut Urban Lab, who have been leading the overall project, from continuing their work. A comprehensive report on the ongoing urban processes in the affected area was prepared (Beirut Urban Lab & ACTED 2021). Additionally, data on 220 plots along the highway's trajectory were documented and collected through field research, observation, interviews with residents, and land title analysis (Beirut Urban Lab et al. 2021). These data are intended to facilitate the project's implementation. A small section of the area, The Mar Mikhael Square, was selected as a pilot project; this would serve as the basis for the continued implementation of the other parts of the Al-Masar Al-Akhdar project. Urban planners from Beirut Urban Lab, following a thorough participatory process conducted shortly after the explosion, proposed a people-centred urban design intervention to enhance pedestrian and social spaces (Fig. 5). After incorporating residents' feedback and finalising the project design in 2020, they applied for the necessary construction permits. Although the project faced complex bureaucracy, it received approval after two years. Construction began in March 2023, and was due to be completed by July of the same year. Representatives from Beirut Urban Lab were present on-site even during the construction (Interview D 2023). However, during this phase, the project was halted at the request of the citizens themselves.

Vol. 29 • No. 4 • 2025 • pp. 213-220 • ISSN: 2084-6118 • DOI: 10.2478/mgrsd-2025-0015

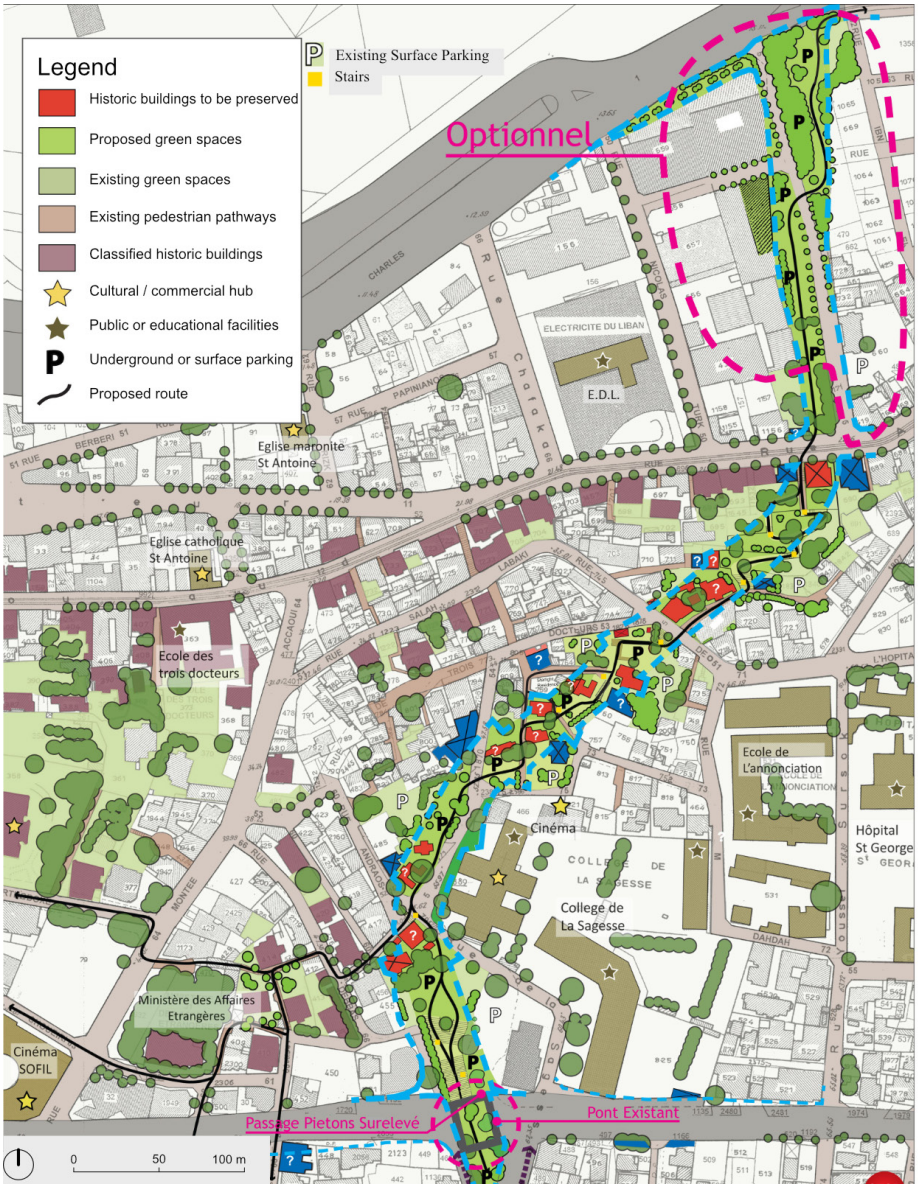

Figure 4. The Al-Masar Al-Akhdar master plan, 2020
Source: Stop The Highway

It might seem that the project had successfully progressed through all stages—from its inception, supported and partially initiated by the wider public; through a comprehensive analytical and design phase involving professionals, experts, and the residents of the affected areas; to its implementation, during which Beirut Urban Lab staff were present on-site. However, in the context of political and religious confrontations, the residents were influenced by significant stakeholders in the area and subsequently rejected the project out of unfounded fear. As a result, the deputy mayor was forced to halt the project under pressure from political factions in the area (Interview D 2023). In response, Beirut Urban Lab promptly created a petition (Beirut Urban Lab 2023b), which was rapidly signed by 270 professionals specialising in urban planning, architecture, landscape design, and transportation. The petition aimed to not only counter false information but also to express the support which the project had from the expert community across Lebanon. The petition was published in French and Arabic by the Lebanese newspapers *L'Orient-Le Jour* and *An-Nahar*. According to an interview with Respondent B from August 2024, the project still remained suspended a year and a half later (Fig. 6, 7).

Karantina, Al-Khodor: case study III

Karantina is a low-income neighbourhood in the north-eastern part of Beirut. It is situated east of the port and north of the Charles Helou highway, which significantly isolates it from the rest of the city. The area comprises several sub-neighbourhoods which are inhabited by refugees from Palestine and Syria, as well as by migrant workers from Lebanon. The explosion on 4 August 2020—caused by ammonium nitrate—inflicted severe damage to both the lives and the physical infrastructure in the neighbourhood, making it one of the most devastated areas in all of Beirut. Despite the substantial national and international aid which the city received following the explosion, Karantina

Vol. 29 • No. 4 • 2025 • pp. 213-220 • ISSN: 2084-6118 • DOI: 10.2478/mgrsd-2025-0015

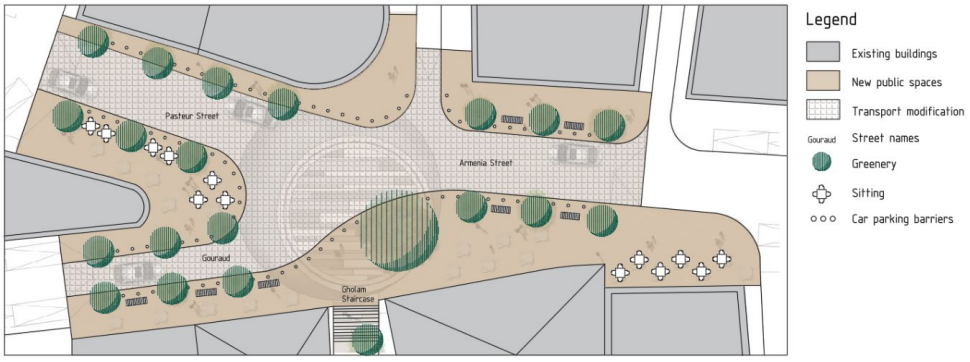

Figure 5. The Mar Mikhael Square master plan
Source: Own elaboration based on Beirut Urban Lab

Figure 6. Halted construction works on The Mar Mikhael Square, 1 August 2023
Source: photo by author

Figure 7. Banner with visualizations of the project on the construction site, 1 August 2023
Source: photo by author

received the least attention (Al-Harithy & Yassine 2023). The lack of sufficient assistance, combined with extensive prior research in the area, prompted Beirut Urban Lab representatives to focus increased attention on the neighbourhood's recovery.

Researchers from Beirut Urban Lab conducted in-situ research shortly after the explosion to assess the situation in the Karantina neighbourhood. After identifying the most pressing issues and the key stakeholders in the area, they realised that the area needed a long-term recovery plan. Over the course of a two-year project, they developed a holistic urban recovery strategy. It has been structured as a five-step project and serves as a strategic framework for the recovery of the Karantina neighbourhood (Interview E, 2023). The project consists of the following steps:

1. Descriptive Memory - pre-diagnosis to identify cross-border issues (Al-Harithy et al. 2021)
2. Strategic Diagnosis - delivery of diagnostic reports (Al-Harithy et al. 2022a)
3. Strategic Framework - identification of recovery strategies (Al-Harithy et al. 2022b)
4. Action Plans - transformation of proposed action plans into concept notes (Al-Harithy et al. 2022c)
5. Monitoring and Indicator System - adjustment and assessment of the framework (Al-Harithy et al. 2023)

A crucial part of the process was community trust-building through bottom-up initiatives, particularly via the engagement of citizen scientists. The 12 citizen scientists involved are active local residents selected and trained by Beirut Urban Lab (Interview E 2023). Those selected represent a diverse cross-section of Karantina's population; they typically have basic literacy skills but lack a university degree. Their role, which is paid and continues beyond the project's completion in 2022, includes collecting data, supervising works, organising workshops, being intermediaries between contractors and Urban Lab, resolving tensions, and informing about current issues (Interview E 2023). In parallel with the development of the strategic framework, Beirut Urban Lab implemented a spatial intervention in the Al-Khodor sub-neighbourhood to engage community groups and apply a participatory method. This spatial intervention was one of the action plans carried out in Karantina—Action Plan 13—which was focused on creating an easily accessible open space network (Al-Harithy et al. 2022c). The intervention started with the completion of surveys and heat maps which identified areas of concentrated

Vol. 29 • No. 4 • 2025 • pp. 213-220 • ISSN: 2084-6118 • DOI: 10.2478/mgrsd-2025-0015

activity. These demonstrated that Mashgara Street was the most significant public space within the Al-Khodor sub-neighbourhood (Al-Harithy & Yassine 2023). In June 2021, three co-design workshops were conducted in order to gather the residents' input concerning site selection and its future design, and to finalise and approve the design proposal for an inclusive, safe, and well-serviced public space. During these workshops, residents had access to visual and 3D materials to help them better understand the plans (Al-Harithy & Yassine 2023; Interview E 2023). Construction plans were drawn up by a team of designers based on the outcomes and visions obtained from the workshops (unfortunately, the plans are not accessible). Implementation began after obtaining permits from the Beirut municipality (whose representatives were part of the consultations) in December 2021, and concluded in May 2022 (Interview E 2023). Throughout the process, the trained citizen scientists were present to address emerging issues and ensure the project's smooth execution. They continue to fulfil their role today by overseeing the functionality and quality of the resulting community space.

During the author's in-situ research in August 2023, the public space was found to be undamaged, well-maintained, and actively utilised (Fig. 8, 9). The project's positive outcome and the necessity for people-centred urban recovery was affirmed by its authors, Al-Harithy and Yassine (2023), in a later article. The success of the recovery project will continue to be measured through a monitoring system based on several indicators; these are to be assessed every five years (Al-Harithy et al. 2023). The overall project stands as a model for successful urban recovery, achieving a balance between top-down and bottom-up planning approaches.

Figure 8: Mashgara Street after the implementation of spatial intervention, Summer 2023
Source: photo by author

Figure 9: Mashgara Street after the implementation of spatial intervention, Summer 2023
Source: photo by author

Discussion and Conclusions

The planning for the reconstruction of the devastated city began during the civil war with debate among architects and planners (Ragette 1983). Unfortunately, these professional discussions on how to seize the opportunity for improvement largely remained unrealised. The Taif Accords and the charismatic leadership of Prime Minister Rafiq Hariri were translated into a powerful but ultimately flawed reconstruction process (Bedascu 2017). Solidere's top-down decision-making, which excluded consultation and participation beyond its own representatives, has been described as an act of urbicide (Baecker 2013). This approach caused damage not only to the physical but also to the social fabric of Beirut (El Khoury & Ardizzola 2021). Today, the depopulated city centre stands as evidence that, despite generous public subsidies and incentives, the top-down recovery approach was unable to revive the heart of the city, generate urban life, or establish a functional economy to sustain it.

In contrast, the port explosion mobilised civil society, uniting a divided population in a common cause. While the admirable efforts of NGOs and syndicates did emerge, their work lacked a comprehensive approach (Fawaz & Harb 2020; Al-Harithy & Yassine 2023). However, the team from Beirut Urban Lab successfully developed such an approach for Karantina. They focused on community-trust building and citizen engagement, which highlighted the importance of a bottom-up approach. Despite numerous problems (population disagreements, bureaucracy, complex permit processes, project changes, re-consultations), their persistent work on people-centred recovery not only restored public spaces in the neighbourhood but also contributed to the sustainable development of this impoverished area.

The Mar Mikhael Square project remains a poignant example of stalled urban recovery. Despite the significant effort invested by both professionals and the general public, the pilot project was halted due to political and religious confrontations. This case study highlights that, even in a people-centred approach, other factors have a significant impact on the results of the recovery. Local, social, and political context should be studied before the beginning of participatory planning. These contexts have been partially explored in this article; however, future research should focus on both the internal (e.g., politics, stigmatisation, collective memory) and external factors (e.g., type of disaster, periodicity, disaster duration) which could also impact this process. Despite the challenges in the construction at Mar Mikhael Square, the project can still be considered a success. This success lies in the shift from a top-down to a people-centred recovery approach, which, unlike the post-war reconstruction, has become more evident following the port explosion.

Vol. 29 • No. 4 • 2025 • pp. 213-220 • ISSN: 2084-6118 • DOI: 10.2478/mgrsd-2025-0015

A key difference between the post-war and post-disaster recovery in Beirut lies in the involvement of key stakeholders in the planning process. While the post-war reconstruction followed a strictly top-down approach, it excluded affected public groups from the decision-making. The planning was concentrated in the hands of the elite government-established public-private company Solidere, which represented the perspectives of only a small segment of society. In contrast, both the urban recovery projects implemented after the port explosion adopted a bottom-up approach, aiming to involve a broad range of key stakeholders in the planning of neighbourhood recovery. These differing approaches to urban recovery led to starkly opposite outcomes in terms of long-term sustainability and community acceptance. The exclusion of a people-centred approach in the post-war urban recovery resulted in the public rejection of, and detachment from, the central district. Meanwhile, the inclusion of participatory methods in the post-disaster recovery produced two different results. The people-centred design in the Karantina area was based on a well-developed strategy co-created with local stakeholders. The project progressed gradually, step by step, ensuring inclusivity throughout the entire process. As a result, the implemented urban recovery solutions were warmly accepted by the local community, which actively maintains the newly created spaces—contributing to the project's long-term sustainability. The case study concerning Mar Mikhael Square highlights an attempt to incorporate a people-centred approach into urban recovery planning. While the strategy was co-developed with local stakeholders, the pilot project was halted during construction by the public themselves. This suggests that the mere inclusion of participatory methods in recovery planning is not always sufficient. There are several factors influencing public participation in post-disaster recovery which should be further examined, as they play a crucial role in determining the success of people-centred recovery approaches.

The results clearly demonstrate, through case studies, the significant limitations of the top-down approach, while simultaneously emphasising that participatory bottom-up approaches can effectively address these shortcomings. The selected case studies for the post-blast recovery, despite the methodological limitations, illustrate efforts to bring urban recovery closer to the needs of its main users—people. They are thus a good indicator of the direction urban recovery from physical destruction should take, emphasising the necessity of a participatory process in achieving sustainable outcomes. These findings contribute significantly to our understanding of the critical importance of local contexts, and the need for a more flexible, context-sensitive framework in urban recovery planning. This approach could ultimately foster more sustainable and resilient urban redevelopment in cities destroyed by man-made disasters.

Funding

Financial support for this research was provided by the Slovak Tatra Banka Foundation as a part of Education Grant Programmes; contract number 2023VZDstipVS009.

Acknowledgements

The author gratefully acknowledges representatives of Beirut Urban Lab for assistance with her research at their laboratory. Acknowledgments are also due to Professor Kostyantyn Mezentsev for his valuable insights.

ORCID

Dominika Verešová https://orcid.org/0009-0001-2189-1178

References

Al-Harithy, H & Yassine, B 2023, 'The co-production of a shared community space in Al-Khodor, Karantina, in the aftermath of the Beirut port blast', *Land 2023,* vol. 12, no.7.

Al-Harithy, H, Yassine, B, Bazzi, M, Cheaitli, A, El Chamaa, M, Ghaddar, A, Haddad, W, El-Jazzar, Ch, Tarhini S, Gosen, C & Shayya, R 2021, 'Descriptive memory' in *An Urban Recovery Strategy for Post-Blast Karantina*, ed. A El-Tayeb, Beirut Urban Lab Report. Available from: <http://api.beiruturbanlab.com/content/uploads/articles/196~BUL_Karantina_Descriptive_Memory-compressed-22-7-24.pdf >. [28 October 2024].

Al-Harithy, H, Yassine, B, Bazzi, M, Cheaitli, A, El Chamaa, M, Ghaddar, A, Haddad, W, El-Jazzar, Ch, Tarhini S, Gosen, C & Shayya, R 2022a, 'Strategic Diagnosis' *in An Urban Recovery Strategy for Post-Blast Karantina*, ed. A El-Tayeb, Beirut Urban Lab Report. Available from: <http://api.beiruturbanlab.com/content/uploads/articles/191~BUL_Karantina_Strategic_Diagnosis-compressed.pdf >. [28 October 2024].

Al-Harithy, H, Yassine, B, Bazzi, M, Cheaitli, A, El Chamaa, M, Ghaddar, A, Haddad, W, El-Jazzar, Ch, Tarhini S, Gosen, C & Shayya, R 2022b, 'Strategic Framework' *in An Urban Recovery Strategy for Post-Blast Karantina*, ed. A El-Tayeb, Beirut Urban Lab Report. Available from: <http://api.beiruturbanlab.com/content/uploads/articles/430~3-BUL_Karantina_Strategic_Framework-min.pdf>. [28 October 2024].

Al-Harithy, H, Yassine, B, Bazzi, M, Cheaitli, A, El Chamaa, M, Ghaddar, A, Haddad, W, El-Jazzar, Ch, Tarhini S, Gosen, C & Shayya, R 2022c, 'Action plans' in *An Urban Recovery Strategy for Post-Blast Karantina*, ed. A El-Tayeb, Beirut Urban Lab Report. Available from: <http://api.beiruturbanlab.com/content/uploads/articles/523~4-BUL_Karantina_Action_Plans-min.pdf>. [28 October 2024].

Al-Harithy, H, Yassine, B, Bazzi, M, Cheaitli, A, El Chamaa, M, Ghaddar, A, Haddad, W, El-Jazzar, Ch, Tarhini S, Gosen, C & Shayya, R 2023, 'Monitoring and indicator systems' in *An Urban Recovery Strategy for Post-Blast Karantina*, ed. A El-Tayeb, Beirut Urban Lab Report. Available from: <http://api.beiruturbanlab.com/content/uploads/articles/917~Indicator-systems-draft-3.pdf>. [28 October 2024].

Al-Harithy, H & Yassine, B 2024, 'A people-centered urban recovery strategy for Karantina (Beirut, Lebanon) in the aftermath of the Beirut port blast', *Oxford Research Encyclopedia of Natural Hazard Science 2024*. Available from: <https://oxfordre.com/>. [28 October 2024].

Badescu, G 2017, 'Post-war reconstruction in contested cities: Comparing urban outcomes in Sarajevo and Beirut', in *Urban Geopolitics*, eds J Rokem & C Boano, Routledge, London, pp. 17-31

Baecker, D 2013, 'Mapping a city onto itself: A note on the reconstruction of Beirut Central District', *SSRN Electronic Journal*, article number 2229687. Available from: <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2229687>. [28 October 2024].

Beirut Urban Lab 2023a, *The Mar Mikhael Square Project*. Beirut. Available from: <https://beiruturbanlab.com/en/Details/1931>. [28 October 2024].

Vol. 29 • No. 4 • 2025 • pp. 213-220 • ISSN: 2084-6118 • DOI: 10.2478/mgrsd-2025-0015

Beirut Urban Lab 2023b, *Petition to Support the Public Square Project at the intersections of rue Gouraud, Armenia, and Pasteur in Gemmayze/Mar Mikhael*. Beirut. Available from: <https://docs.google.com/forms/d/e/1FAIpQLSewYmNttIPKkOxh7SwMZgg3miHZ5k8STibGpNfcHpWgdkakHQ/viewform>. [28 October 2024].

Beirut Urban Lab & ACTED 2021, *Mar Mikhael urban Snapshot*, Working document. Beirut. Available from: <https://www.acted.org/wp-content/uploads/2021/08/urban-snapshot-mar-mikhael-2021-06-02-final.pdf>. [28 October 2024].

Beirut Urban Lab, URBI, Beirut Heritage Initiative & Live Love Lebanon 2021, *Al-Masar al-Akhdar*. Beirut. Available from: <https://experience.arcgis.com/experience/1ac6e923b079489b88c5a74a89f27bf6>. [28 October 2024].

El Khoury, R & Ardizzola, P 2021, 'From the Port City of Beirut to Beirut Central District: Narratives of destruction and re-constructions', *SPOOL*, vol.8, no.1, pp. 5–22.

Fawaz, M & Harb, M 2020, *Is Lebanon becoming another "Republic of the NGOs"?* Beirut. Available from: <https://beiruturbanlab.com/en/Details/697/is-lebanon-becoming-another-republic-for-ngos>. [28 October 2024].

Hadžimuhamedović, A 2018, 'Culture-based urban resilience: post-war recovery of Sarajevo', *UNESCO, World Heritage Convention*. Sarajevo. Available from: <https://www.academia.edu/40157140/Culture_based_urban_resilience_post_war_recovery_of_Sarajevo>. [28 October 2024].

Jabri, L 2023, 'Mobilizing ordinary people for the sake of the environment: Challenges of urban activists within clientelistic conditions in Lebanon', *Les Cahiers de la recherche architecturale urbaine et paysagère,* vol. 2023, no.17, pp. 40-67. Available from: <https://journals.openedition.org/craup/12116?lang=en>. [28 October 2024].

Kellett, P & El-Masri, S 2001, 'Post-war reconstruction. Participatory approaches to rebuilding the damaged villages of Lebanon: a case study of al-Burjain', *Habitat International*, vol. 25, no. 4, pp. 535–557.

Khalaf, S & Khoury, P 1993, *Recovering Beirut. Urban design and post-war reconstruction*, Brill Publisher, Leiden.

Khodor, A & Mrad, EA 2022, 'Beirut Port reconstruction. An integral participatory urban strategy - Phase 1', *Project Brief & Planning Directives report*. Beirut. Available from: <https://www.academia.edu/80681565/Beirut_Port_Reconstruction_Integrated_Participatory_Urban_Strategy_Phase_1_Project_Brief_and_Planning_Directives_report>. [28 October 2024].

Van der Krabben, E, Piyush, T & Jyoti, S 2020, 'Land use management strategies for equitable infrastructure and urban development: Overview of strategies and tools', *ADBI Working Paper Series*, no. 1191. Tokyo. Available from: <https://www.adb.org/sites/default/files/publication/648256/adbi-wp1191.pdf>. [28 October 2024].

Mango, T 2004, *Solidere: The battle for Beirut's Central District*. Master thesis, Massachusetts Institute of Technology.

Pilav, A 2018, 'Collective documenting of extreme urban transformations evidence of urban resilience during the war in Sarajevo (1992–1996)' in *Architecture and Resilience: Interdisciplinary Dialogues,* eds K Trogal, I Bauman, R Lawrence & D Petrescu, Routhledge, London, pp. 17-31.

Piplas, H, Klumper, H & Brillembourg, A (eds) 2019, *City action lab – integrated urban toolbox for post-socialist Central and Eastern European cities,* Zurich: ETH Zurich, Chair of Architecture and Urban Design; Network City and Landscape.

Ragab, T 2011, 'The crisis of cultural identity in rehabilitating historic Beirut-downtown', *Cities*, vol. 28, no.1, pp.107–114.

Ragette, F 1983, *Beirut of tomorrow: Planning for reconstruction,* American University of Beirut Press, Beirut.

Sanderson, D 2023, 'Identifying opportunities to build resilience in urban disaster recovery' in *Integrative Approaches in Urban Sustainability - Architectural Design, Technological Innovations and Social Dynamics in Global Contexts*, eds A Amjad, A Almssad, I Yitmen, M Wallhagen & YF Yang, Sustainable Development, Intech Open, pp. 45-57

Schilderman, T 2010, 'Putting people at the centre of reconstruction' in *Building Back Better,* Rugby, Practical Action Publishing Ltd, pp. 7–37.

Solidere 2014, *Solidere annual report. The Lebanese company for the development of Beirut Central District*. Available from: <https://www.solidere.com/sites/default/files/attached/solidere_consolidated_fs_2014.pdf>. [28 October 2024].

Solidere 2004, *Beirut City Center. developing the finest city center in the Middle East*. Available from: <https://www.solidere.com/sites/default/files/attached/cr-brochure.pdf>. [28 October 2024].

Stop the Highway, Build the Fouad Boutros Park 2014a, *An obsolete plan from the 1950's*. March 2, 2014: blog. Available from: <https://stopthehighway.wordpress.com/the-hekmeh-turk-fouad-boutros-project/an-obsolete-plan-from-the-1950s/>. [28 October 2024].

Stop the Highway, Build the Fouad Boutros Park 2014b, *The petition*. February 24, 2014: blog. Available from: <https://stopthehighway.wordpress.com/the-petition/>. [28 October 2024].

Verdeil, É 2005, 'Plans for an unplanned city: Beirut (1950–2000)', *Worldview. Perspectives on Architecture and Urbanism from around the World*. Available from: <https://www.researchgate.net/publication/280757236_Plans_for_an_unplanned_city_Beirut_1950-2000>. [28 October 2024].

NOTES

Interview A – anonymous, historian, online, February 2023

Interview B – anonymous, urban planner, Beirut, July 2023 and 2024

Interview C – anonymous, taxi driver, Beirut, August 2023

Interview D – anonymous, architect and urban planner, Beirut, July 2023

Interview E – anonymous, researcher and urban planner, Beirut, July 2023