

Reconstruction as a Catalyst for Security, Stability, and Urban Resilience: A Case Study of Murzuq

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Abstract—Cities throughout history have often found themselves at the heart of conflict and disaster, pushing their residents to seek safety elsewhere. Murzuq, a city in southern Libya, has faced its share of hardship since 2019, enduring violent conflict that displaced thousands and left much of its infrastructure in ruins. The destruction not only threatened the safety of its people but also their ability to live and rebuild their lives in their hometown. In 2024, with the establishment of the Libya Reconstruction and Development Fund (LRDF), efforts have been underway to turn the page toward healing, rebuilding, and reimagining the city's future. This research looks into how reconstruction can help bring back a sense of security and stability, using Murzuq as a real-world example. It delves into what has been done so far, what impact those efforts have had, and what can be learned from other global cases. Through descriptive and analytical methods, the study compares the city's state before and after the intervention. The findings demonstrate a strong connection between reconstruction initiatives and improvements in both safety and resilience. They also shed light on the obstacles that remain and offer pathways for building stronger foundations—especially through collaborative efforts at both the national and local levels aimed at reviving state institutions and restoring basic services.

I. INTRODUCTION

Cities and societies are frequently radically transformed in terms of their economic, environmental and social structure by disasters, crises and wars. So, they engage in the effort to extend and improve urban and administrative orders, while optimizing their efficiency and, above all, more adequately satisfying the needs of their population – often far better than before. Reconstruction as a multi-faceted form of intervention that encompasses environmental, and social and economic dimensions has gathered importance altogether, bearing in mind that reconstruction procedures are also related to ensuring the safety and security of disaster, war- or conflict-affected cities, and transforming these cities into viable destinations. This in turn clears the way for all sorts of development [1].

Post-war reconstruction presents a shared challenge for affected citizens, governments and stakeholders. It's not just about fixing the damaged physical infrastructure; it's about rebuilding the social, economic, and institutional fabric of the impacted communities. Understanding the interconnectedness of these elements in a city affected by conflict is crucial—

specifically, how the physical infrastructure interacts with social, economic, and security dimensions [2].

When it comes to reconstruction aimed at enhancing security, stability, and resilience, Murzuq city serves as a compelling case study. It illustrates the link between reconstruction and urban resilience. In 2019, the city experienced public unrest and armed conflict, leading to extensive damage to its infrastructure and displacing thousands of residents. Now, five years later, reconstruction efforts are being spearheaded by the Libya Development and Reconstruction Fund (LRDF), and signs of transformation and progress are already visible. There's hope for a brighter future where security, peace, and stability can be achieved throughout the city, making it an opportune moment to examine the effects of reconstruction on urban resilience [3].

This research aims to examine the role of reconstruction in enhancing security, stability, and urban resilience in the city of Murzuq, while benefiting from lessons learned from similar international experiences. The research seeks to answer the following questions:

- a) What is the nature of the relationship between reconstruction, security and stability in conflict-affected areas?
- b) How have reconstruction efforts in Murzuq contributed to enhancing security and stability?
- c) What indicators of urban resilience can be observed in Murzuq as a result of the reconstruction efforts?
- d) What are the challenges and opportunities associated with strengthening the relationship between reconstruction, security, stability, and urban resilience in Murzuq?

II. STUDY METHODOLOGY

The research relied on a mixed methodology that combines:

- a) The literature review of previous studies on post-conflict reconstruction, security, stability, and urban resilience.
- b) Analysis of secondary data from official reports, statistics, and media reports about Murzuq.
- c) Analysis of images and documents related to reconstruction projects in Murzuq.

The data was collected from various sources, including:

- Academic studies and research reports.
- Official reports issued by the Libyan government and international organizations.
- Media and press reports.
- Photos and documents related to the reconstruction projects in Murzuq.

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III. THEORETICAL AND CONCEPTUAL FRAMEWORK

A. *The concept of reconstruction*

The World Bank [4] describes post-conflict reconstruction as a means of supporting a nation's transition from conflict to peace through socioeconomic recovery efforts. Similarly, Baradan [5] defines post-disaster reconstruction as the rebuilding of physical structures, such as buildings damaged by war or natural catastrophes. However, this narrower view—focused solely on physical restoration—overlooks the broader context, as the built environment often reflects deeper cultural, social, economic, historical, and technological dimensions of a society [6].

Consequently, reconstruction should be understood as a comprehensive process that goes beyond infrastructure repair to encompass the holistic revitalization of war-torn or disaster-affected regions [7]. It plays a vital role in stabilizing communities, fostering safer and healthier living conditions, stimulating economic revival through employment generation, and reestablishing essential public services like electricity and water. As noted by Romanovych et.al. [8], these integrated efforts are fundamental to enhancing overall social and economic well-being in post-conflict settings.

The African Union Review Board [9] defines reconstruction as a broad and inclusive approach designed to meet the needs of external states and their populations, emphasizing the importance of effective state-building and long-term, balanced economic recovery. When these critical elements are missing, reconstruction efforts risk becoming vulnerable to external influence, potentially skewing the process to serve the interests of outside actors rather than the affected communities.

Collier [10] further elaborates on reconstruction as a coordinated effort to rebuild areas impacted by conflict across four key dimensions: physical, social, economic, and institutional. These efforts not only aim to restore essential services and infrastructure but also to promote social cohesion, stimulate economic growth through job creation, and reestablish effective governance. At its core, reconstruction is deeply linked to peacebuilding, striving to stabilize post-conflict societies and prevent a resurgence of violence.

According to Adly et.al. [11], reconstruction is a political and economic process that involves rebuilding the state and reshaping the relationship between society and the state after the conflict has ended. The interplay between political and economic factors is key to determining the prospects for post-war stabilization, especially in the MENA environment, which is rife with regional competition [12].

B. *The concept of security and stability*

The concept of security in a post-conflict context goes beyond the traditional notion associated with the absence of direct violence to include broader dimensions such as human security and community security. Human security refers to the protection of individuals from various threats, including economic, food, health, environmental, personal, societal and political threats [13].

Stability signifies a condition of societal balance that enables individuals and institutions to operate efficiently and

predictably. It represents a foundation where systems function without major disruptions, ensuring a sense of continuity and order in daily life [3].

This state of equilibrium is shaped by several interconnected dimensions. Political stability involves the presence of a legitimate, effective governance structure that commands public trust. Economic stability depends on reliable access to employment opportunities and essential services. Social stability, meanwhile, is rooted in the strength of social ties and the absence of severe conflict or polarization within communities [13].

C. *The concept of urban resilience*

Urban resilience describes a city's capacity to recover from disruptions, adapt to emerging challenges, and transition toward more sustainable development trajectories. It encompasses not just bouncing back after a crisis, but also adjusting urban systems and structures to withstand future shocks. This multifaceted concept includes the ability to restore essential functions, respond dynamically to change, and reimagine urban life through transformative innovation [14].

At its core, urban resilience is built on three foundational capabilities. First is the power to recover, which involves reinstating critical services and infrastructure following a disturbance. Second is adaptability—the city's readiness to evolve structurally and functionally in light of new conditions. Finally, resilience entails a transformative dimension, where long-term shifts are made to foster more equitable, inclusive, and environmentally sound urban futures [15].

Several key factors underpin the development of urban resilience. These include ensuring diversity in resources and skillsets, fostering integration across different urban systems, and enabling active community participation in planning, decision-making and implementation [16]. Additionally, a resilient city must nurture a culture of continuous learning and innovation, empowering it to evolve proactively in response to uncertainty [17].

D. *The importance of post-war reconstruction*

Post-war reconstruction plays a pivotal role in stabilizing nations emerging from armed conflict. While wars often leave widespread destruction in their wake—especially in terms of damaged infrastructure—their impact extends far deeper, causing lasting psychological, economic, and social distress. Addressing these multifaceted consequences is essential to fostering long-term recovery and development [18].

At the heart of reconstruction lies the physical restoration of war-torn environments. This involves rebuilding essential infrastructure such as homes, roads, public buildings, and utilities. Simultaneously, reconstruction projects stimulate the local economy by generating employment and revitalizing business activities. Enhancing public services like healthcare, education, water, and electricity further supports communities in regaining a sense of normalcy and access to basic needs [19].

Beyond physical and economic recovery, post-war reconstruction fosters social cohesion and trust. By improving living conditions and reducing poverty and discontent, reconstruction contributes to greater societal stability. It also

opens the door to international collaboration, attracting humanitarian and financial aid from global partners. Perhaps most importantly, successful reconstruction can help rebuild citizens' trust in their government and lay the groundwork for peaceful coexistence among diverse social groups [20].

E. The Pillars of Post-Conflict Reconstruction

According to the Center for Strategic and International Studies (CSIS) and the Association of the United States Army (AUSA) [21], effective post-conflict and disaster reconstruction rests on four fundamental pillars as shown in Figure 1. These interconnected elements provide a framework for rebuilding societies that have experienced significant upheaval, ensuring that recovery efforts are comprehensive and sustainable.



Figure 1. Pillars of Post-conflict Reconstruction

The first pillar, security, aims to establish a stable and safe environment by developing legitimate and dependable security institutions. This not only protects individuals and communities but also lays the groundwork for all other forms of recovery. Without security, developmental progress in other areas becomes challenging. Closely related is justice and reconciliation, which emphasizes creating a fair legal system capable of addressing past injustices. By enforcing laws, resolving grievances, and upholding the rule of law, this pillar fosters public trust and promotes healing.

The third pillar focuses on social and economic well-being, targeting immediate needs through emergency assistance while also supporting long-term development. Restoring essential services and providing economic opportunities are crucial to stabilizing affected populations and enhancing their quality of life. This includes efforts in healthcare, education, and infrastructure to rebuild the social fabric.

The final pillar, governance and participation, underscores the importance of inclusive and transparent political systems. Establishing accountable institutions and encouraging civic engagement ensures that communities have a voice in shaping their future. By empowering civil society and promoting democratic processes, this dimension of reconstruction helps ensure that policies reflect the needs and aspirations of the population [20].

IV. PREVIOUS GLOBAL AND LOCAL CASES

As a result of crises, wars and armed conflicts, various cities were subject to destruction and damages, not only in

building and infrastructure but also the societies in depth [10]. Therefore, efforts were made to overcome these problems by comprehensive reconstruction strategies that take into account various dimensions including security, social and physical. The following are some global and local cases of reconstruction:

A. Reconstruction of Afghanistan

The Special Inspector General for Afghanistan Reconstruction [22] identified seven main lessons covering the 20-year process that can be used in other conflict zones around the world (see Figure 2 below). The world is as follows:

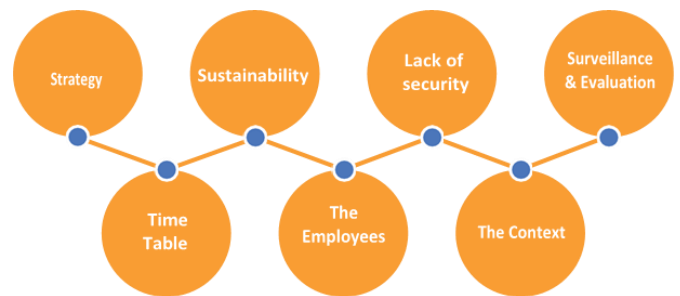


Figure 2. Lessons Learned from Reconstruction in Afghanistan

Effective reconstruction hinges on empowering civilian agencies with genuine authority, sufficient resources, and the flexibility to lead initiatives—not merely in principle but through actionable practice. However, efforts in Afghanistan were frequently undermined by unrealistic timelines and pressure to spend funds rapidly. These constraints often fostered inefficiencies and corruption, ultimately compromising the sustainability and effectiveness of programs intended for long-term impact.

Sustainability proved to be a major challenge, as many funded initiatives lacked long-term viability. Infrastructure developed under these programs was frequently neglected or left unused, resulting in significant waste of resources. Contributing further to these shortcomings was the deployment of inadequately trained personnel and a high turnover rate, which eroded institutional memory and weakened operational continuity on the ground.

Security conditions also played a central role in impeding reconstruction. Persistent violence and instability disrupted implementation, reduced access to project sites, and jeopardized the safety of personnel and beneficiaries alike. These challenges were compounded by a limited understanding of local societal dynamics, which led to the imposition of Western models that often failed to align with Afghan needs and priorities.

Finally, the lack of robust monitoring and evaluation mechanisms further diluted the impact of reconstruction programs. Without systematic assessment of outcomes, initiatives lacked the agility to adapt and improve, frequently missing their objectives. Together, these factors underscore the complexity of post-conflict reconstruction and the critical importance of contextual awareness, institutional capacity, and iterative learning in achieving meaningful and lasting outcomes.

B. Reconstructing Warsaw:

Vale and Campanella [3] explain that Poland embraced a socially driven approach in reconstructing Warsaw, guided by several key principles. Foremost among them was the emphasis on preserving the city's identity. Rebuilding Warsaw in its original form served as a tribute to the city's deep-rooted history and cultural legacy. This act of restoration represented a quiet form of defiance and a deep sense of pride in a distinct national character. For many citizens, the city carried the emotional weight of generations of personal and communal memories.

Another central principle was the safeguarding of collective memory. The goal of reconstruction was not merely physical, but emotional and symbolic—aiming to restore Warsaw exactly as it once stood to support the healing process from wartime devastation. Such precise rebuilding fostered a sense of continuity and helped reinforce the shared memories of the nation. Where possible, original architectural plans and materials were used to ensure the authenticity of each restored landmark [23].

Community involvement also played a pivotal role in this process. In the absence of a local government, civil society stepped forward to preserve the cultural heritage. Citizens, organizations, and heritage groups took it upon themselves to protect valuable documents and materials, ensuring they would survive for future generations. Their active participation in the rebuilding process turned community resilience into a powerful force for cultural preservation [3].

Together, these efforts created a model of post-war recovery rooted in social cohesion, historical fidelity, and civic pride. Poland's approach to rebuilding Warsaw not only restored the physical structures of the city but also reaffirmed a collective sense of belonging and national resilience in the face of great adversity [23].

C. Reconstruction of the City of Derna

On September 11, 2023, the city of Derna experienced catastrophic flooding caused by Hurricane Daniel. The storm triggered an extraordinary rise in the water level of Wadi Derna, which overwhelmed the city and devastated large areas. This natural disaster led to significant loss of life and property, displacing many families and leaving the community in deep distress [24].

In response, the Libyan state faced the immense challenge of not only reconstructing damaged buildings, public facilities, and infrastructure, but also addressing the psychological and social impact on the population. To guide and manage these efforts, the Derna Reconstruction Fund was established as a central body for rebuilding the city and supporting the affected areas in their recovery [24].

Thanks to the Fund's work, more than 3,500 housing units were rebuilt, along with numerous schools, roads, and critical infrastructure. Restoration also extended to public buildings and healthcare facilities, while previously stalled projects were completed. Notably, the Derna Corniche project was carried out, and contracts were signed with several companies to construct six new bridges: the Sea Bridge, Wadi al-Naqa

Bridge, Al-Sahaba Mosque Bridge, and Wadi Bridges 1, 2, and 3 [25].

D. Reconstruction of Benghazi

Following years of conflict involving armed groups, the city of Benghazi entered a new phase of recovery and reconstruction after its liberation. One of the key initiatives was the restoration and reopening of the Benghazi Municipal Stadium, a symbol of community and resilience. In tandem, significant work was carried out to rehabilitate various faculties at the University of Benghazi, allowing students and faculty to return to a functioning academic environment [26].

Efforts to rebuild the urban fabric extended to the refurbishment and repainting of thousands of buildings and residential units across the city. New hospitals were constructed to improve healthcare services, and a massive infrastructure project was launched to support the development of 20,000 housing units—marking a crucial step toward addressing the city's housing shortage and revitalizing neighborhoods.

The reconstruction also involved large-scale infrastructure upgrades, including the rehabilitation of essential services and transport networks. Among the projects were the construction of several strategic bridges, such as the one at the Jarat Island and Main Post Office intersection, the bridge at Al-Salam neighborhood island, and another at the Al-Hawari Road and cement factory junction. These efforts aimed to restore connectivity and improve mobility throughout Benghazi.

E. Reconstruction of Sirte

From 2011 until January 2020, the city of Sirte endured intense violence at the hands of ISIS, resulting in widespread destruction across buildings, public facilities, and vital infrastructure. The aftermath left deep scars on the urban landscape and profoundly impacted the lives of the city's resident.

In an effort to revive and rebuild Sirte, over 180 reconstruction projects were launched. These included major road improvements, the construction of sports fields and a children's water park, and the rehabilitation of Sirte University. Public parks were developed, mosques and healthcare centers were restored, and several key government buildings—such as Sirte Radio, administrative offices, hotels, and the power company—underwent renovation [27].

Reconstruction also focused on reconnecting the city and improving quality of life. Multiple bridges were built at Sirte's main entry points, including pedestrian walkways, while damaged neighborhoods and buildings received structural repairs. Strategic plans were introduced to offer psychological and material support to those affected by the conflict, especially residents of deteriorated homes. At the same time, efforts continued to renovate and repaint additional housing units, preparing them for distribution to displaced citizens [27].

V. THE RECONSTRUCTION OF MURZUQ

A. Introduction to Murzuq:

The city of Murzuq is located in the southwestern part of Libya and for several centuries was the historical capital of Fezzan. In addition, the city is the administrative and service center for the Murzuq sub-region, which extends from Wadi Utba to Tjirhi, Al-Bakhi, and Al-Qatron, passing through the cities of Traghen, Umm Al-Aranib, Zawila, Tamessa, and Majdul. This sub-region is part of the Fezzan planning region, which consists of four sub-regions: the Sebha sub-region, the Wadi Al-Shati sub-region, and the Ubari sub-region. Figure 3 shows the location of the city of Murzuq and its sub-region within the Fezzan region [28].

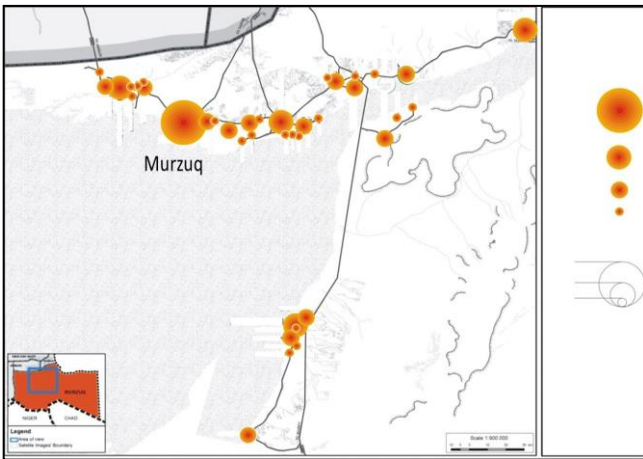


Figure 3. Location of Murzuq City [28]

In the year 2020, the demographic composition of the Murzuq municipality was approximated to be around 94.1 thousand Libyan inhabitants, as per the information disseminated by the Bureau of Statistics and Census - Libya. This figure represents approximately 1.4% of the overall national population, which was estimated to be 6.9 million during the same annum. The urban center of Murzuq comprises over 42.5% of the population within the municipality (i.e., exceeding 40 thousand inhabitants) [29].

After the independence in 1951, during the 1960s, specifically in 1968, a general plan for the city was prepared, later known as the first-generation plan [30]. The target population over 1,500 inhabitants by the year 1988. This plan was followed by the so-called second-generation plan in 1985 (Figure 4), aiming to serve over 6,500 inhabitants by the year 2000 [31]. The urban expansion after 2000 necessitates the preparation of a new plan for the city's future to ensure optimal urban growth according to an approved plan. Unfortunately, this situation applies to all Libyan cities, whether they had previously prepared urban plans or were not included in the urban planning programs.

The Urban Planning Agency contracted the third generation of plans project (2006-2025) with The Engineering Consulting Office of Utilities (ECOU), supported by foreign consulting firm [32]. The target population within the urban area of Murzuq in 2025 was estimated to be over 19 thousand inhabitants. The consultant began by surveying work and the initial proposals for the

plans. After the events of 2011, the project was halted, and recently, the authority canceled the contract as the target year 2025 was reached without any significant progress. Now, the Urban Planning Authority has prepared a short-term plan program to prepare and evaluate the plans at the level of Libya, including the city of Murzuq. Figure 5 illustrates the proposed urban structure and land uses of the third generation 2025.

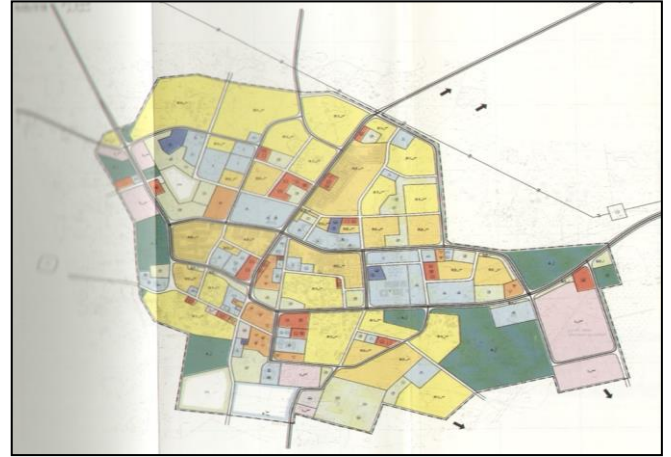


Figure 4. 2nd Generation Plan for Murzuq City 2000 [31]



Figure 5. 3rd Generation Plan for Murzuq City 2025 [32]

In 2007, a contract was signed between the Housing and Infrastructure Board (HIB) and the Tatweer Joint Urban Development Company to implement the Integrated Utilities Project for Murzuq, Traghen and Fanqal. The project includes the implementation of the integrated facilities project for the city's master plan and the execution of integrated services and infrastructure for a residential neighborhood of 1,500 housing units located north of the city. The project still not totally implemented due to the circumstances of 2011 and after [33].

B. The armed conflict impact on Murzuq:

In August 2019, the Murzuq municipality encountered a significant decline in security attributable to armed hostilities in densely populated areas. These occurrences resulted in the displacement of over 5,643 families—comprising around 28,215 individuals—seeking refuge. The majority of the displaced individuals relocated to adjacent regions in

southern Libya, whereas a subset was also reported to have reached more remote areas within coastal municipalities across both western and eastern Libya [34]. The conflicts also lead to extensive damage affecting buildings, public services, and critical infrastructure especially the electricity network that powers significant portions of the city [35].

C. Reconstruction Efforts

The city of Murzuq serves as a living example of applying the concepts of reconstruction and urban resilience in the context of post-conflict. The city has faced significant challenges ranging from mass displacement, a decline in economic activities, and social impacts resulting from recent conflicts, which necessitated action from governmental bodies and local society to support reconstruction efforts. Before implementing reconstruction projects, the city of Murzuq was suffering from the disintegration of its urban fabric due to ongoing conflicts, with rising displacement rates and a decline in the level of basic services. These factors resulted in a weakened local economy and the emergence of gaps in the provision of public services. The reconstruction efforts include:

a) Development Initiatives

Local authorities, in cooperation with LDRF, have launched several major development projects, including [35]:

- Restoration of administrative and service institutions: The project aims to restore more than 30 public buildings including the restoration of local administration buildings and the modernization of facilities such as the Directorate of Security and its facilities, the health facilities, the educational facilities, and the Fezzan University buildings, which contributed to restoring the confidence of citizens.
- Housing and Residential Development Project: The project included maintenance of the damaged houses (Figure 6, Figure 7 and Figure 8), and the completing the construction and equipping of over 1,137 modern housing units to provide shelter for the return of citizens and minimize displacement.
- Support Small and Medium Enterprises: The technical and marketing capacities of local entrepreneurs are under strengthening program to equip them to capitalize on local resources and improve the economic situation in the city.

The estimated restoration cost of both housing units and administrative buildings is approximately over 432.7 million Libyan Dinars (LD), as presented in Table 1. The table indicates that over 80% of the housing units have been completed, while the completion rates for administrative buildings range from 50% to 100%.

Table 1. Estimated cost of building restoration

Building		Estimated Cost (Million LD)	Implementation (%)
Types	Quantity		
Housing units	1,137	312.7	80 – 88
Administrative	30	120.0 (Approx.)	50 – 100
Total		432.7	-

* Source: LDRF [35]



Figure 6. Some damaged houses



Figure 7. Maintenance operation of some damaged houses



Figure 8. Reconstruction of road network [36]

b) Community Initiatives

The Community initiatives have played an important role in the reconstruction efforts in Murzuq, most notably:

- a) The efforts of the Council of Wise Men and Notables of Libya, especially the south, as well as civil society institutions, are making serious attempts to promote social reconciliation in the city.
- b) Initiatives of the General Assembly of Murzuq

Families to support the return of displaced people.

- c) Civil society initiatives to provide assistance to those affected.

These initiatives have contributed to strengthening social cohesion among the various population of the city, facilitating the return of displaced people to their homes, and providing material and moral support to those affected.

VI. ANALYZING THE RELATIONSHIP BETWEEN RECONSTRUCTION, SECURITY, AND STABILITY IN MURZUQ

a) *The Social Aspect:*

Reconstruction efforts contributed to enhancing the social fabric in Murzuq through:

1. Resettling displaced residents and providing them with adequate housing.
2. Promoting community reconciliation among the citizens of the city.
3. Restoring trust between citizens and the state.

National reconciliation efforts played a pivotal role in paving the way for stability, as they contributed to healing social rifts and enhancing understanding among the residents, which provided a favorable environment for reconstruction and the restoration of services.

b) *The Economic Aspect:*

Reconstruction projects affected the economic stability in the city of Murzuq through:

1. Providing job opportunities for local residents in reconstruction projects.
2. Rehabilitation of economic infrastructure such as markets and roads.
3. Revitalizing commercial and investment activity in the city.

These impacts contributed to improving living conditions for residents, positively reflecting on social and security stability in the city.

c) *The Security Dimension*

The close relationship between reconstruction and security in the city of Murzuq has emerged through improving living conditions and strengthening the institutional presence of the state through rehabilitating government facilities and implementing laws and ordinances.

The residents of the city have praised the efforts of the Libyan armed forces that contributed to restoring security and enforcing order, paving the way for a return to normal life and the resumption of vital services across various sectors.

VII. URBAN RESILIENCE INDICATORS IN MURZUQ

a) *The ability to recover*

Murzuq's recovery capacity is evident through several key indicators that reflect its resilience and determination to rebuild. Among the most telling signs is the return of displaced residents who, despite ongoing obstacles, are coming back to their city. Simultaneously, essential services

such as healthcare, education, water, and electricity are gradually being restored, marking crucial steps toward normalcy and stability.

In addition to these efforts, the city has undertaken the rehabilitation of damaged infrastructure, signaling a broader commitment to long-term recovery. Despite facing extensive destruction and persistent challenges, Murzuq has demonstrated a strong ability to bounce back, showcasing both community strength and institutional dedication in the face of adversity.

b) *Adaptation capacity*

In the city of Murzuq, several indicators highlight its capacity to adapt to evolving challenges and uncertainties. One key aspect is the development of infrastructure that is more resilient to crises, ensuring essential services remain functional during disruptions. Another significant element involves broadening the economic base to reduce dependence on a single sector, which enhances economic stability and flexibility in the face of shifting conditions.

Additionally, fostering improved communication and understanding among the city's inhabitants strengthens social cohesion and facilitates cooperative problem-solving. Together, these measures reflect Murzuq's growing ability to navigate change, overcome adversity, and build a more sustainable and inclusive future.

c) *Transformation capacity*

Murzuq's transformation capacity can be observed through its embrace of progressive, inclusive development approaches. This includes the adoption of sustainability-focused models that prioritize environmental responsibility and social equity. In parallel, the city encourages active community participation in shaping policies and decisions, ensuring that diverse voices are represented and local needs are addressed.

Another key indicator lies in the formulation of forward-looking visions that integrate the hard-earned lessons of past conflicts. These efforts mark the city's transition toward more resilient and just urban systems. Together, these initiatives signify the early stages of a broader transformation aimed at building a future that is both inclusive and adaptive to change.

d) *Challenges and Limitations*

Although reconstruction efforts in the city have achieved significant milestones, several pressing challenges continue to hinder progress. One major issue is the lack of strong coordination among government agencies and the multiple stakeholders engaged in rebuilding. This fragmentation slows down decision-making and leads to overlapping or inconsistent efforts across different sectors.

Another key obstacle is the shortage of financial and material resources, which limits the capacity to implement essential development projects comprehensively. As a result, critical initiatives aimed at revitalizing infrastructure and improving public services often face delays or remain incomplete, undermining long-term recovery goals.

Moreover, affected families continue to experience hardship due to delays in receiving financial compensation, which hampers their ability to rebuild their lives and contributes to lingering social and economic instability. Collectively, these challenges diminish the overall impact of reconstruction and constrain the city's ability to foster sustainable security, societal stability, and urban resilience.

VIII. CONCLUSION AND RECOMMENDATIONS

a) Conclusions:

Based on the current data available in the city of Murzuq, a series of key findings have been identified, with the following being the most significant:

1. Due to the tragic events that occurred in the city, many residents were displaced and are now struggling with various challenges, largely because of the absence of specialized agencies equipped to offer essential assistance and plan effective reconstruction efforts.
2. The damage affected most of the residential housing in Murzuq and many public and service buildings.
3. Certain parts of the city's infrastructure were impacted, especially the electricity network that powers significant portions of the city and its surrounding agricultural areas.
4. For over a year, the LRDF has been carrying out maintenance work on all city structures and infrastructure, alongside launching new development projects aimed at revitalizing the city and supporting the return of its residents.

Additionally, it can be said that reconstruction plays a pivotal role in enhancing security, stability, and urban resilience in conflict-affected areas, such as Murzuq. Through a detailed analysis of development processes, it becomes clear that rebuilding infrastructure and providing housing and essential services is not only a means of transitioning from a state of conflict to a state of stability, but also paves the way for strengthening local capacities to withstand future challenges. Key points that emerged from the study include:

1. Reconstruction is a fundamental pillar in achieving security and stability, as it helps reduce displacement and build trust between citizens and the state.
2. Urban resilience is based on improving infrastructure and activating community participation mechanisms and participatory planning, contributing to a quicker response to emerging challenges.
3. Supporting small and medium-sized enterprises is a vital factor in providing job opportunities and achieving sustainable economic growth in Murzuq.
4. The success of reconstruction processes requires effective coordination between government authorities, local and international organizations to ensure that the entire community benefits from available resources.

b) Recommendations:

After an in-depth study of the available data and analysis of the impact of reconstruction projects in the city of Murzuq, the following key points can be drawn:

- Continuous investment in developing transportation networks and essential facilities is necessary to provide a sustainable and safe environment capable of facing shocks (such as natural disasters or security crises).
- Achieving stability requires reducing displacement by supporting small and medium enterprises and utilizing local resources, which helps in recycling capital within the community.
- Active participation of citizens is an integral part of successful reconstruction efforts, as it helps create a sense of belonging and trust between citizens and the government.
- Clear coordination mechanisms must be established among government bodies, civil society organizations, and international partners to ensure the community benefits as much as possible from available resources.
- It is essential to establish a system for the periodic monitoring and evaluation of the implementation of development projects to identify weaknesses and successes, along with making necessary adjustments to improve the overall performance of the city.

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