

GUIDELINES FOR SUSTAINABLE RECONSTRUCTION AND URBAN REGENERATION IN THE MENA REGION

Executive Summary

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EXECUTIVE SUMMARY

According to the United Nations High Commissioner for Refugees (UNHCR), the Middle East and North Africa (MENA) region hosted some 15 million refugees, Internally Displaced Persons (IDPs), asylum-seekers and returnees in 2018. More than 10 million of which were internally displaced from conflicts in Iraq, the Syrian Arab Republic and Yemen and some 7.2 million refugees and asylum-seekers from the same conflicts found protection and assistance in countries across the region and further abroad. Moreover, 35 million people needed humanitarian services on a daily basis in conflict-ridden areas. The toll a war or conflict can take on cities, infrastructure, neighborhoods, and housing, is reflective of the impact conflict can have on human beings, physically and mentally. The built environment is intrinsically integrated with the population that functions within it and a thriving economy develops people and their built-environment forms equally.

Another threat that compounds the existing danger of conflict is climate change. The MENA region is specifically vulnerable to floods, extreme heat/cold, drought, wildfire, and rising sea levels. As observed in other parts of the world, these climatic anomalies threaten to increase the risk of poverty, poor livelihood, and more conflict over endangered natural resources. These risks are mutually reinforcing and can magnify other risks such as poor physical health and mental wellbeing.

However, with consideration to stress, conflict, and climate change, human beings are biologically primed with a powerful survival instinct that is inclusive of their innate psychological primacy of seeking growth, wellbeing and prosperity. Consequently, in the MENA region, postwar populations will inevitably recover, heal and strengthen over time through diligent humanitarian efforts that also give rise to a new built environment. Therein

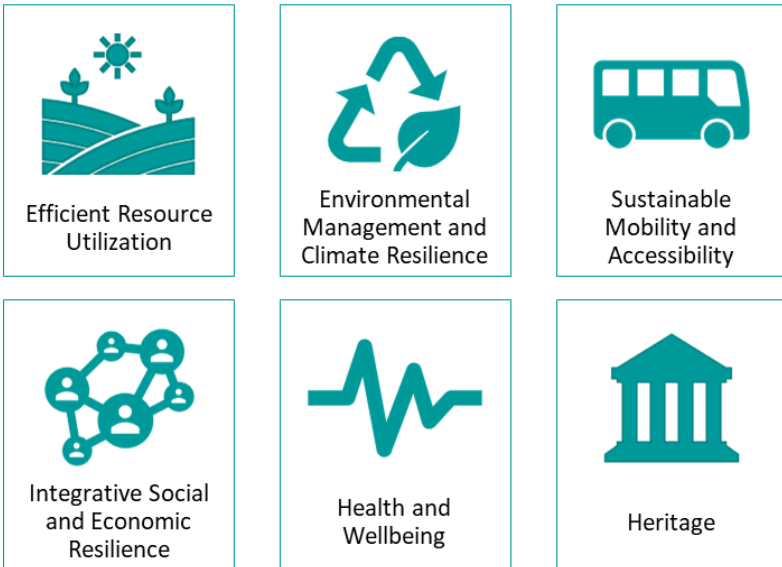
also lies the opportunity to benefit from not only the latest sustainable construction best practices, materials and technologies, but also to ensure resilient and sustainable development, social wellbeing, environmental protection and the reduction of construction-based, financial and legal risk

Hence, the United Nations Human Settlements Programme (UN-Habitat) and the World Green Building Council (WorldGBC) co-developed the *Guidelines for Sustainable Reconstruction and Urban Regeneration in the MENA Region* to highlight key issues, approaches and methods, and propose bespoke solutions for individual and community-wide sustainable reconstruction projects based on the Build Back Better, leveraging recognized sustainability practices in the built environment while also addressing context specific needs unique to post-conflict reconstruction and urban regeneration. This entails the restoration of physical infrastructure, environmental and societal ecosystems, and the revitalization of livelihoods through a thriving economy. In several MENA countries where conflict has destabilized the foundation of many communities, the methodical and planned recovery, rehabilitation and reconstruction that must take place is an essential antidote that can also increase the resilience of cities and neighborhoods. When communities are built back better, incorporating sustainability principles, societies are stabilized and economies revitalized.

The Guidelines for Sustainable Reconstruction & Urban Regeneration in the MENA Region is a working document that pools local and international knowledge and best practices in order to provide considerations and actionable guidance that addresses the changing environmental landscape for reconstruction in the MENA region. Among the primary aims of the document is to highlight the regulatory vacuum that exists in several post-conflict cities and communities, and to fill that void with essential knowledge and tools that promote multi-stakeholder capacity and the prospect of inclusivity, long-term social stability, and economic recovery.

The Guidelines offer a holistic framework for urban reconstruction and

regeneration that is grounded in sustainable built environment principles spanning Climate Action, Resources & Circularity and Health & Wellbeing, with additional emphasis on Mobility & Accessibility, Social & Economic Resilience and Heritage. The document comprises six overarching thematic areas that encapsulate a spectrum of opportunities which when implemented thoroughly will enable resilient long-term growth. The relevant themes are: 1) Efficient resource utilization, 2) Environmental management and climate resilience, 3) Sustainable mobility and accessibility, 4) Integrative social and economic resilience, 5) Health and wellbeing and 6) Heritage.



Each of the six overarching themes delve deeper into nineteen related subtopics or chapters, which range from life cycle assessment strategies, to energy and water saving measures to protocols of good archeological preservation.

The first two themes ensure the proper utilization and regeneration of resources to ensure continued growth and environmental resilience. The following four themes address the social environment as they reflect on the wellbeing of a community: this entails freedom of access for all members of society in an environmentally sensitive and healthy manner; the establishment of integrative social and economic resilience which in-turn fosters community growth, health and wellbeing, and lastly, the preservation of local heritage which has enriched the history and culture of the MENA region and which promotes a sense of belonging and wellbeing for its residents. The last theme of heritage is of utmost importance for the MENA region, which is rich in history and culture. Identity is strongly linked to the heritage of an area and is a crucial aspect towards a sense of belonging, and in-turn wellbeing.

An addendum chapter referring to Governance is attached to the Guidelines, which addresses ‘good’ urban governance as an essential condition to Sustainable Reconstruction and Urban Regeneration. This chapter affirms the need for a common interest in instilling a governance framework that all stakeholders can participate in for proactive, inclusive, effective recovery effort that is driven by five key pillars; Ownership, Participation, Communication, Capacity, and Accountability.

The overarching themes in the Guidelines can be referenced independently for project related purposes, however, it is recommended that planning and design teams leverage the synergy between the thematic subchapters in order to create a robust development strategy. More importantly, the Guidelines for Sustainable Reconstruction & Urban Regeneration are not restricted to the MENA region alone. The framework is underpinned by strategic versatility and can be integrated into any urban regeneration project in the world, especially those reviving under similar circumstances of war, conflict, and/or natural disaster.

Lastly, the Guidelines aim to revive and restore struggling communities and cities through the prescription of effective stakeholder consultation

exercises at all development phases. This approach, when implemented judiciously, has been proven to streamline disparate development objectives and align all relevant stakeholders - such as the government, private sector, philanthropic institutions, NGOs, development teams and the public - on a common platform of sustainable and resilient urban regeneration and reconstruction work. This is an important feature that determines resilience as it reduces development costs and risk, promotes economic growth, and positively reinforces wellbeing and health.

Each theme is elaborated on as per its importance to the Build Back Better vision. This is followed by a definition from an international organization clarifying the intended scope of the theme followed by its sub-thematic areas and essential conditions. From there, the reader may navigate to the corresponding sub-thematic Chapters.

Each Chapter starts with the main sustainability intent of the proposed strategies, followed by theory and background, and definitions for specific terms. The main overarching development strategies are then introduced in accordance with applicable levels of development. This is followed by a list of suggested stakeholders who are considered essential for enabling the proposed strategies. The three urban development levels which are the focus of the Guidelines are as follows:




- 1. City level**
- 2. Intermediary level, i.e. Neighborhood level or Man-Made Open Space level**
- 3. Building level**



Moreover, each Chapter is subdivided into the following time frames:



Phase 1: Assessment & Preparation

Phase 2: Planning & Design

Phase 3: Implementation, Construction & Operation

GUIDELINES THEMES	SUB-THEMES	FOCUS AREAS
<p data-bbox="138 312 315 434">EFFICIENT RESOURCE UTILIZATION</p> 	<i>Life cycle assessment</i>	Life cycle assessment Promote sustainable procurements
	<i>Materials</i>	Reduce waste Upcycling / recycling / reuse Construction debris / waste management Waste management (operational phase) Prioritize use of local material
	<i>Energy</i>	Energy modeling and simulation Renewable energy Energy efficiency Monitoring systems Prioritize use of local sources
	<i>Water</i>	Preserve water Reduce demand / reuse Monitoring systems
<p data-bbox="116 829 338 986">ENVIRONMENTAL MANAGEMENT AND CLIMATE RESILIENCE</p> 	<i>Land</i>	Reduce man made footprint Brownfield recovery
	<i>Ecology</i>	Preserve/restore undeveloped land Preserve/restore ecology, wetland Preserve/restore surface water, groundwater quality Preserve/restore habitat
	<i>Climate Change Adaptation</i>	Control floods Control landslides/sinkholes Multifunctional infrastructure
	<i>Climate Change Mitigation</i>	Reduce embodied CO2 Reduce operational CO2 emissions Heat-island effect
<p data-bbox="127 1283 327 1401">SUSTAINABLE MOBILITY AND ACCESSIBILITY</p> 	<i>Mobility</i>	Alternative transportation Public transportation Parking
	<i>Accessibility</i>	Wayfinding Equity & social justice Walkability & accessibility

GUIDELINES THEMES	SUB-THEMES	FOCUS AREAS
<p data-bbox="124 448 300 608">INTEGRATIVE SOCIAL AND ECONOMIC RESILIENCE</p> 	<p data-bbox="340 304 463 368"><i>Social Resilience</i></p>	<p data-bbox="534 177 1001 491"> Provision of utilities Participatory approach Enhancing social networks Diversity of land use Provision of public open space Social inclusion Transparency and accountability Public space and community amenities Affordable housing </p>
	<p data-bbox="340 628 463 692"><i>Economic Resilience</i></p>	<p data-bbox="534 501 964 815"> Local participation in reconstruction Economic development & capacity building Asset / facility management Life cycle cost Affordability and feasibility Access to agriculture land Access to employment Land tenure </p>
	<p data-bbox="340 900 463 932"><i>Education</i></p>	<p data-bbox="534 825 983 997"> Awareness on climate/environmental risks Preparedness to climate and environmental risks Training for green energies jobs </p>
<p data-bbox="124 1139 300 1219">HEALTH AND WELLBEING</p> 	<p data-bbox="340 1043 497 1139"><i>Social & mental well-being</i></p>	<p data-bbox="534 1007 997 1177"> Community needs and notions of well-being Biophilic design Healthy, clean and comfortable environment </p>
	<p data-bbox="340 1315 418 1347"><i>Safety</i></p>	<p data-bbox="534 1187 1005 1469"> UXO (Unexploded Ordnance) clearance Accessibility of emergency vehicles Disaster Risk Reduction Public health and safety Construction soundness Mold & dampness prevention Structural safety Construction site safety </p>

GUIDE- LINES THEMES	SUB-THEMES	FOCUS AREAS
HEALTH AND WELL- BEING	<i>Comfort</i>	Air quality & ventilation Thermal comfort Lighting Noise, acoustics & vibration Daylight & views
	<i>Pollution</i>	Air, Water and Soil Noise, vibration, acoustics and light Construction impact
HERITAGE 	<i>Archeology</i>	Site assessment Protection of archaeological sites Rehabilitation of historic ensembles, single monuments and spaces of cultural practices
	<i>Heritage</i>	Heritage and Identity



