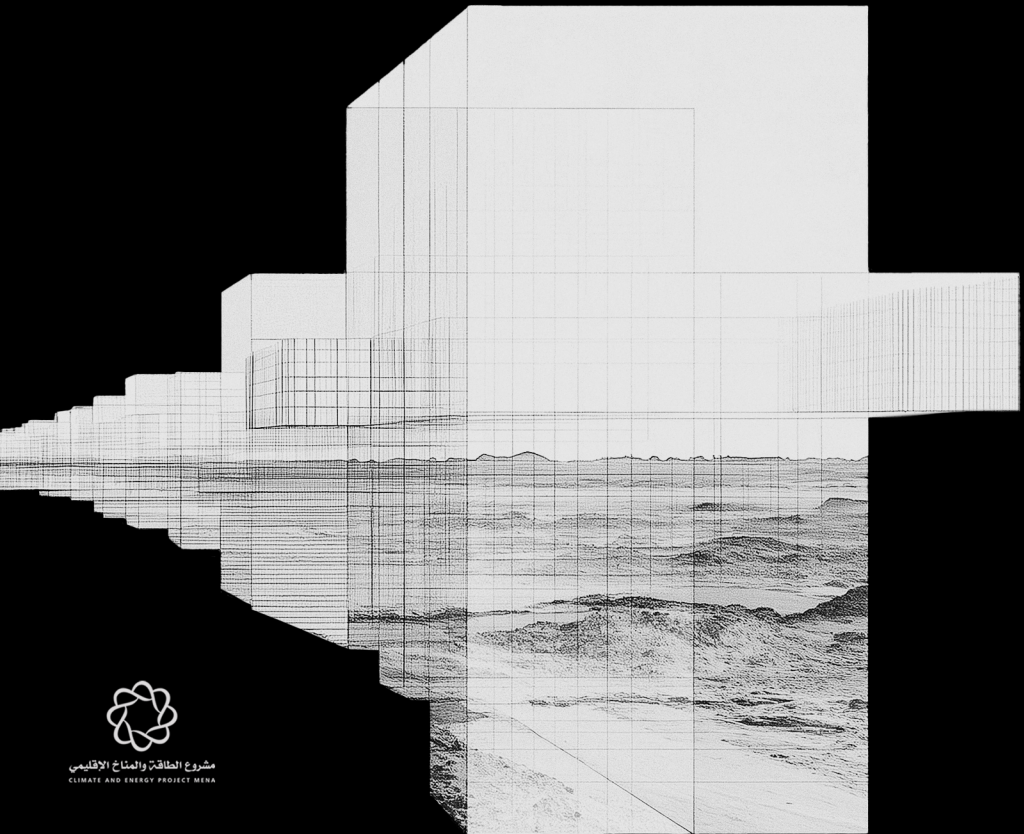


URBAN *succession*

Navigating the Past, Present, and Future of Sustainable Cities and New Urban Centers

Dina Kisbi, Jawad Dukhgan

2024



مشروع الطاقة والمناخ الاقليمي
CLIMATE AND ENERGY PROJECT MENA

**FRIEDRICH
EBERT** 
STIFTUNG





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About

About Friedrich Ebert Stiftung (FES)
Regional Climate and Energy Project MENA

The Regional Climate and Energy Project MENA advocates for an energy transition into renewable energy and energy efficiency. It continues to search for just transition solutions in the energy sector that ensure both, the protection of the planet and the people.

As the MENA region is one of the areas most heavily affected by climate change, we contribute to policy advising, research, and advocacy in the areas of climate change policy, energy transition, and urban sustainability, with the support of research institutions, civil society organizations, and other partners in the region and Europe.

Contributors

This report has been developed through a series of insightful conversations and discussions held during the 12th Sustainable Cities MENA Conference in Amman, Jordan, with the active participation of experts including Leen Fakhoury, Ayman Smadi, Chloe Pottinger-Glass, Ahmed Al Amra, León Díaz-Bone, Amir Gohar, Chafic Mekawi, Yousef Mansour, Lama Awad, Rawan Attour, Reem Halaseh, Deema Abuthiab, Rami Abi Ammar, Hadeel Ayed, Wijdan Alsharif, Lina Shbeeb, and Adel Assaf. Your invaluable insights and contributions have greatly enriched this report, and we extend our appreciation to each of you.

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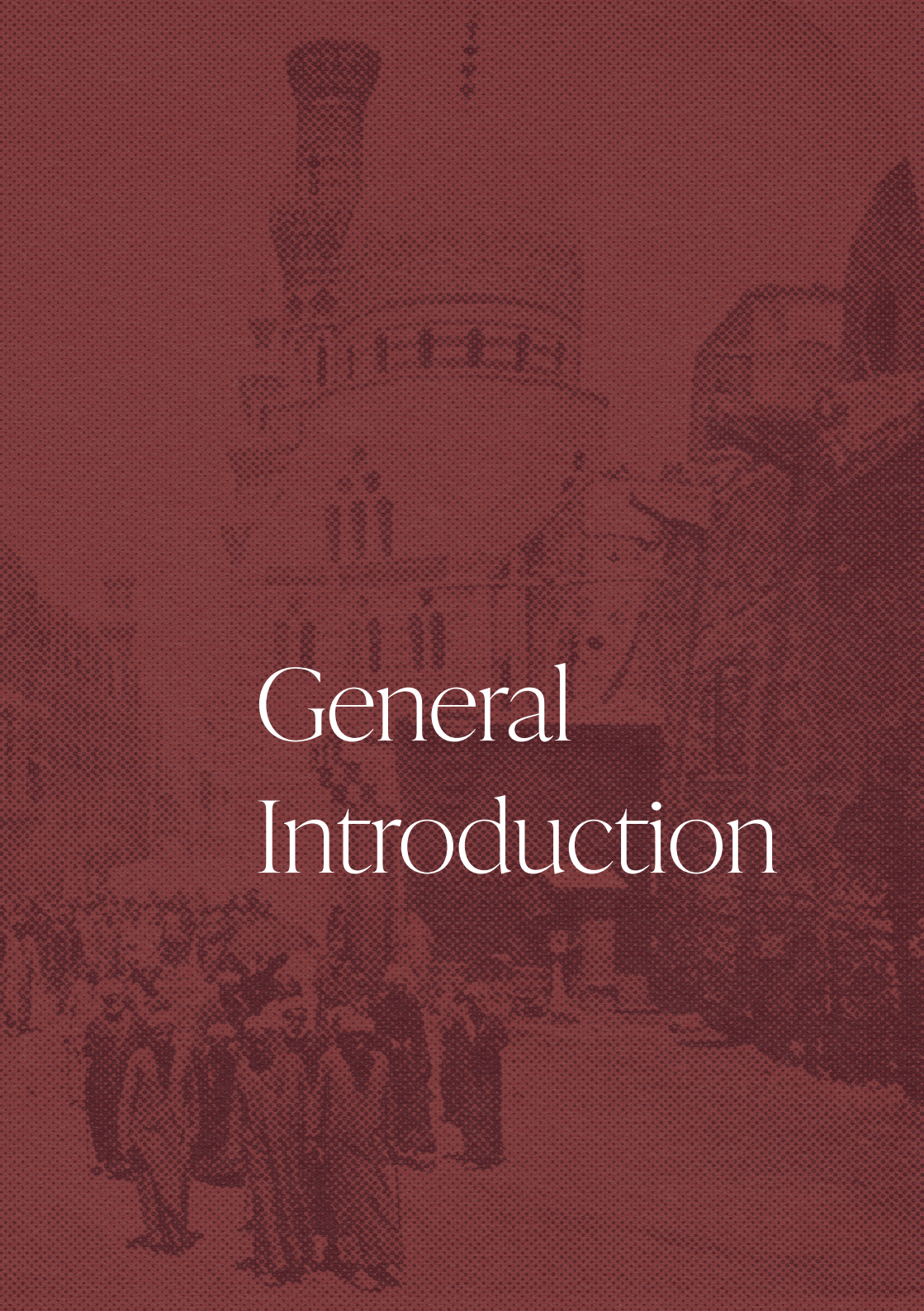
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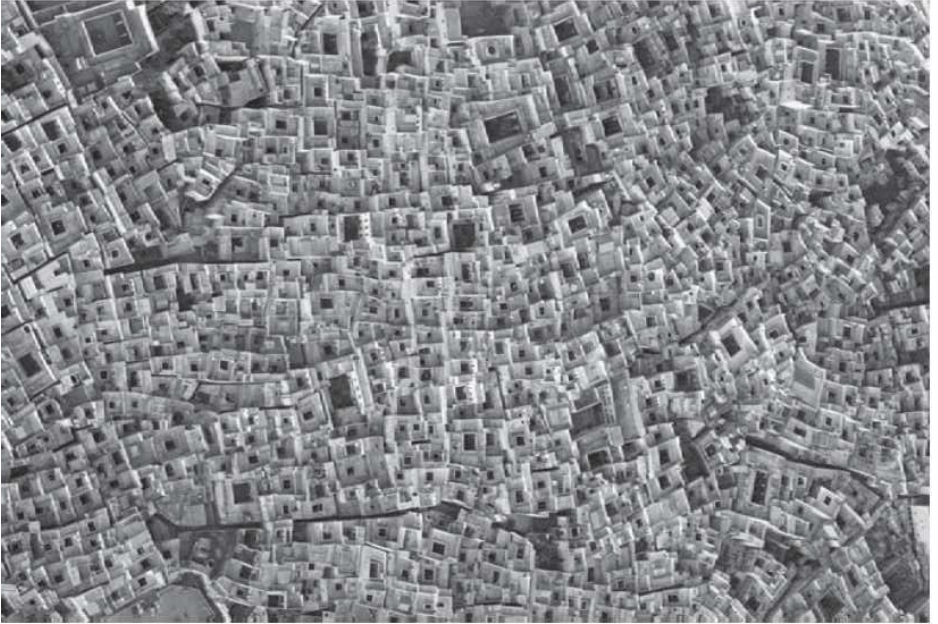
General Introduction

In the Middle East and North Africa (MENA) region, urban development is a complex interplay of history, society, economy, and environment. This report, a collaboration among national and regional experts and international contributors, distills insights from discussions that took place during the 12th MENA Sustainable Cities Conference that was organized by the Regional Climate and Energy Project MENA at FES.

DEVELOPMENT.

Focused on the MENA region, our exploration delves into urban growth, infrastructure, and societal dynamics. Established and emerging urban centers present unique challenges and opportunities that shape sustainable development, a theme elaborated in the following chapters. We emphasize the importance of investing in sustainability, liveability, and social responsibility in urban development. Environmental stewardship, social equity, and economic vitality are key considerations, guiding the evolution of urban centers toward a high quality of life for residents.

The report moves beyond the surface of new urban projects to scrutinize their operational realities. We aim to provide a comprehensive understanding of these endeavours and their implications, drawing lessons from past experiences and emphasizing sustainability, inclusivity, and long-term viability in new urban planning.



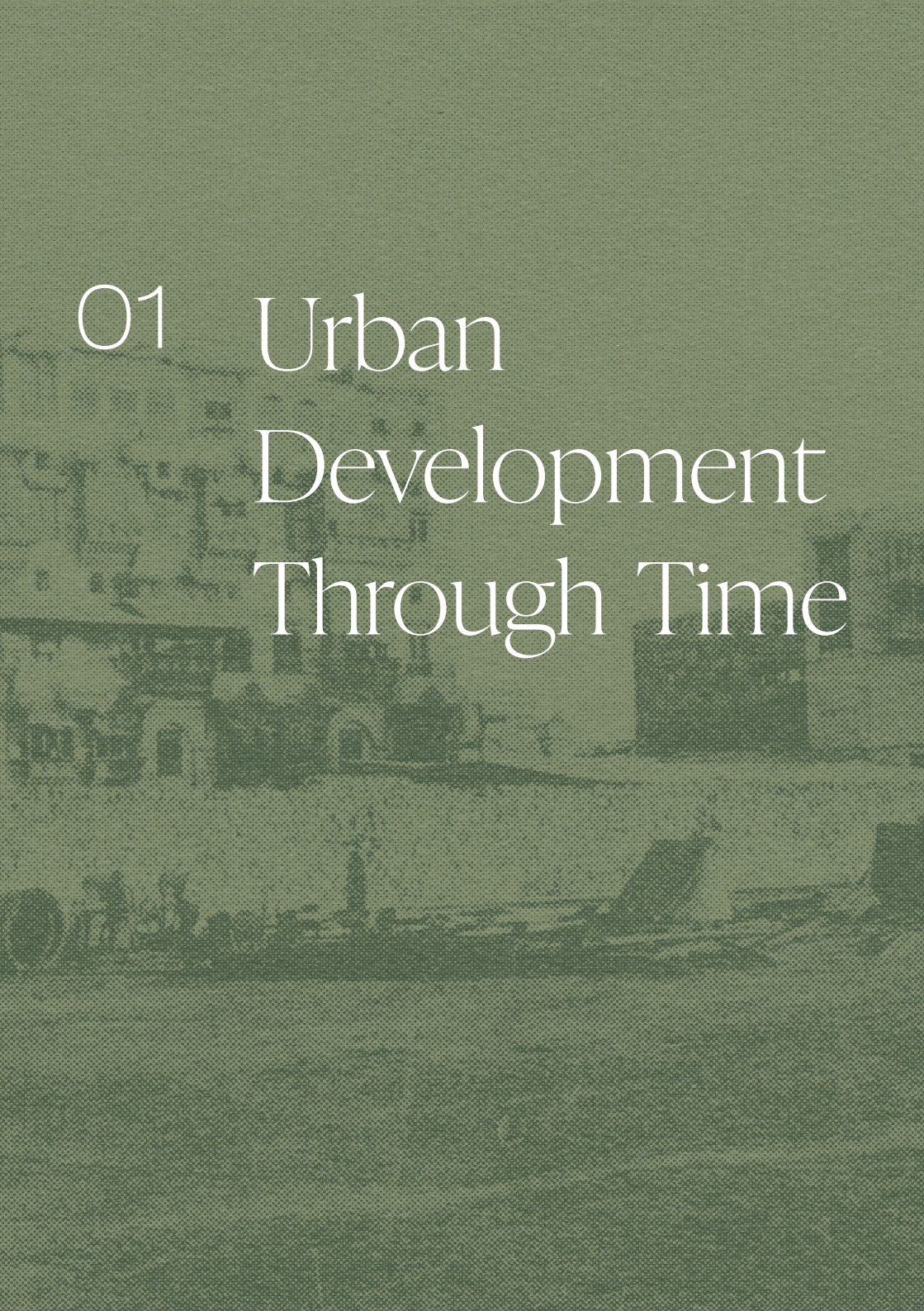
00. FEZ MEDINA

VISION.

Urban and climate resilience are central to our vision for sustainable cities. We advocate for smart technologies, data-driven solutions, and social considerations to enhance cities' adaptability and energy efficiency. Balancing technological progress, social equity, and environmental preservation is crucial for resilient urban landscapes.

This report invites readers to learn from history, nurture existing cities, and explore the potential of emerging urban centers. It highlights the transformative role of technology and social considerations in shaping future cities, aiming for harmonious urban environments that meet the needs of current and future generations.

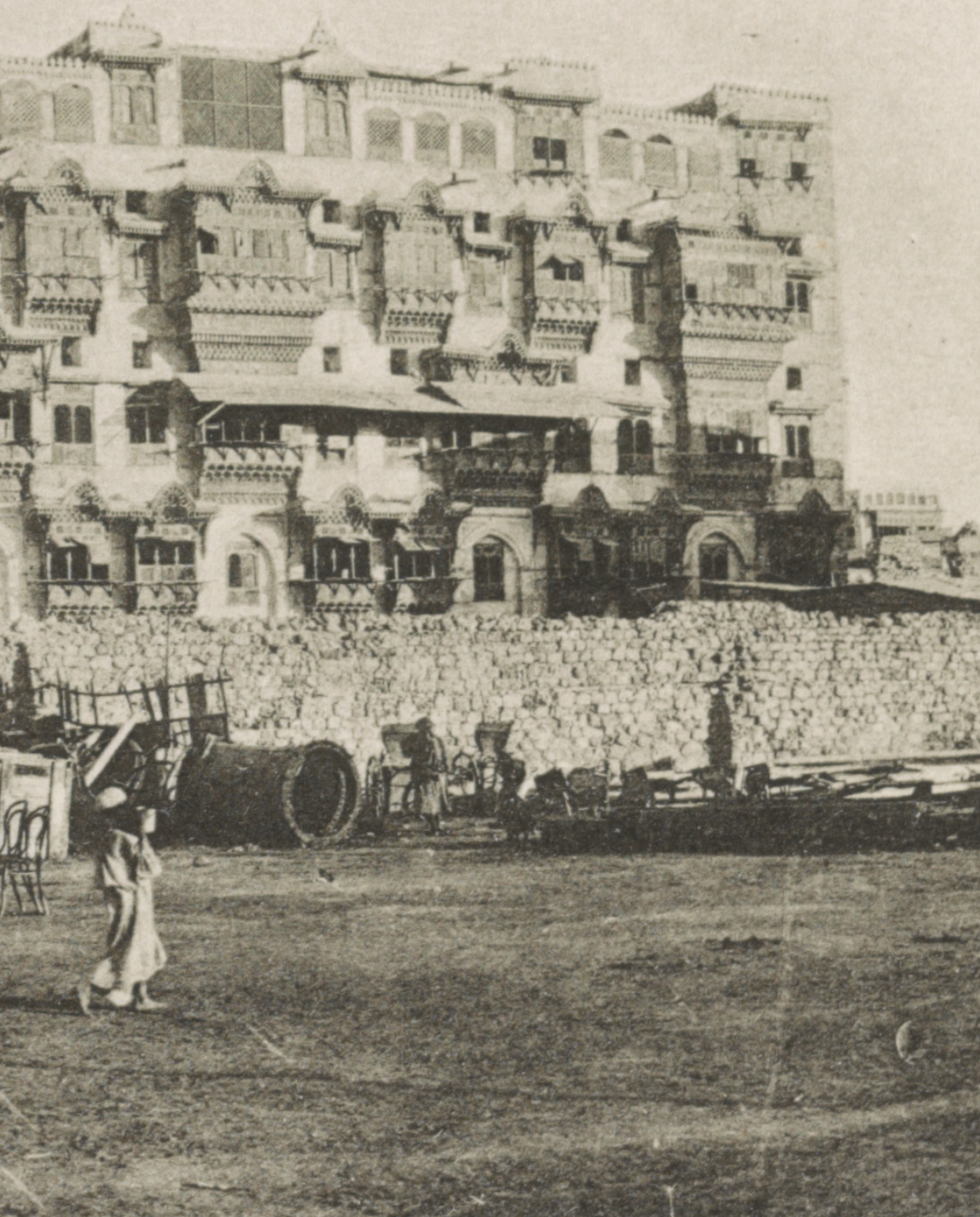




01 Urban
Development
Through Time



00. JEDDAH WEST GATE 1914



Chapter 1

Urban Development Through Time: Urban Dynamics and Development Trajectories

Historical Urban Development Proposals

Understanding the historical context of cities is pivotal for shaping their sustainable future. This chapter explores the growth and evolution of cities, extracting insights from previous urban development approaches. By delving into the past, we not only learn from achievements and setbacks but also discern strategies to overcome contemporary challenges.

HISTORY.

The exploration commences with an examination of historical urban development proposals, recognizing urbanization as a constant throughout human history that significantly shapes cities over time. Key historical periods, spanning ancient civilizations, medieval cities, and the Industrial Revolution, are scrutinized to discern their profound influence on urban growth. Emphasis is placed on historical factors such as economic dynamics, technological advancements, and societal shifts in shaping cities. The inclusion of case studies from various epochs illuminates the distinct characteristics of cities and imparts enduring lessons¹.

In addition, the critical work of Robert Fishman in “Urban Utopias in the Twentieth Century” is considered.

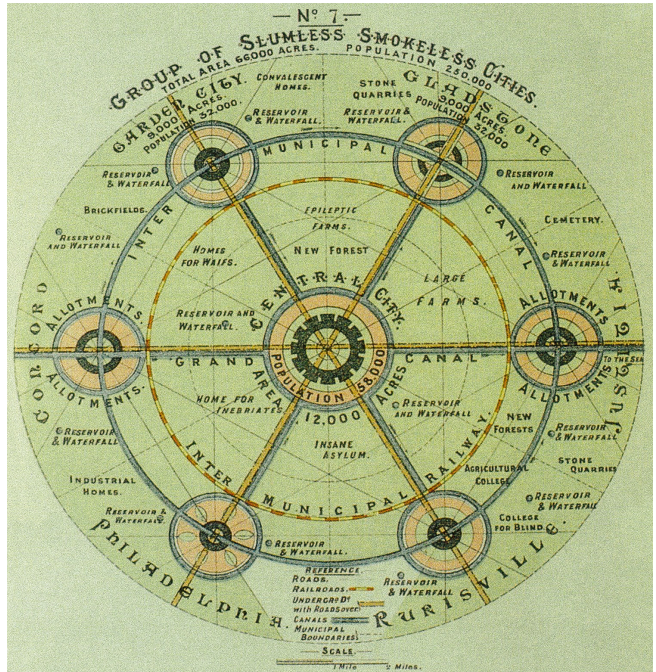
FISHMAN.

Fishman’s exploration of urban visionaries, including Ebenezer Howard, Frank Lloyd Wright, and Le Corbusier, provides invaluable insights. Each visionary presented utopian ideas aimed at addressing pressing social, economic, and environmental challenges².

HOWARD.

Ebenezer Howard’s garden city concept, articulated in his 1898 work “Garden Cities of Tomorrow” sought to mitigate the detrimental consequences of industrialization and urban overcrowding. His vision birthed self-contained, planned communities blending urban and rural elements, with greenbelt areas enveloping the city to incorporate agricultural land and natural spaces. Howard’s design aimed for social harmony, improved living conditions, and a reconnection with nature.

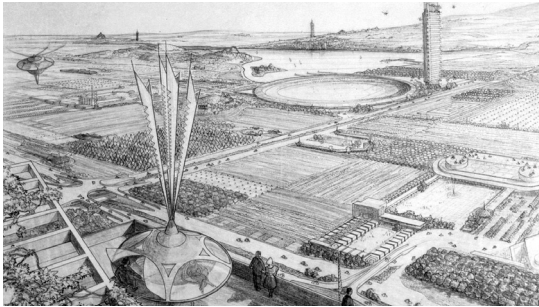
GARDEN CITY.



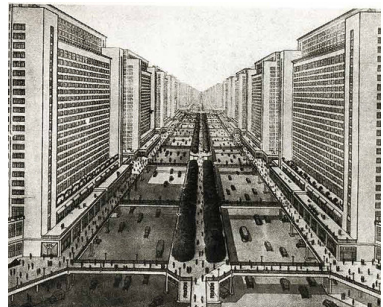
01. THE GARDEN CITY CONCEPT BY EBENEZER HOWARD

FRANK
LLOYD
WRIGHT.

Frank Lloyd Wright's concept of Broadacre City, conceived in the 1930s, responded to the challenges of urbanization and congestion with a decentralized living model. Each family was allotted an acre of land for residences, agriculture, and other pursuits, all harmoniously integrated into the natural surroundings³. Broadacre City championed individual freedom, self-sufficiency, and automobile-centric transportation, boasting extensive road networks and flexible zoning to promote mobility⁴.



02. HISTORY OF UTOPIA



03. THE CITY OF TOMORROW

LE
CORBUSIER.

Le Corbusier, the eminent modernist architect, envisioned the Radiant City in his 1929 time, “The City of Tomorrow” This vision emerged as a response to rapid urbanization and societal dislocation. Le Corbusier advocated for the demolition of existing slums and the construction of modern, functionalist buildings arranged systematically. The Radiant City emphasized high-rise structures and efficient transportation systems to accommodate burgeoning urban populations interspersed with green spaces. It aimed for efficiency, hygiene, and social order through modernist design principles⁵.

While these urban utopias harbored noble intentions of creating livable and harmonious urban environments, they were not impervious to criticisms and limitations. Critics like Jane Jacobs pointed the concerns about homogeneity and social segregation, arguing that such

CRITIQUE.

utopian ideals risked stifling cultural diversity and exacerbating economic disparities⁶. Additionally, the potential environmental impact of high-rise buildings and extensive road networks in utopian designs raised ecological sustainability concerns, as highlighted by Lewis Mumford⁷. Some utopian visions were criticized for their lack of cultural sensitivity, with preservationists lamenting the destruction of existing communities and historical landmarks⁸.

Finally, questions about the feasibility of large-scale implementation were raised, particularly regarding whether planned communities like Howard's garden city concept could effectively integrate urban and rural elements while remaining economically viable⁹. These critiques, though significant, are viewed in the context of their era, and modern urban planning endeavors aim to address these historical shortcomings while preserving the enduring ideals of these visionaries. Acknowledging and learning from these challenges is imperative as we forge the path toward future urban development initiatives.

LEGACY.

Nonetheless, the ideas propounded by Howard, Wright, and Le Corbusier continue to reverberate through urban planning and architecture, leaving an indelible mark on the discourse surrounding sustainable, inclusive, and aesthetically pleasing cities. By scrutinizing the lessons embedded in historical urban development proposals and delving into the realm of urban utopias, we amass invaluable insights to inform the design and planning of cities. The visions of Howard, Wright, and Le Corbusier have provided an enduring blueprint for urban planning, fostering dialogues on the creation of sustainable, inclusive, and aesthetically captivating urban environments.

Exploring Visionary Arab City Projects

VISIONARIES.

As we delve into the realm of urban development, our attention now turns to visionary projects within the Arab world that epitomize the pursuit of sustainable and resilient urban environments. These ambitious initiatives not only offer valuable insights but also influence public perception significantly, showcasing a harmonious blend of tradition and innovation.

In the following sections, we explore pioneering urban projects in the Arab world that exemplify sustainable and innovative city development. These projects, including NEOM in Saudi Arabia, Masdar City in the UAE, Egypt's New Administrative Capital, and a new city proposal in Amman, Jordan, offer valuable insights into diverse strategies for building resilient Arab cities.



04. NEOM - CUTTING STRAIGHT THROUGH THE DESERT

NEOM: A Vision for a Technological Oasis

MEGAPROJECT.

Unveiled in 2017 as part of Saudi Arabia’s Vision 2030 plan, NEOM is a groundbreaking project with the aim to reduce oil dependence and foster economic diversification. Nestled in northwestern Saudi Arabia, NEOM carries an initial budget estimate of approximately \$500 billion, ranking among the world’s most ambitious megaprojects, although budgets for such undertakings are subject to change over time¹⁰. This visionary endeavor goes beyond conventional city boundaries, introducing an unprecedented, sustainable and technologically advanced megacity.

ZERO GRAVITY URBANISM.

NEOM’s ambition knows no bounds; it aspires to redefine urban living and sustainability through the revolutionary concept of “Zero Gravity Urbanism”. The concept of “Zero Gravity Urbanism” as developed for NEOM’s THE LINE project, represents a progressive and radical approach to urban planning. It seeks to address global environmental and social challenges by finding a balance between nature conservation, liveability, and sustainable human progress. The concept proposes a sustainable model that responds to pressing environmental and urban challenges, such as urban sprawl and climate change, while accommodating a fast-growing urban population. With plans to initially accommodate approximately over one million citizens, NEOM envisions becoming home to a significant urban population. The project’s anticipated commencement in 2022 aims for completion by 2030, setting a timeline for its ambitious goals¹¹.



00. DAMASCUS CITY 1911



MOBILITY.

NEOM's beneficiaries span over various categories: firstly, Saudi Arabia anticipates economic diversification, job creation, and GDP growth. Secondly, international investors and corporations are invited to engage in sectors like technology, tourism, and renewable energy. Lastly, residents are promised a high-quality, sustainable living environment with advanced infrastructure and technology. The project's innovative spirit extends to its infrastructure, featuring gravity-defying structures and advanced transportation systems. A fleet of flying taxis and autonomous vehicles promises unparalleled mobility within the city, raising the bar for urban connectivity. Sustainability takes centre stage, with NEOM committing to harnessing renewable energy sources, implementing smart grids, pioneering innovative waste management solutions, and integrating vertical farming and advanced agricultural techniques to ensure food security.

CRITICISM.

Nevertheless, NEOM's grandeur has triggered concerns among experts and environmentalists alike. Critics voice apprehensions about the massive financial investment, fearing that it might divert crucial resources away from pressing regional needs¹². The environmental impact of erecting such a colossal city, particularly within the delicate desert ecosystem, raises significant concerns, encompassing potential repercussions for local flora and fauna. The displacement of local communities and the potential erosion of traditional ways of life have also ignited ethical questions, underscoring the intricate balance between progress and preservation¹³. Furthermore, the scale and pace of development have engendered apprehensions about the project's long-term viability and sustainability, given the intricacy and challenges inherent in realizing this audacious urban experiment.

SUMMARY.

In summary, NEOM stands as an unprecedented testament to visionary urban development driven by an astronomical budget and a transformative vision for sustainable, technologically advanced urban living. Yet, it faces a panorama of challenges and concerns that will shape its trajectory, from financial considerations and environmental impacts to questions of ethics and long-term viability.

Masdar City: A Model for Sustainable Urban Development



05. MALAPERT CITY OF POSSIBILITIES



05.1 MASDAR CITY MASTER PLAN



05.2 MASDAR CITY

MILESTONES.

Situated in the heart of the United Arab Emirates, specifically in Abu Dhabi, Masdar City stands as a beacon of sustainable urban development, earning international acclaim for its unwavering commitment to eco-friendliness and energy efficiency. With an estimated budget of \$22 billion, Masdar City embarked on its ambitious journey in 2008, initially targeting completion by 2025, nevertheless, it has encountered delays along the way¹⁴.

FEATURES.

A defining feature of Masdar City is its relentless dedication to harnessing renewable energy sources. The city extensively leverages solar and wind power, creating a self-sustaining energy ecosystem that significantly minimizes carbon emissions. Complementing this commitment, innovative waste management systems underscore its eco-friendly ethos, contributing to a holistic approach to environmental sustainability.

In addressing food security concerns and reducing reliance on external sources, Masdar City incorporates cutting-edge technologies, including vertical farming and advanced agricultural techniques. This multifaceted approach tackles not only sustainability concerns but also endeavors to redefine urban living with a heightened environmental consciousness.

CHALLENGES.

Despite accolades for its sustainability initiatives, Masdar City has faced critiques. Some experts express concerns about its elevated construction costs and the perceived lag in achieving self-sufficiency. Questions persist regarding the scalability of Masdar's sustainability model to other cities and regions, particularly considering the unique circumstances of the UAE¹⁵. Additionally, accessibility and affordability issues have been noted, potentially limiting its appeal to a broader demographic.

These critiques shed light on the formidable challenges and intricate considerations involved in implementing sustainable urban development on such a grand scale. As Masdar City continues to evolve, it stands as a captivating case study of a city daring to push the boundaries of sustainability in urban planning and urban design.



05.4 MASDAR CITY

Egypt's New Administrative Capital: Transforming Urban Dynamics

THE CAPITAL.

In Egypt, where rapid population growth and urbanization present formidable challenges, a transformative urban development project has taken shape—the New Administrative Capital. Positioned to the east of Cairo, this monumental initiative aims to tackle urban congestion, create job opportunities, and spur economic growth in a country grappling with these issues. Boasting an estimated budget of around \$58 billion¹⁶, the vision for this modern administrative hub extends beyond mere relief for Cairo; it aspires to set new standards for urban living in Egypt.

IMPACT.

At the heart of the New Administrative Capital's appeal is its anticipated economic impact. Beyond serving as a government administrative center, it envisions itself as an economic powerhouse, generating jobs and attracting businesses and investments to significantly contribute to the national economy. The project's synergy of government funding and private sector investments underscores the collective confidence in its potential to stimulate economic development.



06 NEW ADMINISTRATIVE CAPITAL



06.1 NEW ADMINISTRATIVE CAPITAL

DEBATES.

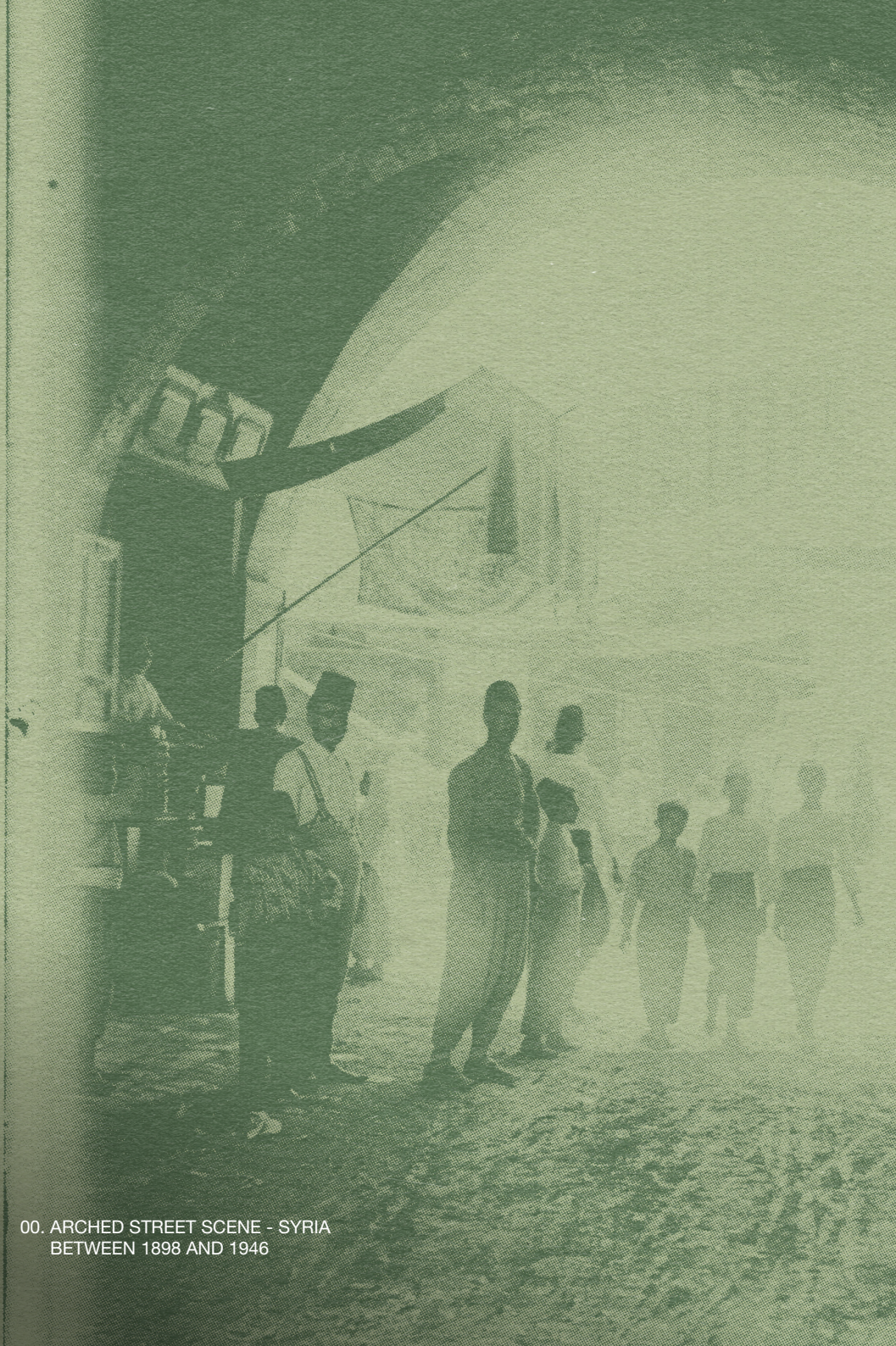
However, like any ambitious urban development venture, the New Administrative Capital has not escaped debates and concerns. Experts and citizens alike question its impact on surrounding communities. The swift pace of development and potential displacement of existing residents have ignited discussions, emphasizing the need for thoughtful urban planning that prioritizes social equity and the well-being of all citizens. Additionally, the grandiosity of the project prompts a closer examination of its economic implications, particularly against the backdrop of Egypt's economic realities. Notably, as Egypt undertakes this massive project, questions arise about the strain on the country's financial resources, given the three loans totaling \$20 billion from the IMF over the past six years¹⁷. Economic challenges, including the devaluation of the Egyptian pound, cannot be overlooked. There are apprehensions that Egypt's ambitious administrative capital project, with all its grandeur and promise, has strained the country's financial resources, raising concerns about sustainability and potential long-term economic consequences.

ECONOMIC CATALYST.

Moreover, discussions about the equitable distribution of economic benefits persist. While the project holds promise as an economic catalyst, it is imperative to ensure that these benefits reach every segment of the population, particularly those vulnerable to economic shifts.







00. ARCHED STREET SCENE - SYRIA
BETWEEN 1898 AND 1946



Amman: Forging Sustainable Urban Progress Amidst Challenges

VISION.

Amman, the dynamic heart of Jordan's urban landscape, grapples with the evolving needs of its burgeoning population. In response, a visionary proposal has emerged—a new city creation, seemingly positioned to address the city's expanding demands. However, this proposal is not an isolated endeavor; it reflects a global trend of large-scale urban projects that often make grand promises but confront critical challenges.

Initially appearing as a pragmatic response to Amman's resident needs, the proposal aligns with a broader narrative of ambitious urban projects that frequently aim to balance urban development and environmental preservation. This poses a fundamental challenge that the proposed city in Amman must confront.

COMMUNITY.

On the surface, this ambitious vision aims to alleviate the pressures of growing populations in large cities like Amman and Zarqa. The Jordanian government envisions the new city, sprawling across 266,000 dunums of land, as a future home for a million people, with an initial population of 157,000 residents by the end of the first phase in 2033. The project aims for overall completion by 2050, symbolizing a monumental effort in urban expansion¹⁸.

Beneath the veneer of progress, however, the project raises questions about its potential impacts on existing communities. The specter of community displacement, a recurring theme in urban development projects, looms large. The proposal must grapple with the profound responsibility of preserving the well-being of these communities amidst the transformative tide reshaping their surroundings. Mitigating the potential upheaval caused by such a project is of paramount importance.

VIABILITY.

Moreover, this ambitious plan comes with financial concerns. Jordan's economy faces challenges, with a 2023 budget of just \$2.5 billion and a national debt of \$45 billion¹⁹. On social media, some Jordanians expressed concerns that such a megaproject may necessitate taking on additional debt, following a similar path to Egypt.

Jordanian Members of Parliament (MPs) echo these concerns, suggesting that the nation should prioritize sectors like industry over building an entirely new city from scratch²⁰. They raise valid questions about the feasibility of the project, given the existing debt burden and the potential for increased corruption and theft.

DEBATE.

Yet, others view this project as a necessity for the future. Former governmental employees believe it can be executed easily, under the conditions of land being provided to developers for free in exchange for utilizing it. They also point to global trends where many world capitals, including Egypt, are making similar changes due to high population density.



07 AMMAN





GLOBAL URBANIZATION.

In summary, the proposal for a new city in Amman, while ostensibly a symbol of progress, should be approached with a critical eye. It reflects broader challenges associated with ambitious urban projects, including the need for ecological balance, community preservation, and equitable development. Only through rigorous examination and careful planning can these challenges be effectively addressed, ensuring that the pursuit of sustainability in urban development does not inadvertently create new problems. As Amman embarks on its journey towards sustainable urban development, it does so with the wisdom of lessons learned from global urbanization trends, mindful of the imperative to foster harmony between growth, preservation, and progress.

SUMMARY.

Through our exploration of these innovative endeavors in the region, we gain valuable insights into the diverse strategies and approaches employed to design sustainable and resilient urban environments within the Arab world. However, the cautionary voices of experts remind us of the complex challenges and uncertainties that accompany these visionary projects.

Conclusion.

EXPLORATION.

In this chapter, we embarked on a captivating journey through the accounts of time and the vast expanse of urban landscapes, exploring the historical nuances of urban development and immersing ourselves in the visionary projects that define the modern urban context. From the genesis of cities in earlier civilizations to the audacious dreams of contemporary urban utopists, our exploration provides profound insights into the evolution of urban living and the enduring lessons bequeathed by those who have sculpted its narrative.

Our study of historical urban development reveals cities' pivotal role in human progress, melding innovation, culture, and societal evolution. Despite enduring challenges, cities reflect economic, technological, and societal changes, shaping urban growth and highlighting their historical context's importance. Exploring visionary urban planners' ideas, such as Howard, Wright, and Le Corbusier, offers insights. Their utopian visions, while noble, often clashed with reality, sparking debates on sustainability, inclusivity, and urban design.

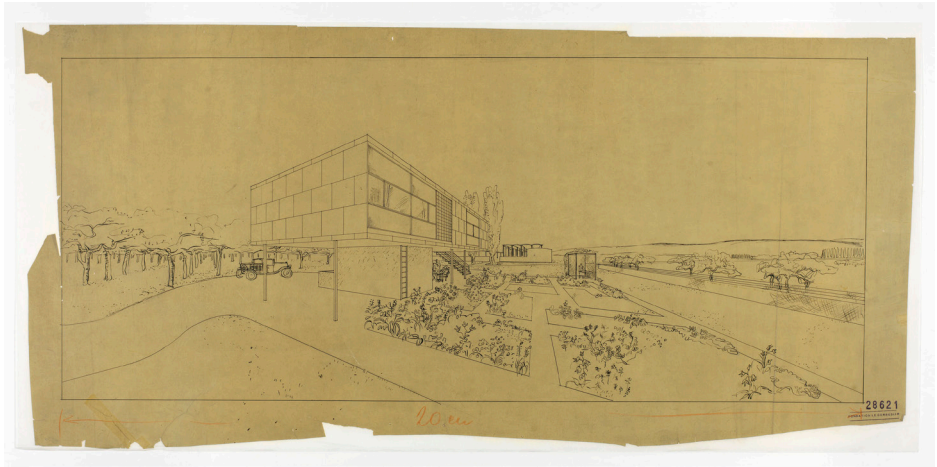
Looking at visionary Arab city projects like NEOM, Masdar City, Egypt's New Administrative Capital, and Amman's new city, we see attempts to redefine urban living. These projects, while admirable, face scepticism regarding feasibility, sustainability, and social impact, urging a need for careful assessment.

ODYSSEY.

In conclusion, our odyssey through the past and present of urban development unveils the intricate tapestry of human progress. It serves as a poignant reminder that cities transcend being mere concrete jungles; they are living organisms shaped by the interplay of history, culture, and human aspirations. As we envision the future of cities, we must navigate the delicate equilibrium between innovation and preservation, progress and ethics, and economic growth and social equity. Our







00. VILLE RADIEUSE

journey through the corridors of history and contemporary visions acts as a compass, guiding us toward a future of cities that is sustainable, inclusive, and harmonious.



00. THE 1933 RENDERING OF PLAN OBUS FOR ALGIERS DEMONSTRATES LE CORBUSIER'S SUPERIMPOSITION OF MODERN FORMS





02 Building for the Future

Chapter 2

Building for the Future: Transforming Existing Cities into Sustainable and Inclusive Urban Centers in the MENA Region; Challenges and Solutions

APPROACH.

Investing in existing cities in the MENA region is a nuanced attempt, brimming with challenges and opportunities. While the allure of developing new urban centres may be enticing, a closer examination reveals the vital importance of prioritizing the long-term sustainability and social inclusivity inherent in existing urban landscapes. As we navigate through this chapter, we delve into the complexities of why channeling investments into existing cities in the MENA region is not only a pragmatic approach but also a socially responsible one.

INTRICACIES.

This exploration is grounded in insights picked up from extensive discussions with a diverse panel of experts, including local, regional, and international voices. These conversations have illuminated the multifaceted landscape of urban development in the MENA region, shedding light on the courtesies of investing in existing cities. From infrastructure challenges to social equity considerations, we aim to provide a comprehensive understanding of the factors that shape the sustainable evolution of urban spaces in this dynamic region.

Land Use Planning



08 CITY OF CAIRO



08.1 HISTORIC CAIRO

Cities in the MENA region, including historical centers like Cairo and rapidly growing metropolises like Dubai, face a delicate challenge in managing their urban landscapes. The historical cities, shaped by centuries of existence, embody a unique blend of narrow streets and ancient architecture interwoven with modern developments. Meanwhile, the explosive population growth in cities like Dubai, soaring from under 1 million in 2000 to almost 3 million in 2020²¹, intensifies the strain on available land resources, demanding innovative land use strategies.

STRATEGY.

Dubai, recognizing the urgency of sustainable urban development, responded to this challenge with the Dubai 2040 Urban Master Plan. Unveiled by Sheikh Mohammed bin Rashid, this visionary initiative seeks to transform the emirate into a people-centric, interconnected city. The plan strikes a careful balance between community needs, tourism, modernity, and heritage preservation.

Projected to accommodate 5.8 million residents by 2040²², Dubai's master plan concentrates on the existing city limits, emphasizing efficiency in space utilization and optimization of urban areas. This forward-looking plan encompasses the development of five main urban areas, a 25% increase in educational and health facilities, a substantial expansion of areas for hotels and tourism, and a significant allocation of land for commercial and economic activities. A noteworthy commitment dedicates 60% of Dubai's land to nature reserves and natural areas, ensuring that 55% of the population will live within 800 meters of a main public transport station²³.

MASTER PLAN.

Additionally, the Dubai International Financial Centre (DIFC) serves as another compelling example. The DIFC concentrates financial services in a compact area, curbing the need for sprawling developments and contributing significantly to Dubai's economic diversification. This focused approach has proven effective in creating a vibrant financial hub while minimizing the environmental impact of urban expansion.



09 DUBAI INTERNATIONAL FINANCIAL CENTRE (DIFC)



10 LEBANON

However, lessons from the redevelopment of Beirut's downtown area underscore the importance of a holistic perspective. While the Solidere project successfully transformed the area into a commercial and cultural hub, it triggered debates about social inclusion and gentrification. The focus on attracting investors and job creation, while economically beneficial, led to the displacement of some long-time residents, emphasizing the need for a balanced approach that considers both economic benefits and the community's well-being and cultural identity²⁴.

ENGAGEMENT.

Also, an inclusive and participatory process involving various stakeholders such as residents, municipalities, and the private sector is crucial to successful land use planning. Cities like Amman and Casablanca have embraced participatory urban planning, resulting in community gardens, revitalized neighborhoods, and an improved quality of life for residents²⁵²⁶²⁷.

INTEGRATION.

Examining successful instances within the MENA region provides valuable insights. The historic medina of Marrakech stands out as a notable case study, showcasing the harmonious coexistence of heritage preservation and urban development. Traditional riads have been transformed into boutique hotels and restaurants, safeguarding cultural heritage and fostering economic growth. This approach demonstrates the potential for urban development to enhance both the economic vitality and cultural richness of a city.

CONCLUSION.

In conclusion, land use planning in the MENA region demands a comprehensive and dynamic approach. Urban planners must navigate the intricate relationship between history, culture, and contemporary needs. Engaging all relevant stakeholders in a participatory process ensures that land use planning serves the needs and aspirations of the community while preserving social cohesion and cultural heritage. This holistic perspective is essential for achieving sustainable and inclusive urban development in the MENA region.

Affordable Housing:

Affordability Crisis

In the heart of Cairo, the magnitude of the housing affordability crisis is starkly evident, with a significant segment of the population residing in informal settlements, locally referred to as “ashwaiyyat”²⁸. These areas are marked by overcrowding, inadequate infrastructure, and substandard housing conditions. It is estimated that between 38% to 70%²⁹ of the Greater Cairo population live in such settlements, illustrating the formidable reality confronting a substantial portion of Cairo’s residents. The ramifications of this affordability crisis extend beyond immediate living conditions, permeating the social fabric of the city. Inadequate housing exacerbates socioeconomic disparities, constraining access to education, healthcare, and economic opportunities for those residing in these challenging conditions.



11 «ASHWAIYYAT»

Cairo’s experience serves as a valuable source of insights into tackling the pressing issue of housing affordability. Amidst the historic city’s bustling streets, various innovative projects and initiatives have emerged, showcasing both the challenges and successes of navigating the intricate terrain of urban hous-

AFFORDABLE.

ing. A notable testament to Cairo's commitment to affordable housing is the "Hayyena" initiative. This ambitious endeavour by the Egyptian government, funded by an USD \$8.1 million deal that aims to enhance urban development in Egypt. The project is part of an Egyptian-Swiss agreement for financial and technical cooperation back in 2013. By emphasizing affordability through partnerships between the public and private sectors, it seeks to streamline construction processes and reduce costs, thereby making homeownership accessible to those previously excluded. The project will be implemented in two pilot governorates between 2018 and 2024, in cooperation with the United Nations Human Settlements Programme (UN-Habitat)³⁰.

SOLUTIONS.

Another project is the "Al Asmarat" housing development, situated in Cairo's heart, focusing on constructing thousands of residential units with a keen eye on affordability. Beyond mere housing, Al Asmarat integrates essential amenities such as schools, healthcare facilities, and community spaces, recognizing that affordable housing extends beyond physical structures to encompass the broader well-being of residents³¹.

Addressing Cairo's affordability crisis demands innovative solutions tailored to the city's unique urban context. While statistics paint a concerning picture, a closer examination unveils transformative opportunities. Social housing programs have emerged as a pivotal avenue to alleviate the burden on vulnerable populations, offering affordable rental units. However, it's crucial to acknowledge the inherent limitations of these programs, marked by bureaucratic complexities, insufficient funding, and occasional mismanagement, leaving numerous residents in need without adequate housing.

Jordan's experience in addressing affordable housing provides valuable insights. Despite facing challenges with land availability, Jordan has implemented various initiatives to promote affordable housing, which primarily aim to provide housing units for low- and middle-income families. Additionally, the Jordanian government has collaborated with international organizations to mainstreaming housing into national urban policies, showcasing a commitment to addressing the housing needs of its population³².

Limited Land Availability: A Myth in Cities?

SCARCITY.

In many cities in the MENA region, including Beirut and Amman, there's a prevalent narrative of land scarcity, often perpetuated by the banking and real estate sectors. This belief suggests that the limited availability of land for new developments inevitably raises land values and, consequently, the overall cost of real estate. However, a deeper examination reveals a different reality — one where relative scarcity is rooted in competing economic behaviours, interests, and complex legal dynamics.

VACANCIES.

In Beirut, approximately one-third of plots within the municipal boundaries are vacant and technically suitable for development, including vacant lots, temporarily occupied spaces, and potentially under-occupied buildings that could be repurposed or redeveloped³³. Similarly, Jordan has implemented various strategies and policies to address the issue, highlighting the importance of comprehensive approaches that consider not only the availability of land but also economic factors, legal frameworks, and social policies³⁴. Prominent real estate developers in cities like Beirut

CHALLENGES.

have focused on constructing luxury condominium towers in recent years, requiring large plots of land. However, finding sizable, easily tradable, and reasonably priced land parcels has proven challenging. Many landowners, aware of the demand, set high pricing demands, particularly with no tax incentives for swift sales. Moreover, intricate legal statuses, such as joint ownerships or public and religious property designations, further complicate or even prevent transactions³⁵.

This competition between economic interests of devel-



12 BEIRUT

PERCEPTIONS.

opers and landowners, coupled with legal complexities, contributes to perpetuating the idea of land scarcity in these cities. Some developers even disseminate misinformation, suggesting insufficient land supply, especially during real estate booms, to encourage hasty property purchases. In essence, the perception of land scarcity in cities like Beirut and those in Jordan is relative, primarily concerning price and accessibility rather than sheer quantity³⁶.

Favourable tax and legislative environments for prop-

DYNAMICS.

erty investment, external financial inflows, and subsidized housing loan programs have maintained high real estate demand in cities like Beirut and Jordan³⁷. This high demand, coupled with limited immediate increases in floor area supply, resulted in escalating real estate prices during boom years. Moreover, market opacity and the notable, albeit challenging to quantify, utilization of real estate assets for activities like money laundering and tax fraud have contributed to the persistent elevation of real estate prices in these cities.

INTERACTIONS.

Economic mechanisms play a significant role in the intricate dance between real estate and land markets in cities. One key aspect involves how real estate developers decide how much they can invest in acquiring land, considering various factors such as construction costs, financial considerations, taxes, and anticipated profits from the project. Essentially, it's about determining the economic feasibility of the venture. As the real estate market experiences cycles, certain dynamics come into play. When there's a heightened demand for real estate, developers have more funds at their disposal for acquiring land, influencing an increase in land prices. In simpler terms, the demand for real estate has a direct impact on the cost of land, creating a closely intertwined relationship between the two markets.

INSIGHTS.

On the flip side, when the real estate market faces a slowdown or a slight downturn, the adjustment in land prices doesn't happen immediately. Landowners tend to hold onto their price expectations, anticipating a future rebound in real estate prices. This delay, known as the "ratchet effect", poses challenges as it prevents quick responses to changes in the market³⁸. Understanding these economic mechanisms is crucial for policymakers and stakeholders in cities worldwide. It sheds light on the interconnected nature of real estate and land markets, providing insights that can inform effective strategies and reforms in the realm of urban development and affordable housing.

In conclusion, the notion of land scarcity in many cities does not stem from an absolute lack of land but rather

CONCLUSION.

from the intricacies of competing economic interests, legal complexities, and economic mechanisms influencing the relationship between land and real estate markets. Recognizing that limited access to large, affordable land parcels in cities is largely driven by economic factors, not spatial determinism, opens avenues for land policy reforms aimed at regulating price inflation and organizing urban development more effectively. These reforms could pave the way for a more equitable approach to land and affordable housing in cities worldwide.

Rapid Urbanization

The MENA region finds itself at the forefront of rapid urbanization, undergoing one of the swiftest rates globally. This phenomenon is propelled by a confluence of factors, including population growth, rural-to-urban migration, and the allure of economic opportunities within urban centers.

METROPOLIS.

Illustrating this transformative urbanization trend, Amman, the capital of Jordan, serves as a compelling case study. Over recent decades, Amman has undergone substantial population growth and urban sprawl, evolving from a relatively small city into a vibrant metropolis, magnetizing both internal and external migrants seeking improved prospects. In the early 2000s, Amman's population stood at around 1.5 million, and by 2020, it had skyrocketed to over 4 million—a testament to a staggering urban transformation³⁹.

While this rapid urbanization signals progress and development, it presents a complex challenge: how to provide housing that not only keeps pace with the burgeoning population but is also affordable and accessible to diverse income groups. The multifaceted challenges arising from this urban surge necessitate

GROWTH.

Amman's urban planners and policymakers to address the urgent need for expanding the city's housing inventory strategically. Simultaneously, they must ensure that this housing is not only strategically located but also affordable and equipped with essential services, meeting the dynamic and diverse needs of the urban populace.

DYNAMICS.

The rapid urbanization sweeping the MENA region unveils both opportunities and challenges. Examining specific cases, such as Amman, offers valuable insights into the intricacies of managing urban growth, ensuring housing affordability, and enhancing the quality of life for residents amidst transformative changes. The evolving landscape calls for adaptive urban planning and housing policies to foster sustainable, inclusive, and thriving cities throughout the MENA region.

Infrastructure and Services

PIVOTAL.

Across many cities in the region, there's a pressing challenge to meet the growing demands for infrastructure as populations expand. This challenge is particularly acute in informal settlements and low-income neighbourhoods, where deficiencies in essential services such as clean water, sanitation, electricity, and reliable public transportation are prevalent. Recognizing that affordable housing initiatives must be complemented by well-designed infrastructure and services is pivotal for addressing the comprehensive needs of urban populations.

Examining Cairo, Egypt's expansive capital and one of Africa's largest cities, offers a vivid real-life illustration of the intricate relationship between affordable housing and infrastructure challenges. With a population ex-

ceeding 20 million⁴⁰, Cairo found itself stretching its existing infrastructure to its limits. In low-income neighbourhoods, residents faced significant hurdles in accessing basic necessities, including clean water, sanitation facilities, electricity, and dependable public transportation⁴¹.



13 CAIRO

This manifested in health risks due to inadequate sanitation services and hindered mobility and restricted access to job opportunities due to unreliable public transportation. The challenges highlighted the urgent need for holistic urban planning, seamlessly integrating affordable housing initiatives with strategic infrastructure development.

Effectively tackling these complexities demands not only financial investments in physical infrastructure but also a commitment to sustainable urban planning practices. Cities can explore innovative solutions such as green infrastructure, prioritize the development of robust public transportation networks, and implement efficient waste management systems. Such measures are crucial for elevating living conditions and enhancing the overall urban experience for diverse populations⁴².

The MENA region's rapid urbanization and the intricate interplay of infrastructural needs call for nuanced and context-specific approaches to affordable housing. Real-life examples, such as the unprecedented growth in Dubai and Cairo's infrastructure challenges, underscore the interconnected nature of affordable housing and urban development. Striking a harmonious balance between providing affordable housing and establishing resilient infrastructure and services is imperative for crafting inclusive, sustainable, and thriving cities in the MENA region.

Solutions and Examples from the MENA Region in Relation to Affordable Housing

In response to the complex challenges of affordable housing, several cities across the MENA region have initiated innovative solutions and projects, showcasing a commitment to sustainable urban development. These initiatives leverage a combination of public-private partnerships, community engagement, and forward-thinking urban planning.

- o **Mixed income Housing Projects:** Many cities in the MENA region are spearheading mixed-income housing projects through public-private partnerships (PPPs). Notably, Abu Dhabi's "Al Ghadeer" development exemplifies this approach by collaborating with private developers like Aldar Properties. The project integrates a variety of housing options, from affordable units to luxury residences, within the same community. This integration not only addresses housing affordability but also fosters social inclusivity and economic diversity. Al Ghadeer



14 ABU DHABI

includes residential units, community facilities, and commercial spaces, creating a vibrant, mixed-use community that promotes sustainable urban living⁴³.

On the other hand, Dubai’s “Jumeirah Central” project highlights the challenges that can arise with PPP initiatives. Despite its ambitious plans to create a mixed-use urban district, the project was put on hold due to market reassessments and changes in strategic priorities at Dubai Holding. This demonstrates that while PPP collaborations can be successful, as seen with Al Ghadeer, they also require careful planning and management to navigate potential pitfalls⁴⁴.

- o **Upgrading Informal Settlements:** A crucial aspect of mitigating the affordability crisis involves the upgrading and formalization of informal settlements. In Cairo, these efforts are part of a collective approach overseen by the Ministry of Housing, Utilities, and Urban Communities, developed in collaboration with international organizations such as UN-Habitat, which provides technical support and expertise⁴⁵. These projects concentrate on elevating living conditions,

enhancing infrastructure, and improving services in informal settlements. What sets them apart is the emphasis on resident participation in decision-making processes, ensuring that the community's voice is integral. This holistic approach not only uplifts housing quality but also empowers communities⁴⁶.

- o **Smart Urban Planning:** MENA cities are increasingly embracing smart urban planning strategies to optimize land use and foster sustainable growth. Smart urban planning refers to a comprehensive approach that integrates technology, sustainability, and community needs to create efficient and liveable urban spaces. It involves using data and digital tools to enhance infrastructure, transportation, and services while promoting environmental and social sustainability⁴⁷.

Dubai's "2040 Urban Master Plan" is a prime illustration of this shift. The plan focuses on developing within existing urban areas, enhancing infrastructure, and accommodating population growth without compromising affordability. Key strategies include improving the efficiency of resource utilization, doubling green and recreational spaces, providing sustainable and flexible means of mobility, fostering greater economic activity, and enhancing environmental sustainability⁴⁸. Additionally, the plan emphasizes safeguarding cultural and urban heritage, developing vibrant and inclusive communities, and implementing a comprehensive governance model to support sustainable development and growth. These strategies align with the broader goal of enhancing overall quality of life and positioning Dubai as a global destination for citizens, residents, and visitors.

- o **Government Subsidies:** Recognizing the economic disparities, some governments in the MENA region have implemented housing subsidies for low-income citizens. In Egypt, the "Social Housing Program" is a notable initiative⁴⁹, aimed at providing affordable housing units to low-income families. The program,

overseen by the Ministry of Housing, Utilities, and Urban Communities, and supported by the Social Housing and Mortgage Finance Fund (SHMFF), offers affordable rental units and financial incentives to eligible families. According to the Egypt Human Development Report 2021 by the United Nations Development Programme (UNDP), as of June 2020, the program had already benefited approximately 312,000 families, providing them with monetary support of up to EGP 4.9 billion. This initiative, backed by significant funding from the World Bank, not only alleviates housing burdens but also contributes to fostering social equity by improving the affordability of formal housing for low-income households⁵⁰.

By comprehensively addressing these multifaceted challenges, policymakers, urban planners, and stakeholders in the MENA region can collaboratively develop strategies for affordable housing. This involves not only the creation of diverse housing options but also the enhancement of urban infrastructure and services. Through these initiatives, the aim is to foster sustainable, inclusive, and equitable urban development tailored to the distinctive contexts of existing cities in the MENA region.

CONCLUSION.

Infrastructure retrofitting and the integration of smart city technologies in the MENA region represent a transformative journey deeply intertwined with the region's cultural and historical fabric. The diverse urban landscapes, ranging from well-planned neighborhoods to informal settlements and refugee camps, present unique challenges and opportunities for upgrading infrastructure.

Infrastructure Retrofitting and Smart City Technologies in the MENA Region

In the context of retrofitting existing infrastructure, innovative solutions are required to upgrade transportation systems, utility networks, and public spaces. These upgrades not only meet pragmatic demands but also harmonize with cultural heritage and ensure sustainability. This collaborative approach ensured that the infrastructure upgrades not only met pragmatic demands but also harmonized with cultural heritage and ensured sustainability.

INNOVATION.

Across the MENA region, the topography and, in some cases, limited land availability pose significant challenges for infrastructure upgrades. Advanced engineering techniques, such as tunnelling and elevated infrastructure, are essential to navigate these constraints. These innovative solutions ensure that the transformation aligns with the unique needs of each locality. For example, in Amman, Jordan, the “Ras Al Ain Hangar” project transformed an abandoned hangar into a vibrant cultural space through a collaborative effort involving local authorities, community representatives, and experts. The project, which was overseen by the Greater Amman Municipality, showcases the benefits of transparent and accountable infrastructure development. The adaptive reuse of the historic electricity hangar not only preserved the building’s industrial character but also created a multifunctional space that now hosts exhibitions, fairs, and cultural events. This initiative highlights how strategic planning and community involvement can align with the unique needs and aspirations of the region⁵¹.



15 RAS ALAIN HANGAR

SMART INFRA- STRUCTURE.

Moreover, the infusion of smart technologies and digital infrastructure holds immense promise for optimizing resources and enhancing overall efficiency. Smart city technologies, such as Internet of Things (IoT) devices, sensors, and data analytics, play a crucial role in this transformation. These technologies enable cities to collect and analyze real-time data, leading to improved decision-making and resource management. IoT-based solutions, for example, can manage utility services by allowing residents to monitor and control their usage remotely, which enhances efficiency and conservation. Additionally, smart lighting systems adjust based on real-time conditions, and advanced waste management systems optimize collection routes, reducing costs and environmental impact. Furthermore, air quality sensors and public safety systems utilizing data analytics can significantly enhance the living environment by monitoring pollution levels and predicting potential crime scenes⁵²⁵³.

The Dubai Water Canal project exemplifies a successful retrofitting initiative where an existing waterway was transformed into a vibrant waterfront destination. The project involved the construction of new bridges, walkways, and waterfront developments, enhancing the city's urban landscape and recreational offerings. Smart technologies, such as smart lighting systems and environmental monitoring, were integrated into



16 DUBAI

REVITAL.

the project to improve efficiency and sustainability. For instance, the project integrated smart lighting systems, CCTV cameras, Wi-Fi coverage, audio systems, step lighting, planter lighting, and boardwalk handrail lighting. Additionally, it included the installation of low voltage switchgears, electrical cabling, LED lights, and CCTV on the three pedestrian bridges spanning the canal. These smart technologies were part of the project's aim to enhance efficiency, safety, and overall user experience⁵⁴.

However, securing funding for smart city initiatives remains a significant hurdle, particularly due to budget constraints. Innovative financing models, such as public-private partnerships and grants from international organizations, can mobilize private sector investments and support sustainable urban development projects. This collaborative approach ensures that infrastructure upgrades not only meet pragmatic demands but also harmonize with cultural heritage and ensure sustainability.

UNITY.

In this transformative journey, establishing a collaborative mechanism that is inclusive and participatory is crucial. Engaging local communities in the planning process, leveraging their intimate knowledge of neighborhoods, is pivotal for success. Urban planners, architects, and engineers work in unison to assess existing infrastructure, identify areas for improvement, and craft comprehensive retrofitting plans.

CONCLUSION.

In conclusion, integrating smart city technologies into existing urban environments in the MENA region is a complex but rewarding endeavor. By learning from both successful and unsuccessful experiences, existing cities can develop tailored approaches to leverage the benefits of smart technologies while addressing their unique challenges.



Community Engagement and Participation

Community engagement and participation stand as a cornerstone for the rejuvenation of existing cities in the MENA region. This integral aspect of urban development, while holding immense transformative potential, encounters significant challenges. Navigating through limited civic awareness, power imbalances, and inadequate resources is essential for fostering inclusive decision-making processes that resonate with the genuine needs of diverse communities.

Challenges in Achieving Community Engagement

- o **Power Imbalance:** Power imbalances between community members and decision-makers pose significant challenges, as it plays a crucial role in influencing urban sprawl dynamics. When decision-making is concentrated in the hands of a few, urban planning tends to favour interests that may not align with sustainable development goals. In cities in the MENA region, this power imbalance can lead to unchecked expansion, contributing to the sprawl of informal settlements. Residents, lacking influence in these decision-making processes, find themselves in environments shaped by urban sprawl without adequate consideration for their needs and preferences⁵⁵. This power imbalance contributes to unplanned expansion, emphasizing the importance of inclusive decision-making processes. Residents often face challenges in influencing decisions that directly impact their housing needs, highlighting the need for more equitable participation⁵⁶.
- o **Limited Civic Awareness:** In several cities across the MENA region, a critical lack of civic awareness poses a significant barrier to active community participation in decision-making processes. For instance, in Cairo, Egypt, the Nada Foundation for Safe Egyptian Roads, operating under the Ministry of Social Solidarity, has been at the forefront of advocating for road safety and sustainable transport since its establishment in August 2014. In collaboration with Tabdeel, an organization dedicated to promoting environmentally friendly practices, and the Cairo transport authorities, the Nada Foundation launched initiatives in 2021 to support communities in creating safer street environments. These efforts aimed to promote safer modes of transportation such as walking, cycling, and non-motorized mobility. Nada Foundation, emphasized their commitment to protecting vulnerable road users, including pedestrians,

cyclists, public transport users, the elderly, children, people with disabilities, and two-wheeled vehicle drivers. These initiatives underscore the importance of targeted campaigns and collaborative approaches in raising civic awareness and fostering community engagement⁵⁷.

- o **Inadequate Resources:** Certain communities encounter obstacles stemming from insufficient resources, hampering their meaningful involvement in urban planning processes. These resources include financial resources, access to information, and technical expertise. Cities in the MENA region face significant challenges due to rapid urbanization and environmental stressors. These challenges include escalating temperatures and diminishing green spaces, which adversely affect public health and increase energy consumption. The lack of adequate resources significantly impedes community participation in urban planning⁵⁸. In some regions, the scarcity of resources has been a substantial barrier to meaningful community engagement, emphasizing the need for better access to financial support, information, and technical expertise to foster active participation⁵⁹. Additionally, initiatives that address these resource gaps are crucial to enhance civic participation in urban planning and management. Targeted programs that provide the necessary support and tools are essential to empower communities, ensuring their voices are included in the decision-making processes that shape their environments⁶⁰.



Solutions to Enhance Community Engagement

- o **Developing Public Awareness Campaigns:** Local governments, supported by relevant stakeholders such as NGOs and community-based organizations, should develop comprehensive public awareness campaigns to empower residents by providing information about their rights and opportunities for involvement. For example, in

Amman, Jordan, GAM initiated the Amman Green City Action Plan, a long-term sustainability strategy⁶¹. As part of this initiative, Greater Amman Municipality (GAM) conducted extensive public awareness campaigns to engage residents in the city's sustainability efforts. These campaigns included community workshops, educational programs in schools, and public events showcasing sustainable practices. By involving residents in the planning and implementation of sustainability initiatives, GAM successfully created a sense of ownership and pride among the community, leading to greater support and participation in environmentally sustainable urban development.

- o **Strengthening Community Organizations:** Empowering community-based organizations is crucial for fostering collective community input. This can be achieved by providing capacity-building programs, access to resources, and opportunities for collaboration with local governments and other stakeholders. Capacity-building programs help community members acquire the necessary skills and knowledge to engage effectively in urban planning processes⁶². Access to resources, such as financial support and technical expertise, enables these organizations to implement their initiatives and advocate for their communities effectively⁶³. Additionally, fostering collaboration between community organizations and local governments can lead to more inclusive and sustainable urban development.

For instance, the Participatory Slum Upgrading Programme (PSUP), implemented by UN-Habitat in countries such as Egypt and Morocco, focuses on strengthening the capacities of community-based organizations and local governments to collaboratively plan and implement slum upgrading projects. This program emphasizes the importance of community participation and capacity-building⁶⁴. In Cairo, the Al-Darb al-Ahmar Revitalization Project involved community members in the restoration and redevelopment of their neighbourhood, providing training and resources to ensure sus-



17 AL-DARB AL-AHMAR REVITALIZATION PROJECT - AL AZHAR PARK

tainable outcomes⁶⁵. Such collaborative efforts highlight the significance of involving community organizations in decision-making processes to create more sustainable and inclusive urban environments.

- o **Digital Inclusion:** Ensuring universal access to digital platforms broadens participation opportunities. For example, in Dubai, the Smart Dubai initiative has implemented various digital inclusion programs to engage residents in urban planning processes⁶⁶. These programs provide online platforms and mobile applications that allow residents to access information, participate in surveys, and provide feedback on proposed projects. By including residents in digital decision-making processes, cities can ensure that urban development projects align with community needs and preferences.

CONCLUSION.

In conclusion, active community engagement is not just a desirable aspect but an imperative one for sustainable urban development. Navigating challenges through public awareness, support for community organizations, and digital inclusion empowers residents to actively contribute to urban planning processes. By fostering inclusivity and embracing community perspectives, cities in the MENA region can create vibrant, sustainable urban spaces that truly resonate with the diverse needs and aspirations of their residents.

Financing Mechanisms: Overcoming Challenges in MENA Cities

COMPLEXITIES.

Investing in the development of existing cities in the MENA region presents a complex financial landscape fraught with challenges. Several cities in the region have faced critical hurdles in securing adequate funding for their ambitious urban projects. These challenges include rising debt levels, limited returns on investments, weak access to financing pools, inadequate project feasibility studies, concerns about long-term fiscal sustainability, and the geopolitical situation of the region. Additionally, the elasticity of the legal system adds another layer of complexity to the financial landscape, impacting the ease of doing business and the security of investments⁶⁷.

For instance, Beirut, Lebanon, found itself grappling with a mounting debt crisis as it pursued urban development initiatives. The city's debt burden strained municipal budgets, hindering its ability to invest in es-

sential services and infrastructure⁶⁸. Meanwhile, in Cairo, Egypt, certain urban development projects struggled to demonstrate a clear return on investments, leading to difficulties in attracting private sector participation or securing financing⁶⁹. This lack of clarity deterred potential investors and impeded project implementation.

CONSTRAINTS.

In Amman, Jordan, and other cities across the region, weak access to diverse financing pools has limited their ability to secure the necessary resources for development. This limitation can be attributed to several factors, including the complexity of procedures required by international financial institutions, a lack of knowledge about available financing options, and insufficient coordination among stakeholders⁷⁰. These challenges hindered their development efforts by impeding their ability to tap into international financial institutions, capital markets, or private investments. Additionally, fiscal sustainability concerns, like those encountered in Casablanca, Morocco, highlighted the importance of balancing budgets amid varying revenue streams and economic fluctuations⁷¹.

SOLUTIONS.

Addressing these financing mechanism challenges required a multifaceted approach. Some attempts were initiated, in Beirut, for instance, they adopted responsible debt management practices, including rigorous debt assessments, clear repayment plans, and strategies to refinance existing debt when favourable opportunities arose⁷². Cairo implemented robust monitoring and evaluation mechanisms for urban projects, allowing the city to track progress, measure impact, and provide evidence of return on investments to potential financiers⁷³.

Cities like Amman established investment promotion agencies actively seeking out domestic and international investors, offering incentives, and facilitating the investment process⁷⁴. Riyadh invested in building the capacity of its finance and planning departments through training programs and partnerships with international organizations, enhancing financial man-

agement skills and project preparation expertise⁷⁵. Furthermore, cities like Casablanca explored innovative financing models such as green bonds and social impact bonds to diversify funding sources, aligning with sustainability goals and attracting socially responsible investors⁷⁶.

Transparency also played a pivotal role in addressing these challenges. Riyadh and other cities prioritized transparent financial reporting, which not only built trust with investors and creditors but also enhanced creditworthiness, facilitating access to financing pools⁷⁷. Collaborative partnerships with international aid and development agencies, including UN-Habitat and UNESCWA, provided technical assistance, financial support, and knowledge sharing to strengthen the financial resilience of cities like Amman and Cairo⁷⁸.

CONCLUSION.

In conclusion, learning from these real-world examples and adopting comprehensive strategies, cities in the MENA region can effectively unlock the financial resources needed to implement sustainable urban development projects, fostering economic growth and improving the quality of life for their residents.

Effective Policy Formation for Existing Cities

Investing in existing cities presents both opportunities and challenges, and the success of their transformation largely hinges on the formulation and implementation of robust policies. These policies must be carefully crafted to address the multifaceted nature of urban environments, considering the intricate interplay between various urban sectors. To achieve this, existing cities can draw inspiration from successful policy examples in the Arab and MENA regions.

RESILIENCE.

One of the primary policy considerations is the need for a long-term vision that prioritizes sustainability. A notable example is the Jordan Green Building Council (JoGBC) and its efforts to promote sustainable building practices in Jordan. JoGBC has developed a comprehensive framework for green building standards and certification, encouraging the adoption of environmentally friendly practices in the construction sector⁷⁹. By promoting sustainable building practices, JoGBC is contributing to the long-term sustainability and resilience of Jordan's urban environments.

ENGAGEMENT.

Furthermore, involving stakeholders in the policy-making process is imperative, as it brings diverse perspectives to the table and fosters a sense of ownership within the community. Housing policies in Qatar, for instance, have seen success through a collaborative approach. The Qatari government has engaged with developers, urban planners, and citizens to create policies that address housing affordability and quality, ensuring that housing solutions align with the community's needs and aspirations⁸⁰.

Coordination among different levels of government and departments is vital to ensure policy alignment and prevent conflicting approaches. Cairo, Egypt, has made strides in this regard through its policies focused on urban transport. By coordinating efforts among local authorities and the national government, Cairo has been able to improve its public transportation system, alleviating traffic congestion and reducing pollution in the city⁸¹.

CAPACITY BUILDING.

Capacity-building initiatives are also essential to enhance the skills and expertise of those involved in policy implementation. Tunisia has demonstrated the importance of capacity building in its urban development policies. Through partnerships with international organizations, Tunisia has provided training and skill development programs for its municipal officials, equipping them with the knowledge and tools needed for effective policy implementation⁸².

Lastly, regular policy evaluation and adaptation are crucial to monitor progress and adjust strategies to

ADAPTATION.

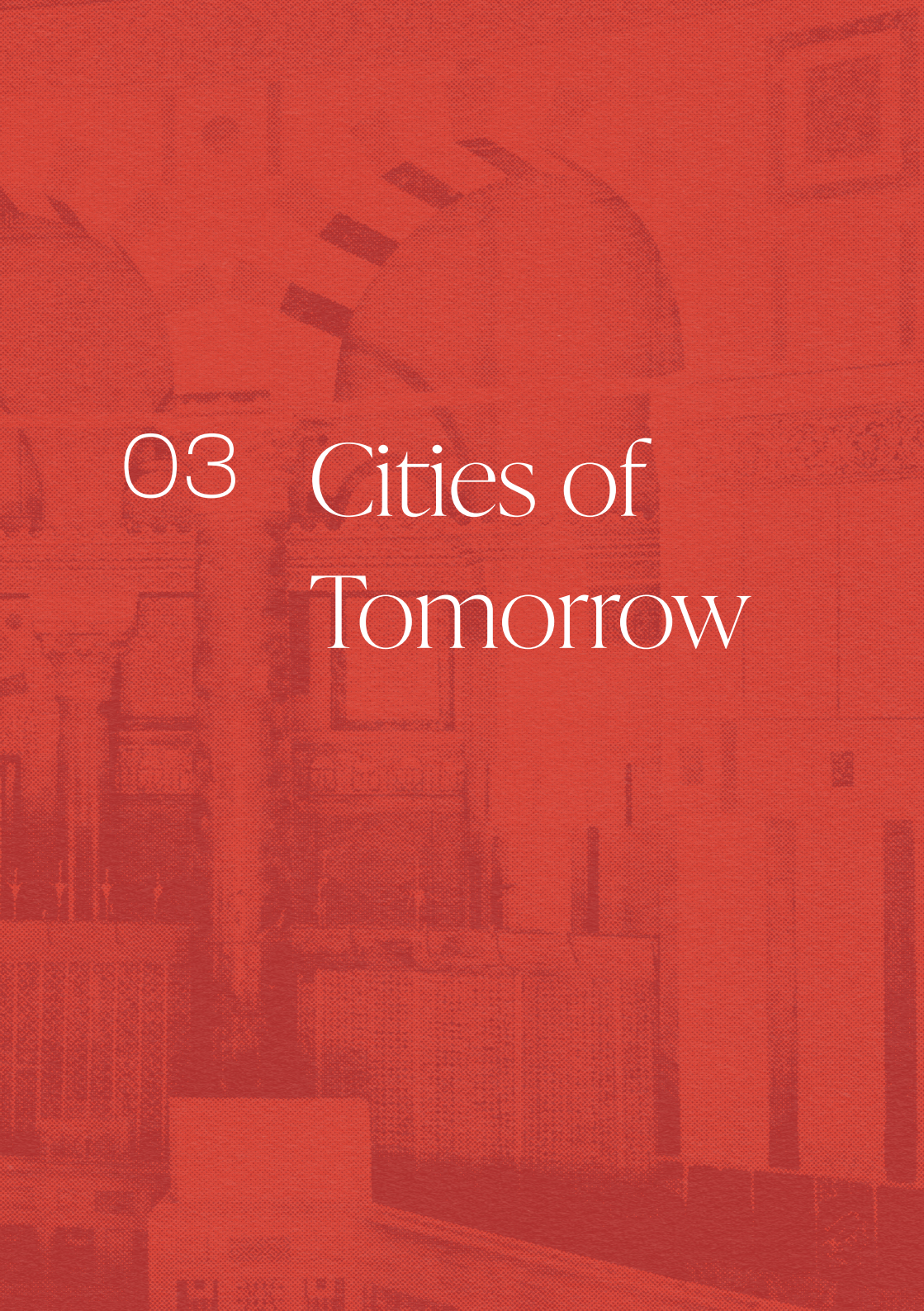
meet evolving needs. Jordan faces significant water scarcity challenges, exacerbated by population growth and climate change. To address these challenges, Jordan has implemented a robust system of water resource management policies that undergo regular evaluation and adaptation⁸³. Jordan's water resource management policies include measures to promote water conservation, improve water use efficiency, and enhance water quality. These policies are regularly evaluated to assess their effectiveness in addressing water scarcity and meeting the water needs of the population. Through monitoring of water availability, demand trends, and environmental impacts, Jordan can identify areas for improvement and adjust its policies accordingly⁸⁴.

FRAMEWORK.

By formulating and implementing effective policies that prioritize sustainability, involve stakeholders, foster coordination, invest in capacity building, and allow for flexibility through regular evaluation, these cities can create an enabling environment for responsible and sustainable urban development. Embracing such policies will contribute to vibrant, inclusive, and resilient urban centers that serve as models for a sustainable future⁸⁵.

CONCLUSION.

All in all, investing in existing cities is a complex and challenging task, but it offers immense potential for enhancing sustainability, liveability, and social responsibility. By retrofitting infrastructure, optimizing land use, ensuring affordable housing, leveraging smart city technologies, fostering community engagement, and implementing innovative financing mechanisms, cities can transform their existing urban landscapes. This transformation requires a multidisciplinary approach involving urban planners, architects, environmental scientists, sociologists, economists, policymakers, trade unions and active citizen participation. Through collaborative efforts and a long-term vision, existing cities can evolve into vibrant, resilient, and equitable urban centers that serve as models for a sustainable future. Embracing the opportunities of investing in existing cities is a pragmatic choice and a responsible and forward-thinking approach toward building inclusive and sustainable communities⁸⁶.



03 Cities of
Tomorrow

Chapter 3

Cities of Tomorrow: Multifaceted Approaches to Urban Sustainability and Resilience

RESILIENCE.

As the spectre of climate change looms ever larger, urban centres emerge as crucial battlegrounds in the struggle to mitigate environmental degradation and foster resilience. Cities worldwide grapple with an array of environmental tribulations, from rising sea levels to intensifying heat waves. Within this context, cities are impelled to spearhead innovative, sustainable urban development strategies, prioritizing ecological balance, resilience, and the welfare of their inhabitants⁸⁷.

ADAPTATION.

The global necessity to confront climate-related vulnerabilities has propelled cities across the world to adopt new approaches and concepts, such as smart cities, discussed earlier. This framework, defined by the integration of cutting-edge technology, informed data analytics, and environmentally conscious practices, has evolved from a strategic option to an essential requirement for urban development⁸⁸. This integration acts as a driving force to reduce greenhouse gas emissions, enhance energy efficiency, and construct urban environments capable of withstanding climate disruptions.

To elucidate the diverse trajectories embarked upon by cities in their pursuit of climatic resilience and sustainability, we delve into the initiatives and endeavours of several emblematic urban centres. Each city, from Riyadh's ambitious solar power initiatives to Amman's trailblazing water conservation projects and Tangiers' coastal resilience strategies, weaves its narrative of commitment, adaptation, and innova-

JOURNEYS.

tion⁸⁹⁹⁰. Through a closer inspection of their diverse strategies, we aim to discern the underlying motivations, realized outcomes, and the continuous journey of refining and augmenting their sustainable urban practices, enabling a comprehensive understanding of their triumphs and the persistent challenges demanding further ingenuity and resolve.

This exploration seeks to provide a comprehensive perspective on the diverse ways in which cities, influenced by their distinctive ecological narratives and cultural richness, are evolving in harmony with the imperatives of environmental stewardship. In doing so, they contribute intricate threads to the global discourse on sustainable and resilient urban development.

Doha: Attempts to Navigate Challenges with Innovation

Doha, Qatar's strategic hub, is undergoing a profound, sustainable urban transformation, balancing ecological considerations amid urban expansion and the challenges posed by climate change along the Arabian Gulf. The city grapples with the intricate dance of rapid urbanization and the recurring threat of extreme heatwaves, necessitating resilient and inventive measures⁹¹.

SUSTAINABLE URBANISM.

Doha's commitment to sustainable urbanism is evident in its transit solutions, notably the Doha Metro and Qbike project. These initiatives aim to reduce reliance on automobiles, curb carbon emissions, and address the challenges of a growing population and urban sprawl. The city's transit landscape is evolving to meet the demands of rapid urban expansion⁹².

The Msheireb Downtown Doha project exemplifies the city's dedication to sustainable urban development. Beyond conventional practices, it incorporates innovative technologies and sustainable design principles to



18 DOHA



19 MSHEIREB DOWNTOWN DOHA PROJECT

address energy efficiency and climatic extremes. The project emphasizes green spaces, walkability, and efficient public transit, contributing to urban resilience while tackling air pollution and traffic congestion⁹³.

CHALLENGES.

Doha faces significant challenges, including water scarcity, which was addressed by the Ras Abu Fontas desalination plant. While such projects augment water supplies, the city contends with the perpetual increase in water demand due to population growth, accentuating the looming threat of water shortages⁹⁴. The Qatar National Food Security Program addresses food security, but ongoing efforts are crucial to counteract vulnerabilities to market uncertainties. The quest for energy, driven by water desalination and urban growth, emphasizes the need for innovation in energy diversification, aligning with Qatar National Vision 2030⁹⁵.

Doha's commitment to sustainability extends to urban transportation with a fleet of electric buses, signalling a shift towards cleaner and more energy-efficient options. This move underscores the city's dedication to reducing its carbon footprint, improving air quality, and creating a more eco-conscious urban environment⁹⁶.

CONCLUSION.

In conclusion, Doha's sustainable strides offer insights into constructing climate resilience amid urban expansion and ecological conservation. The city's journey, marked by formidable challenges, underscores the urgency for innovative strategies in the face of environmental predicaments. Doha is an example of the confluence of innovation and commitment, sculpting a sustainable urban landscape amidst constraints and climatic adversities. The interplay of advanced transit systems and green constructions reflects a profound commitment to ecological equilibrium and climatic resilience. However, escalating challenges demand a perpetual cycle of innovative ideation, strategic interventions, and adaptive solutions to ensure a harmonious, resilient urban future⁹⁷.

Riyadh: Pioneering Sustainable Urban Solutions

ECO CONSCIOUS.

Riyadh, the dynamic capital of Saudi Arabia, is spearheading efforts to address the intricate challenges posed by climate change. Situated in an arid region experiencing rapid urban expansion, Riyadh recognizes the urgent need to transition to renewable energy sources. The city's bold venture into solar power serves not only as a symbol of dedication but also as a commitment to crafting a sustainable and eco-conscious future.

In response to the evolving climate and environmental concerns linked to traditional energy sources, Riyadh positions itself at the forefront of adopting solar energy. This strategic initiative reflects an in-depth understanding of the need to diversify its energy portfolio, reduce



20 RIYADH, THE DYNAMIC CAPITAL OF SAUDI ARABIA

reliance on fossil fuels, and contribute significantly to global climate change mitigation efforts⁹⁸.

TRANSITION.

Riyadh's commitment to solar power is more than symbolic; it represents a strategic shift toward harnessing abundant and clean energy resources. The city is actively investing in solar infrastructure, incorporating cutting-edge technologies to maximize energy efficiency, and implementing large-scale solar projects. This comprehensive approach not only addresses the city's energy needs but also sets a model for other urban centers grappling with the challenges of sustainable energy transition⁹⁹.

SOLAR.

Furthermore, Riyadh's solar endeavours extend beyond energy production. They play a pivotal role in reducing carbon emissions, contributing to the creation of a more eco-friendly urban landscape. By embracing solar power, Riyadh is fostering a paradigm shift in its energy consumption patterns, aligning itself with the global push for a low-carbon future¹⁰⁰.

The symbiotic relationship between Riyadh's solar initiatives and water conservation lies in their shared commitment to overall sustainability. By reducing reliance on conventional energy sources through solar power, the city indirectly contributes to environmental conservation. Solar-powered technologies can be leveraged for energy-efficient water systems, promoting a holistic approach to resource management¹⁰¹.

HOLISTIC APPROACH.

At the heart of Riyadh's sustainability journey lies the King Abdullah Financial District (KAFD), a monumental achievement in sustainable architecture and urban planning. Comprising 83 high-rise buildings, the KAFD is the largest development of its kind in Saudi Arabia, showcasing a harmonious blend of economic strength and eco-conscious design¹⁰².

CHALLENGES.

While the KAFD stands as a testament to sustainable urban development, it presents challenges, particularly in transportation systems and social dynamics. Covering an expansive three million square meters, the project aims to be Riyadh's primary central business district (CBD), foreseeing a substantial increase in traffic¹⁰³.



21 (KAFD)

INNOVATION.

To address potential traffic congestion, innovative solutions are proposed, including an elevated magnetic monorail connecting all skyscrapers within the district. The KAFD's commitment to sustainability sets a model for future urban developments, emphasizing the importance of comprehensive planning and forward-looking transportation solutions¹⁰⁴.

Furthermore, Riyadh's commitment to sustainability takes center stage with the Comprehensive Waste Management and Recycling Programs. This initiative goes beyond conventional waste management, transforming it into a dynamic process that converts waste into valuable resources for a sustainable future¹⁰⁵.

WASTE MANAGEMENT.

At the core of Riyadh's waste management strategy is a holistic paradigm that transcends traditional disposal methods. The city sees waste not as a burden but as an untapped repository of potential. The Comprehensive Waste Management Program seamlessly integrates with Riyadh's urban fabric, aligning waste reduction and recycling efforts with broader sustainability goals¹⁰⁶.

Sophisticated waste collection and separation systems efficiently sort recyclable materials, minimizing the environmental impact of landfill waste. Public engagement through the "Recycle Riyadh" campaign empowers citizens to actively participate in recycling, fostering a culture of environmental stewardship.

RECYCLING.

Riyadh's dedication to recycling has led to a substantial reduction in landfill waste, diverting a growing percentage of the waste stream from traditional disposal methods. The city remains committed to ongoing innovations, envisioning a future where waste is not only efficiently managed but also serves as a foundation for circular economies and resource regeneration¹⁰⁷.

LEGACY.

In summary, Riyadh's proactive endeavours in solar power, sustainable development, and waste management are anchored by tangible projects. The King Abdullah Financial District and the Riyadh Solar Park stand as beacons of sustainable urbanization and clean energy generation. Simultaneously, Riyadh's "Zero Waste Riyadh" program is transforming waste management and recycling, reducing landfill waste and conserving resources¹⁰⁸. While challenges persist, particularly in water conservation, Riyadh's unwavering commitment to sustainable practices and innovative strategies underscores its determination to leave a lasting sustainable legacy for future generations.

Tangiers: Urban Resilience at the Crossroads of Continents

INNOVATION.

Nestled at the crossroads of Africa and Europe, Tangiers grapples with unique environmental challenges as a port city facing rising sea levels and unpredictable weather anomalies. In response, Tangiers is carving innovative pathways in urban resilience, though the journey is not without persistent hurdles¹⁰⁹. The city's commitment to sustainability is evident in its



22 TANGIERS

COASTAL SAFE- GUARD.

comprehensive coastal safeguard and management strategies. Tangiers invests in formidable seawalls, beach rejuvenation, and flood mitigation, fortifying its coastal infrastructure against advancing sea levels. These measures not only enhance climate resilience but also support the city's dynamic tourism sector, serving as an economic cornerstone¹¹⁰. Tangiers extends its sustainability efforts to progressive

BALANCED URBAN HABITAT.

mobility solutions, exemplified by a cutting-edge tram system. This landmark development aims to enhance public transit experiences, alleviate traffic congestion, and align with the city's ambitious emission reduction targets, contributing to an ecologically balanced urban habitat¹¹¹.

However, Tangiers' sustainability journey is intricate and fraught with challenges. The city grapples with the consequences of rapid urban growth and population surges, placing strain on resources and infrastructure. The coastal protective measures, crucial for climate resilience, require continuous adaptations and enhancements to combat the evolving threats of sea-level rises and weather events.

CHALLENGES.

The accelerating pace of urban expansion brings multifaceted challenges, requiring constant infrastructure upgrades and innovative, sustainable planning to manage environmental footprints. Protective measures like seawalls demand regular maintenance and upgrades to withstand unpredictable climatic changes, necessitating substantial financial allocations and extensive research and development¹¹².

CONCLUSION.

In conclusion, Tangiers, serving as a resilient urban nexus uniting continents, remains steadfast in its commitment to sustainable progress and environmental harmony. The city's robust coastal defenses and transformative mobility solutions reflect its resilience and forward-thinking vision. However, faced with relentless urban pressures and evolving climatic landscapes, Tangiers stands at a crossroads, requiring unwavering focus, continuous innovation, and adaptive strategies to overcome extensive challenges and orchestrate a balanced, resilient intercontinental urban nexus.



00 CITY OF TANGIER AND THE BAY 1910-1900



00 OUTER TOWN GATE BETWEEN THE MAIN STREET AND
OUTER MARKET, TANGIER, MOROCCO

Amman: Navigating Water Scarcity, Flash Floods, and Urbanization

PIONEERING.

Amman, the vibrant capital of Jordan, stands as a beacon of evolving sustainable urban initiatives in the Middle East, grappling with distinct environmental challenges, most notably severe water scarcity and persistent air quality issues. Undeterred by these challenges, Amman is making significant strides in sustainability through pioneering projects across various domains, including one specifically addressing the critical issue of flash floods¹¹³.

WATER.

Water conservation takes center stage in Amman's sustainability efforts, a direct response to the pressing problem of freshwater scarcity. The city has introduced innovative measures, such as advanced rainwater harvesting systems on public buildings, schools, and municipal structures. This forward-looking approach not only allows the collection and utilization of thousands of liters of rainwater annually but also exemplifies a holistic strategy toward resource management¹¹⁴. Educational initiatives and awareness campaigns play a pivotal role in cultivating water-efficient practices among citizens, resulting in a tangible reduction in water wastage. Moreover, Amman has made significant strides in wastewater management, implementing facilities to treat and repurpose wastewater for agricultural and landscaping purposes, marking a comprehensive and integrated approach to water resource sustainability¹¹⁵.

Renewable energy integration is another cornerstone of Amman's sustainable vision, with the implementation of solar panels on numerous public buildings. This proactive stance aims to harness thousands of mega-

RENEWABLES.

watt-hours of clean energy yearly, contributing significantly to reducing the city's environmental footprint¹¹⁶. The commitment to energy efficiency further extends to the widespread deployment of LED lighting and energy-efficient HVAC systems in public facilities, aligning with global efforts to mitigate climate change and promote sustainable energy practices.

HERITAGE.

Amman's dedication to sustainability transcends functional domains, intertwining heritage conservation with eco-friendly urbanism. The meticulous restoration of historical sites, including the Amman Citadel and the Roman Theater, serves as a testament to the city's commitment to preserving its rich cultural heritage while simultaneously promoting eco-tourism¹¹⁷. The establishment of pedestrian-only zones in the bustling downtown area further underscores Amman's embrace of environmentally conscious urban planning, offering both residents and tourists sustainable navigation options through heritage-rich districts¹¹⁸.

FLOODING.

One of Amman's noteworthy sustainability projects is the initiative to address flash floods. In response to the significant risk posed by flash floods in Amman, UN-Habitat Jordan, in collaboration with the Greater Amman Municipality (GAM), implemented the project "Strengthening the Social Stability and Resilience of Vulnerable Jordanian Communities and Syrian Refugees in Amman against Flash Floods."¹¹⁹ This project, funded by the Government of Japan, focused on community consultations, awareness campaigns, training, and capacity building to enhance government and community resilience to manage flash floods. As part of this project, a "Flood Risk Assessment and Flood Hazard Mapping" study of Downtown Amman was conducted, identifying flood hotspots and proposing short, medium, and long-term solutions. The Al Zohour Green Triangle, a pilot project demonstrating green stormwater infrastructure, was implemented as one of the short-term solutions.

URBAN CHALLENGES.

Despite these commendable efforts, Amman grapples with the continuous challenge of improving air quality, necessitating policies aimed at reducing vehicular emissions and industrial pollutants¹²⁰. The infrastructural strain resulting from rapid urban expansion is a persistent concern, urging the city to explore innovative approaches in urban planning, service provision, and housing development. Sustainable housing projects and infrastructure enhancements are being piloted to accommodate the burgeoning populace while minimizing environmental impact¹²¹.

CONCLUSION.

In conclusion, Amman, strategically positioned in the heart of the Levant, intricately weaves a tapestry of innovative sustainability, with tangible projects and initiatives spanning water conservation, renewable energy, heritage preservation, and eco-friendly urban planning. The inclusion of the flash flood project reflects the city's commitment to addressing immediate environmental risks while also planning for a sustainable future. Despite ongoing challenges associated with population growth and urban expansion, Amman's dedication to relentless innovation, strategic adaptability, and robust resilience showcases a harmonious blend of tradition and sustainability, shaping the evolving urban landscape of the Middle East.



00. THE THEATRE AT AMMAN
BETWEEN 1898 AND 1946



04

Conclusions & Recommendations

Chapter 4

Conclusions & Recommendations for Sustainable Urban Development in the MENA Region

HOLISTIC.

Our exploration of sustainable urban development in MENA region has unveiled the complexities of creating resilient, harmonious cities. Rooted in the well-being of citizens and the cultivation of sustainable communities, our mission has unveiled a holistic approach that transcends economic growth and real estate ventures.

This holistic approach is centred on a fundamental belief – prioritizing citizens’ welfare over narrow economic interests. While economic growth and real estate investments are crucial, they must not overshadow pressing concerns related to housing and employment. Sustainable development in the MENA region hinges upon the active inclusion of perspectives from visionaries, planners, and, most significantly, the citizens themselves.

INSIGHT.

Honouring the intricacies of existing urban environments is crucial. Rather than rushing to construct new cities, we have learned the value of gaining a deep understanding of the dynamics of established urban landscapes. Delving into the history and collective memory of these cities has empowered us to recognize their unique needs and challenges.

Challenges have been encountered along the way, from limited resources to knowledge gaps. However, our response has emphasized the importance of active

participation from the public, the ultimate beneficiaries of urban development. Community engagement, coupled with thoughtful institutional frameworks, has proven to be of paramount importance.

REIMAGINING.

Governments in the MENA region have emerged as pivotal actors, bearing the responsibility of prioritizing citizens' welfare over personal or investor interests. Effective coordination between the private and public sectors is a fundamental prerequisite for achieving sustainable urban development.

Our journey also emphasizes comprehensive perspectives in evaluating new urban centers and exploring alternatives. Investments in existing satellite cities have been considered to achieve more balanced development, addressing challenges related to overpopulation and congestion in major cities. with a focus on using technologies and new trends

PILLARS.

Social equity and inclusivity stand as fundamental pillars of sustainable urban development in the MENA region. Enabling citizen participation, fostering community involvement, and ensuring the availability of diverse choices and services within cities are indispensable for creating a cohesive and equitable society.

GREEN.

The integration of climate change mitigation and environmental sustainability measures has become critical. Cities are increasingly recognizing their role in addressing climate change and environmental concerns, including measures to reduce carbon emissions, enhance energy efficiency, and embrace green infrastructure.

Throughout our journey, we have drawn inspiration from success stories in MENA cities that have effectively implemented sustainability measures. These cities have become global exemplars, demonstrating that sustainable urban development is not just an aspiration but a tangible reality. In conclusion, our exploration

LEGACY.

has revealed a collective commitment in the MENA region to work towards a sustainable and resilient urban future. By embracing a holistic perspective that prioritizes citizens' well-being, preserves cultural heritage, and addresses environmental challenges, MENA cities are paving the way for better, more sustainable urban futures. These endeavours not only benefit the current generation but also lay the foundation for a legacy of prosperity and harmony for generations to come. The journey continues, guided by the principles of sustainability, inclusivity, and resilience, as we strive to create cities that reflect the very best of our aspirations and values.

Hereunder, the section presents a set of holistic and practical recommendations aimed at fostering sustainable urban development in MENA region. These recommendations have evolved from extensive deliberations during the 12th MENA Sustainable City Conference, where experts and stakeholders convened to address the multifaceted challenges and opportunities inherent in urban development across the region. These actionable recommendations are intended to serve as a robust roadmap, offering clear guidance to policymakers, urban planners, and communities as they navigate the intricate journey towards sustainable urban growth.

PURPOSE.

Clarifying the Purpose of New Cities

This recommendation emphasizes the importance of clearly defining the objectives and motivations behind the development of new cities in the MENA region. Rather than solely focusing on immediate economic returns through activities like real estate speculation and foreign investments, decision-makers should prioritize long-term benefits in consultation with the different stakeholders. These benefits should encompass not only economic prosperity but also the creation of sustainable employment opportunities and the holistic development of communities. This entails a

shift in mindset, where the welfare of citizens takes precedence over short-term financial gains. By doing so, we can foster urban environments that are not only economically prosperous but also socially inclusive, environmentally sustainable, and culturally enriching. Decision-makers should recognize that the ultimate goal is to create cities that enhance the quality of life for their residents, both now and in the future.

URBAN MEMORY.

Embracing Urban Memory

Understanding the history, culture, and unique needs of existing cities is essential for informed urban development. This recommendation encourages stakeholders to embark on a journey of exploration within established urban environments across the MENA region. By exploring the memory of these cities, decision-makers can gain valuable insights into their strengths, challenges, and potential for revitalization. Rather than abandoning established cities in favour of new developments, communities should actively engage in the transformation of their urban centers. This process involves not only preserving cultural heritage but also harnessing it as a source of inspiration for innovative urban solutions. This recommendation champions a more holistic approach that respects the past while building for the future, with the active involvement of the community in shaping the destiny of their cities.

ALIGNMENT.

Aligning Fiscal Policies with Sustainability

Successful urban development necessitates fiscal policies that align with sustainability goals. This recommendation highlights the importance of directing financial resources towards long-term, sustainable initiatives, rather than focusing solely on short-term financial gains. Governments should establish transparent fiscal practices that instil public trust and garner support for urban development projects. By prioritizing sustainability in fiscal policies, decision-makers can ensure that economic growth is coupled with

environmental responsibility and social equity. This approach involves careful budgeting and allocation of funds to initiatives that promote sustainable infrastructure, resource management, and community development. Through transparent financial practices, governments can demonstrate their commitment to the well-being of citizens and the long-term health of urban environments.

COMMUNITY ENGAGEMENT.

Fostering Public Participation and Community Engagement

This recommendation underscores the essential role of public participation and community engagement in the success of urban development initiatives. To achieve this, mechanisms should be created that empower citizens to actively participate in decision-making processes concerning new cities and urban centers. Transparent collaboration among various stakeholders, including local communities, civil society organizations, trade unions and government agencies, is encouraged. Public participation should go beyond mere consultation and extend to active engagement in shaping urban development plans. By involving residents in the decision-making process, stakeholders can ensure that urban projects align with the needs and aspirations of the community. Clearly defined roles and responsibilities for all stakeholders help create a productive and inclusive urban development process that benefits everyone.

FRAMEWORK & STRUCTURE.

Crafting Tailored Institutional Frameworks and Legal Structures

Developing tailored institutional frameworks and legal structures is crucial for sustainable urban development in the MENA region. Each nation in the region has its unique context and challenges, requiring institutions and laws that reflect these specific needs. Instead of replicating models from other countries, governments should focus on creating legal systems that facilitate finance and investment in urban development. Proper legal systems not only provide a foun-

dation for governance but also play a crucial role in facilitating finance and investment. Clarity, predictability, and transparency in legal frameworks can attract more finance and investment into sustainable urban development initiatives. Governments should ensure that their legal systems are conducive to private sector participation and align with the goals of sustainability and inclusivity. Effective coordination between the private and public sectors is essential for the success of these frameworks. This coordination should ensure that urban development initiatives are driven by a shared vision of sustainability and inclusivity. By tailoring institutional setups to local contexts and fostering collaboration between different stakeholders, decision-makers can create a solid foundation for sustainable urban development.

PRIORITY.

Prioritizing Sustainable Infrastructure and Resource Management

This recommendation emphasizes placing sustainability at the core of urban development plans in the MENA region. It involves not only prioritizing the development of green infrastructure but also implementing innovative technologies and trends that enhance sustainability. Efforts should focus on developing green infrastructure that incorporates new technologies and trends, such as smart grids, renewable energy sources, and sustainable building materials. These technologies can significantly reduce the environmental impact of urban areas while improving energy efficiency and promoting sustainability. Implementing efficient waste management practices is also essential. This includes the adoption of waste-to-energy technologies, recycling programs, and sustainable waste disposal methods. Decision-makers should explore innovative solutions to reduce the environmental footprint of urban areas further. Moreover, safeguarding water and food security is paramount. This involves implementing water-saving technologies, promoting water reuse and recycling, and investing in sustainable agriculture practices. The interplay between new urban centers and

rural regions should be carefully examined, with a focus on creating synergies between these areas to promote sustainable resource use. By prioritizing sustainability in infrastructure development, we can create cities that are resilient, resource-efficient, and environmentally responsible.

SOCIAL EQUITY.

Advancing Social Equity and Inclusivity

This recommendation emphasizes the importance of addressing social considerations within urban development plans. It calls for proactive efforts to promote equal opportunities and ensure equitable access to resources and services for all citizens. This entails increasing women's participation in urban governance, ensuring affordable housing for marginalized populations, and creating inclusive public spaces that cater to diverse community needs.

Social equity and inclusivity are not just moral imperatives but also key drivers of sustainable urban development. By fostering an environment where all citizens have an equal stake in the city's future, decision-makers can create urban centers that are more cohesive, resilient, and responsive to the needs of their diverse populations.

CLIMATE CHANGE.

Integrating Climate Change Mitigation and Environmental Sustainability

Urban planning must intrinsically incorporate measures to mitigate climate change and promote environmental sustainability. This involves strategies such as reducing carbon emissions, enhancing energy efficiency, and adopting green infrastructure solutions. Decision-makers should prioritize compact development to combat urban sprawl and consider the introduction of environmentally friendly transportation systems, such as electric buses and cars. By embedding climate change mitigation and environmental sustainability into urban development plans, we can create cities that not only reduce their impact on the environment but also become leaders in sustainable practices. These measures contribute to healthier, more resilient urban environments.

EXEMPLARS.

Learning from Regional Exemplars

The MENA region can draw valuable insights from successful regional examples of sustainable urban development. Decision-makers should actively study cases like Dubai's pioneering solar energy generation, Doha's innovative electric bus networks, and other success stories. By understanding the factors that contributed to the success of these initiatives, future urban development projects can be more informed and strategically sound. Learning from regional exemplars allows decision-makers to adapt and apply best practices to their specific contexts, accelerating progress toward sustainability and resilience.

EXISTING CITIES.

Focusing on Existing Cities and Satellite Cities

Before considering the development of new cities, this recommendation advises evaluating existing satellite cities near major urban centers. Investing in these satellite cities can effectively alleviate the pressure on primary urban hubs, reduce congestion, and disperse economic opportunities. Comprehensive urban planning should include strategies for enhancing these satellite cities to ensure they can adequately accommodate population growth while maintaining sustainability.

Rethinking Urban Sprawl

This recommendation emphasizes the need to address the negative effects of urban sprawl in the MENA region and calls for a comprehensive examination of its causes and impacts. Decision-makers should prioritize the development of efficient and sustainable transportation systems that reduce reliance on personal vehicles. Urban sprawl is often associated with a range of challenges beyond transportation, including increased energy consumption, air and water pollution, and the loss of agricultural land and natural habitats. To combat these issues, cities should consider implementing policies

URBAN SPRAWL.

that promote compact, mixed-use development, and green spaces. This approach not only reduces the environmental footprint of urban areas but also enhances quality of life for residents. Additionally, urban planners should explore innovative strategies for managing urban growth, such as smart growth principles and land use planning. These strategies can help create more sustainable and resilient cities by promoting efficient land use, preserving natural resources, and improving access to essential services. By rethinking urban sprawl and adopting holistic approaches to urban planning, cities in the MENA region can become more sustainable, livable, and environmentally friendly.

YOUTH.

Empowering Youth and Entrepreneurs

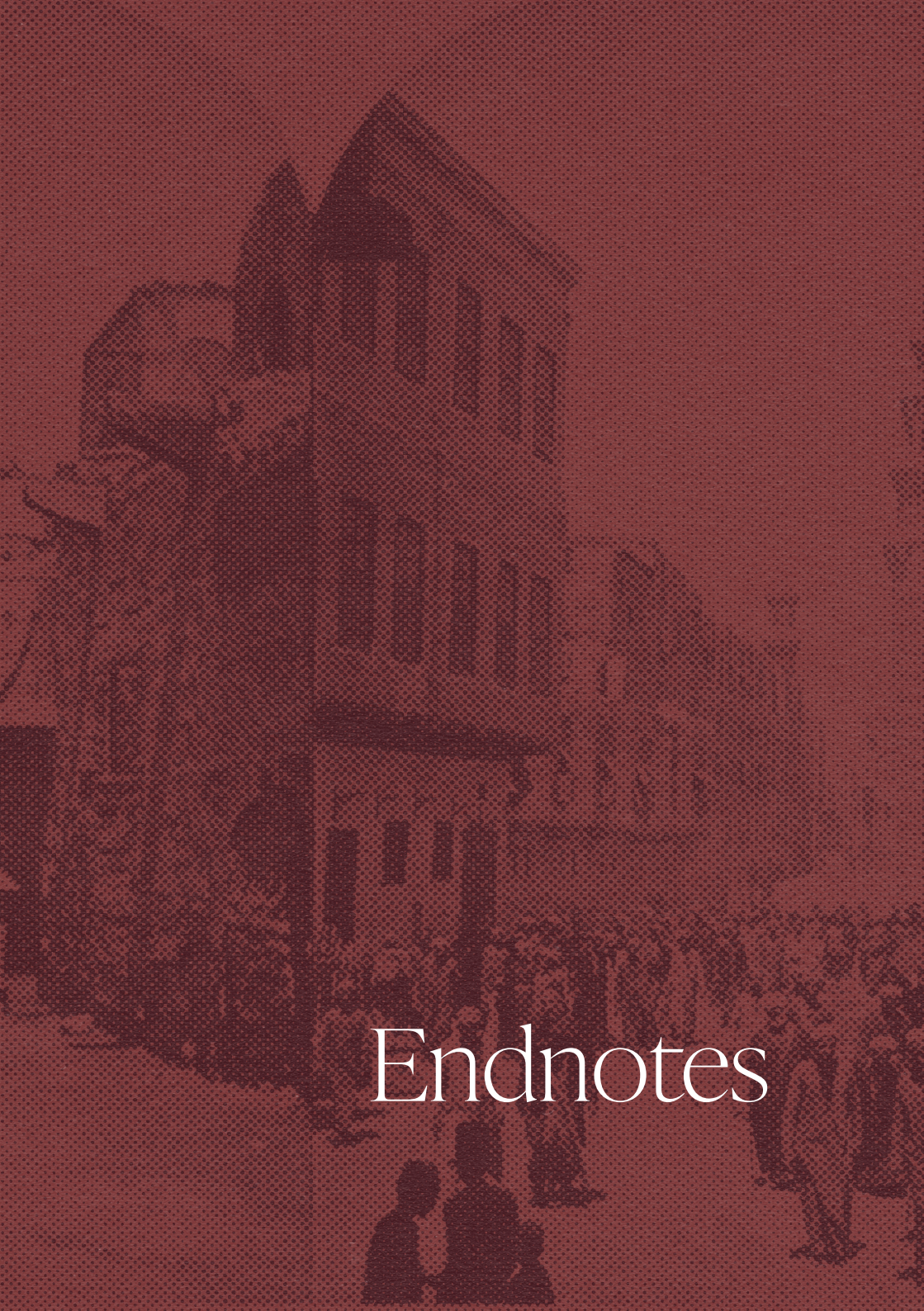
The final recommendation emphasizes the importance of innovation in urban development. Decision-makers should actively encourage the participation of youth and entrepreneurs in the planning process. Establishing innovation hubs, entrepreneurship programs, and incubators can provide fertile ground for innovative ideas to contribute to urban development efforts.

Empowering youth and entrepreneurs not only fosters creativity but also ensures that urban development remains adaptable and forward-thinking. It enables cities to harness the potential of their young talent and drive innovation in sustainable practices.

Conclusion

In conclusion, these comprehensive recommendations for sustainable urban development in the MENA region serve as a transformative guide for advocacy and action. By diligently implementing these recommendations, governments, policymakers, urban planners, and communities can collectively work towards creating more inclusive, equitable, and sustainable cities. These cities prioritize the well-being of their citizens and embrace long-term prosperity while simultaneously preserving the unique character and heritage of the MENA region. This journey towards sustainable urban development is not only about building cities but also about nurturing vibrant, resilient communities for generations to come.





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