



MetroHUB



**HERITOPOLIS** A global consortium on metropolitan heritage

# GAZA: A VISION OF HOPE

Ramez Habboub, Gaza Port, Wikipedia



## **ACKNOWLEDGMENTS**

This document is the collective work of a team from the HERITOPOLIS Consortium, together with other experts addressing specific issues relevant to the Anthedon Initiative and in consultation with key local professionals.

HERITOPOLIS - Heritage and the Metropolis - is an open-ended research network established in 2021 to explore how metropolises are being (re-) shaped by heritage and how they are redefining its meaning. HERITOPOLIS addresses these challenges linking research and practice through the UN-Habitat UNI - University Network Initiative - MetroHUB partnership within the framework of the SDGs and the New Urban Agenda.

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## **Disclaimer**

This booklet has been produced by HERITOPOLIS, as the conclusions of the Anthedon Initiative scoping sessions.

Its contents are the sole responsibility of HERITOPOLIS and do not necessarily reflect the views of UNHABITAT and the MetroHUB.

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This report is structured to allow each section to be read independently or as part of a cohesive analysis, offering a comprehensive overview of Gaza's reconstruction and future development.



# Executive Summary: *The Anthedon Initiative*

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## **Reconnecting Gaza to the Region and the World**

Anthedon is an international initiative aimed at fostering a sustainable and inclusive recovery strategy for Gaza. This initiative, under the auspices of HERITOPOLIS Heritage and the Metropolis, a UN-Habitat UNI consortium, envisions Gaza and the region as an open, interconnected metropolis, integrating advanced urban services, resilient infrastructure, and a sustainable, climate-adaptive economy. Encouraging trans-border transformations and cross-cultural dialogue is essential in recognizing the central role of culture and heritage, where Anthedon places these elements at the heart of reconstruction efforts to revitalize civic identity, strengthen social cohesion, and restore Gaza's historical role as a key regional hub.



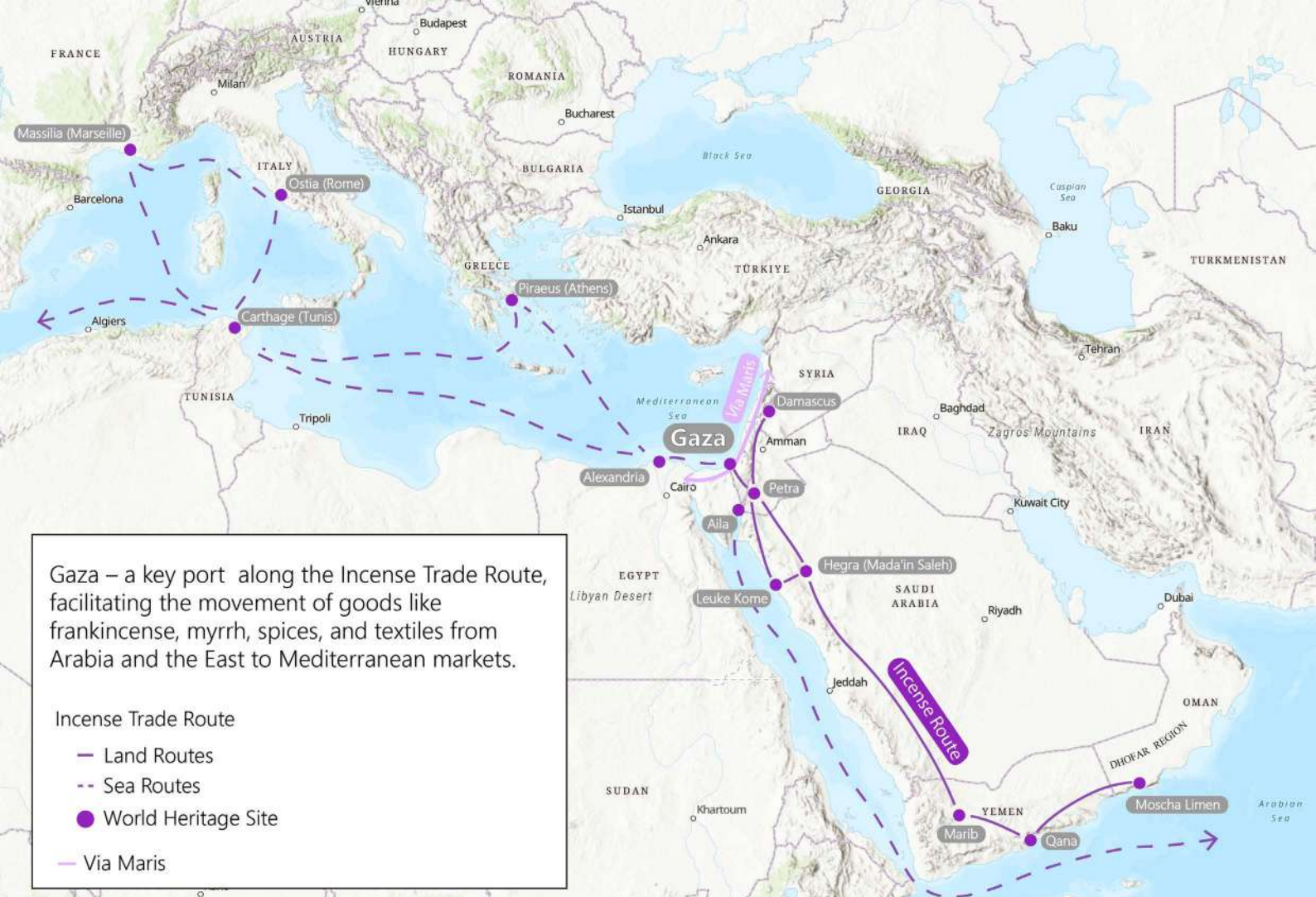
Map 1: Projected connectivity of peace and cooperation in the region, based on urban modeling.

## **Gaza: A Historic Mediterranean Gateway**

Gaza has long served as a strategic trade hub connecting the Mediterranean to the Middle East, with Anthedon as the ancient name of its port for over a thousand years. The city's position at the crossroads of Africa, Asia, and Europe has historically facilitated commerce, regional cooperation and cultural exchange, as a port of the Incense Route and a key junction on the Via Maris. This legacy provides a blueprint for Gaza's reintegration into transnational networks, linking Palestine, Israel, Jordan, Egypt, Saudi Arabia, and beyond through trade agreements, shared economic corridors, environmental cooperation, and the restoration of cultural heritage. Re-establishing these connections is essential for reviving economic activity, enhancing regional stability, and fostering mutual interdependence.

## **Overcoming Devastation and Isolation**

The prolonged conflict, with the latest escalation following the Hamas-led attack on October 7th, has inflicted severe humanitarian, social, and economic crises on Gaza. The large-scale destruction of urban infrastructure, essential services, and cultural institutions has displaced a significant portion of the population, exacerbating insecurity and deepening social fragmentation. The lack of mobility and restricted access to external markets further isolates Gaza, impeding economic revitalization and long-term recovery. Overcoming this crisis requires addressing not only the physical devastation but also the psychological barriers of fear, hate, mistrust, and division, which hinder meaningful reconciliation and cross-border cooperation.



Map 2: Gaza as a Historic Mediterranean Gateway — the Incense Trade Route.

## A Vision for Regional Reintegration

The Anthedon Initiative offers a comprehensive, and modular approach to reconnect Gaza with its region through:

- **Environmental Sustainability and Climate Resilience:** The fundamental starting point for a progressive and sustainable future is the recognition that Gaza's prevailing environmental conditions and the increasing realities of climate change are shared with the surrounding region and can only be fully addressed in a transboundary manner. Addressing Gaza's environmental challenges by promoting renewable energy projects, sustainable water management, and climate-adaptive urban planning. Cross-border cooperation on environmental restoration, coastal management, and clean energy production will address ecological damage and serve as a neutral platform for regional collaboration.
- **Cultural and Heritage Revitalization:** Positioning heritage restoration and cultural diplomacy as key reconciliation and economic recovery instruments. Safeguarding Gaza's archaeological sites, historical districts, and intangible cultural heritage will strengthen local identity, boost cultural tourism, and provide shared narratives that transcend political divisions.
- **Regional Cooperation and Metropolitan Governance:** Establishing a transboundary metropolitan framework, Palestine, Israel and Egypt, to facilitate urban planning, economic coordination, and infrastructure development. This governance model will integrate local, national, and supranational actors, drawing from successful models of cross-border governance in Europe and Latin America. This would include:

cooperation to foster long-term reconciliation and social integration. A collaborative approach to media, education, and civil society engagement will help dismantle stereotypes, promote mutual understanding, and lay the groundwork for a sustainable and democratic peace process.

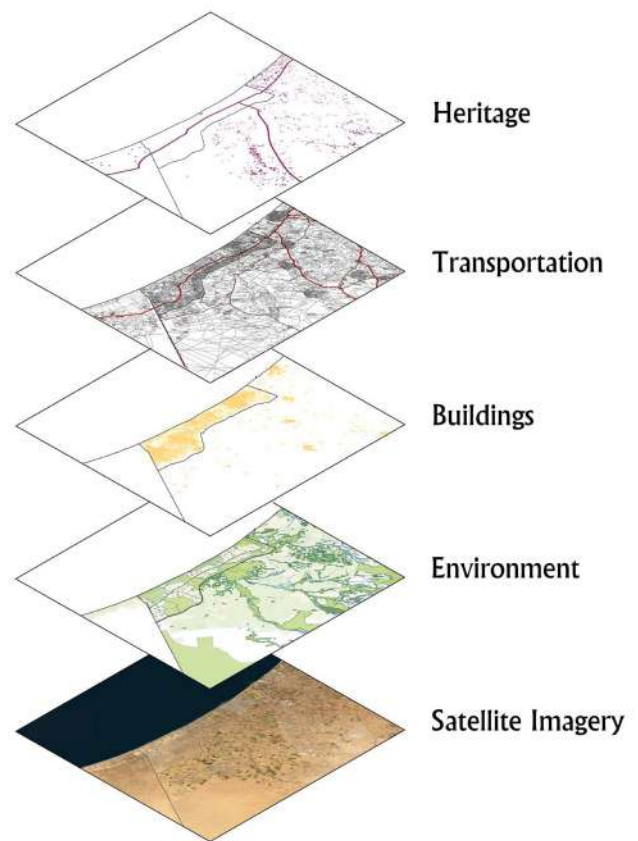


- **Integrated Economic and Trade Networks:** Creating economic corridors that link Gaza to regional and global markets, leveraging logistics hubs, trade agreements, and free economic zones to attract investment and stimulate local industry. This approach would support economic diversification, reduce dependency on humanitarian aid, and generate sustainable employment opportunities.
- **Transport and Mobility Infrastructure:** Enhancing connectivity with the West Bank, Egypt, Jordan, and Israel through multimodal transport systems, including land, sea, and digital infrastructures. A modernized port and logistics network could restore Gaza's historical function as a Mediterranean gateway, facilitating commerce and cross-border mobility.

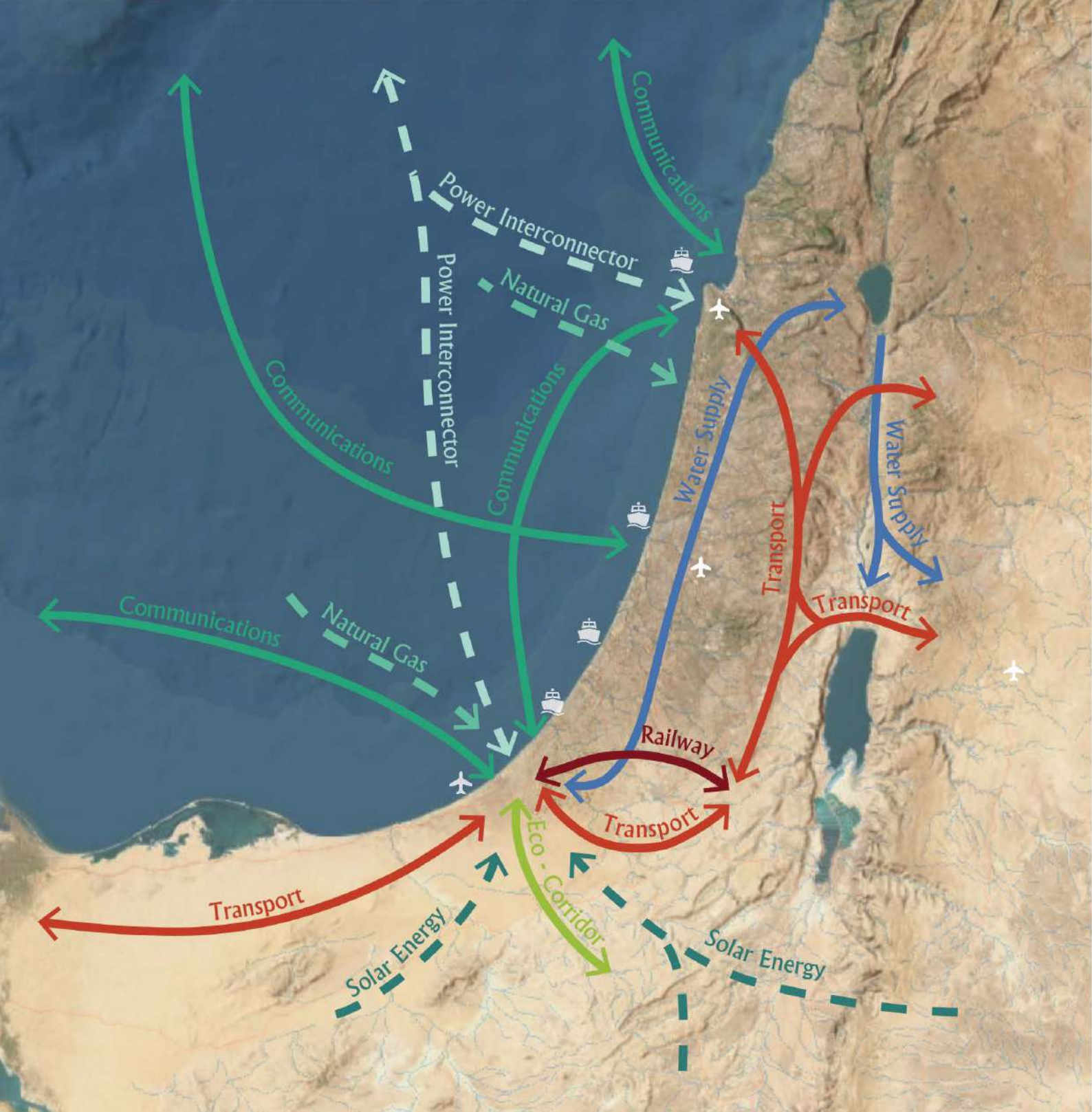
### **A Shared Future: Advancing Peace through Common Interests**

The Anthedon Initiative is not just about rebuilding Gaza—it is about repositioning it as a key player in the regional economic, social, and political landscape. By fostering transboundary cooperation, sustainable development, addressing common environmental challenges, and integrated governance, the initiative aligns with broader efforts to advance regional peace based on a two-state solution, shared infrastructure, and economic interconnectivity. Gaza's recovery must be embedded in a long-term strategy that prioritizes cooperation over isolation, development over destruction, and hope over despair. Reconnecting Gaza within its region and the world is not only a necessity but an opportunity to redefine its future as a bridge between nations and cultures.

With the current barriers to peace, a Vision of Hope is essential in providing the foundations for a region with a flourishing and sustainable economy, whereby the immediate stages of recovery and reconstruction can harness the natural and cultural resources and provide for local initiatives that may support long-term benefits. Developing local modular activities within a regional context will provide steps towards creating confidence and dialogue. The role of the regional facilitators during this period of trust-building is essential in strengthening the cooperation of the major stakeholders, including governmental, public and private institutions. With this in mind, the Anthedon Initiative addresses the short-, mid- and long-term actions within this Vision of Hope.



Map 3: Multi-layered approach to long-term recovery



Map 4: Integrated systems of civic infrastructure and resources.



An aerial photograph of Gaza City, showing the dense urban landscape of the city meeting the Mediterranean Sea. The image is dominated by a deep blue sky with scattered white clouds. The sea is a darker blue, with white waves breaking along the coast. The city itself is a dense cluster of buildings, mostly multi-story apartment blocks, with some taller structures standing out. The overall tone is somber yet hopeful, reflecting the title 'A Vision of Hope'.

# 01 A VISION OF HOPE



## A Vision of Hope

In a historic turning point, the Israeli occupation comes to an end, and Palestine finally realizes its long-awaited independence. Gaza, as an integral and inseparable part of the future State of Palestine, plays a central role in this new era of sovereignty and hope.

Through sustained diplomatic efforts, negotiations, and strong international support, a comprehensive peace agreement is reached. The two states—Palestine and Israel—mutually recognize each other's right to self-determination, sovereignty, and freedom. Peace is grounded in universal values: justice, dignity, shared interests, prosperity, and regional cooperation.

This landmark agreement defines the sovereign borders of the State of Palestine, encompassing the West Bank, East Jerusalem, and the Gaza Strip—coexisting peacefully alongside the State of Israel. Both nations, with secure borders and independent political systems, engage in cooperative efforts at both local and regional levels.

A unified Palestinian state thrives in peace and security, as regional integration becomes a tangible reality. Strengthened by economic, cultural, and political ties with neighboring countries, this new era of stability is supported by international partnerships—laying a strong foundation for Palestine's leadership in regional development, connectivity, and cooperation.

## Gaza: A Cornerstone of Palestine's Future

Gaza has always been a vital crossroads of culture and commerce, linking the Mediterranean world to the Middle East. Despite the devastation of past conflicts, its people embody resilience, creativity, and determination. The vision for Gaza is not only one of physical reconstruction, but of reintegration—into Palestine, the region, and the world.

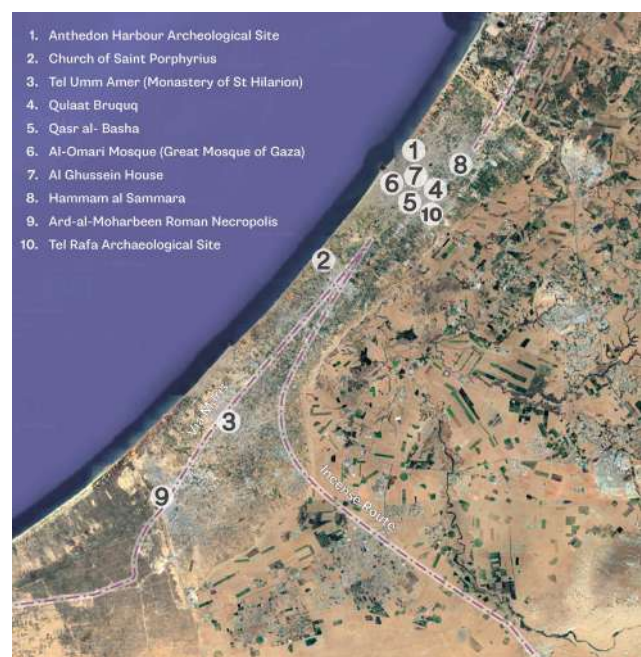
This vision sees Gaza reclaiming its rightful place as a vibrant hub of connectivity, where rich heritage, natural resources, and resilient communities become the bedrock of a renewed future. Gaza's future lies not in isolation, but in its integration as a key part of a unified Palestinian state.

## The Power of Heritage and Identity

Gaza's cultural and historical legacy is central to the collective Palestinian identity. From ancient seaports to historic neighborhoods, these sites are

not merely remnants of the past—they are symbols of continuity and pride. The Anthedon Initiative champions cultural revitalization as both a strategy for economic recovery and a symbolic act of national renewal. Preserving and celebrating Gaza's heritage strengthens its citizens' sense of identity and reaffirms its vital role within Palestine and the broader Mediterranean region.

True recovery must also heal the social fabric, reconnecting communities fractured by conflict. The vision for Gaza emphasizes not only physical rebuilding but also cultural, social, and economic restoration—empowering citizens to reclaim their identity and sense of belonging.

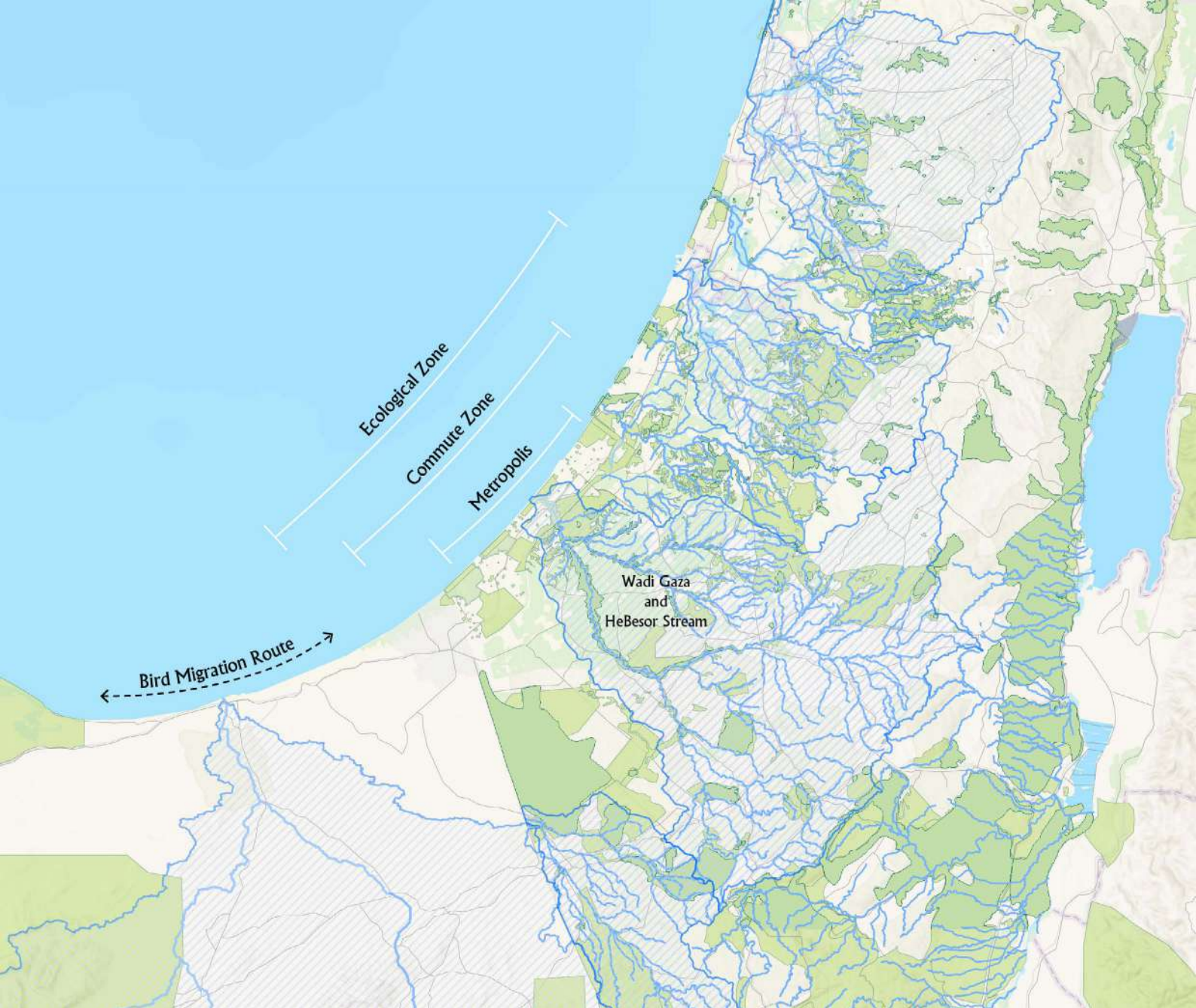


Map 5: Key archaeological sites for urban integration and re-creating local identities

## Reconnecting Gaza: A Hub in a fully integrated Region

As part of a sovereign Palestinian state, Gaza is reconnected to its regional and global networks. The Anthedon Initiative envisions Gaza as a Mediterranean gateway within a transboundary urban region, linking Palestine with Israel, Egypt, Jordan, and beyond. This connectivity restores Gaza's historic role and facilitates the movement of trade, people, technology and innovation.

Economic integration will stimulate growth and support long-term peace and sustainability. With cross-border cooperation, trade corridors, and digital infrastructure, Gaza can emerge as a center of innovation and commerce. Regional cooperation rooted in mutual trust and shared interests can transform



Map 6: Vision of integrated ecosystems in the region.

ethnonational divides into opportunities for collective prosperity and viability.

At the short term and in the current atmosphere of mistrust, progress may begin with modular local projects, evaluated within a broader regional framework, that contribute to lasting peace and cooperation.

## Learning from Global Models of Recovery

Despite the unprecedented destruction and harsh, unlivable conditions Gaza faces today, the world offers powerful lessons in post-conflict recovery. The Marshall Plan revitalized post-war Europe through strategic investment, infrastructure rebuilding, and economic integration. The formation of the European

Union further demonstrated how shared governance and economic interdependence can foster lasting peace and stability.

Japan's recovery after World War II—driven by large-scale reconstruction, community empowerment, and sustained international support—underscores the vital role of social cohesion in national recovery. These examples show that even the most devastated regions can rebuild and thrive.

Gaza can draw from these global models by embracing a comprehensive approach that combines strategic planning with the active participation of civil society, local government, and the private sector, alongside strong international partnerships. Through these coordinated efforts, Gaza can lay the foundation for a peaceful, resilient, and prosperous future as an essential part of a unified Palestinian state.



## Sustainability and Resilience for a New Gaza

Gaza's recovery must confront environmental and economic challenges with bold, sustainable solutions. With resource scarcity and climate vulnerability, Gaza requires forward-thinking policies—renewable energy, efficient water systems, and climate-resilient infrastructure—developed in collaboration with Egypt, Israel, Jordan and other neighbors.

Economic revitalization is equally crucial. Breaking free from siege, Gaza can rebuild its industries, modernize agriculture, and foster entrepreneurship through local and regional partnerships. Free economic zones, logistic areas, and infrastructure projects will stimulate local employment and position Gaza as a dynamic contributor to Palestinian national and

### Fostering Peace through Regional Cooperation

At its core, the vision for Gaza is rooted in reconciliation and the pursuit of lasting peace. Achieving this goal requires building trust through shared initiatives such as cross-border dialogue, capacity building programs, technology educational exchanges, and community-led projects. By fostering relationships grounded in empathy, mutual respect, and shared benefit, Palestine and its neighbors can begin to shape a new narrative of cooperation and coexistence.

International support is essential to this process. Just as post-war Europe and Asia experienced transformation through sustained global investment and collaboration, the recovery and development of Gaza—and Palestine as a whole—will depend on a robust international framework. This must include not only financial assistance, but also technical expertise and enduring partnerships that support long-term peacebuilding, resilience, and regional integration.

### A Future Worth Building

The Anthedon Initiative envisions a Gaza that is not only rebuilt, but reimagined—a core part of one, unified Palestine. In this future, Gaza is a thriving, resilient region, creative region, brain hub connected to its people, its heritage, its national state, neighbors, and the wider world.

This is not a dream, but a realistic goal—achievable through deliberate, modular actions and steadfast commitment to peace, sustainability, and

unity. Gaza's path forward will inspire transformation throughout Palestine and the region, becoming a symbol of what is possible when hope, dignity, and cooperation prevail.

## A

### A Vision of Hope for Gaza and One Palestine

We envision a future where Gaza stands as an integral part of a sovereign, unified State of Palestine—free from occupation, thriving in peace, and fully reintegrated into the region and the world. Rooted in resilience, heritage, and identity, Gaza reclaims its historical role as a cultural and economic hub, connecting the Mediterranean to the Middle East. Through sustained diplomacy, mutual recognition with Israel, and regional cooperation, peace and prosperity are achieved. Gaza's recovery is built on sustainable development, social healing, and international solidarity—transforming it from a site of conflict into a symbol of unity, innovation, and hope for all of Palestine.



Map 7: cooperation and reconciliation through shared resource





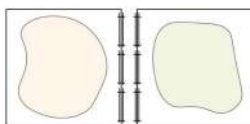


At present, there is no single, clearly defined path for Gaza's future. However, the five scenarios outlined below illustrate a range of possible developments, each shaped by political negotiations and ongoing events. These scenarios are not just distinct possibilities - they may also represent stages in a broader process that could lead Gaza from crisis to recovery and long-term stability. By examining these different pathways, we can better understand the challenges and opportunities that may define Gaza's future.

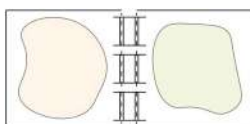
The significance of these scenarios lies in how they assist us in anticipating an uncertain future. Through these scenarios we are able to situate responses within a specific political and temporal context, and by extension, tailor recommendations to different degrees of feasibility, urgency and risk.

Five scenarios were developed, ranging from complete separation to full connectivity. These scenarios are considered with five potential governance models, which are discussed in detail later:

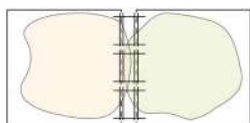
→ Closed borders



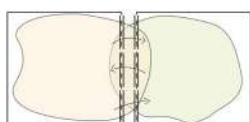
→ Border line not fully open



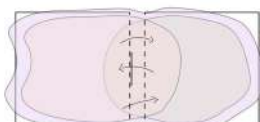
→ Border zone as it can develop when the border is open;



→ Bi-lateral intergovernmental arrangements



→ Multilevel/supranational scale as a frame condition for open borders



The Palestinian scenarios are: One Palestine, Neo-Oslo, Ribat, Status Quo, and End of National Aspiration. These are paralleled by five Israeli scenarios: the two-state solution, Oslo C, Israel 100, Israel as an island, and Apartheid.

→ Governance

Multilevel/supranational  
Bi-lateral arrangements  
Border zone open;  
Border line not fully open  
Closed borders

→ Palestinian scenarios

One Palestine,  
Neo-Oslo,  
Ribat,  
Status Quo,  
End of National Aspiration

→ Israeli scenarios,

The two-state solution,  
Oslo C,  
Israel 100,  
Status Quo - island policies  
Apartheid

## Methodology

Scenario building is a strategic planning tool used to explore plausible futures by analyzing current realities, identifying key trends, and constructing alternative projections. In the Palestinian context, the Anthedon initiative implemented a fully participatory and locally owned scenario-building process, centring the voices and leadership of Palestinians from Gaza, the West Bank, and East Jerusalem. Between July 2024 and April 2025, 76 diverse participants—including civil society actors, women's groups, youth, local leaders, professionals, and private sector representatives—were actively involved in shaping scenarios that reflect Palestinian lived realities, challenges, and aspirations. Their ownership of the process ensured that the scenarios were grounded in authentic perspectives and not externally dictated, fostering local agency in envisioning Gaza's reconstruction and a broader national future.

The methodology followed these key steps:

- 1** Analysis of the current situation – assessing the political, social, and economic landscape.
- 2** Identification of driving forces and key trends – including regional dynamics, normalization, and internal governance challenges.
- 3** Selection of critical uncertainties and game changers – distinguishing between high-impact, high-uncertainty and more stable trends.
- 4** Scenario formulation – developing multiple coherent narratives that explore a range of future outcomes.
- 5** Joint vision development – creating a collective long-term vision based on shared goals.
- 6** Exploring barriers and opportunities – testing the vision against each scenario to assess risks and strategic options.
- 7** Feedback and refinement – integrating stakeholder input to ensure the scenarios are inclusive, relevant, and reflective of diverse Palestinian voices.

This structured yet participatory approach enabled Palestinians to actively shape a framework for strategic thinking, policy planning, and resilience building in the face of ongoing uncertainty.

## Five Scenarios

We developed five future scenarios for Palestine through a participatory process that brought together a diverse group of Palestinian stakeholders from Gaza, the West Bank, and East Jerusalem. These scenarios reflect a spectrum of possibilities grounded in current realities, emerging trends, and deep uncertainties. The best-case scenario, "One Palestine," envisions the realization of the Palestinian national aspiration—achieving sovereignty, unity, justice, and self-determination through a rights-based and inclusive political resolution. The "Neo-Oslo" scenario imagines another interim agreement shaped by external actors, where limited autonomy is preserved without genuine sovereignty, reinforcing dependency and delaying a final resolution. In contrast, the "Ribat" scenario highlights collective resilience and survival, focusing on community-driven resistance, steadfastness, and local rebuilding efforts to preserve identity and prevent displacement in the absence of political breakthroughs.

The "Status Quo" scenario captures the continuation of the present fragmented reality, marked by political stagnation, deepening occupation, and weakened institutions, where daily life is managed but without meaningful progress toward statehood. Finally, the worst-case scenario projects large-scale displacement and the collapse of the national project, where political fragmentation, forced migration, and the erosion of collective identity lead to the dissolution of the Palestinian cause as a unifying vision.

Each scenario includes a specific narrative for the future of Gaza and its reconstruction, reflecting how conditions might evolve under different political and structural contexts.

These narratives explore critical questions about recovery, governance, community agency, and long-term sustainability. The outcomes of this scenario-building exercise will be fully detailed in a forthcoming report by the Anthedon programme, offering strategic insights for policy, planning, and local resilience efforts.

### Summary of the Five Scenarios

#### Scenario 1 | One Palestine

In a transformative geopolitical breakthrough, the Israeli occupation ends, and the State of Palestine gains full independence, recognized through a historic peace agreement that affirms the sovereignty and secure borders of both Palestine and Israel. This two-state solution, achieved through sustained diplomacy, international support, and mutual recognition, ushers in a new era of cooperation, stability, and shared prosperity across the region. Palestine emerges as a democratic, inclusive, and economically vibrant nation—playing a central role in regional integration alongside Jordan, Egypt, and Israel. Jerusalem is reimaged as a shared capital and global city of peace, while Gaza is rebuilt as a symbol of resilience and innovation. Through cross-border collaboration in areas such as trade, infrastructure, sustainability, and governance, Palestine becomes a key actor in shaping a unified, peaceful Middle East—anchored in mutual respect, interdependence, and regional development.

#### Scenario 2 | Neo Oslo

In the "Neo-Oslo" scenario, the Palestinian Authority (PA) remains a weak but internationally endorsed caretaker government, managing limited areas of the West Bank without true sovereignty, while Hamas's influence is diminished and confined. Despite the appearance of stability, Israel retains deep control over territory, resources, and movement, effectively erasing the possibility of a viable, contiguous Palestinian state. Fragmentation, settlement expansion, and military dominance define the



landscape, and interim agreements aimed at conflict management replace genuine steps toward peace or self-determination. The international community focuses on maintaining order rather than resolving the conflict, propping up the PA with aid and reforms while avoiding meaningful political engagement. Dependent on Israel and foreign donors, the PA struggles with internal corruption, stifled civil society, and economic stagnation, leaving the Palestinian population under a perpetual status quo that suppresses democratic renewal and national aspirations

### **Scenario 3 | Ribat**

Despite devastating military operations, occupation, and systemic efforts to displace them, Palestinians have demonstrated extraordinary resilience through the practice of Ribat—a deeply rooted concept of steadfastness that embodies both physical and spiritual resistance. In Gaza, amid destruction and blockade, communities rebuild homes from rubble, restore daily life using local resources, and refuse to abandon their land. In the West Bank, Palestinians cultivate ancestral farmland and protect homes from demolition, while in East Jerusalem, they maintain a presence despite evictions and settlement expansion, preserving cultural and religious sites. Across all regions, grassroots efforts and community-based leadership have replaced weakened political factions, reinforcing identity, history, and connection to the land. This collective refusal to surrender or be displaced, despite overwhelming odds, transforms survival into an act of defiance and affirms a national spirit that continues to resist erasure.

### **Scenario 4 | Status Quo**

Since the escalation on October 7, 2023, Gaza has endured catastrophic destruction and mass civilian casualties, with over 48,500 Palestinians killed and more than 112,000 injured amid widespread displacement, famine, and infrastructure collapse. Nearly 90% of Gaza's population requires emergency aid, while 92% of homes and major portions of educational, healthcare, and transportation systems lie in ruins. Economic losses exceed \$53 billion, but international funding remains critically insufficient. In the West Bank, Israel has accelerated de facto annexation, expanding illegal settlements, demolishing Palestinian homes, and enabling settler violence, while severe movement restrictions and military operations have devastated communities. The Palestinian Authority faces financial collapse, political irrelevance, and deep internal divisions, while Gaza's people, abandoned by both Israel and international actors, have adopted grassroots rebuilding efforts. East Jerusalem

has also seen increased settlement activity and rising tensions around the Temple Mount/ Haram al-Sharif.

### **Scenario 5 | End of the National inspiration**

Israeli military operations in Gaza and the West Bank have led to mass forced displacement and the dismantling of all forms of Palestinian civil governance, rendering large areas uninhabitable and effectively blocking reconstruction. This systemic destruction, combined with the annexation of Area C and fragmentation of Palestinian territories through military zones and settlements, has created conditions widely described as ethnic cleansing. Entire communities were expelled from Gaza, East Jerusalem, and parts of the West Bank, deepening the exile of the Palestinian population. With both the Palestinian Authority and Hamas discredited and incapable of mounting effective resistance or governance, the national movement collapsed, leaving Palestinians without leadership or a path to statehood. Traditional structures replaced national institutions, and the once-unified aspiration for independence gave way to a fragmented struggle for survival and identity in exile. As right-wing Israeli factions advanced policies of displacement under religious and nationalist ideologies, supported by international allies, the dream of Palestinian self-determination was extinguished—marking a new Nakba and a profound geopolitical and humanitarian crisis.

## **Future of Gaza: Reconstruction and recovery under the Five Scenarios**

### **1. One Palestine Scenario:**

Palestine emerges as a beacon of hope and stability in the Middle East, flourishing as a democratic viable independent state. After years of colonization, destruction, and division, the Palestinian people rise to form a strong, unified leadership that fosters both political and civil progress. This new Palestinian reality is built on the foundation of a democratically elected leadership, deeply rooted in legitimacy, good governance, and a vision for long-term prosperity.

Gaza's reconstruction is part of a comprehensive regional development and peace initiative, promoting cross-border cooperation in key areas such as energy, water, security, regional transit trade, transportation, environmental sustainability, tourism, employment, technology, and spatial planning. This integrated approach frames Gaza's rebuilding within a broader cooperative regional strategy designed to foster prosperity and stability across borders. The initiative also ensures that the State of Palestine plays a key role

in the emerging regional order, positioning Palestine as an essential partner in shaping the future economic and political landscape of the region.

International donors and the global community, recognizing Palestine's commitment to peace and development, play an active role in facilitating the reconstruction of Gaza and other affected areas. Once ravaged by conflict, Gaza is transformed into the Gateway of Palestine and a regional hub of innovation, business, and culture—an emblem of resilience and hope. The reconstruction efforts are aligned with the broader vision of a unified Palestinian state, contributing to regional development and integration.

Gaza is now seamlessly connected to Hebron, a major industrial and commercial hub in the south, and Nablus, the primary city in the north, known for its thriving industrial and commercial sectors. The Jerusalem Metropolis acts as the central link in this north-south economic network, which is fully integrated with neighbouring countries and the broader region, forming a vital part of the global connection between East and West, Global South and Global North.

Peaceful relations with neighbouring countries and the region's positive socio-economic progress have fostered stability and security for all. A free and prosperous Palestine acts as a stabilizing force, contributing to regional harmony and promoting mutual growth. This dynamic not only enhances local resilience but also strengthens the foundations for long-term peace and cooperation across the region.

## **2. Neo Oslo**

In this future scenario, the Palestinian Authority (PA) takes responsibility for Gaza, engaging local communities and including representatives from professionals and non-politically affiliated technocrats in governance. While still entrenched as the internationally recognized representative of the Palestinian people, the PA remains confined to a limited autonomy, offering no real prospects for achieving full sovereignty or political independence. Its leadership, though weak, continues to manage day-to-day governance, operating more as a caretaker government than a force for significant political change.

The international community has taken an active role in promoting reforms and supporting the PA, hoping to revive a pathway to peace and stability in the region. The weakening of Hamas' political and military power in Gaza has been seen by the international community and regional countries as an opportunity to empower and revitalize the PA. However, the horizon for a political solution, while resembling the Oslo framework, remains vague, with no clear endpoint for a two-state solution. The focus remains on managing

the daily life of Palestinians and reinforcing the PA's security apparatus to prevent any hostile actions against Israel, its military, and settlers in the West Bank.

Israeli military forces have been redeployed from the Gaza Strip and certain parts of Area C, which are now under Palestinian Authority control. Natural resources are fully controlled by Israel. The borders with Jordan and Egypt are fully controlled by Israel, remaining semi-open for goods and workers, with mobility and freedom of movement highly controlled by Israeli military. Meanwhile, the borders with Israel are moderately permeable, allowing limited movement but still heavily controlled.

The PA's development plan, however, is ill-equipped to address the escalating challenges posed by the immense need for reconstruction and recovery in Gaza, as well as the high rates of poverty and unemployment. With Gaza's infrastructure devastated and millions in urgent need of assistance, the PA's primary focus is to maintain its bureaucratic and security structures, ensuring the sustainability of its governing bodies, and providing essential resources and providing basic services. While these efforts are crucial for day-to-day governance, they fall short of addressing the broader socio-economic crisis facing the Palestinian people, particularly in Gaza. The PA's inability to implement comprehensive strategies for reconstruction or create sustainable economic opportunities for its people highlights the limitations of its current approach. This has led to an increasing reliance on external aid and international support, leaving the PA in a weakened position to drive long-term solutions for recovery, stability, and development, with limited connections to the West Bank.

## **3. Ribat**

The concept of Ribat, rooted in Islamic tradition, has long been a cornerstone of Palestinian resistance. Originally, Ribat referred to defending a region or territory by remaining steadfast, whether physically or spiritually. In the Palestinian context, Ribat has evolved into a powerful symbol of resilience, encompassing various adaptive methods Palestinians use to safeguard their identity, resist displacement, and ensure the survival of their communities amidst ongoing occupation and annexation. At its core, Ribat is about the refusal to leave one's land—an act of both spiritual and physical resistance that redefines survival under occupation. For Palestinians, this bond to their land is not just geographic; it is an affirmation of their collective identity, culture, and history. It represents their determination to preserve their connection to ancestral homes, despite external pressures to displace them or erase their presence. This resilience is



manifested on both an individual and communal level, as Palestinians in Gaza continue to adapt and survive in the face of relentless adversity.

The PA has been unable to restore its ministerial functions, leaving the region in a state of severe humanitarian crisis. Basic health services are provided by field hospitals and a handful of partially functioning medical centres, while international health organizations, charity groups, and UN agencies supply basic medical supplies and volunteer teams. However, Israeli measures have severely restricted the ability of the UNRWA (United Nations Relief and Works Agency) to operate and access the Gaza Strip, exacerbating the humanitarian situation. As a result, critical sectors such as education, social services, and healthcare have collapsed, and no other agency or the PA itself is capable of filling the massive gap in services. In practice, UNRWA has functioned as the de facto civil authority in Gaza for decades, and no other body has the capacity or resources to take on its responsibilities.

International donors' role in Gaza and the broader Palestinian territories has largely focused on providing immediate humanitarian aid rather than addressing long-term reconstruction and development needs. In the face of deepening occupation, annexation, and the absence of a stable political framework, their engagement has been limited to offering basic services like healthcare, education, water, electricity, and temporary shelter. While these interventions are vital for meeting urgent needs, they fail to provide lasting solutions to the region's deep-rooted challenges. Donors primarily address survival needs through emergency medical supplies, temporary public structures, and food aid. Health services, often delivered by international organizations and local NGOs, are stretched thin and unable to address broader infrastructure deficits. Education remains unstable, with schools in inadequate facilities unable to offer sustainable, quality education. Basic utilities are provided through temporary solutions or hindered by access restrictions. In this unstable environment, donors are reluctant to invest in rebuilding Gaza's infrastructure or supporting political stability, viewing such investments as too risky.

Amidst the ongoing conflict, the Palestinian community in Gaza has adopted self-sustaining methods of rebuilding, relying on local and recycled materials to reconstruct homes, markets, mosques, and learning spaces. They are also addressing the psychological toll of the war. This process of rebuilding mirrors the resilience of previous generations who, after being displaced in 1948, started in tents, built simple structures, and eventually developed entire neighbourhoods. Despite the ongoing conflict and the lack of active international involvement in Gaza's

reconstruction, the community continues to rebuild in a way that emphasizes human dignity, collective resilience, and the restoration of daily life. This makes the process both a survival mechanism and a source of emotional healing. Safeguarding Palestinian identity and existence through reinforcing community resilience has become the main strategy adapted by the Palestinians.

#### **4. Status Quo**

Since October 7, 2023, and according to the Gazan Health Ministry, Gaza has suffered immense devastation, with over 48,577 Palestinians killed and 112,041 injured as of March 17, 2025. Among the victims are 13,319 children and over 7,216 women. The humanitarian crisis has reached alarming levels, with nearly 1.9 million people (89% of the population) in urgent need of shelter and basic household items. Over 436,000 housing units have been destroyed or damaged, representing 92% of Gaza's housing stock. The destruction of essential infrastructure is severe, with more than 2,300 educational facilities destroyed, 88% of schools needing full reconstruction or major repairs, and 35 hospitals either damaged or partially destroyed. Additionally, 81% of the road network has been damaged or destroyed, and only 50% of primary health care centres are functioning. Over 1 million children require mental and psychosocial support, while 1.95 million people face emergency or catastrophic food insecurity. More than 2 million Palestinians have been displaced, facing acute shortages in all basic needs and unprecedented suffering, including famine, malnutrition, disease outbreaks, and the threat of unexploded ordnance (UXOs).

Many families are living in overcrowded and unsafe shelters, with limited access to basic services such as clean water and sanitation. The need for emergency shelter, medical care, and food assistance is critical. Despite these challenges, the international community has only provided 4.3% of the required funding to meet the humanitarian needs of the population in Gaza, underscoring the urgent need for increased support to prevent further suffering.

Due to the ongoing conflict and lack of active international engagement in the reconstruction of Gaza, the Palestinian community has developed a self-sustaining approach to rebuilding amidst conflict and transitional circumstances. This approach emphasizes reconstructing and improving individual homes and spaces that hold personal and cultural significance, focusing on addressing the psychological and emotional impact of war. By centring human dignity and the restoration of daily life, this method makes rebuilding a source of collective resilience and survival.

Amidst the ongoing conflict, the Palestinian community has been forced to adopt self-sustaining methods of rebuilding, relying on limited resources and ingenuity to piece together their lives. They have repaired the remnants of destroyed structures, using simple, often salvaged materials to transform makeshift tents into rudimentary homes, all while living amid rubble and without access to basic services or infrastructure. These temporary solutions come with significant risks, as families continue to face the dangers of collapsing structures and unexploded ordnance. Despite these hazards, the community has pressed forward, transitioning from tents to semi-constructed shelters—not just as a matter of survival but as a way to restore a sense of identity and belonging. This process is not only about physical rebuilding but also about marking the boundaries of their community and reaffirming their resilience in the face of destruction and the constant threat of displacement. Each small structure represents both a step toward normalcy and a symbol of defiance against the ongoing devastation. The Trump Riviera plan was widely rejected by all Palestinians, and it only strengthened their resolve to stay in their communities, defending their right to live in their homeland.

Resuming the war in March 2025 without progressing to stage two of the ceasefire is seen by Palestinians as another attempt to enforce ethnic cleansing and worsen their living conditions. During the entire month of Ramadan, Israel blocked all humanitarian aid from entering Gaza, intensifying the suffering caused by starvation and military operations. The complete halt of food and medical supplies is perceived as part of a strategy to prevent Palestinians from reorganizing and to spread chaos. Hamas, as part of the broader national fabric, continues to exist and adapt in its efforts to survive amidst the ongoing siege and devastation.

## **5. End of National Aspiration**

Israeli military operations in Gaza continued with the aim of fully controlling the Strip. All civil functions within local communities were dismantled, preventing any form of governance, even at the municipal level or civil society. This extended to both local and international efforts to aid. The mass destruction of built-up areas, public institutions, infrastructure, and services was framed as the complete eradication of Hamas, but it also led to keep the uninhabitable catastrophic conditions of the Gaza strip. Israel actively prevented any reconstruction efforts, even at the individual level, blocking temporary solutions that could help residents continue living. This created immense pressure on local communities,

pushing them toward forced displacement—a situation widely recognized as ethnic cleansing.

Despite the widespread devastation, Israel continued to obstruct any efforts to rebuild Gaza, ensuring that the Strip remained uninhabitable and compounding the humanitarian crisis. Palestinians were not only expelled from Gaza, but also from large swaths of the West Bank and the suburbs of East Jerusalem. The systematic displacement continued with the forceful removal of entire communities, deepening the exile of the Palestinian people.

The Palestinian national's leadership, increasingly fragmented and corrupt, was unable to mount an effective resistance to Israel's military operations or occupation measures. The Palestinian Authority (PA), weakened and incapable of protecting its people or advocating effectively on the international stage, only deepened the growing mistrust within Palestinian society. Attempts to pursue peace negotiations faltered under the weight of Israel's overwhelming military power, deepening occupation and annexation leaving the Palestinian population in a state of despair.

The aftermath of the war in Gaza further exacerbated this crisis. Hamas, which had positioned itself as a viable alternative to the failures of the Fatah-led PA, found its strategy of violent resistance equally ineffective. Their attempts to present themselves as champions of Palestinian resistance, in contrast to Fatah's peace negotiations and pursuit of a two-state solution since 1993, ended in failure. The destruction left in the wake of the war decimated Hamas's military and political infrastructure, rendering their strategy impotent and resulting in a complete breakdown of their vision for an alternative to peace through peace negotiations. Both leaderships, Fatah and Hamas, were discredited, leaving the Palestinian people without a clear path forward and no representative leadership.

The collapse of Palestinian institutions—both governmental and civil—ushered the region into chaos. Communities, already distressed, became increasingly divided, while the growing influence of traditional tribal families and religious forces fuelled chaos, unrest and extremism. With no international engagement or support, the situation grew more unstable. The world stood largely indifferent, watching as the Palestinian people faced an existential catastrophe.

The ethnic cleansing of Palestinians and the irreversible loss of their national dream are tragic outcomes of a system that has systematically erased their presence and aspirations. As the Palestinian people face an uncertain future, grappling with the collapse of their political structures, this scenario stands as a stark reminder of the profound and lasting



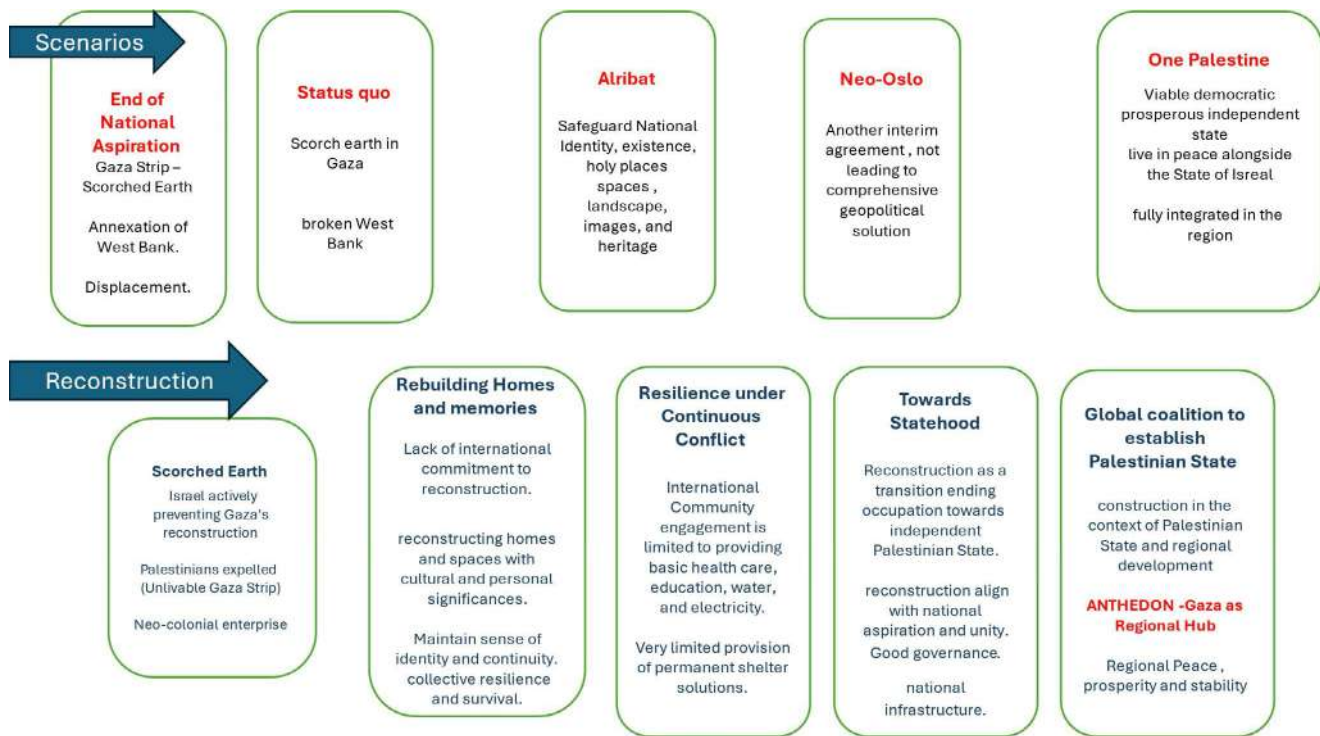


Figure 1: Future Palestine scenarios in relation to Reconstruction

consequences of unchecked injustice. It calls on the international community and the region to recognize the dangers of allowing such oppression to persist without accountability or meaningful intervention.

## Mirror Scenarios for Israel

Each of the five future scenarios for Palestine implies a mirrored trajectory for Israel—reflecting its evolving role, internal dynamics, and regional positioning. These “mirror scenarios” help us understand how Israeli policy choices, societal shifts, and international standing could be shaped by or respond to different Palestinian future. Here’s a brief outline of the type of Israel that corresponds with each scenario:

### 1. Two-state solution

Israel manages to overcome the fear and mistrust built by decades of wars, rejected peace negotiations and violence culminating in the 7th October 2023 massacre. The Israeli authorities manage to bring the divided nation together and give hope once again for a peaceful future. This marks a fundamental shift in Israel’s current policies to one rooted in inclusivity, coexistence, and accountability. As peace takes hold, Israel reorients itself as a regional partner and collaborator, engaging in economic, environmental, heritage and cultural partnerships with a thriving State of Palestine and neighbouring countries. The

resolution of the Palestinian question brings enhanced security, stable borders, and shared prosperity, allowing Israeli society to move away from deep polarization toward a more open, pluralistic national ethos. No longer dominated by fear or militarization, Israel emerges as a hub of innovation, multiculturalism, and tolerance, globally respected for its role in modelling reconciliation and contributing to a peaceful, integrated Middle East.

### 2. Oslo C

In this scenario, Israel continues to manage rather than resolve the conflict with temporary bi-lateral arrangements. It positions itself as a partner for stability, leveraging the weakened PA to maintain control while appearing cooperative to international observers. This model still represents a soft form of occupation—a highly managed with international guarantees and a hierarchical arrangement that prevents Palestinian sovereignty.

This Israel is ambiguous—as a normal nation outwardly but internally defined by unresolved national questions.

### 3. Israel 100

Mistrust and fear continue to manage the control over borders, resources, and strategic areas. A stalemate in the form of weak leadership from both sides with people living in Israel a seemingly normal life, but always wary of future escalations with sporadic eruptions of attacks and violence. A limited open

border zone for some economic activities providing mutual benefits. The national plan for 2048, Israel 100, provides for minimum connectivity. It allows Israel to sustain limited economic ties and diplomatic relations, especially with Western and regional allies, but does not free it from growing criticism or the burden of control over millions of Palestinians.

#### 4. Status Quo – Island policies

The feelings of extreme terror, loss and horror brought on by the violent massacre, and the feeling isolation from the international community leads Israel to become increasingly militarized investing even more in surveillance, border fortification, and security technologies. Its international image deteriorates, facing growing diplomatic isolation and legal challenges due to humanitarian crises in Gaza and the West Bank.

The citizens lose all hope for peace, and the government encourages this with continued right-wing alignment and fear mongering rhetoric. Revenge and complete military control seem to be the only viable solution for the continued existence of Israel. The persistent occupation and siege create perpetual instability, undermining any vision of long-term peace or integration. This version of Israel is a regional stronghold, constantly on edge, defending itself from international criticism and regional hostility, while grappling with moral and political issues.

#### 5. A one-state solution – end of Palestinian national aspirations

In this tragic scenario, Israel becomes a de facto ethnostate, having erased Palestinian national presence through a combination of military force, displacement, and demographic engineering. However, rather than security and stability, this approach turns Israel into a pariah state, likened by many to historical examples of state-led oppression and apartheid.

Despite short-term military success, the long-term costs are extensive. Israel faces massive global condemnation, possible sanctions, and internal moral crises. Jewish voices within and outside Israel split—some defending security measures, others disavowing the state. The demographic challenge remains unresolved, as displaced populations demand right of return, and internal unrest brews even within Jewish Israeli society.

This Israel is powerful but tragically diminished—globally condemned, morally lost, and locked in endless crisis with no path to legitimacy or peace, and may eventually lead, after diplomatic or military conflict, to diverse options of a democratic one-state solution.

Palestinian Future	Type of Israel	Regional Role	Societal Condition	International engagement	Long-Term Trajectory
<b>1. Two-state Solution</b>	Cooperative, Integrated Power	Equal Partner in peace, cross border co-operation and regional hub	Vibrant democratic, social cohesion	Respected leader, reconciler Full global partnership	Sustainable peace, shared prosperity
<b>2. Oslo C</b>	Ambiguous	Conflict management, indirect occupation	Increasingly divided.	Interim bi-lateral agreements	Dispute containment - instability
<b>3. Israel 100</b>	Status Quo Manager	Isolationist, security-dominated	Polarized, society; extreme youth and other social and political groups	Conditioned partnership and support	Stagnation, unresolved conflict
<b>4. Status quo</b>	Island policies	Regional occupier, facing asymmetric resistance	Militarized society, moral fatigue	Condemned by global South, UN, global civil society	Endless cycle of repression and defiance
<b>5. End of National Aspirations</b>	Ethnocratic / Pariah State	Regional enforcer, deeply isolated	Ethical fractures, ideological extremes	Sanctioned, globally shunned except for a few allies	Existential crisis, rising internal dissent. Options for a one-state solution

Table 1: Israel Mirror Scenarios Matrix

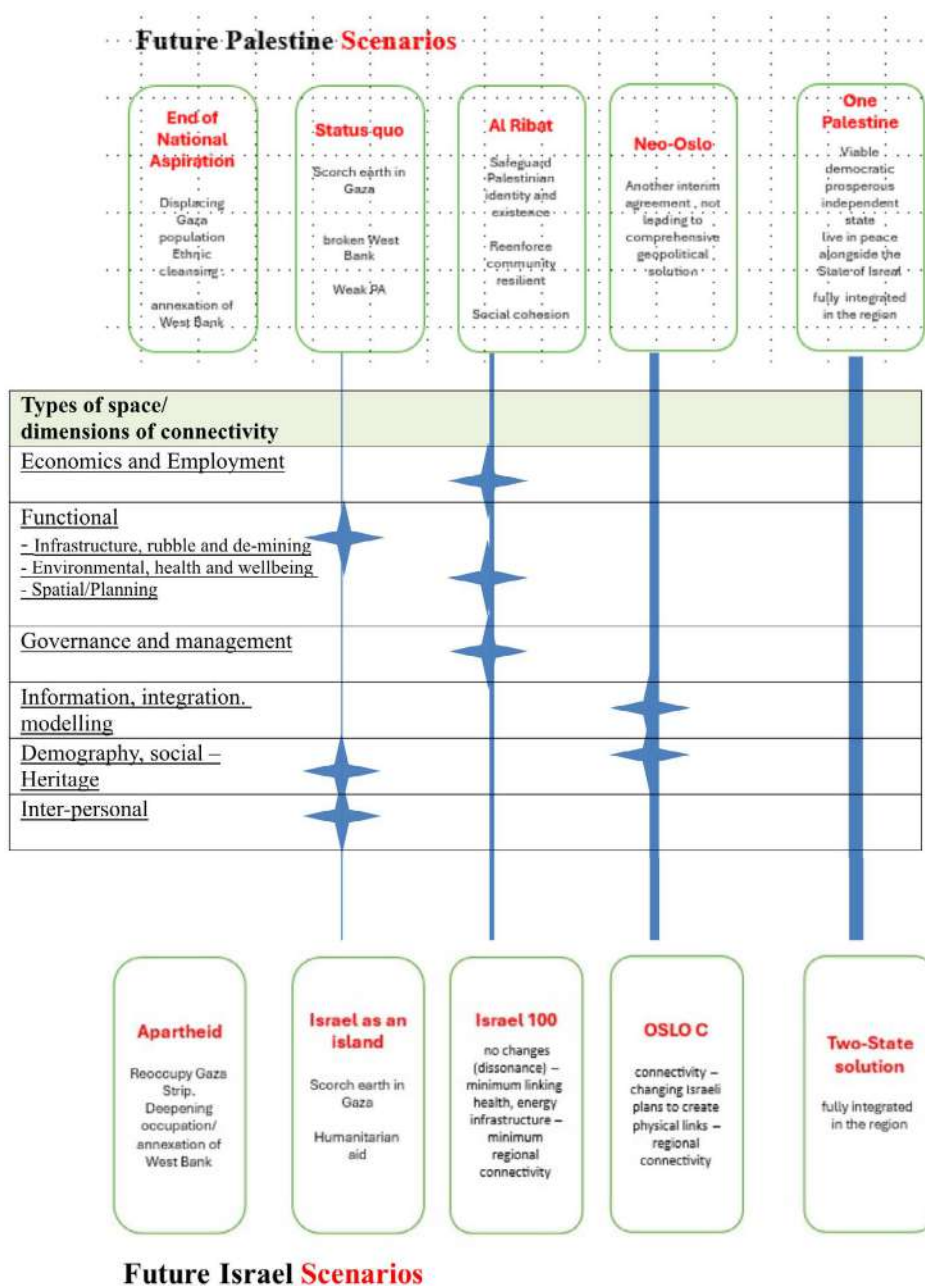


Finally, each future Palestinian reality casts a distinct shadow onto Israel's future. The contrast is stark: the more just, stable, and prosperous Palestine becomes, the more secure, democratic, and respected Israel would become. The more violent and oppressive the policy toward Palestinians, the more embattled and isolated Israel becomes.

## Development Over Time

The Palestinian and Israeli scenarios provide a framework for understanding potential paths towards a negotiated future. While the outcome remains uncertain, each scenario offers a glimpse into what that future might hold.

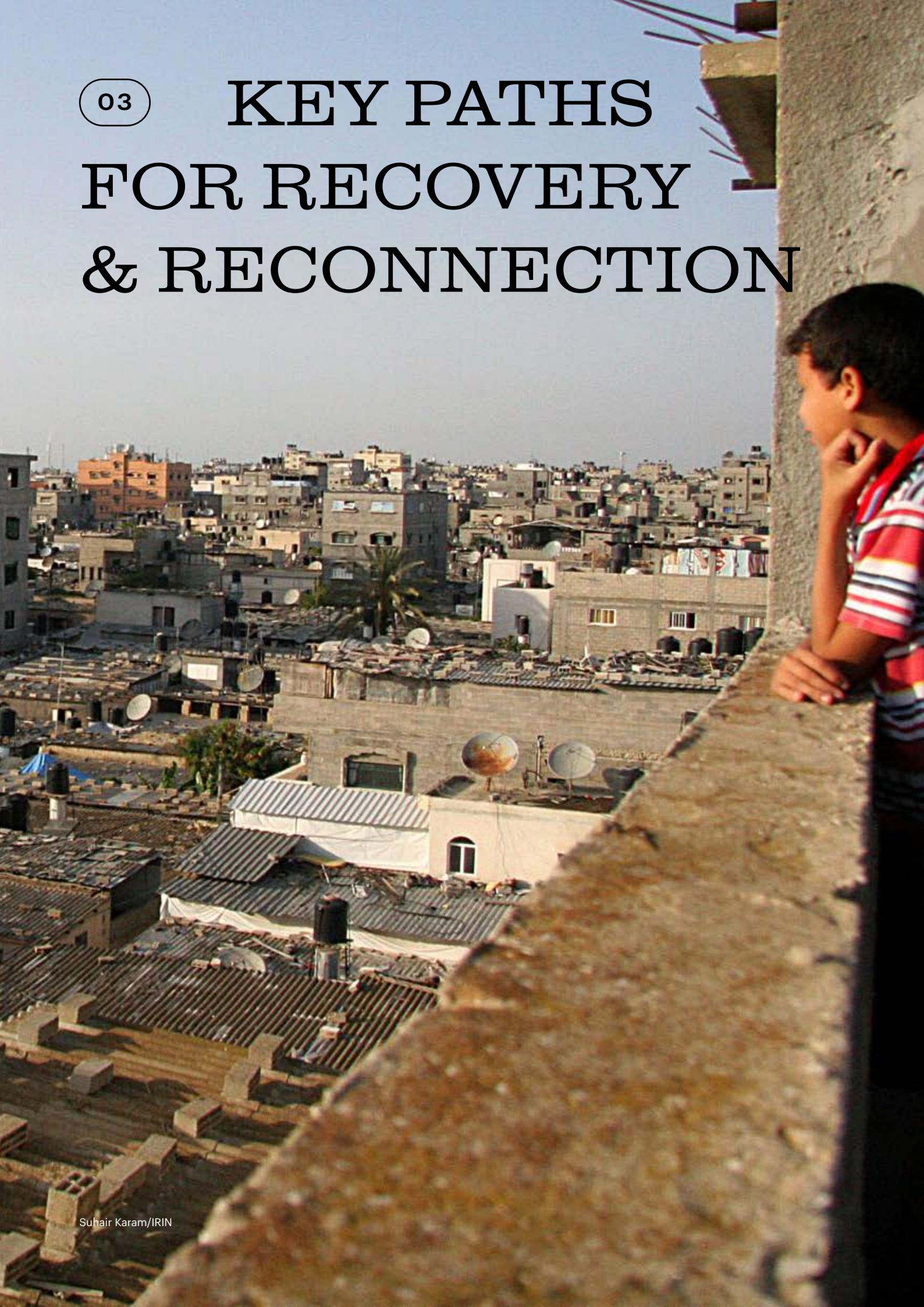
Importantly, these scenarios are not necessarily mutually exclusive – the future may unfold in stages, transitioning from one phase to the next. A long-term vision could lead to a new model of governance by 2050, but meaningful progress can begin now. Key areas for cooperation include environmental/ climate change and economic collaboration, public service integration, stronger institutional ties, cultural engagement, and recognition of rights – all essential to building a more stable and prosperous future.





03

# KEY PATHS FOR RECOVERY & RECONNECTION





The following part of the report is structured into four interconnected subsections. The first, Reconstruction and Integration, focuses on the social structures, economic revitalisation, health and the physical and infrastructure-based reconstruction essential for recovery. The second, Connectivity and Resilience address the concepts of Spatial Planning, reconstruction models and planning for the future. The third looks at Sustainability and Environment, examining the Gaza bioregion and its cultural and natural heritage followed by the effects of climate change and extremes. Finally, Metropolitan Governance, addresses the necessity of cross-border collaboration, effective governance, as foundations for the recovery process.

### 3.1 Reconstruction and Integration

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#### Demography

The total number of the population of Gaza Strip and West Bank in 1955 was less than a million (996,382), fertility rate was 7.82, median age was 15.6 and 40.3% of the population are living in urban centres. Ten years later (1965) the population reached 1,147,310, fertility continue to be high (7.78), median age 14.7 and more than 50% lived in urban areas. In 1975, a change to positive growth started (2.75%) after the few years following the 1967 war and the negative migrants movement to Jordan and other Arab countries. The total population in 1975 was estimated at 1,279,321, fertility was still high 7.48, median age was the lowest (14.1) and the percentage of urban population reached 61%. In 1985 the population of the West Bank and Gaza strip was 1,745,256, fertility dropped slightly 6.94 and median age was 14.3, the natural growth reached 3.51% and urban population increased by additional 5% during this decade (65.6%). In 1995 the growth reached 4.27%, with a population of 2,636,551, fertility still high at 6.61 and a median age stable at 14.5, with an additional 5% added to the urban population. The population of the West Bank and Gaza is among the fastest growing in the world, characterized by a rising natural population growth rate due to declining mortality rates coupled with persistently high fertility rates. During the 1970s and early 1980s, large net emigration masked this trend, resulting in relatively low growth rates—approximately 1–2 percent per year in the West Bank and 2–3 percent in Gaza. Estimates indicate that the natural population growth rate rose from 2.2 percent in 1968 to 3.1 percent in 1978 and 3.5 percent in 1987 for the West Bank, while the rates for Gaza were 2.3 percent, 3.7 percent, and 4.3 percent, respectively.

#### Demographic Trends

High fertility rates in the region can be attributed to early marriage and limited contraceptive use. Fertility rates in the West Bank have declined to 5.4 from 6.7 between 1980 and 1984, while the Gaza Strip has seen a slight decrease to 7.4 from 7.6. The correlation between women's education and fertility rates is evident: women with less than secondary education have a fertility rate of 6.3, compared to 4.5 for those with higher education. Despite declining mortality rates, a demographic transition leading to lower fertility rates has not yet occurred, particularly in Gaza. As a result of high fertility, approximately 47 percent of the population is under 15 years old (50 percent in Gaza and 45 percent in the West Bank). This age structure is similar to that of neighbouring countries like Jordan, Iraq, and Syria, while Egypt, Israel, and Lebanon have lower proportions of their populations under 15. The elderly population (aged 65 and older) makes up 3.5 percent of the total population (2.9 percent in Gaza and 3.8 percent in the West Bank). The working-age population constitutes only 53 percent of the total, leading to a high dependency ratio of 5–6 individuals for each worker, exacerbated by low Labor force participation and high unemployment rates.

#### Population in 2023

In 2023 the total number of Palestinians in West Bank and Gaza Strip was estimated as 5,548,457 - 3,291,406 in the West Bank (59.3%) compared to 2,257,051 (40.7%) in Gaza. There is a small difference in male/female ratios between the West Bank/Gaza with 50.9%/50.7% males and 49.1%/49.3% females. Population density in the West Bank is 582 persons per km<sup>2</sup> compared to 6185 persons per km<sup>2</sup>, before 7 October 2023. The percentage of population below 15 years in Gaza Strip is 40.2% compared to 35% in West Bank. According to indicators from 2022, the average household size in Gaza Strip is 5.5 and 4.7 in West Bank.

#### Population by Governorate and Urban Centres

Hebron continued to be the largest population governorate with one forth of the total population of the West Bank in 2023 an increase of 5% since 1997, the natural growth rate between 1997–2007 was 3.6% in average, decreased to 2.6% in average between 2017–2023. The second largest is Jerusalem, the population percentage decreased from 17.9 in 1997 to 15.6% in 2007, 15.1% in 2017 and end in 2023 dropped to 15.1%. The population of Jerusalem governorate increased by 107% between 1997 until 2023. Nablus sustains its percentage of the total West Bank population of 13.2% in 2023, while the natural growth dropped from 2.7% to 2% on average in the last 15 years. Gaza is the

largest Governorate with a total population of 749,100 in 2023 (before 7 October), making 33.6% of the total population of Gaza Strip more than double of the population in 1997 (357,768), natural growth was 3.6% between 1997–2007, 3.1% in average between 2007–2017, this percentage dropped to 2.7% in the last 5 years. Northern Gaza and Khan Yunis each of them with more than 19% of the Gaza Strip population.

### **Gaza Strip Population Growth Trends**

Following the War in June 1967, the Gaza Strip's population was approximately 360,000. This marked a significant moment in the region's history, as the area came under Israeli occupation, influencing demographics and socioeconomic conditions. During the 1970s and 1980s, Gaza experienced rapid population growth. By the late 1980s, the population had nearly doubled, reaching around 800,000. By the mid-1990s, the population surpassed 1 million. The 2000s saw further increase—1.39 million by 2007, before the onset of the blockade. Despite conflict and hardship, growth continued into the 2010s, reaching around 1.78 million by 2015. By 2023 the population reached 2.2 million. More than 1.6 million Palestinians have been displaced multiple times during the current conflict. Gaza lost 9% of its population, over 41,000 were killed, and more than 150,000 left Gaza Strip in the first weeks of the war, mostly to Cairo. According to Israeli military plans, north Gaza including the City of Gaza will be depopulated, destructed to serve as a military buffer zone.

### **Future Population Scenarios**

According to current growth trends scenario, the total size of the population in the Palestinian territories would increase from 5.5 million in 2023 to 6.9 in 2030 and to 9.5 million in 2050. Fertility is slashed by half during this same period, from 4.06 to 2.17 children per woman. In the Gaza Strip, fertility will decrease but remain above replacement level, from 4.51 to 2.41 in 2050, whereas in the West Bank it will decrease from 3.74 to a replacement level over the same period. Hebron governorate will compose 30% of the population in West Bank and Gaza governorate will be of the same percentage by 2050. 65% of the West Bank population will continue to live in the greater Jerusalem area (East Jerusalem, Bethlehem, Hebron and Jericho) compared to 61% in 2023. By 2050, a demographic shift will project a larger working age population relative to dependence, while increased life expectancy will foster socio-economic development. The projected population growth does not include migration, however, under a sovereign Palestinian State at least 1% annual growth will result from migration. This may

result in the One Palestine scenario for 2050 with a 2–3 million addition to the 9.5 million population of the West Bank and Gaza.

## **Economy**

Gaza's economic situation had been precarious for years, significantly deteriorating since 2007, when Israel declared the region an "Enemy Territory." This marked the beginning of a harsh blockade imposed on Gaza, restricting trade, movement, and access to resources, thus stifling Gaza's economy. Despite historical ties to Egypt and its role as a vital commercial hub before the Israeli occupation, Gaza's economy became increasingly reliant on trade with Israel. Over time, the economy faced severe restrictions under Hamas's governance and the blockade. Prior to the war, Gaza's economy was in a constant state of crisis, with high poverty, food insecurity, and unemployment rates.

Economic and financial breakdown: From 2007 to 2018, Gaza's economy suffered an estimated loss of USD 16.5 billion. The region was crippled by repeated military conflicts, including those in 2014, 2018, and 2021, which caused extensive damage to its infrastructure and industrial sectors. Despite international aid, reconstruction efforts were slow, and large portions of the economy remained stagnant. Agriculture and small-scale manufacturing were the primary sources of income for many families. These sectors were affected by the blockade and recurring conflicts, due to limited access to international markets, and by Gaza's economic infrastructure—such as the port, airport, and industrial facilities—underdeveloped or destroyed due to previous conflicts.

These wars devastated agriculture, fishing, and manufacturing industries, leading to extreme poverty and unemployment, a situation which was aggravated by the October 2023 conflict. Agricultural land, livestock, and irrigation systems were destroyed, leading to an estimated USD 1.3 billion in losses in the agricultural sector alone. Fishing, another critical industry for Gaza, was similarly devastated, with the fishing zone reduced to just 3 nautical miles, far below the 20 miles stipulated under the 1994 Gaza-Jericho agreement.

Gaza's economy was already fragile, but the most recent war brought it to a standstill. The financial sector was decimated, with most banks and financial institutions destroyed. The Palestinian Authority (PA) ceased transferring funds to Gaza due to its own fiscal crisis, and international financial support was restricted for fear it might fall into Hamas's hands. The financial blockade further exacerbated Gaza's critical cash



shortage, stalling any immediate recovery. The absence of a functioning banking system meant that businesses could not operate, and there was a complete breakdown in financial services, including the loss of access to savings and credit.

**Socio-economic Struggles:** In the pre-war period, Gaza's population faced significant hardships. At over 40%, the unemployment rate was already among the highest in the world, with youth unemployment particularly perturbing at over 50%. Poverty rates were soaring, and food insecurity was widespread. Gaza's youth, who were highly educated, represented untapped potential for economic recovery, but they were trapped in a lack of opportunity. The banking sector was also severely affected, with limited access to financial resources, further crippling the local economy.

There were sporadic cross-border initiatives in the fields of agriculture, fashion and design and digital technologies with almost 20,000 Gazans working in Israel

The war that erupted in October 2023 marked a catastrophic turning point for Gaza. The majority of Gaza's population was displaced, and widespread poverty set in. The unemployment rate in Gaza reached over 80% by the end of 2024, over 500,000 jobs were lost, and almost 85% of businesses ceased operation. The northern regions were particularly affected, with food insecurity reaching critical levels. People died from hunger, and many others faced severe malnutrition, particularly children. The collapse of the healthcare system meant that many could not receive life-saving care, and psychological trauma among children and adults increased dramatically.

## **Prospects for Economic recovery and growth**

Gaza faces a monumental challenge in its recovery. Immediate efforts must focus on humanitarian aid, restoring basic utilities, and providing shelter for displaced persons. Long-term reconstruction will require significant investment, international cooperation, and political stability. However, the path forward remains complex due to the political and security situation.

Economic recovery will be key to Gaza's long-term stability. The establishment of the Ramadan markets in Gaza are evidence to the human resilience and these can provide the basis for growth. Job creation must be a priority, particularly for youth who face high unemployment rates. Reinstating academic institutions and technical training will provide confidence and engaging youth in environmental

initiatives will reconnect them to their neighbourhoods. The international community can assist by supporting small businesses and local industries, which can help foster economic growth and reduce dependence on foreign aid. Investment in infrastructure projects, such as energy production and water management, can also create jobs and contribute to the broader economic recovery.

Efforts should focus on improving Gaza's agricultural sector, supporting local farmers, providing local food security and finding ways to access international markets despite the blockade. Additionally, creating conditions for small-scale manufacturing, as well as expanding the scope for international trade, could provide a much-needed economic boost.

**Early Recovery Efforts:** In the short term, aid will be critical to address the most immediate needs. Restoring basic services such as water, electricity, sanitation, and healthcare will be the first priority. Additionally, housing reconstruction will be essential to house the millions of displaced people. While humanitarian aid is crucial, longer-term recovery requires a strategic approach, with attention to rebuilding Gaza's infrastructure and fostering sustainable economic growth.

**Role of SMEs in Recovery:** Small and medium-sized enterprises (SMEs) could play a key role in Gaza's economic revival. Before the war, the service sector represented over 70% of Gaza's GDP, but the war destroyed much of the manufacturing and service infrastructure. Many SMEs, particularly those in food, textiles, and construction, have the potential to restart quickly. These enterprises could help stimulate job creation and economic activity, particularly if international grants, skills training, and access to liquidity are provided.

**Agriculture and Fishing as Recovery Sectors:** The agricultural and fishing sectors, though heavily damaged, offer great potential for post-war recovery. Rebuilding agriculture using modern technology could allow Gaza to return to its role as an exporter of goods such as flowers, fruits, and vegetables. Similarly, the fishing industry could be revitalized through support for aquaculture and the rebuilding of fishing boats and infrastructure. With appropriate support from international donors, including the FAO and the World Bank, these sectors could generate employment and contribute to Gaza's economic recovery.

**Rebuilding Gaza's Infrastructure:** Infrastructure is a critical area for reconstruction. Roads, sanitation, and water systems must be rebuilt to support economic activity and improve living conditions. Investment in infrastructure will also help facilitate trade and

investment. Public-private partnerships could play a crucial role in rebuilding Gaza's transport and logistics infrastructure, including new roads and connections to Israel, the West Bank, Egypt and beyond.

#### International Cooperation and Investment:

For Gaza to recover fully, it must be reintegrated into regional and international markets. International trade, particularly through sea and air routes, should be prioritized. Egypt will likely play a key role in supporting Gaza's reconstruction, given its geographic proximity and historical ties. Additionally, regional investment from Gulf countries, along with support from the PA's Palestinian Investment Promotion Agency (PIPA), could attract both local and international investors.

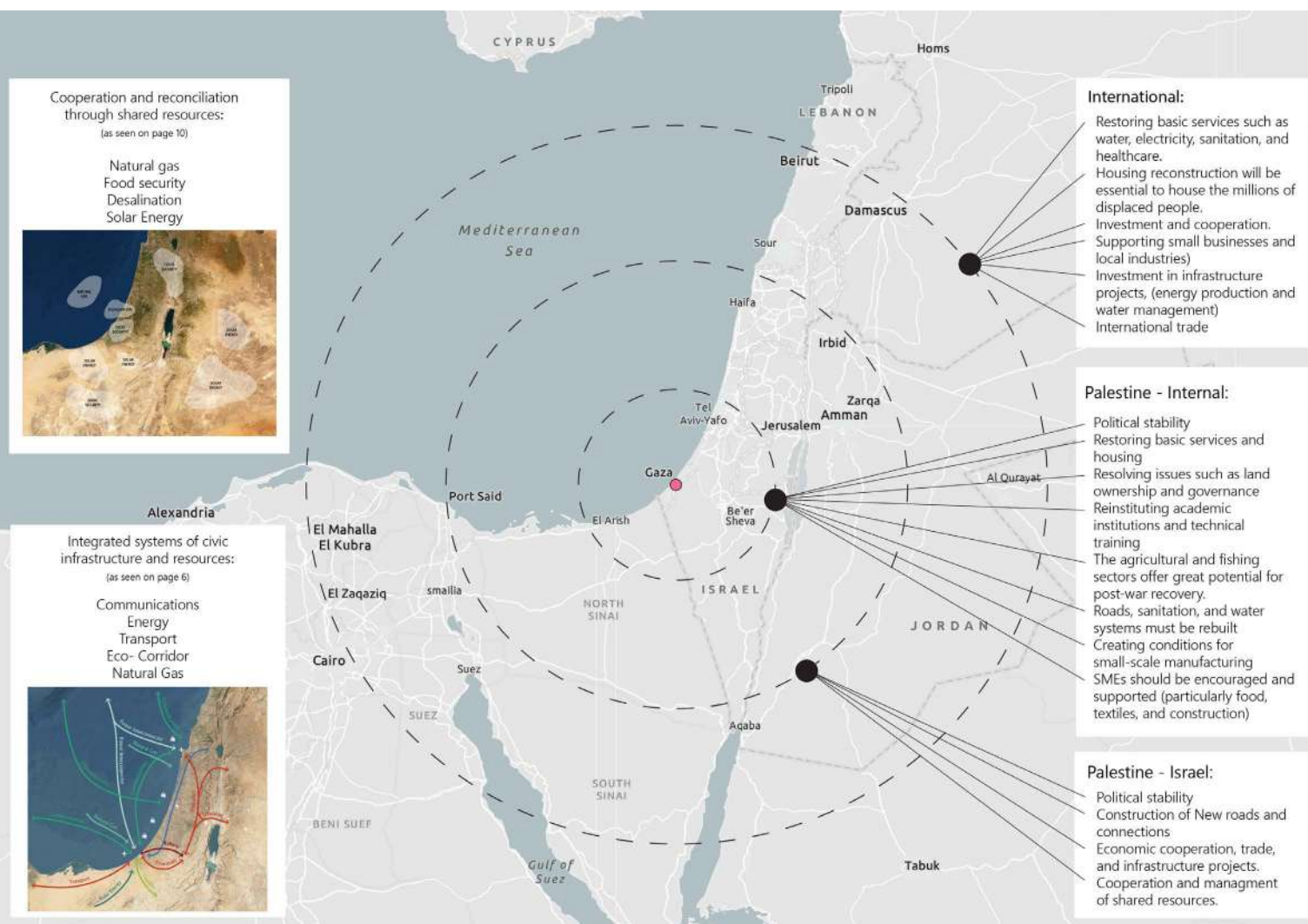
#### Political Stability and Long-Term Recovery:

The ultimate success of Gaza's reconstruction depends on political stability. A permanent peace agreement between Israelis and Palestinians, and the lifting of the blockade, are necessary for Gaza's long-term recovery. The establishment of a Palestinian state, as part of a two-state solution, would ensure lasting security and stability in Gaza, enabling economic

development to flourish. Moreover, resolving issues such as land ownership and governance will be essential to rebuilding Gaza's infrastructure and attracting investment.

**Looking Forward:** While Gaza's recovery will be a long-term process, the potential for a vibrant, sustainable economy exists. If political stability can be achieved, and if reconstruction efforts are focused on green technologies and sustainable development, Gaza, as part of the Palestinian state, could emerge from the war as a more resilient and diverse economy. However, the road to recovery will require coordinated efforts from local, regional, and international stakeholders to ensure that Palestine as a whole can rebuild and thrive in the future.

The Israeli-Palestinian Joint Economic Committee (JEC) was originally established under the Oslo Accords, the JEC was revived in 2021 to address economic cooperation, trade, and infrastructure projects between Israel and the Palestinian Authority and under the present governments is now nonoperational.



ECONOMIC CONNECTIONS AND OPPORTUNITIES: THE PERSPECTIVES ROLES OF PALESTINE, ISRAEL AND THE INTERNATIONAL COMMUNITY

## Health and Wellbeing

Decisions made in the rebuilding process in every sector, from urban planning and housing to transportation and water sanitation, have essential impacts on human health. The “Health in All Policies” (HiAP) framework, adopted by the WHO, should guide decision-making across sectors to ensure that health, mental health and well-being are prioritized in all aspects of reconstruction.

Before the conflict, chronic diseases like heart disease, hypertension, diabetes, cancer, and respiratory diseases were on the rise, while infectious diseases had been decreasing due to improvements in sanitation and immunization efforts. Mental health concerns were widespread, especially among children, due to ongoing political instability and conflict. Studies indicated that a large portion of the population, particularly children and young adults, faced severe psychological distress, with depression rates significantly higher than the global average. Poverty and political restrictions further exacerbated these mental health issues, creating a generation burdened by both physical and emotional health challenges. The most recent war has inflicted significant mental health trauma on the population. The intensity of violence, the displacement of millions, and the loss of family members have pushed an already vulnerable population into even greater psychological distress. Children have been severely affected, with many reporting symptoms of trauma such as depression, self-harm, and suicidal ideation. The situation is dire, with the mental health crisis likely to worsen unless immediate and comprehensive interventions are made.

Gaza’s healthcare delivery system was already under significant pressure due to limited resources and high dependency on international aid. The public sector accounted for only about 32% of healthcare expenditure in Gaza, with the rest largely financed by private spending and external donors. The healthcare system faced structural issues, including an overreliance on hospitals and inadequate primary care. This shortage was evident in the low number of beds for a population of over 2 million, with only 35 hospitals and 314 beds available. The escalation of the conflict has caused widespread destruction in Gaza, particularly to the healthcare infrastructure. Hospitals, clinics, and other essential health facilities were heavily damaged or destroyed, further crippling the already underfunded health system. The destruction of water and sanitation facilities has led to the resurgence of gastrointestinal diseases, while environmental pollutants from air, soil, and rubble are worsening respiratory illnesses. Moreover, the disruption of essential medical services,

including immunizations, maternal and child health care, and chronic disease management, is anticipated to exacerbate chronic health problems in the short and medium term.

The healthcare sector’s ability to respond to such emergencies has been severely compromised. While humanitarian aid is essential to provide immediate relief, there is a need for cross-border access to Gaza for the transfer of critically ill patients, supplies, and the recruitment of medical personnel. Rehabilitation services are also a priority, with thousands of amputees, many of whom are children, requiring prosthetic devices and rehabilitation care.

## Healing and Health recovery for the future

Recovery from the conflict will require a holistic, multi-sectoral approach, addressing both the physical rebuilding of Gaza’s health care infrastructure as well as a commitment to assuring that decisions made in rebuilding in other sectors and strategies for the broader socio-economic and environmental development have a positive impact on the public’s health. In the short term, the focus must be on providing humanitarian assistance to the people of Gaza. This includes food, medical supplies, shelter, and access to clean water. International organizations, such as the United Nations and non-governmental organizations (NGOs), will play a vital role in providing immediate relief. The United Nations and other international organizations are already engaged in efforts to address immediate humanitarian needs, including providing food, water, sanitation, and health services. These efforts are coordinated by the UN Office for the Coordination of Humanitarian Affairs (OCHA) and supported by numerous global NGOs.

One of the most urgent needs is the restoration and expansion of primary care services. The World Health Organization (WHO) emphasizes that strengthening primary care is crucial for achieving universal health coverage and reducing the burden on hospitals. Primary care clinics are more affordable to establish and maintain and can serve as the first point of contact for health and mental health services. A robust primary care system in Gaza would not only address acute illnesses and chronic diseases but also provide a platform for integrating mental health services. By expanding primary care, health services can become more accessible to the community, reducing reliance on expensive hospital care.

A key focus of recovery efforts should be mental health services. As Gaza’s healthcare system rebuilds



itself, integrating mental health care into primary health services will be essential. Psychosocial support for the population, especially for children and those traumatized by the war, will be crucial for recovery. Trauma counselling, mental health services, and social support programmes will help individuals begin to heal from the psychological scars of the conflict. Mental health professionals must be trained and supported to provide both therapeutic interventions and preventative care. Many models exist in other countries to promote engagement and training of community members in mental health care, using local knowledge and trust, will be key in overcoming the stigma associated with mental health issues.

## **Education and Social Services Integration**

In addition to health care services, education will play a critical role in recovery. Schools can act as centres for mental health promotion, offering both emotional support and a sense of normalcy. The WHO's "Health-Promoting Schools" model has been successful globally in fostering mental and emotional well-being among students. In Gaza, integrating mental health and psychosocial support into schools through programmes like the UNICEF Mental Health Program and UNRWA's MHPSS initiatives have already shown promise in supporting children's recovery from trauma. These programmes are essential for fostering resilience and promoting a generation's mental health.

A whole-school approach that includes staff well-being, early identification of mental health issues, and skills-based interventions for students should be scaled up in the coming years. Initiatives like Social Emotional Learning (SEL) programmes, which have been successful in other regions, could also be adapted to fit Gaza's cultural context. These programmes would equip students with essential life skills such as self-awareness, relationship-building, and responsible decision-making, which are critical for long-term recovery.

## **Hospital Planning and Infrastructure Development**

Gaza's health care system, particularly its hospital infrastructure, requires significant reform. Pre-war, the number of hospital beds in Gaza was insufficient to meet the needs of its population. For a population of over 2 million, the 314 available beds represented a serious shortage in acute care capacity. Moving forward, hospital planning should focus on

the optimal bed-to-population ratio, ensuring that hospitals are equipped to handle emergencies while complementing a strong primary care network.

The rebuilding of Gaza's healthcare system must incorporate an integrated approach, ensuring that hospitals are well-distributed across the region, accessible by transportation networks, and supported by sustainable infrastructure (water, sanitation, energy). Coordination between primary care providers and hospitals will also be vital to ensure that patients are referred appropriately, minimizing the burden on acute care facilities.

In conclusion, the path to recovery in Gaza's healthcare sector involves addressing both the immediate humanitarian needs and the long-term development of the health system. Identifying the physical requirements of primary, secondary and tertiary care based on urgent needs is essential in providing long-term solutions for the local community.

Immediate efforts must focus on restoring primary health services, addressing the critical mental health crisis, and ensuring the physical and emotional well-being of children and adults. This is fundamental for future efforts in trust building and anti-demonization efforts in the current conflict.

Strengthening primary care services, integrating mental health into healthcare delivery, and leveraging schools for mental health promotion will be essential in building a resilient, sustainable health system. Recovery will require international support, but, most importantly, it will require political will and collaboration among local health leaders, Palestinian authorities, and global partners. Initiating regional tertiary health services may also provide a basis for cooperation and develop medical research and biotech industries.

Gaza's health system must emerge from this crisis not only rebuilt but reimagined to address the complex health challenges of the future benefitting from regional cooperation.

## **Infrastructure**

The most recent war, triggered by the Hamas attacks of October 7th, escalated in 2023 and continued into 2025, has had a devastating impact on Gaza's demographic and social situation and affected the whole region. While the collapse of social structures have been deeply felt – through the fracturing of families, loss of community cohesion, and widespread psychological trauma – this breakdown is inextricable from the destruction of infrastructure. The disruption of daily life, including education, healthcare,

transportation, and access to essential services, has compounded existing vulnerabilities and diminished any sense of long term security.

Young people, already facing limited opportunities, have seen their futures shattered, by the widespread destruction of schools, housing and public space. This disillusionment has contributed to a growing sense of hopelessness among the younger generation, with many young people struggling to envision a future for themselves. As this section will outline, infrastructure lies at the heart of both Gaza's current crisis and any meaningful vision of recovery. While each area presents urgent challenges, it is also critical to acknowledge the long-standing reliance on unsustainable resources – such as overdrawn groundwater aquifers and imported energy.

## **Transport and Trade Routes**

Historically, Gaza's geographic location made it a vital hub in ancient trade routes, connecting the Levant with Egypt, Africa, and Arabia. During the Ottoman and British periods, Gaza developed basic transport systems, including roads and railways that connected Gaza with Palestine, Egypt, and further parts of the Middle East. However, these transportation systems began to deteriorate after the 1948 Arab-Israeli War and continued to suffer damage during subsequent conflicts.

In the modern era, Gaza's infrastructure suffered greatly due to political and military tensions. The key spine road on the alignment of the Via Maris is Salah-a-Din Street, stretching 45 kilometres from the Rafah Crossing in the south to the Erez Crossing in the north. Historically, it has been a major trade and military route, used by Ancient Egyptian armies, Alexander the Great, Crusaders, and Napoleon in their campaigns, providing the main movement between the urban conurbations of El Arish and Rafa to Khan Yunis and Gaza, and beyond to Ashkelon. The Gaza Strip's transportation systems were left underdeveloped, significantly limiting trade and travel opportunities. Despite this, Gaza's strategic location remained valuable, with future potential for revitalizing its transport links through projects like the development of a seaport and the rebuilding of the Gaza Airport.

The 2023 war resulted in the destruction of key transport infrastructure, including roads, bridges, and railway links. Gaza's roads, already in a state of disrepair before the conflict, were rendered impassable due to bombings and military actions. This disrupted the movement of people and goods, preventing both humanitarian aid from reaching those

in need and civilians from accessing essential services such as healthcare.

## **Energy and Utilities**

Gaza's power infrastructure had been under immense strain, even before the most recent conflict. The Gaza Power Plant, built in the late 1990s, was the primary source of electricity, but it struggled with limited resources, frequent power failures, and reliance on fuel imports from Israel and Egypt, often subject to political restrictions. As a result, electricity shortages were a chronic problem, leading to rolling blackouts and an unreliable power supply, affecting both daily life and economic activities.

Similarly, Gaza's water and sanitation systems had been problematic for years. The region relied heavily on a strained aquifer, with over-extraction, in both Israel and Palestine, causing the contamination of water sources. Over 90% of Gaza's water was deemed unsafe for consumption, contributing to public health concerns and exacerbating waterborne diseases. Efforts to build desalination plants had been made, but they were insufficient to meet the region's growing needs.

The Gaza Strip has experienced extensive infrastructure destruction, particularly in terms of power, water, sanitation, and transportation. The Gaza Power Plant was severely damaged during the conflict, leaving large portions of Gaza without electricity for prolonged periods. Wells, pipelines, and water treatment facilities were also destroyed, worsening the ongoing water crisis. As a result, access to safe drinking water became more limited, with some areas experiencing just one or two litres per person per day, far below the minimum required for survival.

Communication infrastructures, including mobile networks and internet connections, were also severely impacted. The lack of communication networks hampered coordination between humanitarian agencies, international organizations, and local authorities, making relief efforts more difficult. Gaza's isolation, already a long-standing issue, was exacerbated, as the destruction of the port and airport further severed the region from the outside world.

The sanitation system, already fragile before the war, completely collapsed. Over 70% of sewage pumps and wastewater treatment plants were rendered non-functional, causing raw sewage to spill into streets and water sources. This led to an immediate public health crisis, with diseases such as diarrhoea, scabies, and other waterborne illnesses rapidly spreading among the population.

## **Social Infrastructure**

Social infrastructure, which includes healthcare, education, and housing, had been under tremendous pressure due to rapid population growth and a lack of resources. Gaza's healthcare system faced significant challenges, including overcrowded hospitals, limited medical supplies, and the inability to offer specialized services due to the constraints of the local health infrastructure. Meanwhile, the education system, though characterized by high literacy rates, also suffered from overcrowded classrooms, damaged facilities, and limited access to modern educational tools and technology.

The housing sector was in a perpetual state of disrepair, with inadequate construction materials and restrictions on building caused by the political situation. This was compounded due to the complexities of land registration. As a result, the region's housing stock was not sufficient to meet the demands of a growing population, leading to overcrowding and informal settlements in urban areas. Many families lived in overcrowded and substandard conditions. In the face of limited space and a lack of construction materials, families often resorted to building makeshift homes or living in tents. Refugee camps, where basic amenities were often lacking, were especially overcrowded, making it difficult for residents to access essential services like healthcare and education. After October 2023, the destruction was catastrophic; Hundreds of thousands of homes were reduced to rubble, leaving families without shelter. Many people were forced to live in temporary shelters, often under poor conditions, and faced the uncertainty of rebuilding their homes amidst ongoing insecurity. The destruction of homes was particularly severe in areas like Gaza City and Khan Younis, where entire neighbourhoods were flattened.

The education sector was also under stress, with many schools operating in shifts due to overcrowding. Schools in Gaza were sometimes damaged by previous rounds of conflict, making education for many children more difficult. Despite these challenges, Gaza boasted a relatively high literacy rate, with education being a priority for many families in the region, even under difficult conditions. The education system was also significantly impacted by the 2023 war, with hundreds of schools damaged or destroyed. The United Nations Relief and Works Agency (UNRWA) reported that at least 200 schools in Gaza were either partially or completely destroyed, affecting the education of thousands of children. Many children who had already missed school due to previous conflicts were left with no access to education, creating long-term implications for their development and future opportunities.

Beyond the physical destruction, the psychological toll of the conflict has been devastating. Years of repeated violence and the trauma associated with bombings, displacement, and the loss of loved ones have created a mental health crisis. The destruction of schools, homes, and public spaces has disrupted social cohesion, creating a generation of children who have grown up in an environment of war and loss.

## **Reconstruction and the building for the future**

Reconstructing Gaza will require a strategic and multi-phased approach, balancing immediate relief with long-term development goals. Efforts to rebuild the region must focus on restoring essential services, creating sustainable solutions, and ensuring that infrastructure can withstand future conflicts or disasters and provide a modular approach that may lead towards regional cooperation.

### **Immediate Reconstruction Needs**

The immediate priority is the restoration of essential services, including electricity, clean water, and healthcare. International support will be necessary to deploy rapid response teams that can begin to restore power to Gaza and address urgent water and sanitation needs. Mobile clinics and temporary housing solutions will also be essential to meet the immediate needs of the displaced population.

Efforts should focus on the rehabilitation of key infrastructure, such as health services, hospitals and clinics, power plants, and water treatment facilities. Temporary solutions like portable desalination units and solar-powered generators can provide relief in the short term, while longer-term infrastructure solutions are developed.

### **Rebuilding Gaza's Transport and Communications Infrastructure**

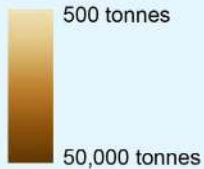
The rebuilding of Gaza's transport and communication networks will be crucial for economic recovery and regional integration. The development of a seaport will provide Palestine with critical access to the Mediterranean and international markets, reducing its dependency on Israeli ports. Similarly, rebuilding Gaza's airport, once security arrangements and political agreements are in place, will open up air routes for



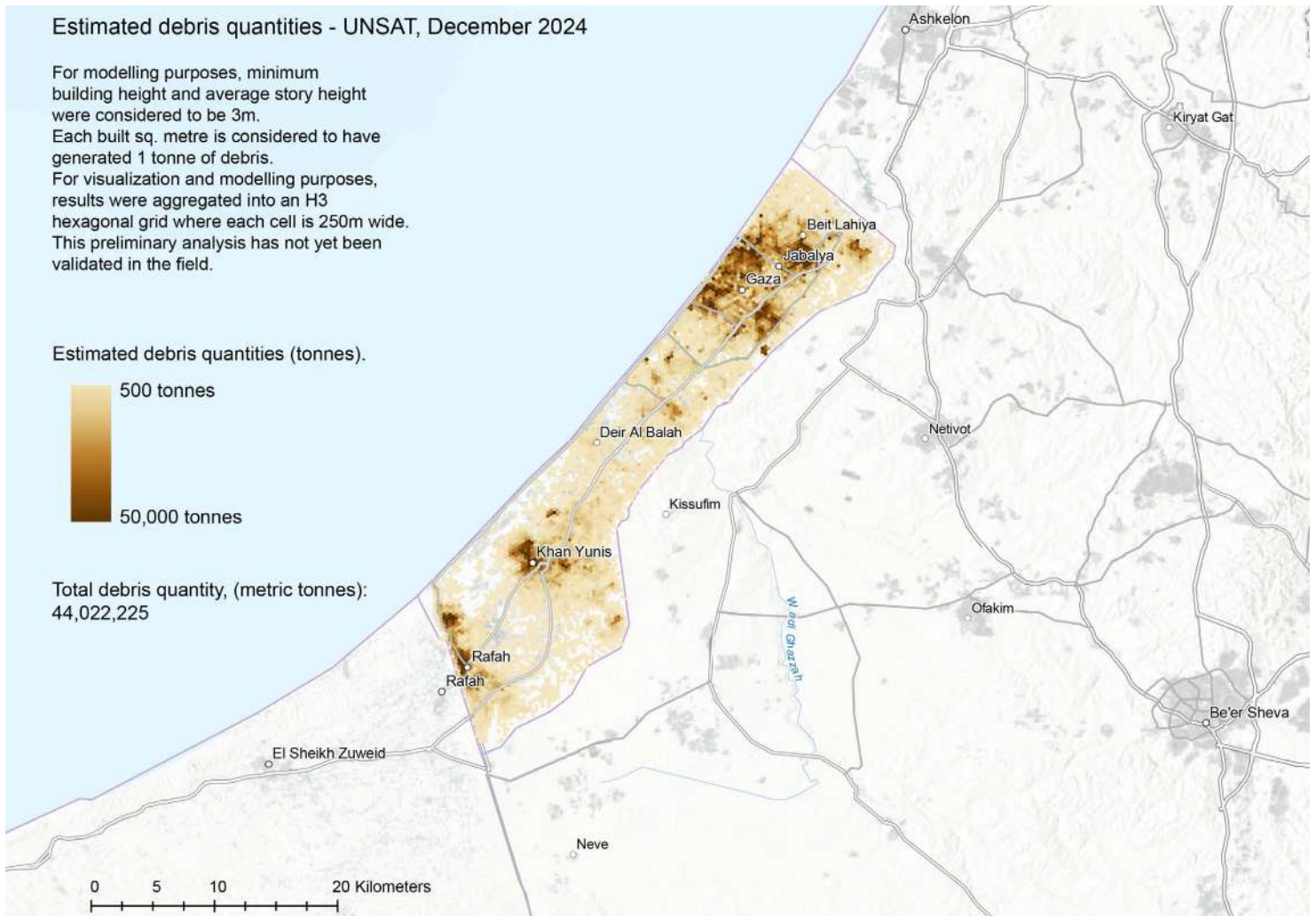
## Estimated debris quantities - UNSAT, December 2024

For modelling purposes, minimum building height and average story height were considered to be 3m. Each built sq. metre is considered to have generated 1 tonne of debris. For visualization and modelling purposes, results were aggregated into an H3 hexagonal grid where each cell is 250m wide. This preliminary analysis has not yet been validated in the field.

Estimated debris quantities (tonnes).



Total debris quantity, (metric tonnes):  
44,022,225



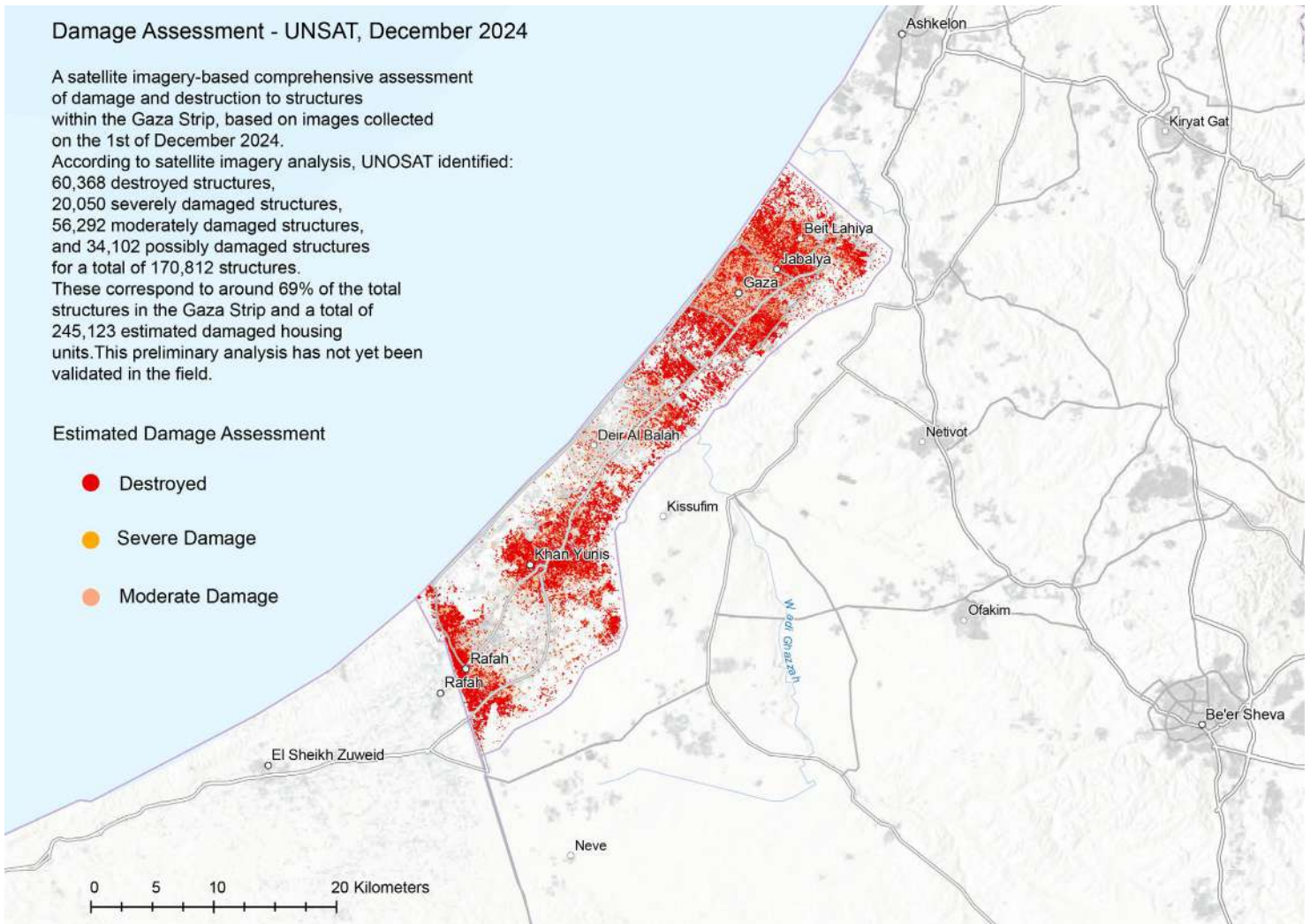
Map 9: Damage assessment, based on UNSAT, December 2024

## Damage Assessment - UNSAT, December 2024

A satellite imagery-based comprehensive assessment of damage and destruction to structures within the Gaza Strip, based on images collected on the 1st of December 2024. According to satellite imagery analysis, UNOSAT identified: 60,368 destroyed structures, 20,050 severely damaged structures, 56,292 moderately damaged structures, and 34,102 possibly damaged structures for a total of 170,812 structures. These correspond to around 69% of the total structures in the Gaza Strip and a total of 245,123 estimated damaged housing units. This preliminary analysis has not yet been validated in the field.

Estimated Damage Assessment

- Destroyed
- Severe Damage
- Moderate Damage



Map 10: Estimated debris quantification, based on UNSAT, December 2024

passengers and goods, improving regional connectivity.

Reconstructing the road networks and establishing a modern railway system that connects Gaza with Egypt, Israel, and the West Bank could help improve the movement of goods and people. These transportation links are vital for the region's economic development and for fostering regional cooperation.

#### **Sustainable Solutions for Water, Energy, and Waste Management**

Gaza's water and energy infrastructure must be rebuilt with a focus on sustainability. Investment in renewable energy sources, such as solar power, will reduce Gaza's dependency on external sources of electricity. The integration of green technology into infrastructure projects can ensure that Gaza's recovery is environmentally sustainable.

Regional cooperation on issues like water management, energy production, and waste management will be essential to achieving long-term resilience. Large-scale desalination projects can address the region's water scarcity by providing a reliable and sustainable supply of drinking water and recycled wastewater can contribute to regional sustainability in agriculture.

### **A Note on Sustainability & Resilience.**

Key to addressing Gaza's infrastructure challenges lies in developing a roadmap towards a resilient and sustainable suite of movement corridors, utilities and associated services – a 'system of systems' fit for the future. Resilience will depend on the use of proven, relatively simple and maintainable technologies, while sustainability will require greater reliance on local resources and systems that are closed-loop, integrated, or circular in nature.

### **Long-Term Social Infrastructure and Economic Development**

Rebuilding Gaza's social infrastructure, including healthcare, education, and housing, will require substantial investment. New schools and healthcare facilities must be built to accommodate the needs of the growing population. Efforts should also focus on providing vocational training and educational

opportunities to equip the workforce with the skills needed for economic development.

Economic recovery will be driven by investments in small businesses, regional trade, and job creation. Initiatives that promote entrepreneurship, support local industries, and improve access to markets will be critical in boosting Gaza's economy.

### **International Support and Coordination**

Reconstruction efforts in Gaza will require the active participation of the international community. Donors, international organizations, and governments must coordinate their efforts to ensure that resources are allocated effectively and efficiently. Funding should be directed toward rebuilding critical infrastructure, supporting economic development, and addressing the social needs of the population.

In addition to financial support, the international community can assist in building local capacity by providing technical expertise and training to Palestinian engineers, urban planners, and healthcare professionals. This will ensure that Gaza's infrastructure can be managed and maintained in the long term.

### **Peacebuilding and Political Stability**

The reconstruction of Gaza is inextricably linked to the broader political situation. Beyond physical reconstruction, there is a need to address the underlying political and social issues that have contributed to Gaza's instability. Sustainable recovery in Gaza cannot occur without a political settlement addressing the conflict and ensuring long-term peace and security. This includes issues such as the political fragmentation, and the relationship between Gaza and the West Bank and a negotiated agreement between Palestine, Israel and neighbouring countries. Achieving long-term stability and peace in the region will require a political solution that addresses the underlying causes of conflict. While sustainable infrastructure development cannot occur without a stable political environment, building shared initiatives will be a way forward to creating stability.

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## B

### The Reconstruction of Mosul

#### **Context**

The liberation of Mosul from ISIL left behind a devastated urban landscape, with significant damage to housing, infrastructure, and cultural heritage. UN-Habitat and UNESCO developed an Initial Planning Framework to guide Mosul's recovery, addressing immediate humanitarian needs and long-term urban development. The framework emphasized heritage preservation, economic revitalization, and citizen empowerment.

#### **Lessons for Gaza Comprehensive Framework**

Gaza's reconstruction should balance immediate humanitarian relief with long-term urban planning. This includes addressing housing deficits, rebuilding infrastructure, and fostering economic opportunities. As was the case in Mosul, this is also an opportunity to address structural issues that predate current destruction.

#### **Heritage Preservation**

Protecting Gaza's cultural and historical assets is vital for retaining community identity and pride. Incorporating heritage conservation into reconstruction plans can strengthen social cohesion.

#### **Private Sector Engagement**

Encouraging private investment and supporting local entrepreneurship can catalyze economic recovery. Public-private partnerships could play a significant role in Gaza's redevelopment.

#### **Environmental Restoration**

Rehabilitating natural ecosystems, such as Gaza's coastline, is crucial for sustainability. Lessons from Mosul's environmental challenges highlight the importance of integrating ecological restoration into urban planning.

#### **Citizen Empowerment**

Engaging local communities in reconstruction efforts fosters ownership and resilience. Programs supporting self-reconstruction, similar to Mosul's initiatives, can empower Gaza's residents to take an active role in rebuilding their communities.

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It should be recognised that the current conflict has deepened the mistrust and hate and therefore sectorial and modular solutions need to be applied in the short and medium term, while understanding the wider perspectives and implications of peace. Anthedon provides this Vision of Hope. Efforts should focus on building trust between Palestinian and Israeli people and authorities, as well as with neighbouring countries, to create a foundation for lasting peace. Social programmes aimed at strengthening communities, particularly those most affected by the conflict, will be crucial for healing and recovery. Joint activities with the catalytic facilitation of third parties should be encouraged with face-to-face meetings especially in the professional and academic fields. Reconstruction should also prioritize community-based initiatives that foster social cohesion and reconciliation among Gaza's diverse communities and the Palestinian people.

The road to rebuilding Gaza is fraught with challenges. However, through a combination of immediate relief, strategic planning, and long-term investment, Gaza can rebuild its infrastructure and create a more resilient, prosperous future for its population. The international community must play a key role in supporting a comprehensive Palestinian recovery, while also working towards lasting political solutions that can ensure peace and stability for future generations.

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## C

### The Reuse of Rubble

In conflict zones, the sheer amount of rubble left behind is staggering. After the 2014 Gaza conflict, for instance, the debris was estimated to be equivalent to 12 Giza pyramids. The debris resulting from massive destruction presents significant challenges to any future planning for the physical rebuilding of Gaza. Traditional methods of disposal—like dumping it in landfills—are expensive and unsustainable. So, what if instead of treating rubble as waste, we saw it as a resource?

Reusing rubble can reduce the demand for new raw materials and even create economic opportunities. Crushed concrete, for example, performs similarly to virgin materials and can be used in rebuilding efforts. But while this approach holds promise, it comes with its own set of challenges.



One major issue is safety. Rubble often contains hazardous materials like asbestos, heavy metals, or even unexploded ordnance (UXO), all of which require careful handling. Then there's the environmental impact - crushing rubble generates dust and air pollution, and there's also the risk of water contamination. Even beyond the technical aspects, there are social and ethical concerns. Families who have lost their homes might find it difficult to accept that the remains of their communities are being repurposed, especially if personal belongings or human remains are found in the debris. That's why community engagement is crucial.

Despite these challenges, rubble has immense potential. It can be crushed and repurposed as construction material for roads, bridges, and buildings. It can be used for environmental projects, like preventing soil erosion or even creating artificial reefs. Beyond infrastructure, it can have cultural and social value too—some communities have incorporated rubble into public art and memorial projects, turning destruction into a symbol of resilience.

The process of recycling rubble could also bring employment opportunities. Setting up processing facilities would require skilled labor and training, offering jobs in construction, environmental management, and materials science. And in the long run, small businesses built around rubble recycling could help stimulate local economies, potentially even exporting materials to nearby regions.

Several organizations and research institutions are already exploring innovative ways to reuse rubble. The Fraunhofer Institute and Urban Mining and Recycling (UMAR) are studying how to make construction materials more sustainable. The UK Building Research Establishment (BRE) is developing guidelines for recycling debris. Meanwhile, international efforts, like UNDP's collaboration with Türkiye's Ministry of Environment, are helping to set up model facilities for safely processing rubble, using industrial crushers and separators.

Rubble reuse isn't just a necessity – it is an opportunity. With the right approach, it can be a cost-effective, sustainable solution for post-conflict reconstruction. But success depends on careful planning: addressing environmental concerns, involving local

## 3.2 Connectivity and Resilience

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### Spatial Planning

The UN-Habitat New Urban Agenda provides a framework for the implementation of the Sustainable Development Goals, especially Goal 11 – making cities safe, inclusive, resilient and sustainable. The three dimensions, economic, social and environmental are supplemented by the concepts of spatial sustainability. The city, per se, is no longer a sustainable unit by itself and needs to be considered within its hinterland and wider context in many instances as part of a metropolis and bioregion. This is all the more relevant for Gaza, where a detailed plan needs to be considered within a future regional vision.

Before the war, Gaza's urban planning, as part of national Palestinian strategies, was characterized by a dense development. The closed borders and the rising population left limited space for natural areas. Gaza was a mixture of urbanized habitats and agricultural land, struggling with a lack of infrastructure and limited access to public services. Geopolitical constraints and population growth compounded the difficulties in spatial planning, making it harder to manage land use efficiently. The region also faced challenges in transportation, green infrastructure, and the lack of public open spaces, which resulted in poor urban resilience and connectivity.

The war has exacerbated Gaza's spatial planning issues. Critical infrastructure—such as roads, sanitation, and housing—has been destroyed, and the territorial fragmentation has worsened. The physical layout of the city was severely impacted, with limited space for public facilities and green areas. The destruction has undermined urban connectivity, as essential roads and transport networks are no longer functional. The rebuilding process is further complicated by the difficulty in accessing resources and the political constraints imposed by the conflict.

Spatial sustainability in the New Urban Agenda (NUA) refers to the balanced and efficient use of urban space to promote environmental, social, and economic sustainability. It emphasizes compact, well-planned cities that reduce urban sprawl, enhance connectivity, and support inclusive and resilient communities. The NUA highlights spatial sustainability as a way to optimize land use, integrate green spaces, and ensure equitable access to resources and opportunities.





## **Spatial Planning for Recovery - Priorities for planning in Gaza**

Within these visions the spatial planning for Gaza's recovery must address several key aspects to ensure a sustainable future:

- **Public Action for Overall Planning:** Comprehensive planning must focus on infrastructure, including health, education, and sanitation facilities. It is essential to design transportation networks, public spaces, and waste management systems while securing areas for public infrastructure before private development takes over.
- **Private, Local Action for Reconstruction:** Residents should have the freedom to rebuild individual structures, improving resilience through measures like rooftop solar panels or agrivoltaics. While larger industrial areas require centralized energy systems, small businesses and homes can utilize decentralized energy solutions.

## **Land Issues**

Gaza's land regulations are a complex amalgamation of Ottoman, British, Egyptian, Palestinian, and Israeli laws, which complicate land use and administration. Approximately 30% of Gaza's land remains unsurveyed, with fragmented land ownership. Multiple land categories—private, state, Waqf, and special status—create challenges in property rights and land administration. Resolving tenure issues is essential for equitable rebuilding efforts.

## **Housing**

Housing has long been a central issue for Palestinians, exacerbated by displacement since the 1948 Arab-Israeli war. With 66% of Gaza's population living in refugee camps, housing rights and living conditions have been shaped by complex regulatory frameworks and ongoing displacement. After the October 7 conflict, over 1.9 million people were displaced, with many forced to move multiple times. The damage to infrastructure and the built environment has created unsafe conditions, further complicating rebuilding efforts.

Efforts to rebuild must prioritise safe, permanent housing solutions, moving beyond temporary shelters and addressing conditions in refugee camps. A balance between top-down public and bottom-up private

initiatives will need to be achieved, by an understanding of the land ownership and community structure through the governates and local municipalities.

Equally important is the integration of open spaces, play areas and culturally significant sites. These spaces contribute, not only to physical liveability, but also to restoring identity, dignity and a sense of normality for displaced communities. This includes Wadi Gaza, the sea and its shore providing for the spirit of Gazans.

## **Public Spaces**

Public spaces in Gaza are shaped by overlapping legal frameworks from various historical periods. With only 15.3% of Gaza designated as public land, access to open public spaces is limited. A 2020 study showed that urban space in Gaza accounts for just 1.7% of the land, with only 3.5m<sup>2</sup> of public space per capita. The destruction of civic infrastructure and services, particularly in refugee camps, calls for the prioritization of public spaces as part of recovery and resilience efforts. Public spaces that emphasize green and blue spaces that can bring natural environments into the city, promote exercise and provide a sense of public safety have been shown to foster community well-being, civic engagement, and a sense of identity.

Reconstruction must integrate landscape and heritage considerations, with special attention to the preservation of open spaces, agricultural land, and historical landmarks. A landscape plan should address:

- **Open Space Layout:** Plans should focus on the qualification and connectivity of open spaces, such as parks and street vegetation. The aim should be to create areas where residents can relax and engage with nature.
- **Public Participation:** Involve residents in the planting of drought-resistant trees and vines, which require little maintenance. This initiative not only helps beautify the area but also promotes community engagement and ownership.
- **Heritage Preservation:** The Historic Urban Landscape (HUL) approach, adopted by UNESCO, emphasizes the integration of cultural and natural heritage in urban development. Gaza's reconstruction should balance the preservation of tangible heritage with the needs of modern urban life. This approach allows for the city to be reconstructed with respect to its history, while also meeting contemporary needs.



## Basic Services

The ongoing waste management crisis and the collapse of Gaza's waste management system have created significant public health risks. Over 225 informal waste disposal sites have emerged, exacerbating urban sanitation challenges. Similarly, the water crisis in Gaza has worsened, with the majority of the population relying on contaminated water sources. The destruction of critical water and sanitation infrastructure has left many Gazans without access to clean water, deepening the humanitarian crisis.

## Transportation

Gaza's transportation infrastructure is severely restricted due to isolation and limited access to international transport networks. Pre-conflict, Gaza's road network was functional but lacked a formal public transport system. Rebuilding Gaza's transportation system will require addressing both road networks and public transport needs, ensuring sustainable mobility

to support economic recovery and urban development. Minimizing dependency on cars and promoting public transport, as well as bicycling and walking, can be critical steps to promoting health.

The recovery process should capitalize on the opportunity to improve infrastructure that was previously lacking. Essential networks include:

- **Transportation Routes:** A transit corridor along the border could minimize destruction while enhancing regional connectivity. This could take the form of roads or light rail systems, with bridges eventually facilitating cross-border movement once peace is achieved.
- **Green Infrastructure:** Establishing ecological corridors, promenades, and flood corridors is crucial for maintaining biodiversity and improving the quality of life. The design should focus on areas that connect agricultural land, wetlands, and urban spaces, allowing residents to enjoy natural spaces and maintain a connection to the environment.

Reconstruction Models and Approaches:



Map 11: land categories in the region

## Recovery can follow several models:

- **Top-Down Reconstruction:** This model, often driven by public authorities and large private firms, imposes a new urban layout without much input from the inhabitants. Examples include post-WWII Le Havre (France) and the reconstruction of Beirut (Lebanon). While it can result in a more organized city, it risks ignoring the social and cultural needs and aspirations of the local population.
- **Spontaneous Reconstruction:** This model relies on the residents to rebuild based on their own needs, leading to a more organic and less coordinated city layout. It can lack critical infrastructure and result in an unorganized urban environment, often making infrastructure and service provision problematic.
- **Mixed and Collaborative Approaches:** Combining public planning with collaborative initiatives and private self-construction, this model seeks to balance large infrastructure projects with local rebuilding efforts. Cities like Warsaw (Poland) and Dresden (Germany) after WWII used this model. This approach can preserve the overall urban form while allowing for innovation in the reconstruction of buildings and infrastructure. Increasingly, substantive co-design and co-production methods bring together different stakeholders in strong participatory approaches to bridge their 'conflicting rationalities' and increase senses of ownership by the beneficiaries.

## Planning for a Future

To improve urban management, it is essential to prioritize decentralization by clearly defining responsibilities and institutional powers. Urban governance laws should be updated to align with modern needs, and institutional capacities must be reviewed to tackle current and future challenges. Implementing a benchmarking system will promote performance monitoring, and community participation should be enhanced to ensure local influence in planning.

Urban growth in Gaza must be contained within designated areas to protect agricultural and environmental land. Gaza City and Deir Al Balah should serve as key urban hubs, supported by a network of smaller centres for services and transport. Economic zones along Gaza's borders will complement urban centres, with initial growth focusing on existing planned areas before expanding into new zones.

To address land fragmentation, a comprehensive strategy for land assembly using voluntary tools like land purchase and land readjustment should be adopted. When voluntary tools fall short, involuntary measures like expropriation may be used for large-scale projects. Land readjustment policies will help consolidate private parcels, promoting urban regeneration.

An integrated climate action framework should strengthen the coordination among stakeholders to develop climate-resilient land-use policies. Additionally, the National Climate Change Committee (NCCC) must be reviewed to ensure broader representation and stronger climate action leadership.

A transnational city region encompassing Palestine, Jordan, Egypt, and Israel should be developed, removing political and logistical barriers. A connected transportation network will foster economic and social cooperation, with this region becoming a key global player.

Measures to protect and restore natural ecosystems, such as beaches and coastal zones, must be prioritized in urban planning. Public access to these spaces should be promoted to balance development with conservation.

Gaza's transportation network requires development, including a rail corridor along the historic rail alignment, a north-south light rail system, and improved local transportation networks. Regional and international connectivity should also be enhanced through road, sea, and air links, aligning transportation planning with urban development.

Urban, rural, and peri-urban areas should have clear planning strategies that preserve agricultural and natural land. Sustainable water management, such as using treated wastewater for irrigation, is vital. Zoning should allow denser development, while land value capture mechanisms will fund infrastructure projects. A polycentric urban structure will reduce congestion and improve accessibility.

Public spaces should foster community resilience and support sustainable development. These spaces must be accessible to all and integrated into a network of recreational, cultural, and natural areas. Effective governance, updated planning laws, and clear policies are crucial for ensuring long-term sustainability and inclusivity.

These recommendations aim to tackle challenges and promote sustainable growth in Gaza and the West Bank, with an emphasis on effective governance, infrastructure integration, climate resilience, and community engagement.

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**D**Gaza Planning Challenge

<b>Infrastructure</b>			
<b>Housing</b>	Lack of institutional capacity	High population density	Lack of affordable housing
<b>Land and landuse</b>	Security of tenure		
<b>Transportation</b>	Weak coordination between transport and other sectors	Poor road network, congestion, and lack of adequate public transport	
<b>Sustainability</b>		Lack of coordination between disaster risk management and urban development	Lack of natural risk information
<b>Public spaces</b>	Insufficient access and diversity of use	Poor governance, management, and maintenance	
<b>Basic services</b>	Inadequate solid waste management		
<b>Urban economy</b>	Concentration of economic activity in urban areas and lack of rural vitality	Rural-urban migration	Low employment rate (pre October 7)

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Current state of spatial aspects in Gaza Strip and the region.

Source: Israel National Master Plan and Antique Authority, Geomolg Palestine, Endangered Archaeology in the Middle East and North Africa, Humanitarian Data Exchange



Map 12: Currentt composite state of the region

### 3.3 Sustainability and Environment

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It goes without saying that reconstruction and development in an arid environment like Gaza and rest of the study area has to take account of prevailing conditions and the already accelerating pace of climate and broader environmental changes. Failure to do so will inevitably jeopardise the sustainability of such investments and, indeed, the lives and livelihoods of residents, livestock, agriculture and the environment.

A report of this nature must nevertheless be highly selective. Accordingly, the focus here on understanding the key environmental, biodiversity and climate parameters – and the elements of diversity even within this relatively small geographical region – does not mean that we regard other environmental challenges as unimportant. Pollution and contamination from fractured infrastructure, previously unsustainable activities, use of non-biodegradable pesticides and fertilisers, and uncontrolled waste dumping are all important and can have major health implications. One critical conflict-related aspect, namely contaminated rubble, is addressed in Box B.

#### The Gaza Bioregion

A bioregional approach to Gaza requires geographical and ecological analysis, incorporating both experts and local inhabitants to redefine territorial boundaries collaboratively. A bioregion does not have distinct frontiers—these are blurred as neighbouring regions merge into each other, and indeed these areas of overlap are themselves of great interest. The term “Gaza Strip” has historically isolated Gaza, removing it from its natural territorial context. The geopolitical strife resulting from the Israeli-Palestinian conflict, alongside the legacy of the 1948 war and the creation of the “Otef” (a cordon of Israeli settlements along Gaza’s border), underscores the need for a new, inclusive narrative—one that fosters long-term coexistence through a shared cross-border bioregion.

This vision would integrate Gaza with neighbouring territories in a larger bioregional context, where geographical and ecological links offer a pathway to peace and shared prosperity.

#### Characteristics

The Gaza bioregion is defined by several physical and ecological features. It is unique in being a meeting place of the Mediterranean and the Sudanian biomes,

within the wider Irano-Turanian and Saharo-Arabian biomes of the Negev Desert to the east

- **Coastline and Geography:** Gaza’s coastline stretches in a linear path with minimal bays or headlands. From the Bardawil Lake to the Carmel mountains, the coastal plain is characterized by three natural kurkar levees, transitioning into the arid Negev Desert to the south and the mountainous Mediterranean biome to the north. This coastal plain provides fertile grounds for agriculture before it meets the more arid and mountainous zones inland. Mediterranean currents from the Nile Delta to the Carmel mountains provide for sand replenishment, albeit affected by the Aswan Dam.
- **Climate and Vegetation:** Rainfall decreases as one moves from northeast to southwest, transitioning from Mediterranean climates to arid and desert environments. Gaza is a transition zone for vegetation, with citrus, olive, and palm groves. Pre-war agriculture in Gaza resembled that of Israeli farms near Ashkelon. Further south, greenhouse agriculture dominates due to harsher conditions.
- **Urbanization and Agriculture:** Gaza’s population density, coupled with closed borders, has led to a heavily urbanized area with limited natural spaces. This anthropocentric development is mirrored on the Israeli side, where kibbutzim and intensive mechanized agriculture dominate the landscape. Both territories face similar challenges in balancing urban growth and agricultural needs with integrated pest management.
- **Hydrology and Water Resources:** The region’s hydrology is defined by streams flowing perpendicular to the coast, with Wadi Gaza/Nahal Besor serving as the main watercourse, a seasonal river that is fed by a water purification plant near the Israeli border. Southward, streams become dry, prone to flash floods. Hydrological connections across borders, such as the Hebron River flowing into Nahal Beersheva and Wadi Gaza, highlight potential for cross-border water management.
- **Wildlife and Marine Life:** The heavily cultivated environment limits biodiversity, but migratory birds between Eurasia and Africa pass through the region, particularly along the coast and Rift Valley. These have been recognized on the World Heritage Tentative Lists of Egypt, Palestine and Israel. Coastal fishing and industrial fishponds provide



food, and migration through the Suez Canal affects marine life in both directions.

- **Industrial and Construction Trends:** Gaza is transitioning from traditional construction to reinforced concrete. Industrial activities have been impacted by the exploitation of gas fields in the Mediterranean, providing energy for desalination but contributing to global warming.

A bioregional approach offers a way forward for Gaza, rooted in the region's shared geography, ecology, and economy. By redefining Gaza's role within a larger bioregion, integrating cross-border environmental, agricultural, and hydrological systems, and fostering cooperation with neighbouring regions, this approach can serve as a foundation for long-term coexistence and peace. The Wadi Gaza/Nahal Besor river basin, uniting the West Bank, northern Negev and Gaza, can constitute a founding element for a future parliament of stakeholders, dealing with the rehabilitation of the river

### Bioregion according to the coastal plain

From northeast to southwest, from the Sharon region in Israel, through Gaza in Palestine to the northern Sinai in Egypt, the increasingly arid climate is reflected in the types of vegetation and agriculture.



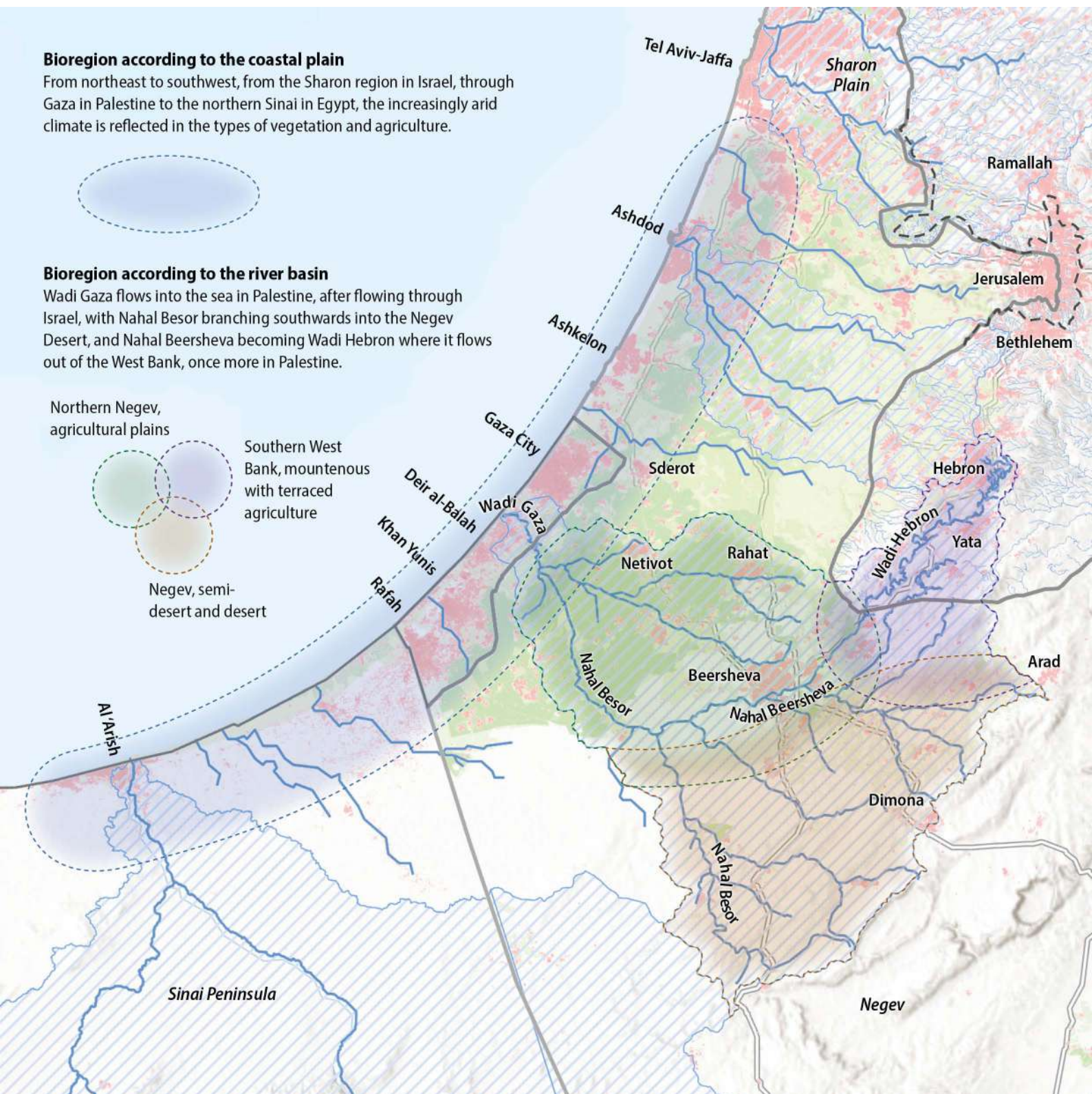
### Bioregion according to the river basin

Wadi Gaza flows into the sea in Palestine, after flowing through Israel, with Nahal Besor branching southwards into the Negev Desert, and Nahal Beersheva becoming Wadi Hebron where it flows out of the West Bank, once more in Palestine.

Northern Negev,  
agricultural plains

Southern West  
Bank, mountainous  
with terraced  
agriculture

Negev, semi-  
desert and desert



Map 13: the bioregion



and surrounding areas on its cross-border journey. A similar approach can follow the beach and littoral zone stretching from Ashkelon, through Gaza, to El-Arish.

The international artist workshops organised around bird migration routes, with young Israelis, Palestinians and Jordanians, is proof that such an approach is possible.<sup>1</sup> The cross-border barn owl project between Israel and Jordan could be replicated between Israel and Palestine. A pair of barn owls eat between 2,000 and 6,000 rodents every year, allowing farmers to stop using pesticides.

The need to take care of a shared land is a potent

means to forge a togetherness that might help to undo the current deadlock.

<sup>1</sup> In the Hula Valley in Israel in 2009, and above the Dead Sea in Jordan, in 2017.

## Climate Change and Extremes

Reconstruction in Gaza must account for the region's arid climate and ongoing environmental challenges, which will worsen living conditions and livelihood prospects. Addressing these issues is crucial for overcoming destruction, poverty, and distrust, and for fostering a sustainable and resilient future. Climate change, particularly its effects on health through changing incidences of disease and exposure to debilitating and potentially fatal heat exposure, must be integrated into reconstruction processes. Socially, economically and physiologically vulnerable groups

<sup>2</sup> One Health is a collaborative, multisectoral, and transdisciplinary approach — working at the local, regional, national, and global levels — with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment.

and individuals (the elderly, infants and under-fives, and those with cardio-vascular and other underlying health conditions) are most at risk. The One Health approach<sup>2</sup> balancing the health of people, animals, and ecosystems, is vital for this integration.

### Key Considerations:

→ Climate and Environmental Changes: Ongoing shifts in rainfall, water resources, extreme weather, and rising temperatures across the region are authoritatively predicted to accelerate between 2030 and 2050 and have substantial implications for human and animal health, livelihoods, biodiversity and ultimately livability. These challenges are transboundary, affecting Gaza, the West Bank, Israel, and Egypt, and require multi-stakeholder collaboration. Key dimensions are summarized in Box 4.1, while Box 4.2 provides

geographically disaggregated projections of temperature, precipitation and humidity for 2023, 2030 and 2050, to provide more detailed inputs that will need to underpin all reconstruction and new sustainable and resilient developments.

→ A current critical issue is rising sea levels and increasing shore erosion due to the reduced sand renewal from the Nile, since the building of the Aswan Dam. Sea level rise and falling water tables through increasing exploitation of aquifers combined with reduced precipitation will accelerate salinization of groundwater, thereby exacerbating freshwater supply challenges.

## E

### Current dimensions of climate/ environmental change in Gaza, the West Bank, Israel and Sinai

- The Mediterranean's surface temperature is now 1.5°C above pre-industrial levels, with corresponding increase in high-temperature extreme events. The rate of increase in surface warming has increased since the early 1980s, by 0.29 – 0.44°C per decade, especially in the eastern basin, which is at the upper end of this range.
- Sea level rose by 1.4±0.2 mm yr<sup>-1</sup> during the 20th Century, and by double that rate (2.8±0.1 mm yr<sup>-1</sup>) from 1993-2018, while ocean acidity is also increasing.
- With these changes intensifying, by 2050, sea level is predicted with high confidence to rise by another 0.15–0.33 m, and possibly more.
- "Air and sea temperature and their extremes (notably heat waves) are likely to continue to increase more than the global average (high confidence). The projected annual mean warming on land at the end of the century is in the range of 0.9–5.6°C compared to the last two decades of the 20th century, depending on the emission scenario (high confidence). Precipitation will likely decrease in most areas by 4–22%, depending on the emission scenario (medium confidence). Rainfall

extremes will likely increase in the northern part of the region (high confidence). Droughts will become more prevalent in many areas (high confidence).” (p.2235)

- “The process is irreversible at the scale of centuries to millennia.” (p.2235)
- A growing number of observed impacts across the entire basin are now being attributed to climate change, along with major roles of other forcings of environmental change.
- “Due to its particular combination of multiple strong climate hazards and high vulnerability, the Mediterranean region is a hotspot for highly interconnected climate risks [that can, in turn, dramatically affect the population’s health]. The main economic sectors in the region (agriculture, fisheries, forestry, tourism) are highly vulnerable to climatic hazards, while socioeconomic vulnerability is also considerable. The low-lying areas are the most vulnerable areas for coastal climate-related risks (e.g., sea level rise, floods, erosion) and other consequent risks (e.g., saltwater intrusion and agriculture damage) (high confidence). Climate change threatens water availability, reducing river low flows and annual runoff by 5–70%, reducing hydropower capacity (high confidence). Yields of rain-fed crops may decrease by 64% in some locations (high confidence). Ocean warming and acidification will impact marine ecosystems, with uncertain consequences on fisheries (low confidence). Desertification will affect additional areas, notably in the south and

southeast (medium confidence). Burnt area of forests may increase by 96–187% under 3°C, depending on fire management. Beyond 3°C, 13–30% of the Natura 2000 protected area and 15–23% of Natura 2000 sites could be lost due to climate-driven habitat change (medium confidence).” (p.2237)

- Many of the key parameters of climate/ environmental change for 1.5°C and 4°C of warming (NB: 4°C is correct; the figure caption incorrectly states 3°C)
- Compatible with this regional perspective, the Israel National Spatial Strategic Plan (2024) identifies and examines four key climate change spatial trends affecting Israel (with some variations):
  - Rising sea levels
  - Reduction of precipitation averages and increased frequency of extreme events
  - Desertification
  - Extreme heat

“In particular, rising air temperatures are expected to have significant planning and geopolitical implications on Israel and its neighbouring countries.” (p. 222)

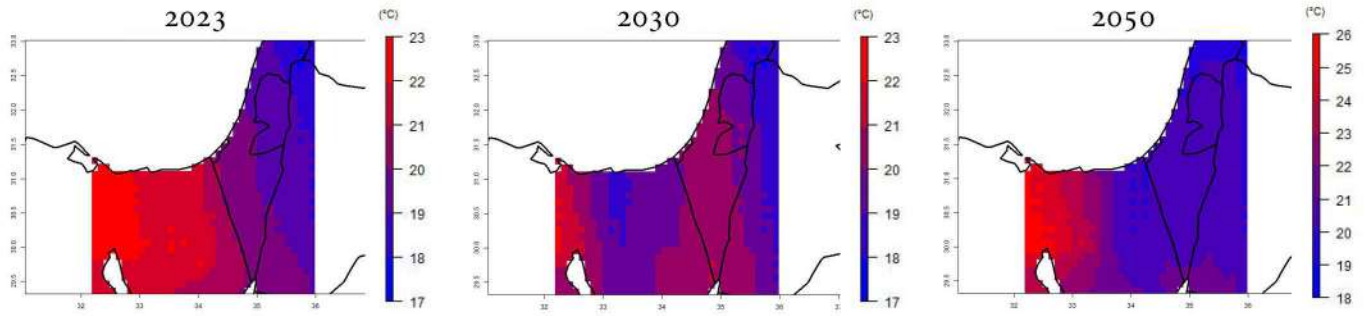
Inevitably, given the geographical scale of our study area, these also apply to Gaza, the West Bank and littoral zone of Sinai.

Sources: IPCC AR6 WG2 report 2022; cross-chapter paper 4: Mediterranean Region; Israel National Spatial Strategic Plan 2024.

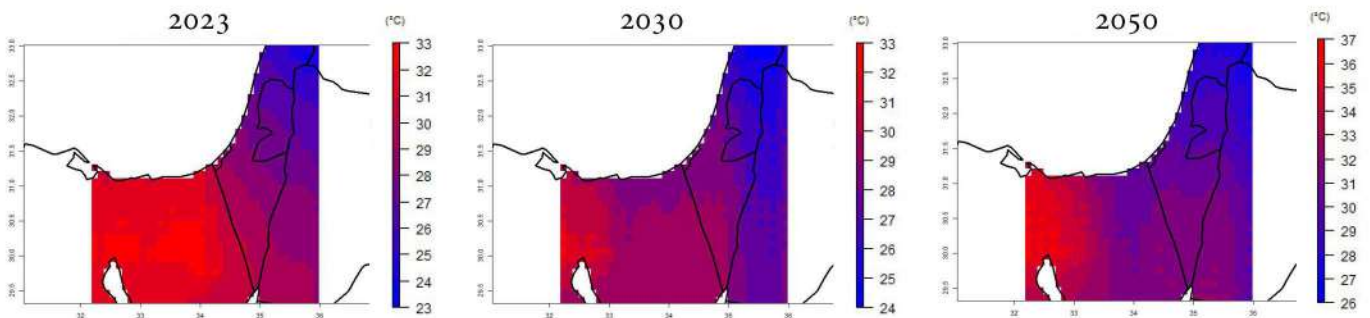
## Synthesis of observed and projected (1.5°C and 4.0°C global warming levels) changes in climate drivers affecting the Mediterranean region



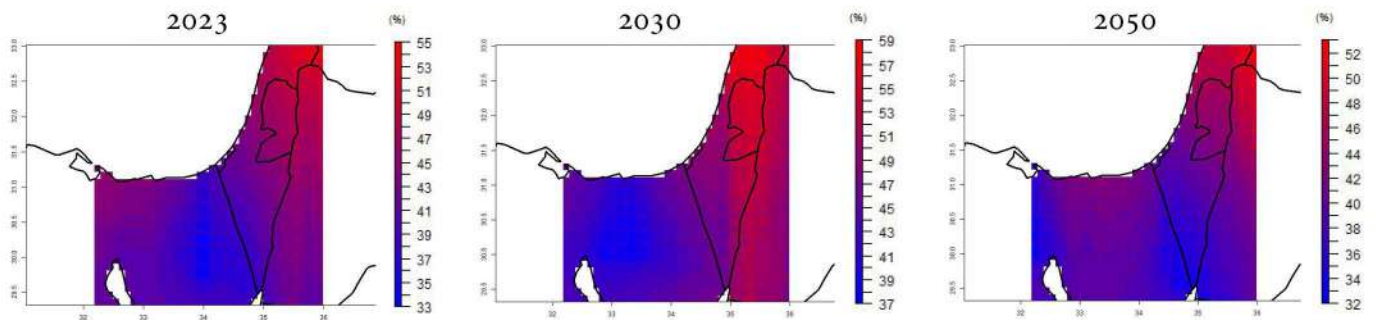
## Minimum Temperature °C



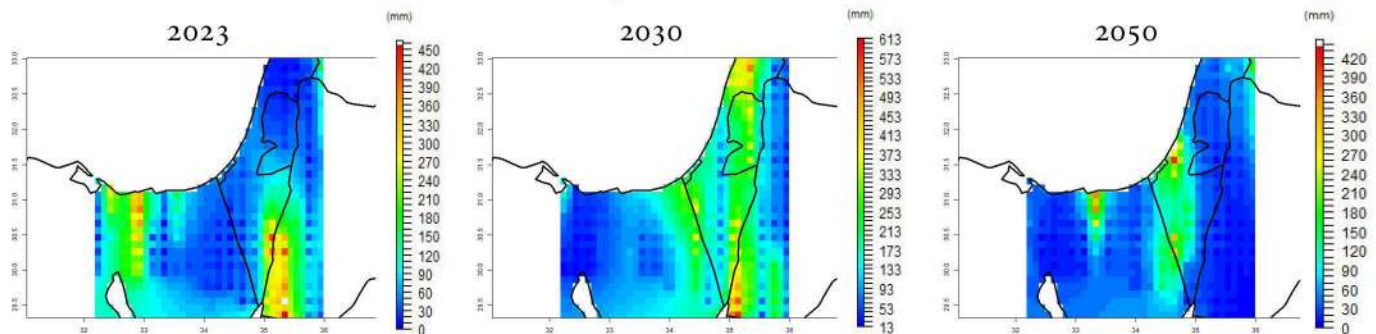
## Maximum Temperature °C



## Relative Humidity (%)



## Precipitation (mm)





## F

### Disaggregated projections for the study area

To augment the above regional-scale perspectives of current and likely future changes, we have utilised the most appropriate climate model to provide best estimates of the scenarios for the SE Mediterranean coastal area, from El Arish in Egypt to the Israeli coast as far as Haifa, including the Sinai Peninsula. Inland, the study area to the River Jordan valley and associated human settlements.

- Approximate projections of temperature, humidity and precipitation at the coast and with increasing distance inland (at 10km intervals) for 2023, 2030 and 2050.
- This enabled visual inspection of overlays with topographical, surface and subterranean water data, vegetation, agriculture info (available in GIS layers) and maps/literature. In the next stage of research, the aspiration is to build one comprehensive GIS system incorporating all these data on a standardised basis, thereby enabling more detailed locality-specific analysis of trends and projections.

Climate model utilised: Using the Earth System Grid Federation (ESGF) portal, the MNA (Middle East North Africa) CORDEX 22 data in daily format were utilised, due to their higher resolution, and transformed modestly to provide continuous 10km-scale coverage for the study area rather than point data.

### Annual average results summary and principal likely impacts

Precipitation totals (mm) reveal considerable year-on-year variation. The 2023 data show relatively high rainfall in lower Jordan River Valley (south of the West Bank) and adjacent parts of western Jordan, and in the extreme west, on the eastern fringes of the Nile Delta north of Cairo (where autumn 2024 indeed brought unusually heavy rainfall) but the 2030 and 2050 projections show this trend falling away, with an adverse effect on the rapidly expanding area of agricultural cultivation eastwards into the desert from the Nile Delta.

Map Precipitation 2030 shows substantial change from 2023. As with humidity, the most pronounced increases are predicted in northern Israel including the Galilee and Golan Heights, and most of the West Bank, as well as the Gaza Strip and a belt straddling the Suez Canal (around 300-350 mm p.a.), with totals of 275–400 mm p.a. and only isolated pockets receiving above 450 mm p.a. This would enhance agricultural prospects locally, boost water runoff into the Jordan River system and enable some aquifer recharge.

The 2050 projection (Map Precipitation 2050), however, shows those areas drying again, with much of the east receiving below 100mm p.a., which would render most conventional agriculture unviable and lead to severe water stress in view of the density of urban and some rural populations. The Gaza Strip, western Negev and Suez Canal belt are predicted to experience a more modest decline in precipitation, to somewhere between 100 –250 mm p.a., and only a small area north and northeast of the Gaza Strip likely to receive above that (perhaps up to 400 mm. p.a.). Only a narrow north-south belt in the north-central Sinai is expected to receive increased precipitation – up to 350 mm p.a. locally. This could enhance seasonally rainfed or drip irrigation agriculture in these small and sparsely populated areas. There is expected to be inter-annual variability, as regards both total precipitation and incidence (a higher proportion of total precipitation falling on a smaller number of days), although rainy seasons in the wetter parts may extend modestly.

NB: When comparing the maps, note that the colours correspond to different precipitation levels in the respective maps.

Humidity (Near-surface relative humidity (%)) trends inevitably mirror precipitation changes quite closely. Hence humidity is projected to increase between 2023 and 2030 (Maps Relative Humidity 2023 and 2030), with the magnitude increasing with distance from the coast, and thus most pronounced in the east of the region (West Bank, Galilee, Golan, Jordan Valley). This is likely to increase summer thermal stress and discomfort for residents, particularly the elderly and those with underlying health conditions as noted above. By 2050, however, humidity is predicted to have moderated in much of the study area, except for the extreme northeast of Israel along the Syrian border, with the decline most marked in Gaza, the Negev, West Bank and Jordan River Valley. Only in

north-central Sinai is a modest increase expected as a consequence of the increased precipitation (Map Relative Humidity 2050).

Temperature maxima and minima (°C) both show annual trends broadly inverse to those of precipitation and relative humidity. The highest 2023 maxima were in the Sinai and western Negev, which, along with many other areas, including much of the West Bank, are forecast to decline by 2030, mostly by 1-2 °C but double that in northeast Sinai. Modest increases are predicted along parts of the Israeli coast. These trends will reverse thereafter, with significant increases of 2-3 °C by 2050 in most areas but by up to 4°C in the western Sinai and Nile Delta (Maps Maximum annual temperatures 2023, 2030 and 2050). Minimum temperatures are projected to follow similar trends to maxima (Maps Minimum annual temperatures 2023, 2030 and 2050). Again, note that the colour scale is different for 2050.

These are quite pronounced shifts, making winters milder and more comfortable but increasing risks to elderly and vulnerable people from late spring to late summer, and necessitate some behavioural changes as adaptive coping strategies in those areas. As has been shown in other countries, high temperatures have also been shown to reduce economic productivity by affecting individuals' ability to work outdoors Cheng He et al Nature Communications 13 No.3847 (2022). It will also impact agriculture, potentially increasing food insecurity, and potentially water supply as a result of increased plant evapotranspiration and surface evaporation.

Monthly average data show some variation in seasonality, with summer extending a bit later, and winters also becoming warmer.

- **Timing and Sequencing:** Urgent reconstruction of housing, healthcare, and infrastructure should consider long-term goals and avoid recurring problems. In some locations, this may require use of temporary structures to facilitate subsequent, more sustainable reorganization.

- Recent approaches recognize post-conflict reconstruction as an opportunity to renew physical, social, and institutional fabrics. Given the interconnectivity of sectors, including housing, transport, energy, and cultural heritage, an integrated approach based on community involvement is the only route to long-term peace and resilience. Instead of restoring the physical elements of the pre-conflict conditions, recent practices propose an integrated and broader participatory approach to the design, reconstruction, and recovery process that invests in people and place. In short, it is an opportunity to “build back stronger” and address the roots of conflict in the process. (Wahba, S. et al, 2022)

- Planning should also anticipate future environmental changes, such as sea level rise, flooding, and food insecurity. The UNDRR Build Back Better approach in post-disaster recovery<sup>3</sup>, emphasizes resilient reconstruction, risk reduction, and sustainable development.

<sup>3</sup> <https://www.undrr.org/terminology/build-back-better>

- **Vulnerabilities:** The poor, with limited resources, are most vulnerable to these risks. Without disaster risk reduction strategies, these challenges will worsen health and livelihood disparities. These may be addressed through the UNDRR Resilient Cities Programme.<sup>4</sup>

<sup>4</sup> The UNDRR Resilient Cities Programme, known as Making Cities Resilient 2030 (MCR2030), is a global initiative aimed at helping cities reduce disaster risks and build resilience <https://mcr2030.undrr.org/>

- **Environmental Health Risks:** Gaza's population faces pollution, water contamination, energy shortages, and exposure to infectious diseases. These issues are exacerbated by conflict, and climate change will further increase vulnerabilities.
- **Heritage Restoration:** Protecting cultural and natural heritage, along with integrating traditional knowledge, can guide sustainable construction practices and improve urban resilience. Using natural elements for passive cooling and designing green public spaces can help minimize losses and protect community well-being.

- This should be developed with Nature and Culture Based Solutions as supported by the International Union for Conservation of Nature (IUCN).

In conclusion, a transboundary, collaborative approach is essential to address climate related challenges and ensure sustainable and resilient reconstruction in Gaza.

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## Heritage

In the aftermath of significant cultural destruction, a non-conventional approach is vital for reinstating Gaza's heritage, emphasizing healing and memorialization driven by its citizens. This strategy encourages Gazans, civil society, and cultural actors to redefine heritage by merging the spirit of the place with collective memory, reconnecting historical remnants to inform recovery and reconstruction plans.

Gaza, located at the crossroads of history and culture, has long been a vibrant centre of human activity. With a history spanning millennia, Gaza's cultural and natural heritage represents the intertwined legacies of its diverse populations, its rich geographical setting, and its continuous role as a hub of commerce and civilization. Before the recent war, Gaza's heritage was defined by a mix of ancient landmarks, historical sites, and natural landscapes that spoke to its long history, rooted in the traditions of its people and the various civilizations that have called it home.

The recent war, with its devastating impact on Gaza's infrastructure, has caused irreparable damage to both the physical structures and the intangible cultural fabric of the region. Cultural and natural heritage sites, which once formed the heart of Gaza's identity, have faced destruction from aerial bombardments, ground assaults, and the ongoing siege. The consequences of this destruction are not just physical but also psychological, eroding a sense of collective memory and identity that was built over centuries.

### Cultural Heritage

As a crossroads between the Incense Route and the Via Maris, the Gaza port of Anthedon was a gateway of the Mediterranean. These cultural itineraries are crucial in bringing back the connectivity of Gaza to the region and a potential for cultural tourism.

Gaza had a wealth of ancient ruins, many of which date back to the Pharaonic, Roman, Byzantine, and Islamic periods. Key heritage sites included Churches and Mosques, like the Great Omari Mosque, originally a fifth century Christian byzantine church,

that held great significance for the people of Gaza and Palestine at large, and the Saint Porphyrius Church, named after the fifth century bishop of Gaza, one of the oldest Christian churches in the region. Among the most important heritage of Gaza are the ruins of the Saint Hilarion Monastery, marking the birthplace of the fourth century Syrian-Palestinian monk, still used for worship by the local population and the Gaza synagogue built in the early 6th century with unique mosaics depicting King David and inscriptions in Hebrew and Greek.

Finally, the remnants of the Anthedon harbour, comprising elements from the Iron Age, Persian, Hellenistic, Roman and Byzantine periods, show the role Gaza played for millennia as one of the greatest commercial and cultural hubs of the Mediterranean. This was the gateway to the Mediterranean for the overland Incense Routes from the Arabian Peninsula with its zenith during the Nabatean and Roman rules.

Several palaces, like the Qalat Barquq, built during the rule of the Mamluk Sultan Barquq in 1387, or the 13th century Qasr el-Basha, also known as Radwan Castle and Fort Napoleon, that hosted a collection of artefacts spanning different periods of Gaza's history, bear witness to the long past of Gaza. Remnants of Roman times, like the recently discovered Ard-al-Moharbeen necropolis are also vital pieces of the region's historical fabric. Gaza's old city boasted a unique blend of Ottoman-era architecture, with intricately designed homes, markets, and public buildings. The Khan al-Zeit and Khan Younis, among other caravanserais, played vital roles in trade and the movement of people throughout history.

The city's old buildings, markets, and architectural gems have been severely impacted by the destruction of infrastructure. Residential areas, many of which embodied traditional Palestinian architecture, have been reduced to rubble, leaving the cityscape unrecognizable.

Institutions like the Palestinian Museum in Gaza and various public libraries preserved and displayed the region's rich history. The Gaza Cultural Center and smaller community initiatives also provided spaces for contemporary Palestinian art and culture.

As a result of the recent war, several key landmarks of Gaza's cultural heritage have been damaged or destroyed. The Omari Mosque, a central symbol of the region's historical depth, was severely damaged, as were several churches that had stood for centuries.

Palestinian Museum in Gaza, along with various local cultural institutions, was badly affected. Many priceless artifacts, manuscripts, and historical records were either lost or damaged beyond repair, depriving









Map 14: Historical routes, cultural sites and natural systems of the region.

future generations of the ability to access their heritage.

Gaza's intangible cultural heritage was rich in oral traditions, music, dance, and culinary arts. Folk dances like Dabke and traditional Palestinian embroidery were key aspects of local culture, symbolizing both social cohesion and identity. The ongoing conflict has disrupted traditional practices, cultural events, and daily life that sustained the intangible heritage of Gaza. Folk music, dance, and art were affected as people were displaced and communities fractured.

### **Natural Heritage**

Gaza's coastline along the Mediterranean Sea is one of its most valuable natural assets. The beaches, despite being heavily impacted by urbanization, remained a source of livelihood and local pride.

The area at the north-eastern edge of the Sinai Desert, bordering Wadi El Arish, has historically been known for its fertile agricultural land, supporting a diverse range of crops, including olives, grapes, and citrus fruits. Traditional farming methods, passed down through generations, connected people to their land and environment.

Gaza was home to diverse ecosystems, with coastal wetlands and migratory bird routes that were crucial for both local biodiversity and as a stopover for migratory species. These are recognised regionally on the World Heritage Tentative Lists of Egypt, Palestine and Israel – Lake Bardawil, Wadi Gaza and Hula Valley respectively.

Wadi Gaza and its watershed in Israel, supports a variety of species, from wildflowers to small mammals. Efforts were made to preserve Gaza's natural environment, that showcased the importance of the region's natural beauty. These areas helped preserve Gaza's environmental history and supported local communities in sustaining their agricultural traditions.

The impact of the war on Gaza's natural environment has been severe. Coastal areas have been contaminated by chemicals and debris from the conflict, significantly harming marine life. The destruction of irrigation systems and farmland has resulted in a loss of agricultural production, affecting both the local economy and the food security of Gaza's population.

The conflict has exacerbated existing environmental issues in Gaza, with toxic materials and debris polluting the landscape. This will have a long-term effect on the soil, water quality, and biodiversity, threatening the sustainability of Gaza's natural heritage.

Areas like Wadi Gaza and other natural reserves, which once supported biodiversity, have been impacted by the destruction of infrastructure, making them

difficult to protect and restore. The loss of these spaces deprives both the environment and the people of valuable natural resources.

### **Restoring and rebuilding heritage**

The challenge of rebuilding Gaza's cultural and natural heritage is immense. However, the process of recovery and reconstruction will offer an opportunity to rethink how cultural heritage is preserved and transmitted in the face of adversity. Rather than solely focusing on the physical restoration of buildings and landscapes, future efforts could emphasize the importance of collective memory, social relationships, and community-based heritage.

Collective memory is essential for reconnecting fragments of historic remnants and guiding recovery efforts. It can help weave together the torn fabric of Gaza's urban landscape, preserving traces of the past and enhancing cultural itineraries, such as the Via Maris and the Frankincense Route. These routes can serve as a foundation for regional cooperation.

A focus on local communities in the reconstruction process is essential with the engagement of youth to clear rubble and restore the traces of the past. Rather than relying solely on external experts, the involvement of local artisans, scholars, and cultural practitioners in the recovery of heritage sites will ensure that the process reflects Gaza's living traditions and values. In the short term these sites need to be identified and rehabilitated, and as part of the public open spaces for recreation where relevant.

With the physical destruction of many sites, there is an opportunity to employ digital technologies to preserve and share Gaza's heritage. Digital archives, 3D reconstructions, and virtual museums could play a critical role in keeping Gaza's cultural identity alive for future generations.

A focus on oral history and the transmission of cultural knowledge between generations can help safeguard intangible heritage. By documenting the stories, memories, and traditions of Gaza's people, particularly those displaced by the war, a sense of cultural continuity can be maintained despite the loss of physical heritage.

The reconstruction of Gaza's heritage requires international solidarity and cooperation. Cultural preservation efforts should be supported by global institutions, such as UNESCO, which can offer technical assistance, funding, and expertise to restore key cultural landmarks.

### **Revitalizing Natural Heritage**

Key natural features include the kukar ridges and unique coastal watersheds. Reconnecting Wadi Gaza/



Nahal Besor with broader transboundary ecological corridors will foster regional environmental resilience and biodiversity, transforming the area into a public space that serves as a cultural and ecological hub. This transformation will enhance local identity and promote long-term sustainability through open spaces providing regional stopping along the migratory bird flyways.

Restoring Gaza's natural environment requires significant investment in ecological conservation, including an intensive re-planting programme. Efforts to rehabilitate damaged agricultural land, regenerate ecosystems, and mitigate pollution will be essential in rebuilding Gaza's environmental heritage. The establishment of new green spaces and nature reserves can also promote biodiversity and environmental education.

Future development in Gaza must prioritize sustainability, ensuring that any reconstruction respects the delicate balance between urbanization, agriculture, and nature. Traditional knowledge of sustainable farming and resource management should be integrated into reconstruction efforts.

Local communities, especially farmers and fishermen, must play a central role in environmental restoration. Empowering them to manage and protect local resources can help foster a sense of responsibility toward the land and its preservation.

### **A New Vision of Heritage in Gaza**

The prospects for Gaza's cultural and natural heritage are deeply tied to the resilience of its people. While the destruction of the recent war has dealt a significant blow, it also offers an opportunity to build a new, inclusive vision of heritage—one that goes beyond the physical and embraces the collective memories, stories, and relationships that define Gaza's identity. Through community-driven efforts, international cooperation, and a commitment to sustainability, Gaza's heritage can be rebuilt, not just as a series of monuments, but as a living, evolving testament to the strength and unity of its people.

Heritopolis, the UN-Habitat UNI consortium brings global inter-disciplinary expertise in highlighting the role of heritage in the metropolis and for providing environmental sustainability through nature- and socio-economic sustainability through culture-based solutions.

## **G**

### Cultural and natural heritage: paths to recovery

Gaza's cultural and natural heritage has been severely impacted by war, with physical monuments and landscapes suffering significant damage. However, rebuilding Gaza's heritage doesn't require large-scale projects alone. Short-term interventions, even with limited funds, can stabilize and revitalize this heritage, providing employment, fostering community engagement, and enhancing the region's identity.

### **Community-Based Heritage Documentation**

- Objective: Preserve intangible cultural heritage through community-driven efforts.
- Actions:
  - Launch oral history projects where local elders share personal stories and traditions.
  - Train youth and cultural workers to record these histories through digital formats.
  - Create accessible digital archives or virtual museums to share these stories globally.
- Impact: Preserves heritage, empowers local communities, and creates jobs in digital archiving and storytelling.
- Employment: Youth can be trained as archivists and researchers, passing on skills while preserving cultural knowledge.

### **Revitalizing Cultural Spaces through Art Installations**

- Objective: Use art to reclaim and commemorate spaces while engaging local artists.
- Actions:
  - Create temporary art installations (murals, sculptures) in public spaces to reflect Gaza's cultural identity.
  - Employ local artists to produce works that focus on themes of resistance, memory, and hope.
- Impact: Restores a sense of pride and

transforms damaged spaces into places of reflection and healing.

- Employment: Local artists and craftsmen are employed, sustaining traditional art forms and providing economic relief.

### **Cultural Heritage Workshops and Skill Development**

- Objective: Support the preservation of traditional crafts and create jobs.
- Actions:
  - Organize workshops on Palestinian crafts like embroidery, pottery, and carpentry.
  - Offer skill-building programs for youth and women in restoration, woodwork, and textiles.
  - Establish cooperatives for sustainable production and sale of heritage crafts.
- Impact: Helps preserve crafts and provides direct employment, particularly for women and youth.
- Employment: Job creation in restoration, crafts, and cultural tourism.

### **Environmental Heritage Restoration**

- Objective: Engage local communities in environmental restoration projects.
- Actions:
  - Initiate low-cost restoration efforts like cleaning coastal areas and replanting native trees.
  - Involve farmers, fishermen, and youth in land restoration and eco-tourism initiatives.
  - Provide workshops on sustainable farming and environmental awareness.
- Impact: Addresses environmental damage while promoting sustainability and conservation.
- Employment: Local farmers and youth are involved in restoration and eco-tourism projects.

### **Emergency Restoration of Heritage Sites**

- Objective: Safeguard key cultural landmarks using local craftsmanship.
- Actions:
  - Protect damaged heritage sites from further harm through temporary reinforcement with local materials.
  - Train craftsmen in basic restoration practices, using traditional methods and materials.
- Impact: Prevents further damage to heritage sites while creating jobs in conservation.
- Employment: Local craftsmen and conservators can be trained and employed in heritage restoration.



#### Basic Tenets

The Vision of Hope is based on the desire of all the inhabitants of the area, as national citizens, to live peacefully within a region that includes territories of different States. This requires the establishment of:

- A fully operational Palestinian State (including a national government, and local authorities)
- A framework for cross border integration (and not only cooperation) allowing free movement across national borders.

The viability of a Palestinian territory requires economic integration, through trade and cross border engagement, with the neighbouring states, and particularly Israel. Such an integration is also necessary for Israel, because of the need for a cross-border workforce.

These dimensions are today far from the reality, and reconstruction plans implemented so far have not taken into account the need of cross border integration. The Vision of Hope provides the framework to take short-term decisions that may have regional support in the long-term.

This perspective requires, as well:

- An incremental process in a long-term perspective (far beyond usual time scales for reconstruction after disasters within one single country) and
- An ambitious vision established from the very beginning.
- A multi-level governance approach, including at least 3 levels: local authorities; States; and supra national level (in the Gaza context: UN agencies, regional organisations, international donors...).
- A multi-dimensional approach, including, in the long run, 6 dimensions of integration: economic (eg cross-border workers); functional (eg cross-border public services); institutional (cross-border governance); informational (cross-border data, media); cultural (common heritage and vision); and inter-personal. These dimensions are further elaborated upon in the following pages.

### Cross-Border Integration Framework

#### Economic and Employment Integration

The current geopolitical landscape restricts economic interactions due to closed borders, limiting trade and labour mobility. The initial stage of integration involves the facilitation of cross-border economic activities, such as controlled workforce mobility and trade corridors. For the short and medium term, virtual connectivity should be encouraged – this may include renewal of high-tech cooperation and independent industries supporting cooperation in fashion and agriculture. Bilateral agreements can then establish cross-border economic zones, fostering coordinated industrial policies and investment strategies. In the long term, a supranational framework could be developed to regulate the free movement of goods, services, capital, and people, optimizing regional economic potential and stability.

#### Functional Integration: Services

At present, public infrastructure and services operate strictly within national jurisdictions, creating inefficiencies in resource distribution and emergency response. Initial cross-border cooperation can focus on shared services in critical sectors such as healthcare, energy, and transport. Over time, regional coordination mechanisms should be established to integrate public service planning and infrastructure development at a transnational level, ensuring resilience, interoperability, and optimized resource allocation.

### Governance and Management

Governance structures currently remain confined to national frameworks, limiting institutional cooperation. The first phase of cross-border governance involves bilateral agreements that enable joint initiatives and policy coordination. Further integration would necessitate the establishment of cross-border governance bodies, incorporating democratic decision-making processes to regulate economic, environmental, and infrastructural policies. Ultimately, a multi-level governance system, encompassing local, national, and supranational authorities, would provide the regulatory mechanisms required for sustainable cross-border integration.

#### Information and Communication

National policies presently dictate information systems, resulting in fragmented data collection, media access, and policy analysis. Enhancing cross-border data-sharing mechanisms and collaborative



media networks would improve transparency and coordination. The next stage involves the development of transnational information systems, including harmonized statistical frameworks, integrated research institutions, and cooperative media platforms. Such initiatives facilitate evidence-based policymaking and foster a more coherent cross-border public sphere, also involving citizens and businesses.

### Cultural Integration: Heritage and Identity

Heritage conservation and cultural policies remain largely restricted to national narratives, limiting opportunities for cross-border cohesion. Initiatives promoting cultural and educational exchanges can serve as foundational steps in fostering mutual understanding. Over time, a transnational approach to cultural heritage management should be developed, including joint heritage conservation programs, integrated educational curricula, and cross-border cultural institutions. This would strengthen regional identity and social cohesion while preserving the unique historical and cultural assets of the area.

### Interpersonal Connections: Families and Communities

Legal recognition of personal status, civil rights, and mobility is currently restricted to national jurisdictions, creating barriers for cross-border families and communities. Policy adjustments should initially focus on recognizing cross-border family rights through bilateral agreements. A more advanced stage would involve the establishment of a transnational legal framework addressing migration, refugee status, and cross-border residency rights. Such a system would ensure legal consistency, promote social integration, and uphold human rights across the region.

Cross-border integration requires a multidimensional approach that encompasses economic, infrastructural, governance, informational, cultural, and social dimensions. The phased implementation of cross-border cooperation mechanisms will lay the foundation for a fully integrated regional framework, fostering economic growth, social stability, and institutional resilience. By adopting international best practices and leveraging supranational support, cross-border integration can be structured in a way that ensures sustainability, long-term peace, and regional prosperity.

In this context, the overarching priority is to rebuild Gaza, with a cross-border approach whenever possible. The six different dimensions of integration are partially independent. Progress across the six dimensions of integration may occur at different rates, with advancements in one area helping to mitigate shortfalls in others. Scenarios may differ on each border (Gaza/Israel; Gaza/Egypt, etc.). To sustain social and economic recovery, quick wins should be researched for basic cross-border public services (mobility, health, etc.); minimum free movement (cross-border workers and trade), because States and persons need it; people to people projects; institutional cooperation involving local authorities and citizens, under benevolent control of States. Regional organisations and international donors should be honest brokers, while a full supranational multi-level governance is a long-term aim.

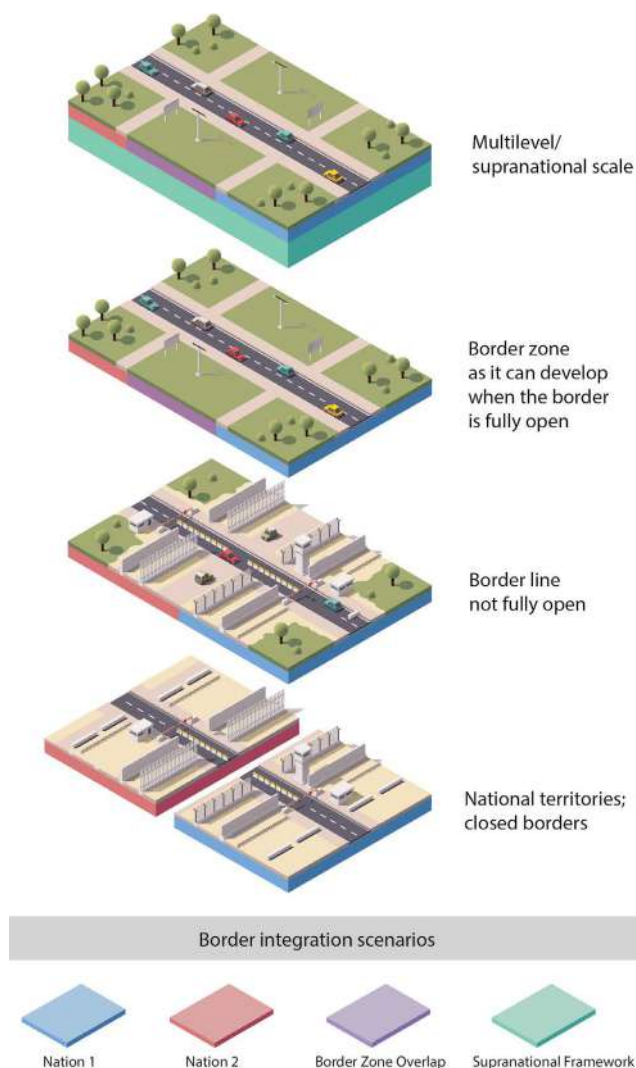


Figure 2: Border Integration Scenarios

Types of space/ dimensions of cohesion	National territories; closed borders	Border line not fully open	Border zone as it can develop when the border is fully open; bi-lateral intergovernmental arrangements	Multilevel/supranational scale as a frame condition for open borders
<b>Economics and Employment</b>	States are only concerned with flows within domestic markets; closed border, no CB flow.	CB economic flows (commuting CB workers, goods...) are allowed.  CB integration only economic  No common CB management > spill over effect impacting non-CB actors CB workers generally paying income tax abroad, but no public investment funding across the border	Consideration of CB living areas (not only workers, consumers; also citizens)  CB markets, and CB economic policies CB Free trade area zones  Co-development: Bi- lateral agreements on CB development, tax retransfer	Regional Free trade area Free movement of people, goods, services, capital  “green lanes” for goods.  Supranational framework for taxation of CB work, social security  Supranational funding programme for CB activities
<b>Functional</b>  - <b>Infrastructure, rubble and de- mining</b> - <b>Environmental, health and wellbeing</b> - <b>Spatial Planning</b>	National territories: bundles of domestic public services maintained by States	Public services end at the border  Limited interoperability  Untapped potential for economies of scale and agglomeration  Borders as filters	Cross-border metropolitan integration CB sectoral/spatial planning  CB public services guaranteed in case of crisis: cross-border living area card.  Health criteria coordinated on each border	Regional harmonisation of national frameworks, referring to SDGs  CB public services regional framework,  Green pass integrating the needs of CB living areas common health criteria
<b>Governance and management</b>	Institutional sphere embedded within each State, founded on national democracy-limited to national citizens  State provides security, solidarity, public goods and services via public policies  State monopoly of legitimate violence	No or little coordination on the borders  Possibility of CB cooperation structures	Bi- lateral treaties CB governments or structures, under democratic control, with full mandates and competences CB democracy: CB citizen debate forums; towards CB election Towards Cross-border citizenship Dual citizenship recognised and encouraged	Supra national governance Multi-level governance of borders, regulated at supranational level Transnational citizenship in particular in the CB context Transnational competence in crisis management, public health
<b>Information, integration and modelling</b>	Statistics, production of social sciences, education and media organised at national level  State monopoly of evidence	Border, place of contradiction between States Lack of cross-border information, redoubled in case of crisis Misunderstanding	CB Media, CB data  CB information organised on the basis of cross-border and multilevel structures	Transnational, multi-level information, media  Common statistical system
<b>Social – heritage</b>	Civil society structured within national framework  Each national territory is a community united by a “national narrative”, heritage, common language	Borders: places where different cultures, visions, languages, clash  Boundary between two national universes turning their backs on each other	Emergence of a CB civil society People to people, educational, cultural (heritage) projects to rebuild trust Learning the neighbour's language Common history teaching Knowledge of the past, vision of common future, preconditions for CB integration and its maintenance in case of crises	Emergence of a common transnational civil society  Transnational education programmes
<b>Inter-personal</b>	Life of couples and families regulated within domestic framework (civil status)  Recognition of national citizens only  Networks in a predominantly national framework	Only economic agents (CB workers) or national citizens considered  Non-recognition of non- nationals (including in case of CB couples or families)  Distrust  Networks back-to-back at the border (boundary)	Guarantee of rights for persons, couples, families, living in CB living areas (beyond economic or national citizen status); including migrants, refugees CB living areas cards Informal, inter-personal CB links, going beyond routines: resources for CB public action, to be reinforced Multi-level structured CB networks of persons	Family rights; migrant and refugee rights acknowledged in a transnational perspective  Transnational framework  Extended networks at transnational scale

Table 2 The Dimensions Of Integration In Different Border Scenarios

## Transborder Metropolitan Area

Creating peaceful coexistence within a region necessitates establishing a fully functioning Palestinian state, complete with a national government and local authorities. A transboundary metropolitan area, comprising the urban regions of Al Arish - Rafah, Gaza, Ashkelon-Ashdod, could ensure coherent governance of environmental and economic processes, facilitate the integration of respective economic activities, and enhance development on both regional and international scales.

Drawing from international experiences, transborder metropolitan areas have played a crucial role in fostering economic resilience, social cohesion, and sustainable development. Examples such as the San Diego-Tijuana corridor in North America, the Øresund Region between Denmark and Sweden, and the Basel Metropolitan Area spanning France, Germany, and Switzerland illustrate how structured cross-border cooperation can transform divided regions into thriving hubs of integration. These cases highlight the importance of infrastructure coordination, shared economic policies, and institutionalized governance frameworks in overcoming political and historical divisions.

While the current reality may seem distant from this vision, effective reconstruction plans must prioritize the potential for cross-border integration. This process requires incremental actions with a long-term perspective, extending beyond traditional disaster recovery timelines, alongside concrete international support and partnerships from the outset. The development of border zones into cooperative economic and cultural spaces can serve as a foundation for peacebuilding, while also ensuring long-term sustainability for all parties involved.

Key components of this approach include:

- Developing cross-border community initiatives with tangible events to foster trust and healing, following examples like the cross-border cultural initiatives in the Rhine region or the EU's INTERREG program, which funds collaborative projects between neighbouring regions.
- Establishing a multi-level governance system encompassing local, national, metropolitan, and supranational levels, modelled on successful frameworks such as the Greater Region of Luxembourg or the cross-border urban partnerships in Latin America.

- Implementing a multi-dimensional strategy focusing on six integration dimensions: economic, functional, institutional, informational, cultural, and inter-personal connections. These dimensions reflect lessons learned from initiatives such as the Alianza del Pacífico's regional cooperation efforts and the European Grouping of Territorial Cooperation (EGTC), which enable joint planning and administration.

Proposing a form of metropolitan governance based on UN-Habitat expertise of the Metro-Hub in Latin America will be supported by case studies and research of the French Transborder Operational Mission (MOT). By integrating principles of polycentric governance and adaptive urban planning, this approach may facilitate a structured dialogue between national authorities and local and regional players, demonstrating mutual functional support and providing valuable insights for viable solutions. Ensuring that reconstruction efforts incorporate lessons from established transborder metropolitan governance models will contribute to lasting stability, economic revitalization, and cooperative development in the region.

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## H

### Franco-German Border Cooperation

#### Context

The Franco-German border has transitioned from a symbol of conflict to a model of cross-border cooperation. Following a history of animosity, particularly during World War II, the Elysée Treaty (1963) and the Treaty of Aachen (2019) institutionalized collaboration. These agreements emphasized youth engagement, civil society partnerships, and multi-level governance. Additionally, cross-border institutions like the Upper Rhine Franco-German-Swiss Conference have addressed shared challenges in education, infrastructure, and economic development even beyond cooperation between the two countries.



## Lessons for Gaza

### **Multi-Dimensional Approach**

Addressing historical tensions requires combining institutional collaboration with cultural and interpersonal initiatives. Gaza's integration with neighbouring regions could benefit from similar efforts, emphasizing shared goals such as peace and economic development.

Youth engagement, akin to the Franco-German Youth Office, could promote long-term reconciliation by fostering understanding among younger generations.

### **Multi-Level Governance Models**

Multi-level governance structures can provide a framework for cross-border cooperation, integrating local, regional, and national stakeholders. Gaza and its neighbours could establish committees or councils to address shared challenges. The Franco-German example involves the additional, supranational level of the European Union which encourages and facilitates cross-border cooperation - free movement within the EU Single market, and EU cohesion policy funding (Interreg programs). While this does not exist around Gaza, it could be an inspiration for a similar "umbrella" framework.

### **Citizen-Centric Policies**

Initiatives like the Joint Citizens' Fund highlight the importance of grassroots efforts. Similar programs in Gaza could empower civil society to drive reconciliation and cooperation.

### **Patience and Persistence**

The Franco-German example underscores the importance of sustained efforts over decades. Trust is built across generations and over decades. Gaza's integration will require a long-term vision and commitment to gradual progress.

## I

## Tijuana-San Diego Region

### **Context**

The Tijuana-San Diego region demonstrates how deeply interdependent border areas can overcome disparities to foster economic collaboration, cultural exchange, and governance integration. Despite significant challenges, such as economic inequalities and strict border policies, initiatives like the Cross Border Xpress (CBX), between Tijuana Airport and San Diego and the San Diego Association of Governments (SANDAG) Borders Committee have enhanced connectivity, economic synergy, and environmental cooperation. This Committee is a policy advisory group that focuses on issues affecting the borders of the San Diego region. Unlike the European example of cross-border cooperation, this case study shows how such cooperation can be fostered independently from supranational systems such as the EU.

## Lessons for Gaza

### **Economic Interdependence**

Gaza can leverage economic complementarities with neighbouring regions. Developing trade hubs and innovation zones could create shared prosperity and reduce economic disparities.

### **Mobility and Connectivity**

Binational structures of border crossings, like CBX, could enhance movement between Gaza and adjacent territories, facilitating trade, tourism, and family connections.

### **Governance Mechanisms**

Binational organizations, similar to SANDAG, could coordinate cross-border initiatives in transportation, housing, and environmental sustainability. These mechanisms would provide a structured approach to addressing shared challenges.

### **Environmental Collaboration**

Shared environmental challenges, such as water management and pollution, require binational cooperation. Projects like the Tijuana River Valley Recovery Strategy highlight the importance of integrated ecological policies.

### **Public-Private Partnerships**

Collaborative investments in infrastructure and services can bridge disparities and foster mutual benefit. Innovative financing models could support long-term development in Gaza.

#### **Integrated Governance**

Establish multi-level governance frameworks to coordinate cross-border relations and reconstruction efforts. Engage stakeholders at all levels, from local communities to national governments.

### **People-Centric Development**

Prioritize civil society engagement, youth programmes, and cultural initiatives to foster mutual understanding and social cohesion. Empower residents to actively participate in shaping their future.

### **Economic Synergy**

Develop trade hubs, innovation zones, and cross-border infrastructure to enhance economic interdependence. Promote entrepreneurship and attract private investment.

### **Environmental Sustainability**

Address shared ecological challenges through collaborative strategies for water management, pollution control, and ecosystem restoration. Ensure environmental policies are integral to urban planning.

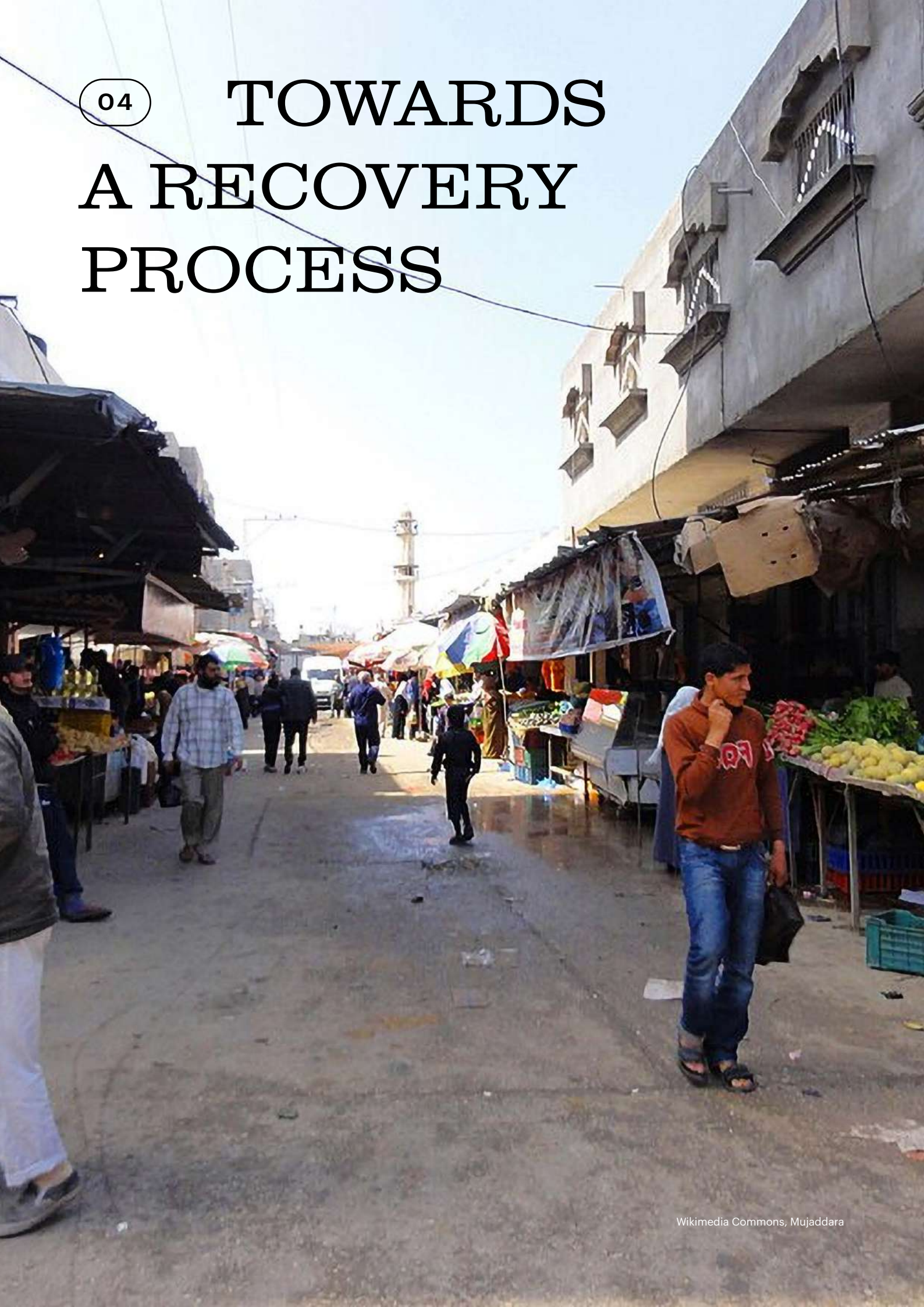
### **Inclusive Urban Planning**

Rebuild with a focus on equity, heritage preservation, and resilience against future crises. Incorporate housing, infrastructure, and cultural conservation into comprehensive plans.



04

# TOWARDS A RECOVERY PROCESS





Even before October 7th, 2023, Gaza faced a severe humanitarian crisis, with an unemployment rate of 53% and nearly half the population living on less than \$5.50 a day. Access to basic necessities like safe drinking water and electricity was critically limited, while health services deteriorated. This situation stemmed from a 17-year Israeli blockade, seen as collective punishment, despite Israel's withdrawal of settlers in 2005. By late 2014, almost 80% of Gazans lived below the poverty line, and there was a housing shortage of 71,000 units.

By October 2024, conditions have worsened significantly. Gaza has lost about 2% of its population, with over 42,000 reported killed and around 100,000 injured. Approximately 150,000 have fled, mostly to Egypt, while over one million and a half people are now internally displaced. Infrastructure damage is extensive, affecting 360,000 buildings, with 60% of residential and 80% of commercial facilities destroyed. Education has also been impacted, with 88% of schools affected.

The current humanitarian crisis arises from the destruction of housing and essential services. Establishing emergency shelters will be crucial, along with recovering remaining structures. Immediate recovery efforts must prioritize restoring essential services, infrastructure, and transportation networks to facilitate economic recovery. Damaged transportation networks isolate communities and hinder access to healthcare. The lack of sanitation and clean water exacerbates public health issues, complicating recovery efforts. Support for displaced families must be integrated into health and education redevelopment initiatives.

The main challenge is balancing immediate survival needs with the gradual, long-term improvements necessary for infrastructure, agriculture, and overall resilience. Given the complex political, social, and economic conditions in Gaza and the West Bank, compromises will likely be necessary to balance the urgency of recovery with the need for sustainable development. These challenges will require constant monitoring, adjustments, and ongoing review of the process to ensure that no critical components are left behind.

## 4.1 Regional Integration

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The sustainable future of Gaza is dependent on developing an integrative and phased planning approach. To this end, the Anthedon Initiative has compiled data by governorates and districts in the region

from Palestine, Israel, Egypt and Jordan. This will be extended to include Lebanon, Syria and the Kingdom of Saudi Arabia to better understand the qualitative advantages and quantify the benefits of peace through urban modelling.

### Regional Plans

Regional plans lack regionality and there is lip-service to real connectivity. Anthedon has initiated a platform to bring together national visions for social wellbeing, environment and economic growth as a first step for a regional Vision of Hope.

### Israel

Israel's National Outline Plan (NOP 1) is a comprehensive framework that guides the country's land use, infrastructure, and environmental planning. Ratified by the Israeli government on January 12, 2020, it consolidates previous national outline plans into a single, unified strategy to regulate development, infrastructure, and environmental systems. However, NOP 1 does not explicitly address regional cooperation with Palestinian territories. Broader discussions on regional collaboration and Israeli-Palestinian economic ties are typically handled by entities like the Ministry of Regional Cooperation, which works on cross-border infrastructure, trade, and environmental projects.

Additionally, Israel has long-term strategic planning initiatives, such as Israel 2020 to Israel 2050, which focus on economic growth, spatial equality, and environmental sustainability. The 2050 Strategic Plan acknowledges that by 2050, the population in the region could reach 24 to 32 million, creating pressure on public services and the environment. It argues that mutual cooperation will be a necessity for both nations, as the space between the Mediterranean Sea and the Jordan River is a single geographical zone. With this in mind, a new planning view of Israel is in need, upon a strong regional base, rather than a nation that is located at the outskirts of Europe.

Israel 100 is an academic initiative for planning towards 2048 involving local government bodies, professional organizations, government officials and representatives of the civil society. The initiative promotes environmental quality and quality-of-life at large, for decades ahead. It makes no direct mention of Palestinian territories—West Bank and Gaza—in the publicly available details of the plan.

National Outline Plan 35 (TAMA 35) is a national outline plan intended to define the planning policy and layout of localities in Israel. It was published in November 2000 and approved by the government in November 2005. The stated goals of the plan are "to provide a response to the country's construction and

development needs while preserving open spaces and land reserves for future generations”.

The main points of the plan are strengthening existing cities and metropolises, avoiding suburbs, and prioritizing urban renewal through mixed land use and strengthening public transportation. The plan sees the coasts as a public asset and calls for maintaining green buffer zones between cities and avoiding turning Israel into one large city. The plan also recommends not establishing any more new settlements in Israel.

Being a national outline plan, TAMA 35 in most cases forms the basis for all development and construction initiatives in Israel, and regional and local outline plans are supposed to be based on the principles formulated in the document and are not supposed to exceed the limits set by it.

Southern district plan is Israel (TMM 4) applies to 60% of the country, and includes the districts of Ashkelon, Be'er Sheva and Eilat. The plan focuses on creating a metropolis around Be'er Sheva and the development of various types of employment areas. The centralized development allows for the preservation of extensive open areas. The plans mention that “The district's location constitutes a land bridge with potential for international connectivity in times of peace”.

## Palestine

The Palestinian vision for 2050 centres on achieving sustainable development, environmental security, and national sovereignty through long-term spatial and urban planning.

Planning period	Main Goal	Plans specification	Focus/impediments
<b>1994-2000</b>	Establish Palestinian Authority institutions: ministries and sovereign government institutions.	1998-2000 Palestinian development plan 1996-1997 Palestinian investment plan 1999-2003 - 5 years development plan	- Packages of projects for donor support: the new government structures and agencies. - infrastructure projects
<b>2000-2006</b>	Reconstruction PA rule of law institutions and emergency relief. - increase private sector participation and civil society in the process of developmental planning	-immediate intervention plan 2003 -social and economic stability plan 2004 -Medium-term development plan (2005-2007) -Medium-term development plan 2006-2008.	Limited support to the PA Focus on emergency and reestablish Security forces and rule of law institutions.
<b>2007-2014</b>	Reform and statehood: Enhance integrity, and institutional reforms.	-Reform and development plan (2008-2010). -National Development Plan 2011-2013 and 2014-2016 -National strategic Framework For policies and developmental interventions in Area C 2014. - multisector development plan for East Jerusalem. - national strategy for climate change adaptation, 2011. National strategy for renewable energy 2012. - National Plan: early recovery and restoration and reconstruction of Gaza, 2014.	-total dependency on donor support -focus on financial and security reforms -limited social and economic community development interventions. -fragmented projects supporting resilient mainly in Area C and East Jerusalem. - the Ministry of Planning and international cooperation was renamed as the Ministry of Planning and administrative development and was dissolved in March 2014.
<b>2014-2022</b>	Road to independence Improve living conditions, reform and improve quality of public services and sustainable development.	-18 sectoral plans and 3 cross sector plans. - 3 strategic plans covering the period 2017 to 2029. Cluster plans: Agricultural (Qalqiliya, Jenin, Jericho) Industrial (Nablus, Hebron, Jericho) Tourism (Bethlehem, Jericho) Financial and Administrative (Ramallah) Capital Cluster Plan (Jerusalem) Gaza Cluster Plan (maritime, Agricultural, industrial)	During this period, the Palestinian Authority (PA) faced a severe financial crisis due to Israel withholding the transfer of tax revenues. Additionally, donor contributions to the PA's budget and projects were at an all-time low. Many projects initially planned for the 2017-2021 strategic period were shifted to the 2021-2023 and 2024-2029 plans due to a lack of funding for implementation.
<b>2024-</b>	Revitalizing the PA Governance and taking responsibility on Gaza in the Day after. Reconstruction plans.	The Palestinian Government Intervention and services and plans for the day after in the Gaza strip. Second draft (July 2024)	The Ministry of Planning and international cooperation was reestablished in March 2024. Responsibility for planning and coordination with donors. Some donors resumed partial support. Priority support for humanitarian aid in Gaza. Donor involvement will not start before the war ends.

Table 3: Palestinian Authority Development Planning by period, main goal, focus and impediments since the Oslo Accord (1994-2024)

Initiated in 2009 but not yet approved, the National Spatial Plan for Palestine 2050 outlines a comprehensive framework across seven sectors, including economic growth, infrastructure, resource management, and urban-rural integration. Its goal is to shape a cohesive and resilient Palestinian state, despite current political and territorial fragmentation. The 2023 National Urban Policy supports this vision, focusing on cluster development, cross-sectoral coordination, and local resilience. However, meaningful implementation is constrained by Israeli control over Area C, the ongoing blockade of Gaza, and internal political divisions. The massive reconstruction needs in Gaza, that have shifted priorities toward emergency recovery, remain unaddressed in existing development plans.

While the Ministry of Planning was reestablished in 2024 to coordinate future reconstruction, real progress toward the 2050 goals will require political resolution, donor re-engagement, and unified Palestinian governance.

## Egypt

Egypt 2030 – The National Agenda for Sustainable Development was updated in 2023 by the Ministry of Planning and Economic Development. This document defines a set of Guiding Principles under the headings: Equity and Accessibility, Resilience and Adaptation, Human-Centred Development and Sustainability.

These govern the implementation of the Strategic Goals: 1, Improve Egyptians' Quality of Life and Raise their Living Standards, 2, Social Justice and Equality, 3, Integrated and Sustainable Environmental System, 4, Diversified, Knowledge-based, and Competitive Economy, and 5, Well-Developed Infrastructure, and Governance and Partnerships. Seven enablers are identified as necessary to achieve these goals, including Technology and Innovation, and Digital Transformations.

The Israeli-Palestinian conflict is addressed explicitly in the document, mentioning that Egypt is committed to sustainable and peaceful solutions to resolve conflicts. It is stated that Egypt has taken a leading role, for over four decades, in upholding the option of peace as the foundation for resolving the longstanding Arab-Israeli conflict, based on the principle of returning occupied territories in exchange for a peaceful settlement. Egypt's Vision 2030 recognizes that development should be the ultimate objective of international cooperation and believes that peaceful dispute resolution is the only fair and balanced approach to addressing regional and international

conflicts, with the Palestinian issue being a central concern causing instability in the Middle East.

## 4.2 The Timeline for the Recovery Strategy

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### Immediate and Short-term (2025)

The immediate short-term phase will focus on the urgent rebuilding and survival needs, as well as establishing foundational steps for long-term recovery. One key uncertainty in this phase is the political situation and the role of UNRWA, whose absence could significantly hinder reconstruction efforts. Its extensive experience and delivery capacity are indispensable for effective recovery, and without it, the process will be severely slowed.

The guiding principle for the short-term phase is to ensure that all processes are as participatory as possible. This involves actively consulting with local communities, ensuring they are integral in the decision-making processes, and allowing them to co-design their recovery in a way that aligns with their priorities. This participatory approach will help build trust and confidence and ensure that the recovery is rooted in the needs and desires of the communities themselves.

Reconstruction will focus on providing immediate employment to local individuals, including those who may have semi-skilled or unskilled labor. Public works programmes such as rubble clearing, road rebuilding, and revegetation will be crucial for providing jobs and stimulating the local economy. The injection of funds into the local economy through these programmes will promote broader economic recovery. Additionally, basic income and welfare grants should be provided to individuals who are unable to find work, ensuring that the most vulnerable are supported during the recovery period.

Youth engagement will be essential in these early stages. Local youth groups of volunteers, such as scouts, girl guides, and school environmental clubs, should be involved in projects like waste clearing, tree planting, and general environmental cleanup. These activities will not only provide useful labor but also foster a sense of community ownership and responsibility toward the environment.

Public health interventions will need to be prioritized, focusing on community-based primary healthcare systems. This should start from the grassroots level and expand to more serious cases as needed. At the same time, rapid surveys should be conducted to identify key areas for future infrastructure



and buildings, ensuring that critical spaces are reserved and not encroached upon during the recovery process. Initial interventions should also focus on micro-scale efforts closest to communities where they can have the most immediate impact. However, certain essential facilities and structures should be designed with future mobility in mind, enabling them to be dismantled and relocated if necessary to allow for more sustainable and resilient urban reconfiguration in the future.

In terms of educational infrastructure, curricula must be urgently revised to promote understanding, tolerance, and peace, while discouraging violence and hatred. Additionally, establishing unimpeded access corridors linking Gaza to the West Bank will be crucial for facilitating both local and cross-border mobility. Safe cycle lanes within Gaza should also be prioritized to enhance local transport and mobility.

### **Medium-term (2030)**

The medium-term phase, by 2030, will be essential for laying the groundwork for sustainable, resilient human settlements and infrastructure. This phase will focus on the development of cross-border processes, particularly those related to climate change and the environment, which can act as unifying factors. Fostering cross-border collaborations on agriculture, transport, and mobility will be key to rebuilding these critical sectors and facilitating long-term recovery.

Agriculture will play a major role in this phase, particularly as a basis for collaboration between Gaza, the West Bank, and other neighbouring areas. Joint marketing, technical assistance, and shared initiatives will help address local and regional food security while promoting self-sufficiency. Negotiations will be necessary to navigate tensions and trade-offs between local self-reliance and broader regional cooperation for greater resilience.

Technological innovation will be another important area of focus. For example, renewable energy sources, particularly solar and wind, have become much more cost-effective, making it possible to provide electricity to even the most remote settlements without relying on expensive national grids. This will allow for the establishment of micro- and meso-grids for individual neighbourhoods, with interconnections as backups for power outages. Similarly, advancements in transport technology will help facilitate low-energy, multimodal interchanges, allowing for greater efficiency in connecting different regions.

Effective implementation of these initiatives will require fostering trust and cooperation across borders. Building collaborative governance

frameworks will be essential for overcoming political hostilities and ensuring that cross-border activities contribute to mutual benefits. This will likely require a shift in mindset, where participants from different communities begin to understand that collaboration will be more beneficial than remaining separate.

### **Long-term - 2050 and Beyond**

By 2050, sufficient time should have passed to overcome much of the mistrust and animosity that have hindered cooperation in the past. At this point, it should be possible to establish more substantive collaborations based on shared resources and increasingly permeable borders that allow for the free movement of goods, services, and people. Previous efforts in agriculture, transport, and the environment will have laid a strong foundation for this, allowing for joint activities that strengthen regional cooperation.

Shared cultural and natural heritage will be an important part of this long-term vision. By 2050, these heritage assets should have been rehabilitated and reconstructed, making them valuable for promoting cross-border cooperation. Joint tourism marketing initiatives that promote shared heritage sites, including World Heritage Sites, across Egypt, Gaza, Israel, the West Bank, and Jordan, will be a key focus. Collaborative efforts in sports, culture, and tourism will also help build regional cohesion and strengthen people-to-people connections.

In summary, this phased approach seeks to balance immediate recovery needs with long-term sustainability goals. By focusing on community engagement, cross-border cooperation, and the rehabilitation of shared resources, Gaza and the surrounding regions can build a resilient future that fosters peace, stability, and economic integration.

## J

### Short term actions

Short term, 2025

Local communities, physical, micro scale:

#### **Regional Implications**

- Multiple consortia of local NGOs as a bridge between international funders and local communities
- UNRWA is a crucial actor. Unify government and UNRWA curriculum, and transition roles gradually to Palestinian authority with a comprehensive approach over time.

#### **Infrastructure**

- Employ locals to address priority issues (e.g. rubble cleaning) to provide income, education, and resilience.
- Rebuilding efforts should come from local people while organizations support capacity building.
- Cooperation in water management.
- Solar energy to match both energy and climate needs - Mobile and Solar-powered lighting can enhance security, especially for women, while electricity infrastructure is being developed.

#### **Cross-Border Governance**

- Ensure transparency in fund management to uphold public trust.
- Economy and labour as the “foot in the door” for cross-border connectivity

#### **Economic Recovery**

- Rubble removal / treatment / repurposing.
- Empower people to create their own food and microeconomics

#### **Environment and Wellbeing**

- Tree coverage and plantation.
- Initiate an industry for production of prosthetics for amputated people during the war

- Health mindset to inform all decisions - Plans should include both healthy individuals and those with health issues, considering the rising number of war wounded.

#### **Heritage**

- Consider restoration as both a social and cultural process
- Wadi Gaza/Nahal Besor and the Jordan Valley - Using nature as a connector

#### **Spatial organisation**

- Bike lanes offering an affordable, ecological and quick solution for immediate action.
- Prevent building in risk zones.
- Identify partially damaged housing that families can repair and use.
- Creating community health centres as immediate action to overcome trauma and provide for public gatherings.
- Immediate actions should focus on the micro scale, reorganizing people around these areas.
- Simple interventions to enhance public spaces' social inclusivity and interaction. e.g. beach activities
- Quick solutions offering an affordable and ecological solutions that can reorganize people around these spaces.

#### **Urban Modelling**

- Regulate money that is going to flow back into Gaza to avoid housing crisis.
- Fostering personal mobility and trade as an initial step .
- Visualize a shared future and facilitate a cooperative dialogue.
- Point to key “hotspots” for economic connectivity.

## K

### Medium term actions

Mid-term, 2030

Establishing the groundwork for a connected future

#### **Regional Implications**

- The environment will represent an impetus for cross-border cooperation.
- Prioritize Gaza-West Bank connectivity and Israel-Palestine connectivity before regional integration.
- Agriculture as an opportunity for connectivity and cooperation in the region

#### **Infrastructure**

- Building with spare capacity (Infrastructure).
- Think smaller - micro grids, extensions to existing highways (Infrastructure).

#### **Cross-Border Governance**

- Establish organizations with neutral members to foster cross-border trust and collaboration.
- Use mechanisms to incentivise cross-border governance.
- Exchange programs, fellowships.
- Water infrastructure transcends national boundaries, that can initiate cross-border cooperation
- Avoid a top-down approach in Cross-Border Governance.
- There is potential in digital connections.
- Youth leadership programmes must generate the leaders of tomorrow.
- Informal structures: sports, youth groups, Women cooperation and dialogue.
- Healthcare sector as a cross-border cooperation.

#### → **Environment and Wellbeing**

- Reintegrate naturally cooling housing shapes (Public Health).
- Design in an integrative way, energy, sewage, transportation, communications, water systems. (Environment and Climate Risk).
- Use renewable energy.

#### **Economic Recovery**

- Digital connectivity ()
- Sectors where the economy is inherently connected between Israel and Palestine: trade, craft, natural resources, agriculture, IT, textiles, construction
- Use landfill to create urban and green spaces such as parks with hills.
- Empowering industries that serve also as heritage - for example textile.
- Health and education equity are crucial for community support and integration.

#### **Heritage**

- Reviving previous networks of transboundary interaction, particularly for climate change knowledge
- Restoring community spaces (mosques, markets, and children's spaces) to reconnect people, create jobs, and preserve local heritage.
- Trading as cultural heritage of the region - marketplaces as champions for reconciliation.

#### **Spatial organisation**

- 15-minute city|30-minute metropolis concept.
- "Urban acupuncture", minimal actions and interventions with maximum effect.
- Water management systems.
- Highlighting environmental links as Wadi Gaza, bird migration.
- National Housing strategies by Urban Modelling.



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## L

### Long term actions

Long term, 2050 - regional and international efforts, systemic changes:

#### **Regional Implications and Cross-Border Governance**

- Utilize shared resources as catalysts for connectivity: water, air, aquifer, energy (solar/gas). Stable management of shared resources is key for peace and security.

#### **Infrastructure**

- Israel and Palestine together can create a self-sufficient unit- through solar power and agriculture
- Decentralised infrastructure systems that are receptive to the environment.
- Digital connectivity as infrastructure - fundamental to economic future.

#### **Environment and Wellbeing**

- Maximise green and blue space within the city (Environment and Climate Risk).
- Shared specialty health centres between Palestine and Israel (Public Health).
- Collaboration on anti-pollution projects (Public Health).

#### **→ Economic Recovery**

- Shared resources: solar, gas, desalination, heritage
- Cultural routes connecting the region - look for the shared heritage

#### **Heritage**

- Reconnecting the different historical and religious sites - as places of shared heritage.
- Draw on shared memory of intangible heritage.
- Share culture and identity through festivities.

#### **Spatial organisation**

- Key sectors for connectivity: agriculture (research and trade), coastal treaties (one ecosystem, maritime centre),
- Fellowships and exchange programmes in education, transportation, holy sites and heritage
- The opportunity of regional tourism.
- Border events - culture, sports, music, communal cross-border activities.

### 4.3 The Role of International Assistance

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To address these challenges, international support is essential. The Anthedon initiative under the UN-Habitat umbrella of the UNI Heritopolis consortium may be a key facilitator encouraging the integration of various mechanisms from UNESCO, Heritage4All and the Historic Urban Landscape, UN-Habitat with diverse relevant programmes, UNDRR Making Cities Resilient and the UNEP for cross border environmental actions. Key areas for immediate assistance including UN agencies, as UNICEF, WHO, UNRWA, and international NGOs, as Red Cross, World Central Kitchen, Médecins Sans Frontières, are crucial in providing emergency water, healthcare, and sanitation. The World Bank and IMF can help fund infrastructure rebuilding.

#### **Deployment of Rapid Response Teams**

Specialized engineering teams like the US Army Corps of Engineers or the UK's Royal Engineers can assess and repair essential infrastructure. Peacekeeping forces can also help restore critical services.

#### **Public-Private Partnerships (PPPs)**

Corporations like Siemens, Nokia, and General Electric can provide temporary power and communication solutions. Technology companies, such as Google and SpaceX, can offer satellite internet to restore connectivity. Mobile desalination units can provide drinkable water, and renewable

energy sources, like solar panels and wind turbines, can offer power in areas without functioning grids. Emergency communication systems, such as satellite phones and temporary radio networks, can help restore communication.

#### **International Funding and Donations**

Crowdfunding platforms and international donor conferences can raise funds quickly for essential services. The UN and other organizations can facilitate these efforts.

#### **Coordination and Information Sharing**

The UN's OCHA can ensure efficient resource allocation, while international expertise can aid in the reconstruction process and provide local professionals with necessary training.

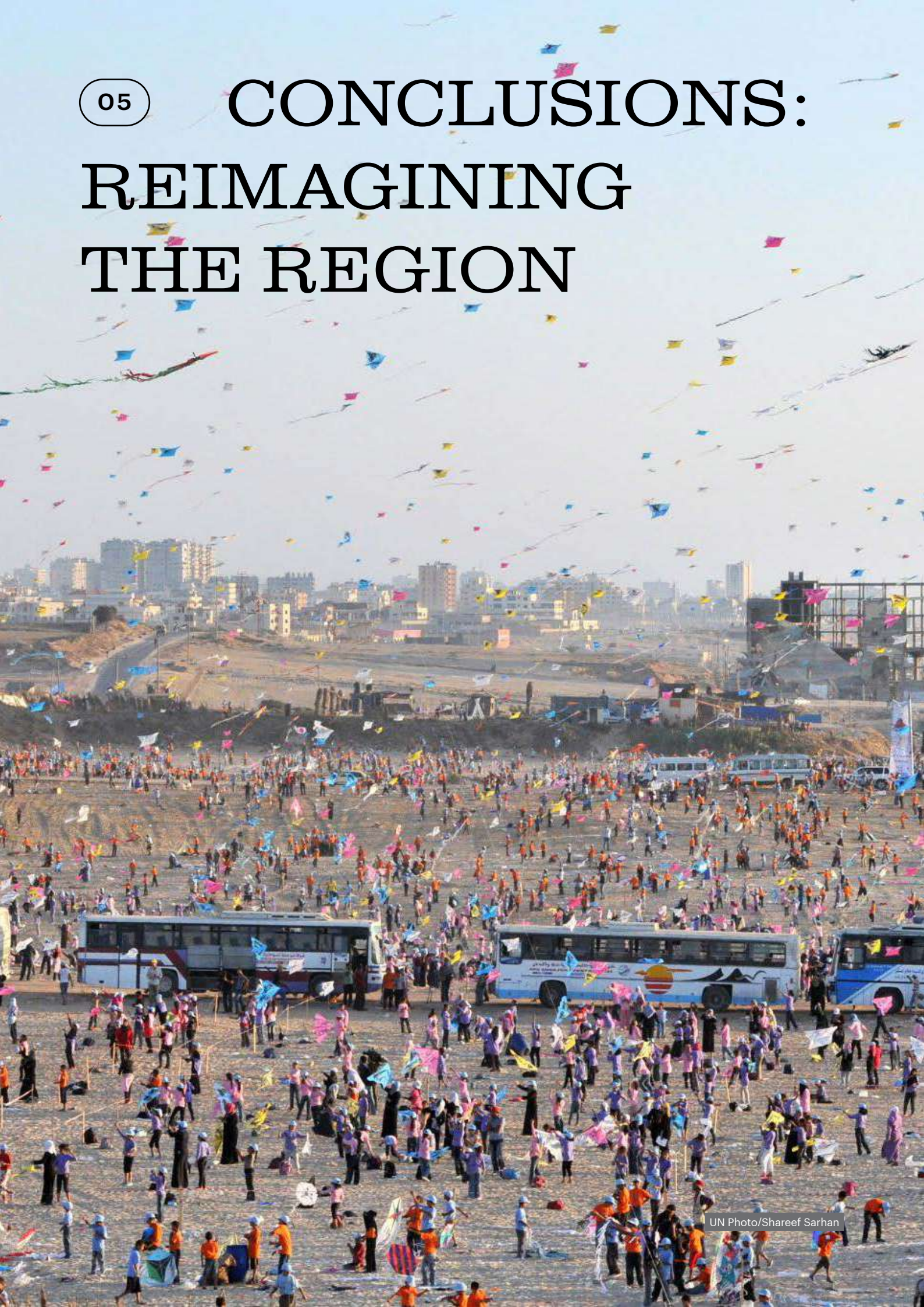
#### **International Legal and Political Support**

Advocacy for humanitarian corridors and the establishment of legal frameworks for reconstruction will be essential to ensure aid delivery and sustainable rebuilding efforts.

International cooperation is crucial for restoring essential services in post-conflict Gaza. By leveraging the capabilities of UN agencies, NGOs, the private sector, and advanced technologies, Gaza can begin the process of recovery and rebuilding. Coordinated efforts and financial support will be key to overcoming the challenges and paving the way for long-term stability.



# CONCLUSIONS: REIMAGINING THE REGION





Reimagining Gaza's future amidst its catastrophic destruction presents an immense challenge, but also an unparalleled opportunity for transformation. With infrastructure, housing, agricultural land, social services, and heritage decimated, the population is left grappling with uncertainty, yet there is still hope. A vision for Gaza that transcends the ongoing conflict is not just about recovery, it is about redefining its future as a vibrant regional gateway to the Mediterranean, where heritage, resilience, and community-led action serve as the foundation for growth and healing.

The Anthedon Initiative, as part of the UN-Habitat UNI consortium on Heritage and the Metropolis, proposes a bold and inclusive vision: Gaza as a cohesive part of a future Palestine within a two-state solution, integrated into a broader regional framework. This future would emphasize sustainable urban services, vibrant local economies, and community-driven development. By reconnecting Gaza to its region—Egypt, Israel, Jordan, and Palestine itself—through enhanced infrastructure, trade, and cultural exchange, we can rebuild Gaza's historical role as a dynamic Mediterranean hub. Moreover, addressing the environmental and climate challenges of the region through renewable energy solutions and sustainable practices is essential to ensure resilience in the face of global changes.

However, realizing this vision is not a solitary or unilateral task. It requires collaborative efforts across borders, sectors, and communities. For the region to thrive once again, international partnerships and long-term support are vital.

## **A Path Forward: Our Collective Role**

The reconstruction and revitalization of Gaza, however daunting, can only succeed through collective action and at a regional scale. As individuals, groups, and organizations, we have the distinctive opportunity to play a pivotal role in supporting the recovery journey. The path forward will require tangible, sustained efforts in multiple domains: from rebuilding physical infrastructure to promoting social cohesion and strengthening local capacities for governance and community engagement.

Here is how we, as Anthedon, can contribute to Gaza's regional recovery and renewal towards a regional peace:

### **1 Fostering Reconciliation and Healing**

Rebuilding Gaza is not only about constructing buildings and infrastructure; it is about healing the wounds of division and mistrust. We can support this healing process by facilitating cross-border dialogues and people-to-people exchanges, promoting joint cultural initiatives, and encouraging economic partnerships that bring Gaza as part of Palestine, back into the fold of regional cooperation with Israel and beyond. Our role can involve facilitating and participating in these initiatives, fostering the trust and understanding necessary to rebuild regional peace while learning from cross-border experiences and processes of reconciliation.

### **2 Promoting a Climate-Resilient and Sustainable Environment**

Any reconstruction and development in Gaza and the region must be premised on the prevailing, mainly arid to semi-arid, environment and the realities of climate and broader environmental changes already under way and which will exacerbate current challenges of decent lives and livelihoods across the region. This applies even more strongly to this alternative vision of hope for transcending the current levels of destruction, impoverishment and misery, hostility and distrust in order to promote a more collaborative, sustainable and resilient future. The importance of doing so is underlined by the absence of such considerations in the majority of even critical recent studies of various aspects of the situation and proposals for the future from various political or ideological positions.

### **3 Promoting Sustainable Urban and Agricultural Development**

Gaza's future depends on the rebuilding of its physical infrastructure with sustainability in mind. Based on the New Urban Agenda, spatial sustainability is a key element for strategic planning encouraging cross-border actions. As part of this, we can contribute by offering technical expertise in urban planning, green energy solutions, and regional environmental approaches.

### **4 Integrating natural and cultural heritage**

Protecting Gaza's historic sites and integrating heritage preservation into recovery efforts will help restore the city's identity and attract both local and international attention to the importance of Gaza as a cultural hub. Applying the Historic Urban Landscape Recommendation by engaging

local communities in these efforts will be crucial in ensuring that heritage remains central to Gaza's reconstruction.

## **5 Supporting Social Cohesion and Inclusive Governance**

One of the most important aspects of recovery will be rebuilding trust and solidarity between the Palestinian communities. We can support this process by collaborating with local organizations, community leaders, and NGOs to create spaces for dialogue, participation, and mutual understanding. Empowering Gazan communities to shape their future through decentralized governance and community-driven urban planning initiatives, within a regional vision, will ensure that the recovery process is both inclusive and sustainable.

## **6 Building Local Capacities for Reconstruction**

We must support the development of local planning capacities that are fundamental to Gaza's future. This requires sharing expertise and helping train local professionals in urban planning, environmental sustainability, and resilient infrastructure. Strengthening local technical teams and empowering civil society to take a leading role in the recovery process is critical. Through joint ventures, educational programmes, and mentorship, we can help build the long-term expertise Gaza needs to sustain its recovery.

## **7 Economic Revitalization and Securing Long-Term Support**

Gaza's economic future lies in its ability to reconnect with its regional neighbours and the broader global economy. As part of the collective effort, we can support initiatives that open up Gaza's markets to the world, enhance trade routes, and foster technological innovation. We must also advocate for the creation of new economic opportunities in Gaza by facilitating entrepreneurship, supporting local businesses, cross-border initiatives and developing policies that attract sustainable investment. Through these efforts, we can help create a thriving economy that offers hope and opportunity to Gaza's youth.

## **8 Building International Partnerships and Regional Integration**

International cooperation and investment are essential to a Palestinian recovery. While much of the Gaza rebuilding must be driven by local actors, continuous international support is needed to ensure that the recovery is both comprehensive

and sustainable. Anhedon can play a crucial role in facilitating regional cooperation by advocating long-term partnerships with global institutions, donor agencies, and other stakeholders.

These partnerships can provide the necessary funding, expertise, and networks to implement reconstruction plans and ensure that they align with international best practices within a regional Vision of Hope.

## **An International Support Team**

As part of these collective efforts, one proposed initiative is the formation of an INternational Support Team - ANThedon, INSTANT - which will provide the academic and professional expertise, capacity-building, and strategic guidance necessary to support Gaza's recovery. This initiative will:

- Enhance Local Planning Capacities by supporting the development of strategic plans for urban development and community rebuilding, in partnership with local governments and civil society groups.
- Provide Expertise to ensure that Gaza's physical rebuilding of infrastructure and housing is resilient, sustainable, and adaptable to future challenges.
- Protect Gaza's Cultural and Natural Heritage by integrating its historic sites into redevelopment and promoting regional cultural tourism as a means of economic and social regeneration.
- Promote Social Organizations and Inclusive Governance by supporting local NGOs and fostering community-driven recovery and reconciliation efforts.
- Provide Facilitation for Regional, Metropolitan Initiatives as a Vision of Hope

This international and interdisciplinary team will work closely with regional and local stakeholders with local professionals, community leaders, and international partners to ensure that Gaza's recovery is not only effective but also inclusive, empowering local communities to shape their own future.

## **A Shared Commitment**

The recovery of Gaza as part of Palestine is not just a distant goal—it is a shared responsibility. By working together, we can contribute to a future where Gaza is not only rebuilt but reimagined as a beacon of hope and cooperation in the region. This will require concerted efforts, not just from Gaza's citizens but from all of us—local and international actors, stakeholders, and communities. Together, we can help Gaza reclaim its heritage, rebuild its economy, and renew its spirit as part of the Palestine-Israel cooperation. Through action, dialogue, and partnership, we can support a journey toward a peaceful, prosperous, and sustainable future.