

فلسطين للتنمية
Palestine For Development



Green Economy Potential in East Jerusalem: A Comprehensive Market Review

October 2023



Green Economy Potential in East Jerusalem: A Comprehensive Market Review

Commissioned by: **Palestine for Development Foundation (PsDF)**

“Palestine Investment Fund (PIF) Social Investment Subsidiary”

فلسطين للتنمية
Palestine For Development



For the: Green Energy and Sustainability Granting Facility

Prepared By: *Faisal Kilani*

October 2023

Preface

In an era where sustainability and economic resilience are at the forefront of global efforts, understanding the intricacies of local economies should be at the center of economic development efforts. East Jerusalem, with its unique socio-political landscape and rich history, presents both challenges and opportunities in the integration of green and circular economies. This market study is an endeavor to shed light on the city's economic sectors, identifying areas with potential for sustainable transformation.

The journey of crafting this report has been both enlightening and challenging. The complexities of East Jerusalem's economic fabric demanded a meticulous approach, and the constraints faced during the study further underscored the importance of adaptability in research methodologies. Despite these challenges, the insights presented are a testament to the resilience and potential of East Jerusalem's economy.

This study, commissioned by PsDF, is a strategic tool to inform and guide sustainable economic support in East Jerusalem under the Green Energy and Sustainability Granting Facility. It serves as a comprehensive resource, equipping decision-makers with insights into the city's economic landscape. By pinpointing sectors showing potential for green economy integration.

We extend our gratitude to all those who contributed to this report, directly or indirectly, and hope that it serves as a valuable resource for all invested in the sustainable development of East Jerusalem.

Table of Contents

Executive Summary	8
1. Introduction	12
1.1. Background and Context	12
1.2. Scope and Objectives	14
1.3. Study Limitations.....	15
1.4. Methodology.....	15
2. MSMEs Under the Green Energy and Sustainability Granting Facility	16
3. East Jerusalem: Socio-Economic Baseline	17
3.1. Historical Context	17
3.2. Socio-Economic Baseline and Vital Statistics.....	18
3.2.1. Population.....	19
3.2.2. Land Use and Zoning.....	19
3.2.3. The Segregation Barrier	20
3.3. Israeli Policies Against East Jerusalemites	21
3.4. Current Economic Landscape.....	22
3.5. Key Economic Challenges	25
4. Sectoral Analysis	27
4.1. THE AGRICULTURAL SECTOR	27
4.1.1 Background	27
4.1.2. Overview	27
4.1.3. Challenges Facing the Agricultural Sector	28
4.1.4. Feasibility for Green Economy Integration	29
4.2. THE SERVICES SECTOR	30
4.2.1. Background	30
4.2.2. Overview	31
4.2.3. Health Care.....	32
4.2.4. Education	33
4.2.5. Transportation and Storage	33
4.2.6. The ICT Sector	34

4.2.7.	Feasibility for Green Economy Integration in the Services Sector.....	35
4.3.	CIVIL SOCIETY SECTOR	36
4.3.1.	Background	36
4.3.2.	Overview of CSOs in East Jerusalem.....	37
4.3.3.	Key Areas of Operations	38
4.3.4.	Challenges Facing the Civil Society Sector in East Jerusalem.....	39
4.3.5.	Feasibility for Green Economy Integration	40
4.4.	TOURISM AND HOSPITALITY SECTOR	42
4.4.1.	Background	42
4.4.2.	Overview	43
4.4.3.	Challenging Facing the Tourism and Hospitality Sector	44
4.4.4.	Feasibility for Green Economy Integration	45
4.5.	CONSTRUCTION AND HOUSING SECTOR	47
4.5.1.	Background	47
4.5.2.	Overview	48
4.5.3.	Challenges Facing the Construction and Housing Sector	49
4.5.4.	Feasibility for Green Economy Integration	50
4.6.	THE INDUSTRIAL SECTOR.....	51
4.6.1.	Background	51
4.6.2.	Overview.....	52
4.6.3.	Challenges facing the Industrial Sector	53
4.6.4.	Feasibility for Green Economy Integration	54
4.7.	WHOLE SALE AND TRADE SECTOR	56
4.7.1.	Background	56
4.7.2.	Overview	57
4.7.3.	Challenges Facing the Whole Sale and Trade Sector	57
4.7.4.	Feasibility for Green Economy integration	58
5.	Conclusions and Recommendations	59
	Bibliography.....	62



List of Figures

Figure 1: Palestinian Localities of Jerusalem Governorate (J1 & J2)(PCBS, 2023a)....	14
Figure 2: Market Assessment Methodology	16
Figure 3: East Jerusalem Map According to 2000 Master-Plan	18
Figure 4: Zoning in East Jerusalem	20
Figure 5: Employed individuals in Jerusalem Governorate distributed by employment status in 2022	23
Figure 6: Percentage Distribution of Employed Individuals by Occupation, East Jerusalem 2022 (PCBS, 2023)	23
Figure 7: Employment in East Jerusalem by Economic Activity, 2022	24
Figure 8: Sector Prioritization of East Jerusalem's Economy in Terms of Green Economy Integration	61



List of Acronyms

CAPEX	Capital Expenditure
CBO	Community Based Organization
CSO	Civil Society Organization
EJ	East Jerusalem
EU	European Union
GDP	Gross Domestic Product
IMoJ	Israeli Ministry of Justice
LFPR	Labor Force Participation Rate
MAS	Palestine Economic Policy Research Institute
MSMEs	Micro, Small & Medium Sized Enterprises
NDC	NGO Development Center
NGO	Non-Governmental Organization
OPT	Occupied Palestinian Territories
PIF	Palestine Investment Fund
PsDF	Palestine for Development Foundation
ROI	Rate of Return on Investment
SROI	Social Rate of Return on Investment
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
CAPEX	Capital Expenditure



Executive Summary

In this Economic Market Review, a comprehensive analysis of East Jerusalem's economic landscape is presented, shedding light on the challenges and opportunities faced by its resilient population. Despite formidable obstacles such as land confiscation, limited resources, and unfair taxation, East Jerusalem's people are determined to preserve their identity and heritage.

The report identifies key sectors within East Jerusalem's economic fabric, where various classifications and segmentations exist within available literature, however the classification utilized by the PCBS has been integrated in this report. Hence 7 key sectors have been analyzed that include agriculture, services, civil society (i.e., CSOs and NGOs), tourism, construction and housing, manufacturing, and trade, each facing its unique challenges.

Amidst these challenges, a ray of hope emerges through the Green Energy and Sustainability Granting Facility, a pioneering collaboration between the Palestine Investment Fund (PIF)'s social investment subsidiary, the PsDF though financing by the EU. This programme aims to empower East Jerusalem's micro, small, and medium-sized enterprises (MSMEs) by integrating green and circular economy initiatives. The report emphasizes the urgent need for sustainable investments, enhanced collaboration, and innovative strategies to leverage East Jerusalem's unique potential.

The Agricultural Sector

The agricultural sector in Palestine, particularly in Jerusalem, has experienced a significant decline from once contributing 22% to the GDP in the 1990s to now making up only 7% of the OPT's GDP and a mere 0.23% of East Jerusalem's GDP. This decline is attributed to challenges such as land confiscation by the separation wall, urbanization, and Israeli restrictions on livestock and produce flow. In East Jerusalem, the agricultural sector employs just 0.2% of the workforce, with olive production being the dominant focus. Challenges faced include producer relocations, limited scaling and development efforts, inadequate funding, political restrictions, and a lack of skill development focus.

Despite its modest size and infrastructure limitations, the agricultural sector holds great potential for integration into the green and circular economy. It offers high returns on green investments and presents opportunities like adopting green technologies such as solar-powered irrigation systems and energy-efficient machinery, enhancing soil health through sustainable farming practices, optimizing water use with techniques like drip irrigation, and reducing carbon footprint with renewable energy sources. However, transitioning to sustainable practices may be hindered by initial investment costs and cultural resistance to change. Additionally, land ownership and access issues influenced by politics may limit the availability of land for green initiatives, and supply chain disruptions due to political circumstances can affect access to green technologies. Nevertheless, East Jerusalem's agricultural sector is one of the most feasible and prominent in the green economy integration, enhancing the sector's resilience facing the multitude of challenges it faces.

The Services Sector

East Jerusalem's services sector spans industries like transportation, healthcare, education, and IT, with a tilt towards traditional services. Key components include NGO-operated healthcare and education, while the transportation sector sees varied contributions and limited green potential, and the ICT sector is hindered by regulatory controls. Despite challenges, there's green potential, especially in healthcare and education, which can be boosted with increased awareness and technical support.

The services sector in East Jerusalem, mainly healthcare and education, has significant potential for green practices due to NGO involvement. Sustainable strategies can be integrated, such as energy efficiency and green curricula. However, barriers like initial costs, knowledge gaps, cultural resistance, and socio-political complexities could hinder the uptake of these green initiatives.

The Civil Society Sector

Civil society organizations in East Jerusalem, while not an economic sector, play a crucial role in economic interventions. This diverse group comprises labor unions, NGOs, media, and religious entities, pivotal in addressing socio-economic issues. They've transitioned from grassroots movements to multifunctional bodies focused on advocacy and development. However, they're limited in number due to Israeli restrictions and face challenges from political pressures, increasing service demands, and resource constraints. They operate in areas like social welfare, cultural heritage, and education, often relying on donor funds.

The Civil Society sector in East Jerusalem is well-suited to integrate a green economy, as outlined in the Sectoral Development Agenda. Leveraging their community roots, these organizations can promote circular economy principles, renewable energy, and energy efficiency. Their collaborative nature aids in spreading sustainable practices via pilot projects and policy advocacy. Yet, they confront issues like knowledge deficiencies, scalability, community opposition, and funding challenges.

The Tourism and Hospitality Sector

The 2015 Jerusalem Tourism Cluster conference emphasized strategic tourism growth in East Jerusalem, recognizing its historical status as a West Bank tourism epicenter, especially under Jordanian influence. Despite obstacles since 1967, East Jerusalem attracts diverse tourists. However, political, legal, and competitive challenges, amplified by limited sector cooperation and Israeli policies, stifle its growth compared to West Jerusalem, emphasizing the need for strategic intervention.

East Jerusalem's tourism industry can adopt green economy practices, aligning with global sustainability trends like Booking.com's ratings. Opportunities include energy efficiency, water

conservation, eco-tourism, and sustainable sourcing, paired with capacity building. Challenges include Israeli regulations, high costs, limited training, cultural priorities, infrastructure gaps, and the need to gauge green demand both locally and globally.

The Construction and Housing Sector

After its 1967 occupation, Israel expanded East Jerusalem's boundaries, enforcing stringent zoning and building rules. Palestinians often find it hard to secure building permits, resulting in unauthorized constructions and subsequent demolitions by Israeli authorities. Despite the urgent housing need, restrictive policies, combined with issues like restrictive zoning and high costs, stifle the construction sector's expansion in East Jerusalem.

In 2020, the global construction sector was responsible for 5% of CO₂ eq. levels, leading McKinsey to emphasize its green potential. Though East Jerusalem has distinct challenges, there's potential for its construction sector to adopt eco-friendly practices. However, multiple barriers, including high initial costs, regulatory issues, and political instability, may hinder this green transition.

The Industrial Sector

In Palestinian J1 areas, strict industrial permits and zoning have pushed most enterprises to J2. By 2013, less than 10% of businesses operated within the Wall, down from 16.5% of 951 in 2009. Many relocated due to regulations, high costs, and permit issues but retained J1 permits for key tourist products. Despite its importance in employment and handcrafted production, the sector faces multiple challenges, leading to a GDP shift towards services and trade by 2021.

Integrating green principles in East Jerusalem's industry presents sustainable growth opportunities, leveraging traditional craftsmanship, energy efficiency, and waste management. Potential advantages include local sourcing, capacity building, and green certifications. Yet, the transition confronts issues like political barriers, infrastructure gaps, and a fragmented base. Strategic planning, considering the region's distinct landscape, is essential for successful integration.

The Wholesale and Internal Trade Sector

Jerusalem's internal trade sector, once economically vibrant, grapples with Israeli policies that have isolated East Jerusalem from other Palestinian cities. This, along with tensions, the presence of Israeli police, and outdated infrastructure, has pressured many businesses to close, and the sector's GDP contribution has declined. While some trade improvements with Palestinian regions in Israel have emerged, issues like high taxes, external competition, and Israeli policies continue to challenge the city's trade dynamics.

The East Jerusalem wholesale and trade sector struggles to adopt green principles due to political and infrastructural challenges. While there are opportunities, such as energy efficiency and sustainable sourcing, barriers like limited space, financial issues, regulatory hurdles, and supply chain constraints impede green advancements, keeping the sector anchored in conventional trade practices.

Conclusions and Recommendations

East Jerusalem's economy, embedded within the Palestinian context, has been systematically marginalized, leading to limited resources, stunted growth, and a heavy reliance on the Israeli economy. Additionally, integrating sustainable practices has been challenging. However, within this intricate economic setting, opportunities for sustainable and resilient development emerge, as highlighted by an analysis of seven essential sectors. The following are organized according to the potential foreseen in each sector for their potential in green economy adoption relevant to the specific context of East Jerusalem;

- Agriculture offers immense promise with its innate ties to nature, making sustainable agricultural practices an achievable goal and among the recommended priority sectors.
- The services sector specifically highlights education and healthcare as green economy integration candidates. Here, the NGO sector takes prominence and should be equipped to lead green transformations in these areas. As such, it is recommended that the focus of the services sector to be integrated with the civil society sector, creating a cross-sectorial intervention programme.
- Civil society, with NGOs and CSOs at its heart, anchors community growth, capacity enhancement, and cross-disciplinary collaborations. Fortifying this sector can drive the broad-based adoption of green principles and nurture a comprehensive sustainable development strategy.
- Tourism remains East Jerusalem's jewel, attracting global attention. Green integration is vital not only for safeguarding the city's charm but also for the longevity of its tourism sector. Eco-conscious tourism, historical site conservation, and community-focused tourism are the way forward.
- The often-overlooked industrial sector is ripe for green transformation. Revamping production, waste management, and resource allocation can steer it towards both economic and environmental success.
- The construction sector, while facing myriad challenges, can harness the potential of sustainable practices, nevertheless, interventions in this sector require substantial investments and strategic support and planning.
- Finally, the trade sector, despite its constraints, it still presents hope for green economy integration, albeit limited given the simple and narrow scope of operations. With interventions centered around resource efficiency in facilities and processes given the simple nature of interventions revolving around the facilities of these establishments.



1. Introduction

1.1. Background and Context

East Jerusalem, with its rich tapestry of history, culture, and socio-political dynamics, has always been a focal point in the Middle East. Its significance transcends its geographical boundaries, resonating deeply with religious, cultural, and political narratives worldwide. However, beneath its historical and religious prominence lies a complex economic landscape shaped by decades of conflict, political decisions, and socio-economic challenges.

Historically, East Jerusalem has been a hub of trade, commerce, and intellectual exchange. Its strategic location, bridging continents, made it a nexus for traders, scholars, and pilgrims alike. In modern times, the economic landscape of East Jerusalem has significantly suffered following its occupation after June 1967. The annexation of East Jerusalem by Israel and subsequent policies have had profound implications for its economy. Restrictions on movement, access to resources, and the construction of the separation barrier have fragmented its economic space, affecting trade, tourism, and the overall business environment.

Furthermore, the city's economy has been shaped by a combination of external pressures and internal dynamics. On one hand, the restrictions imposed by Israeli policies have limited the growth potential of various sectors, especially agriculture and manufacturing. On the other hand, the resilience and adaptability of the residents have led to the emergence of a vibrant services and retail sectors, albeit remaining traditional due to the political instability, the restrictions, and imposed policies.

However, the challenges faced by East Jerusalem are not just economic. Socio-political tensions, issues of identity and citizenship, and the broader Israeli-Palestinian conflict cast a long shadow over its development prospects. Micro, Small and Medium-sized Enterprises (MSMEs) play a pivotal role in this landscape. They not only contribute significantly to the local economy but also act as agents of change, innovation, and resilience. Their adaptability and close ties to the community position them uniquely to drive sustainable initiatives. In this context, the push towards a green and circular economy presents both challenges and opportunities for MSMEs. While the constraints are evident, the potential for sustainable growth, job creation, and environmental stewardship, driven by these enterprises, offers a beacon of hope.

In this regard, and over the recent years, the Palestine Investment Fund (PIF), in collaboration with the EU, initiated the Jerusalem Granting Facility, targeting small and medium-sized enterprises

(SMEs). This initiative successfully supported approximately 75 SMEs, leading to the creation and sustenance of over 650 jobs and allocating around 4.0M EUR directly to these enterprises. However, Jerusalem's SMEs face challenges like high operational costs and limited access to finance, often sidelining environmental considerations. Recognizing this, PIF and the EU have introduced "The Green Energy and Sustainability Granting Facility." This new endeavor emphasizes investments in eco-friendly equipment and renewable energy, aiming to elevate the importance of sustainable energy solutions among SMEs in Jerusalem.

This report serves as the initial phase in a two-part comprehensive study. The primary objective of this report, being the first, is to pinpoint pivotal sectors within East Jerusalem's economy that show potential for the incorporation of green and circular economy initiatives. Following, the later segment of this research will explore the pronounced obstacles impeding the adoption of such initiatives, and will highlight feasible, sector-centric approaches that facilitate a resilient green and circular economy for East Jerusalem's MSMEs. As such, this report will analyze the main economic sectors in East Jerusalem and will provide a prioritization for their feasibility for the integration of green and circular economy processes and initiatives. For this, and while there have been various segmentations described for the economic sectors for East Jerusalem, the report identified and collected 7 main sectors that have been analyzed, this segmentation of the economy has been based mainly on PCBS's accounts and statistics and it integrates the various economic activities in East Jerusalem;

1. Agricultural Sector
2. Services Sector (Healthcare, Education, Transport and Storage, and ICT)
3. Civil Society (i.e., CSOs and NGOs) Sector
4. Tourism and Hospitality Sector
5. Construction and Housing Sector
6. Industrial Sector
7. Internal Trade Sector

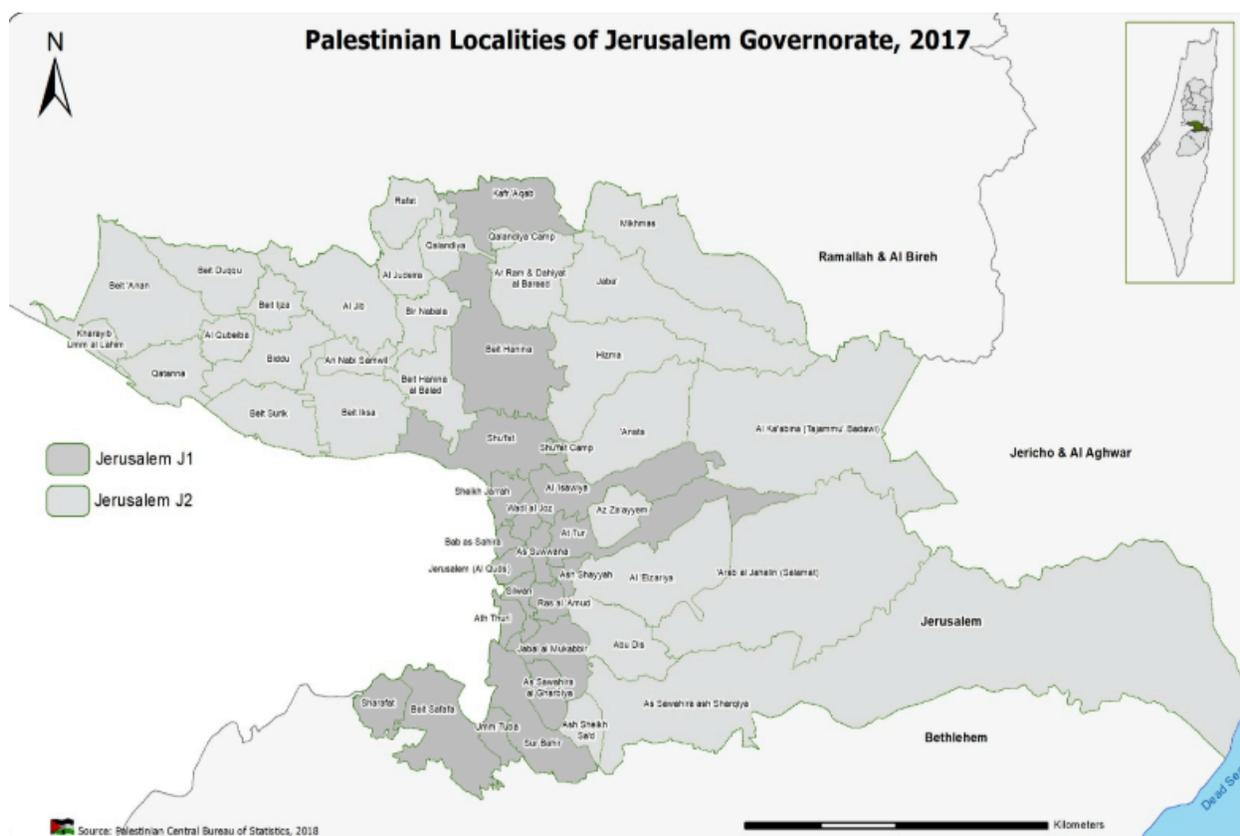


Figure 1: Palestinian Localities of Jerusalem Governorate (J1 & J2)(PCBS, 2023a)

1.2. Scope and Objectives

The primary objective of this report is to offer a comprehensive overview of East Jerusalem's current economic landscape, emphasizing the prioritization of sectors in terms of their potential for the adoption of green and circular economy initiatives, with a particular focus of MSMEs which comprise 92-93% of the total Palestinian economy.

the report's primary focus is on East Jerusalem and its intricate socio-economic fabric. It encompasses a broad spectrum of economic sectors, highlighting their individual and collective significance to East Jerusalem's overall economic health. While highlighting the most recent data and trends, the report acknowledges the fluidity of East Jerusalem's context, emphasizing adaptability and resilience in its recommendations. This report serves as a foundational document, aiming to provide a holistic understanding of East Jerusalem's economic ecosystem and charting a path for the prioritization of most prominent sectors for the Green Energy and Sustainability Granting Facility's interventions. Hence, this report shall assist in setting the direction for the following report that will analyze the sectoral specific impediments for the adoption of green economy, and to devise

interventions with the aim of maximizing the impact of the project through sector-tailored recommendations.

1.3. Study Limitations

This report, while comprehensive in its approach, is subject to certain limitations that should be considered when interpreting its findings and recommendations;

First and foremost, the tragic events that took place post October 7, 2023 and the subsequent escalations in the West Bank, including the temporary closure of East Jerusalem's access points from the West Bank which shortly took place after this study was initiated prevented the consultant from reaching East Jerusalem and conducting field work needed that included stakeholder engagements. Given the prevailing circumstances and the heightened risks, direct interactions and field visits were not possible, as the country's focus was on the unfolding events. As such, the consultant relied on literature review of available data and publications, which in turn might not capture the most recent developments in East Jerusalem's economic landscape. Where some sectors might have shown to present limited data.

Given the current political, social, and socio-economic turmoil, the economic predictions and recommendations made which are based on current and recent trends and data might be subject to external shocks which in turn could introduce variables not accounted for in this study.

1.4. Methodology

The methodology for this study was meticulously designed to ensure a comprehensive understanding of East Jerusalem's economic sectors and their potential for green economy integration, especially given the constraints of direct stakeholder engagements. The approach primarily relied on an exhaustive desk research, which involved a thorough review of existing literature, reports, and publications related to East Jerusalem's economic landscape. This foundational research was supplemented by analyzing statistical data from reliable sources, such as PCBS and other relevant institutions, to discern trends, challenges, and opportunities in the targeted sectors. Given the challenges of direct field visits, the study leveraged alternative methods of data collection, to gather insights about the ground realities and challenges faced by businesses including the review of news articles, and interviews recorded with business owners. Each identified sector underwent a detailed analysis to understand its current state, challenges, and potential for green economy integration. The entire methodology was adaptive, ensuring that the insights and recommendations were grounded in the realities of East Jerusalem's economic context.



Figure 2: Market Assessment Methodology

2. MSMEs Under the Green Energy and Sustainability Granting Facility

The proposed intervention emphasizes the need for sustainable energy investment in Jerusalem. East Jerusalem's energy situation is unique due to limited natural resources, political instability, financial challenges, and reliance on Israeli electricity imports. Meanwhile, Jerusalem's institutions grapple with issues like financing access, governance, and deficits in management and marketing skills.

Besides all the previously mentioned, institutions in Jerusalem suffer from the lack of financial facilities, legal constraints, out-to-date technology and machinery and psychological barriers to invest. The proposed facility will focus on MSMEs in East Jerusalem that are willing to start their business or expand the existing business through utilizing energy efficient and sustainable solutions, ideas, equipment, tools and techniques that are eco-friendly and green.

MSMEs in Palestine was defined according to Palestine Monetary Authority and Ministry of National Economy depending on number of employees, registered capital or revenues as follow:

- Micro Businesses has 1-4 employees and up to 20,000 USD revenues.
- Small Businesses has 5-9 employees and sales between 20-200K USD revenues.
- Medium Businesses has 10-19 employees and sales between 200-500K USD revenues.

The more updated definition that was adopted lately by the financial institutions define MSMEs' as any business that has maximum 25 full-time employees with an annual income that don't exceed seven million dollars. The facility focuses on MSMEs in general and provide additional focus and attention for micro and small sized enterprises. Moreover, the facility will focus on NGOs in Jerusalem that are willing to invest in energy efficient solutions that will create energy sustainability and cut the energy costs and reduce consumption.



3. East Jerusalem: Socio-Economic Baseline

3.1. Historical Context

The history of the City of Jerusalem" since its division in 1948 between a largely Jewish, Israeli western sector and a mainly Palestinian Arab eastern sector is a bleak, yet unique in human civilization. Founded by the Canaanites in 1800 B.C., today's Jerusalem rests on some seventeen layers of history, reflecting the successive rule by Jews, Babylonians, Persians, Greeks, Romans (both pagans and Byzantine Christians), Arabs and Muslims, Ottoman Turks, British rule after 1919 and Jordan between 1948 and 1967. Jerusalem gains its central significance from its centrality to the history and tenets of three monotheistic religions: Judaism, Christianity and Islam (UNCTAD, 2013).

In 1917, during the final stages of World War I, British forces captured Jerusalem. Following the war, the League of Nations granted the United Kingdom a mandate to administer Palestine, with Jerusalem serving as its administrative and political capital from 1922-1948. In 1947, the UN General Assembly's resolution 181 (II) proposed partitioning Palestine into Arab and Jewish states and internationalizing Jerusalem, which would encompass Bethlehem and Ein Karim. The city would be demilitarized, with its neutrality maintained by the UN, and governed by a legislative council elected by its inhabitants.

Following the establishment of the State of Israel, Jerusalem was divided between Israeli-controlled west and Jordanian-controlled east. The proposed international administration for Jerusalem was not realized. Post-1948, Palestinians in East Jerusalem and the West Bank became Jordanian citizens. During this period, East Jerusalem's tourism sector, under Jordanian development programs, flourished. However, since Israel's occupation of the eastern sector in 1967, they have made significant demographic, physical, and historical changes to the city, actions that are inconsistent with international law and UN resolutions.

On 30 July 1980, Israel adopted a law proclaiming Jerusalem as its eternal capital, an act condemned by the United Nations Security Council. Later, and under the Israeli-Palestinian Oslo Accords, negotiations on the question of Jerusalem, like other contentious permanent status issues (settlements, borders, refugees, water), were postponed to the end of the five-year interim period. Though the Camp David negotiations in 2000 did delve into the issue of Jerusalem in detail, a final agreement remained elusive; indeed this issue reportedly proved hardest to agree upon in those negotiations. Hence, after 45 years of Israeli occupation, the only internationally agreed status of the city of Jerusalem remains the frame of reference established by UN resolutions (UNCTAD, 2013).

In terms of local economy, At the end of a positive growth trend in the 1980s on the eve of the first intifada, and well before the 1993 Oslo Accords that ushered in a new context for East Jerusalem economic development, it was estimated that the East Jerusalem economy contributed around 15

per cent of the GDP of the OPT (or some \$250 million in 1990). In particular, East Jerusalem constituted an integral element of the West Bank regional economy with which it was still well connected: 16 per cent of its population, 14 per cent of its labor force, 18 per cent of domestic employment and over 16 per cent of its gross national product (including factor income and transfers). Its centrality as a tourism and related services center was then still reflected in its contribution of over one third of the value added by the West Bank (private and public) services sector. Indeed the East Jerusalem economy's historically high reliance on tourism, transport and related services (alongside weak manufacturing and construction sector performance) is seen in their overwhelming share of East Jerusalem output, estimated at around 80% in 1987(Asmar, 2020).

3.2. Socio-Economic Baseline and Vital Statistics

The term East Jerusalem is generally used with reference to the annexed areas of Jerusalem, or J1, while J2 refers to those parts of East Jerusalem outside the separation barrier. The "City of Jerusalem" refers to the western and eastern sectors of the city and is largely synonymous with the area under the jurisdiction of the Israeli municipality of Jerusalem. The analysis in this review focuses on the economy of the illegally expanded East Jerusalem area to include the pre-1967 area (of 6,500 dunum) and the annexed area of the surrounding 28 towns and villages (an area of 65,500 dunum). The following map depicts the areas included within East Jerusalem, under J1 and J2 areas.

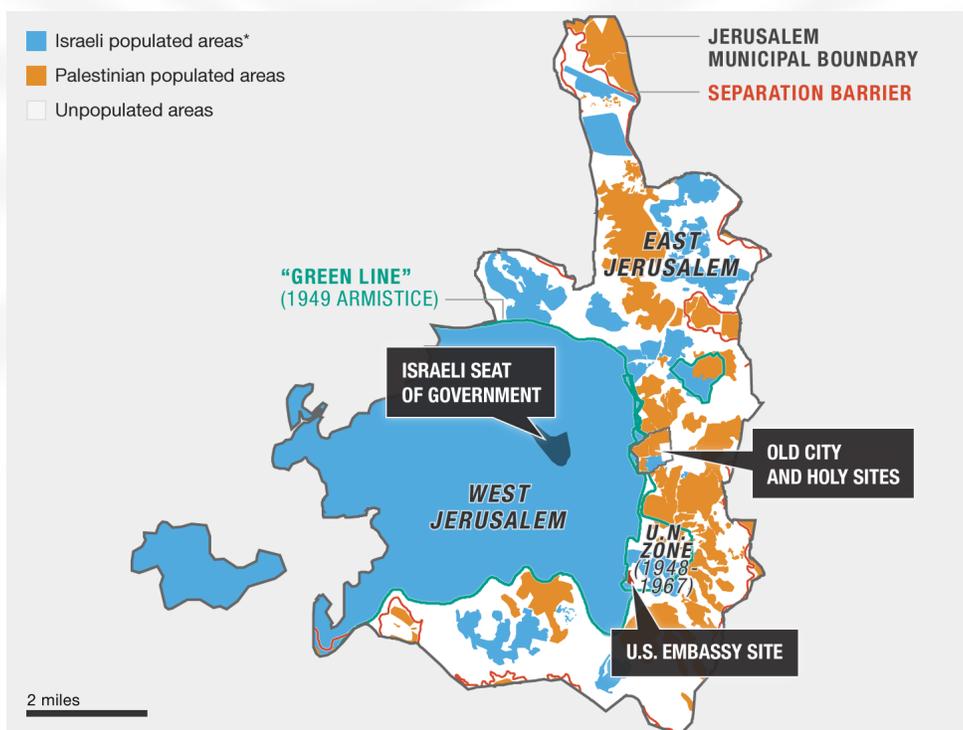


Figure 3: East Jerusalem Map According to 2000 Master-Plan¹

¹ <https://www.mprnews.org/story/2018/05/13/npr-understanding-the-map-of-jerusalem--or-trying-to>

3.2.1. Population

Jerusalem Governorate had a population of around 482,000 Palestinians by the end of 2022, with 311 residents living in J1 areas, and 171,000 living in J2. Representing 9% of the total population of Palestine and 15.1% of the total population of the West Bank (PCBS, 2023b).

With a total area of 345 Km² for Jerusalem governorate, and 71.3 Km² for East Jerusalem, the city has a population density of 1,381 capita/ Km² compared to the West Bank's population density of 563 capita/Km² (PCBS, 2023a).

The growth rate of the Arab population in Jerusalem (which stood at 2.0% in 2019) is higher than that of the Jewish population (1.7%). However, over the last decade, the growth rate of Jews is on the rise, as it was 1% in 2009, while the growth rate of the Arab population is on the decline, and in 2009 it stood at 2.9%. If these trends continue, the growth rates of both populations in the city may equal where the composition currently stands at 62% Jews and 38% Arabs².

In terms of gender segregated data, in 2017, the sex ratio in Jerusalem Governorate was 107.6 males per 100 females³. With a total area of 345 km², the population density in Jerusalem Governorate was 1,322 (capita/km²) at midyear 2020. In terms of women headed households, available literature does not reflect specific statistics for East Jerusalem (UNACTED,2013), however for the West Bank in general, the percentage of women headed households is 12%⁴, which can be assumed to be in the same range for East Jerusalem as well.

3.2.2. Land Use and Zoning

The Jerusalem Municipality has done little to develop the Palestinian neighborhoods. It has built few public structures, developed hardly any public parks, and paved virtually none of the roads that appear on the plans it itself drew up. This vacuum has been filled by the residents themselves, who either draw up their own detail plans on their land or build in a more spontaneous fashion, while not heeding the zoning designations that appear in the plans. As a result, the Palestinian population in East Jerusalem, which has grown five-fold since 1967, lives in crowded conditions, in neighborhoods that have undergone a rapid process of urbanization, with no sufficient planning infrastructure to accompany this growth (BIMKOM, 2013).

² <https://jerusalemstitute.org.il/en/blog/population-of-jerusalem/>

³ <https://www.palestine-studies.org/sites/default/files/jq-articles/Jerusalem%20Statistical%20Yearbook%202021.pdf>

⁴ https://www.un.org/unispal/wp-content/uploads/2023/03/ESCWAREPORT_090323.pdf

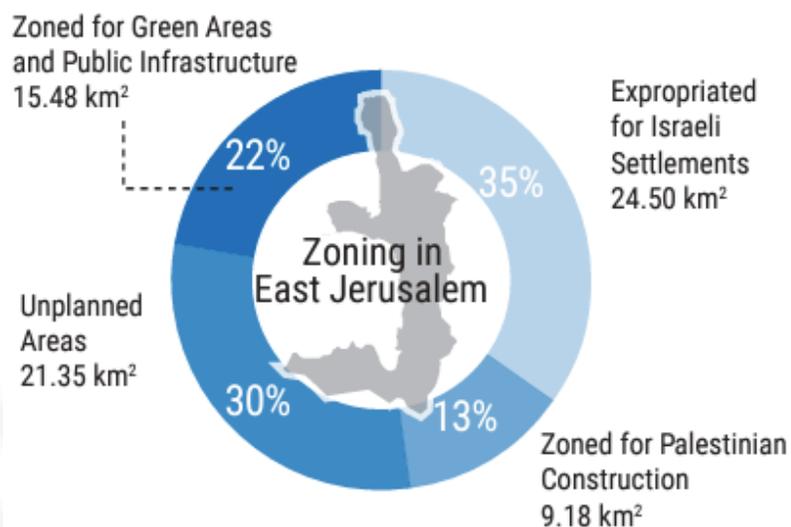


Figure 4: Zoning in East Jerusalem

According to prevailing land use designations outlined in the Jerusalem 2000 master-plan, only 9,000 dunums of East Jerusalem (about 12 percent) is zoned for construction. By the same token, the Jerusalem 2000 master-plan zoned 3,500 dunums for future spatial development in East Jerusalem, compared to 5,000 dunums in West Jerusalem. As such, every 84 East Jerusalemites can share 1 dunum of future spatial development, despite the fact that the housing needs in East Jerusalem is by far higher than the zoned areas (UNHABITAT, 2015).

3.2.3. The Segregation Barrier

In the early 2000s, the state of Israel began to build the Separation Barrier, in an irregular and accelerated planning process and in contravention of existing plans. The barrier, whose stated purpose was to separate between the Palestinian population, which was perceived as a security threat, and the Israeli population, in effect slices through Palestinian communities, creating enclaves and tearing apart social structures. Most of the Palestinian neighborhoods of East Jerusalem remained on the Israeli side of the barrier but, along with many West-Bank villages and towns around Jerusalem, several neighborhoods that belong to the Jerusalem Municipality, partially or entirely, were left on the Palestinian side of the barrier: Kufr Aqab, the Shuafat refugee camp, Ras Khamis, Ras Shihadi, New Anata, and al- Walaje (a total of about 4,200 dunam). Planning and development in these neighborhoods is extremely poor, and of late they do not even receive basic municipal services. The route of the Separation Barrier also cuts off parts of the West Bank around Jerusalem from the rest of the West Bank. (BIMKOM, 2013).

3.3. Israeli Policies Against East Jerusalemites

Palestinian East Jerusalemites are not entitled the Israeli citizenship, their legal status is permanent residents. Since the beginning of Israel's occupation, an average of 6 Palestinians per week have had their residency rights to live in the city revoked. The distressed conditions that exist in East Jerusalem are witnessed in almost in all aspects of daily Palestinian life. For instance, there are 10 times more municipal pre-kindergartens in West Jerusalem than in East Jerusalem (UNHABITAT, 2015).

Additionally, the construction of the wall led to the redrawing of the borders away from the armistice line before 1967 and restricted the movement of entry into and exit from East Jerusalem, which made Jerusalem markets lose an essential element of their consumer base, as the West Bank represented the strategic depth of Jerusalem markets. The direct losses to the residents of Jerusalem from the wall are estimated at more than one billion dollars during the first ten years of its construction, with the average cost of lost opportunity opportunities estimated at 200 million dollars annually. The wall has affected approximately 100,000 Palestinians with Jerusalemite ID cards who found themselves behind the wall and needing to cross barriers and pass through checkpoints in order to enter Jerusalem. Among the most affected areas are Shuafat Camp, Kafr Aqab, Ras Khamis, Al-Sawahra Al-Sharqiya, and parts of Anata. The wall obstructed residents' access. These areas include educational, health and other services facilities that they are entitled to receive as they are legal residents within the boundaries of the municipality of Jerusalem, which extends partially outside the wall). Although the residents of these areas pay Israeli taxes, not all of them have access to sanitation, waste collection, water supply, etc. services. Settlement expansion has further isolated East Jerusalem from the rest of the occupied Palestinian territories. Moreover, the 1E plan is considered one of the most dangerous settlement projects that threaten the connection between East Jerusalem and the rest of the occupied Palestinian territories, as the plan seeks to connect the Maale Adumim settlement to the city of Jerusalem, thus creating a purely Israeli population and architectural bloc from Jerusalem to the Jordan Valley, and at the same time completing the disconnection. Settlement expansion in Jerusalem coincides with restrictions and obstacles imposed by the Israeli authorities on urban planning and construction in Jerusalem. While settlements are built on 35% of East Jerusalem's land, Palestinians are only allowed to build on 13% of the total area of the annexed East Jerusalem areas.

Jerusalem residents face many difficulties in obtaining building permits in Jerusalem, the most important of which is the Israeli authorities' requirement that anyone who wants to obtain a building permit prove his ownership of the land. The problem is that only a quarter of the lands are officially registered (i.e. have proof of ownership) and a quarter of them are subject to settlement and registration procedures (such as Beit Hanina). However, about 50% of the lands are not registered in ownership records, so the procedures for obtaining a building permit require a long time and high costs ranging from 150-300 thousand shekels at least, which forces many Palestinians to build illegally. Palestinians face discrimination when applying laws related to building violations.

According to a report issued by the Center for International Cooperation and Peace, 78.4% of building violations were committed in West Jerusalem between 2004 and 2008. ", compared to 21.5% in East Jerusalem. However, demolition orders were issued against only 27% of all violations committed in West Jerusalem, compared to East Jerusalem, which witnessed judicial demolition orders against 84% of violations there." (MAS, 2017).

3.4. Current Economic Landscape

Over the years, there has been a gradual and notable decline in the economic prominence of East Jerusalem when compared to the broader Occupied Palestinian Territories (OPT). This trend began following the landmark signing of the 1993 Declaration of Principles on Interim Self-Government Arrangements, widely recognized as the Oslo Accords, and various related agreements between Israel and the Palestinian authorities. This shift in economic dynamics can be primarily attributed to a range of Israeli policies that have acted as obstacles to the growth and development of East Jerusalem's economy within the larger Palestinian economic and labor landscape. As a direct consequence of this decline, the socioeconomic conditions in East Jerusalem have deteriorated significantly, impacting the quality of life, housing, access to healthcare, and educational opportunities for Palestinian residents of the city (UNCTAD, 2013).

Living standards in East Jerusalem have their own peculiarities compared to the rest of the West Bank, where when examining the spatial price index, simply known as purchasing power of the local economy, it has been noted to be lower than the West Bank, with 1.277 Shekel for East Jerusalem and 1.063 Shekel for the West Bank. This is in accordance with the PCBS survey for average wage in East Jerusalem which, for a family of 5, averaged around 1,986 USD. Therefore, when utilizing the Israeli poverty line benchmark, it can be noted that 77% of East Jerusalem residents fall below the line (PCBS, 2022).

In terms of labor force participation rate (LFPR), the percentage of participation of individuals (15 years and older) was registered at 37.1% in 2022, compared to 45% in the OPT for the same year. In terms of gender desegregated data, female participation was at only 10.2% compared to 64.9% for males. Additionally, unemployment rate in 2022 for East Jerusalem reached 3.2% compared to the total of the OPT at 24.4% and 13.1% in the West Bank. Where East Jerusalem registered the lowest unemployment rate in the Palestinian governorates with Deir Al Balah in Gaza at 54.8%. Employment rate for females participating in the labor face has reached 94.1% for 2022 (PCBS, 2023b).

In terms of occupation of individuals participating in the labor force, most of East Jerusalemites are wage employees at a rate of 88.9%, with 5.9% self-employed, 4.7% employers, and 0.5% are unpaid family members.

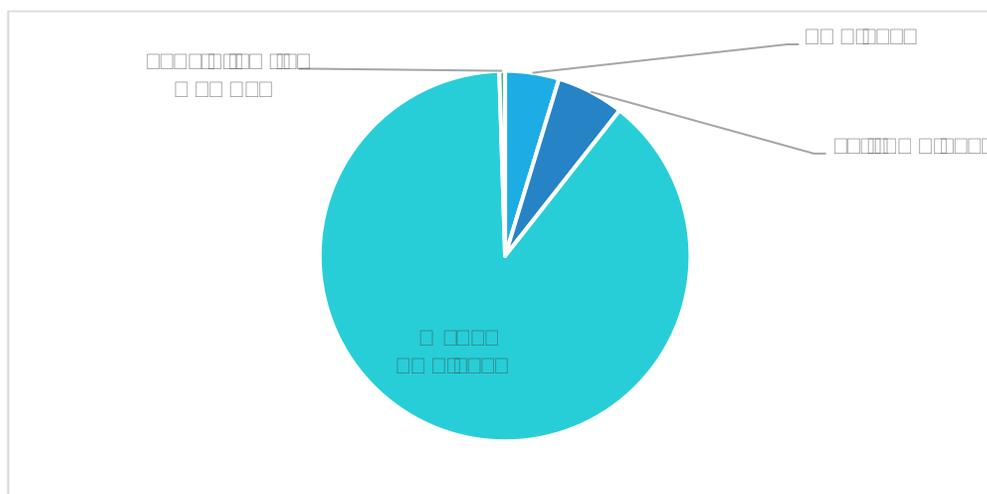


Figure 5: Employed individuals in Jerusalem Governorate distributed by employment status in 2022

The trend has been evident towards wage employment, where the 2020 data has shown 85.6% of individuals being wage employees. Palestinian families in East Jerusalem rely mostly on wages from Israeli market sectors, with 41.6% of families gain their income from these various sectors, with 21.4% gain wages from the private sector, 17.2% rely on national insurance, and around 19% from various sectors such as family businesses, transfers from abroad, social assistance, government salaries, household businesses, and agriculture.

In terms of occupations, the majority of individuals are involved in crafts and related trade works, with the least being involved in agriculture and fishery works. The following chart depict the distribution of employed individuals by occupation in 2022.

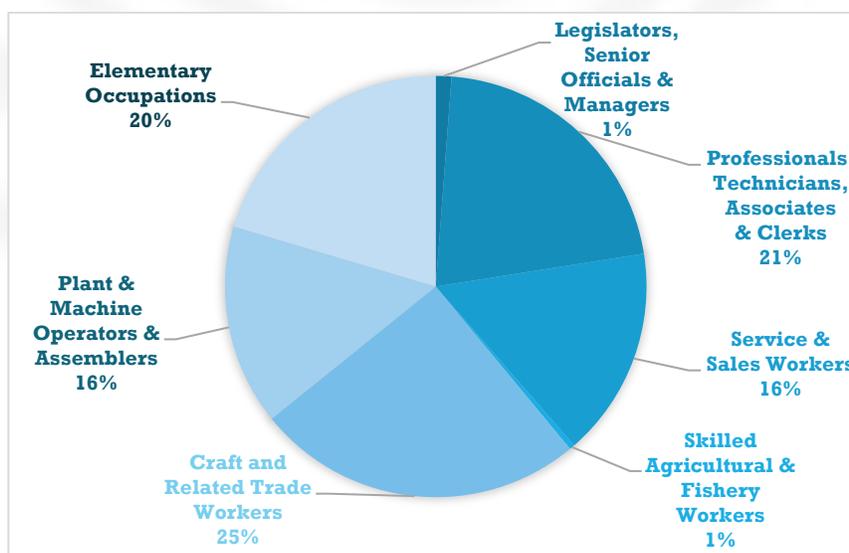


Figure 6: Percentage Distribution of Employed Individuals by Occupation, East Jerusalem 2022 (PCBS, 2023)

In terms of economic sectors and activities, the services sector has recorded the highest participation rate standing at 30.6%. Followed by commerce, hotels and restaurants at 26.5%, with agriculture, hunting, and fishing standing at only 1.8%. The following chart depicts the distribution of employment in accordance with economic activity.

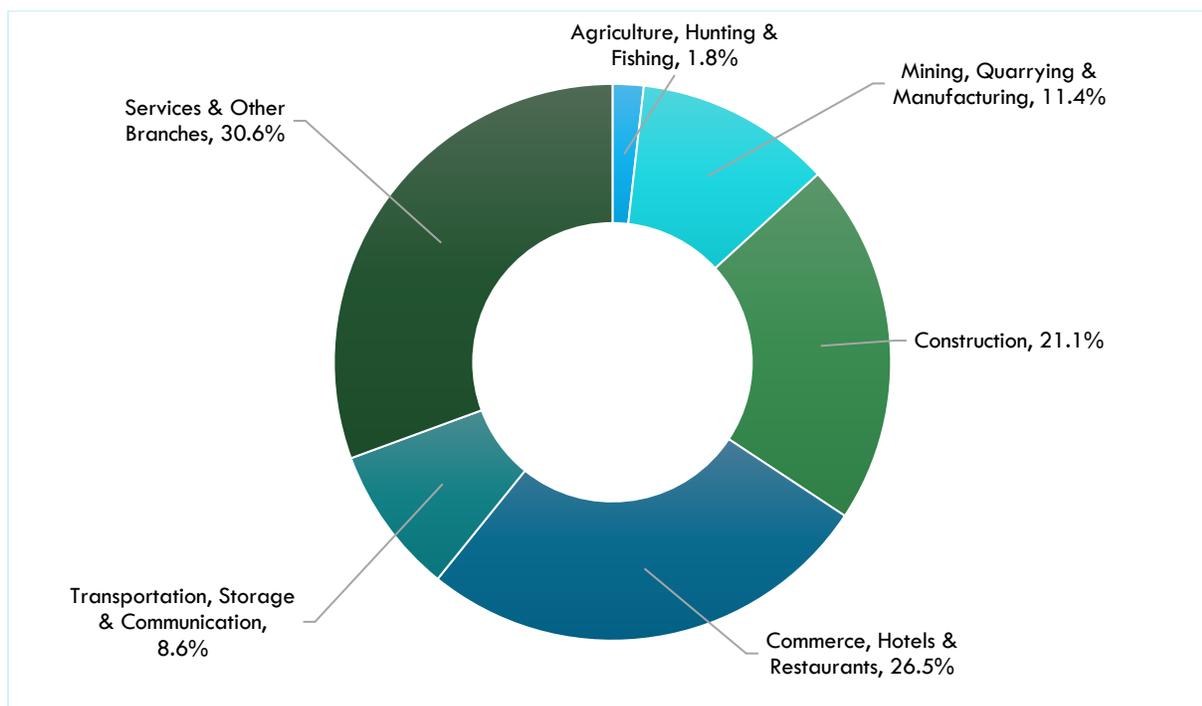


Figure 7: Employment in East Jerusalem by Economic Activity, 2022

Nevertheless, and despite the positive labor force participation and low unemployment rate, the contribution to the Palestinian economy is lower than one would expect as the employment location for East Jerusalemites stands at only 58.1% in the OPT, and 41.9% in Israel and the settlements.

In terms of income, and according to PCBS, income from wages earned from employment in Israel was the main source of household income for 41.6% of households in Jerusalem Governorate in 2018. Income from the private sector made up 21.4%, and income from national insurance allowances⁵ was the main source of income for 17.2%. Wages from the government sector

⁵ Income from National Institute of Israel (NII) is the national institution of social security, operating under the national insurance law of 1953. The main role of the NII is to ensure a means of subsistence to those Israeli residents who cannot earn a living on their own. The NII is the main instrument for reducing poverty; it contributes substantially to the reduction of economic gaps in Israel and guarantees social and economic protection to every resident and family at times of temporary or prolonged distress. The social security is provided by means of about a hundred different benefits paid by the NII to persons entitled to them under the law, as well as by means of rehabilitative and social services. The NII collects insurance premiums, or contributions, from all residents aged 18 or over in accordance with their income (from wages or other sources) and status. All residents of Israel are covered by the NII, and the main social security benefits paid may be divided into the following categories: 1. Benefits given due to physical (health)

represented 4.5% of households in Jerusalem Governorate. The lowest sources of income in contrast were the agricultural sector at 0.9%, social assistance at 9.6% and ownership incomes at 0.5% (PCBS, 2023b).

Active economic sectors in East Jerusalem constituted mainly of; commerce, hotels & restaurants with around 28.7% of reported economic activities, 27.8% as services, 22.4% construction, 11.3% mining, quarrying, and manufacturing, 7.9% transportation storage and communications, and 1.9% in agriculture, hunting, and fishing. In 2017, there were 10,227 establishments operating in Jerusalem Governorate classified by main economic activity: 5,326 in wholesale and retail trade; repair of motor vehicles and motorcycles; 1,239 in manufacturing; and 969 in other service activities.

Business establishments in J1 make up about 50% of the total number of businesses in the Jerusalem Governorate. Their number increased from 2250 in 2000 to 4967 in 2012. In the following years, however, the number fell gradually to stagnate at 4670 in 2017. During this period, more establishments were started in the governorate's towns outside the Wall, reaching 5240 in 2017, an increase of 14% during 2012-2017 periods, which saw many establishments originally operating in EJ moving to the surrounding towns and rest of the West Bank areas outside the Wall (MAS, 2019).

Given all of the above, as well as housing shortages, A high number of Jerusalem residents by birth migrate to other areas of the West Bank for housing and work (8.2%), a dramatic demonstration of the social and economic pressures of life in East Jerusalem, especially housing shortages. Further, hundreds of Palestinian Jerusalemites— who were forced to move outside the Annexation Wall pushed by the occupation's economic coercion— moved their establishments or set up new ones outside the Wall, especially in the internal trade sector. Retail and wholesale trade and repair of vehicles constitute about 60% of the total number of businesses operating inside the Wall, while industrial production enterprises come second, at 13% (or 1296 of the total businesses) . Data on establishment size in J1 measured by the number of employees show that 96% of establishments are microenterprises, which employ 1 to 4 workers. The number of employees in the internal trade has doubled from 2,600 in 2008 to about 5,000 in 2017, an increase of 75%. Its contribution to EJ GDP in 2016 amounted to 27%, or USD 348 million (MAS, 2019).

3.5. Key Economic Challenges

Despite the harsh Israeli policies towards East Jerusalem and its Palestinian population, their percentage in East and West Jerusalem rose from 22% in 1972 to around 40% in 2018. This is due to Jerusalemites' resilience and determination to stay in their birthplace. However, winning the

condition: Long-term care, Disability, Mobility, Work injury, Accident injury, Hostile action casualties, Domestic violence, Radiation, Transfusion-acquired HIV, Polio victims; 2. Benefits given due to employment condition: Income support, Unemployment; Rights of volunteers; 3. Benefits given due to family situation: Survivors, Alimony, Children, Maternity; 4. Other benefits: Old age, Reserve service, Bankruptcy or Liquidation of companies (OECD: <https://www.oecd.org/israel/47346847.pdf>).

demographic battle is not sustainable unless supported by deliberate efforts on all fronts: political, social, cultural, and economic (MAS, 2019).

Education at all levels, health, cultural activities, and economic growth have been ever deteriorating. In 2017 the poverty rate in East Jerusalem was 79.5% for all households and 84% for children. On the other hand, the PNA is allocating a relatively little support to East Jerusalem when compared with the Jerusalemites basic requirements for steadfastness in their city, and when compared with the budgets the Israeli municipality and Jewish agencies inject into the city (MAS, 2018b).

The general challenges that face the revitalization of East Jerusalem's economy given the various economic analysis conducted by various institutions of the UN, the PNA, and private researchers can be summarized to include:

1. The establishment of appropriate institutional arrangements to guide and streamline political, economic, social, and cultural development;
2. Mapping of key actors in each sector is missing, no detailed studies of the economic sectors is available under a coordinated and unified umbrella.
3. Integrated financing schemes for East Jerusalem's economy are scattered and are not coordinated.
4. . Reviving the main sectors of Jerusalem's economy and enabling them to improve their product/service competitiveness and increase their share in the city's as well as the surrounding villages and towns' market;
5. Addressing the housing problem by providing legal, technical, and financial assistance to those wishing to build their homes and to developers willing to invest in the housing sector in the city;
6. Re-integrating East Jerusalem's economy with its base in the rest of the oPt and utilizing East Jerusalem's economy as a Palestinian gateway to foreign markets;
7. . Harnessing the unique touristic position of East Jerusalem to leverage its economy in particular and the Palestinian economy in general.



4. Sectoral Analysis

The economic landscape of East Jerusalem is characterized by a variety of vital sectors, each with its distinct attributes, challenges, and growth trajectories. Through detailed sectoral analysis, meticulously examining the prevailing conditions, impediments, and potential areas of growth within each sector, the focus given to the prioritization and adoption potential of green and circular economy initiatives. The insights derived from this analysis will be instrumental in subsequent research and recommendations on interventions tailored to each identified priority sector.

4.1. THE AGRICULTURAL SECTOR

4.1.1. Background

In the 1990s, agriculture has been largest sector of the Palestinian economy, generating over 22% of the Gross Domestic Product of the West Bank and Gaza and providing employment to over 15% of the population (Isaac, 2000) . During the recent years the agriculture sector witnessed gradual drops in its contribution to the Palestinian economy where this sector currently stands at 7% of contribution to GDP (PCBS, 2022).

Most of crop farms are located outside the Wall. In the past, Jerusalem markets were supplied with vegetables and fruit from villages northwest of the city. The Wall, however, has confiscated and closed large areas of fertile agricultural land. In addition, urbanization has reduced the area of agricultural land and the volume of fruits and vegetables output as a result. Today, vegetables, fruit and other products are supplied by the Israel's Central Cooperative for the Marketing of Agricultural Produce (Tnuva), with the exception of olive, which becomes nowadays the most important crop in East Jerusalem. Pressure on livestock production has continued to grow. Several orders by the Israeli Jerusalem Municipality and the Israeli Ministry of Health restrict livestock-related activities in the city (MAS, 2019). The Friday Market for Livestock, where livestock was traded near Al-Asbat (Lion Gate) Gate, was closed. Yet these restrictions have not stopped investment in the livestock sector. Hamouda Dairy Company in Al-Sawahra Al-Sharqiyah, for example, has managed to obtain a permit for marketing its dairy products in East Jerusalem. Meat shops are supplied with meat from slaughterhouses in the industrial area of Atarot , which in turn, is supplied with chickens from Israel and Palestinian livestock farms in Abu Ghosh and Beit Nekuba, west of West Jerusalem (ARIJ, 2014).

As such, the type of agriculture practiced in the Jerusalem Governorate can be stated to vary according to region, but in general, it can be divided into two groups; i) plant cultivation (both rain fed and irrigated), and ii) livestock production (ARIJ, 2014).

4.1.2. Overview

Jerusalem, although one of Palestine's most prominent business and commercial regions, is not engaged in major agricultural production. Published data indicates that the agricultural sector in

East Jerusalem makes up a modest share of the GDP, and employs only 0.2% of the total workforce, which suffers from a lack of skilled agricultural workers. Livestock businesses produce broiler and egg, in addition to livestock breeding, while farms produce mostly olive oil. About 3.5% of households rely on animal husbandry (especially in Sawahrah Al-Gharbiya, Sur Bahir, Um Tuba and other neighborhoods near the Wall to the east and southeast of Jerusalem), and 98% of the households are engaged in small-scale agricultural activities in home gardens (MAS, 2019).

The share of agricultural sector's contribution to the GDP fell from 1% during 2000-2002 to less than 0.23% in 2014-2016 (MAS, 2018). This is largely due to Israel's imposition of further restrictions on the flow of agricultural produce from East Jerusalem areas outside the Wall into East Jerusalem markets within the Wall, as well as restrictions on livestock breeding within the Wall. By 2021, the agricultural sector's economic contribution dropped to 0.2%, showing a continuing decline in this vital sector's contribution with 0.4% of employed individuals taking roles in the agricultural sector dropping from 2.6% in 2011 (MAS, 2019) (PCBS, 2023b). Moreover, only 0.9% of families in East Jerusalem rely on agriculture as their main source of income.

The number of agricultural holders in Jerusalem Governorate reached 2,542 holders and the number of agricultural holdings reached 2,561 holdings during the agricultural year 2020/2021 (PCBS, 2023a). The total cultivated area in Jerusalem Governorate in the agricultural year 2020/2021 amounted to 10,306 dunums, of which the area cultivated with tree horticulture reached 9,230 dunums, i.e. (89.6 %) of the total area cultivated with crops, and the area cultivated with vegetables 356 dunums, i.e. (3.4%) of the total area cultivated with crops, and 720 dunums, i.e. (7.0%) of the total area cultivated with field crops. The number of cattle as of October 2021 in Jerusalem Governorate 264 heads, with the number of sheep is 31,619 heads, and the number of goats is 18,627 heads.

4.1.3. Challenges Facing the Agricultural Sector

Jerusalem has the smallest cultivated area. Plant production in Jerusalem Governorate forms 1.38% of the total amount of plant cultivated lands across the West Bank. There is a worrying decrease in the amount of lands available for field crop and trees production. Additionally, in terms of methods used for plant production in the Governorate, as of 2007/8 the overwhelming majority of cultivated areas were treated with rain-fed technology (99.66%) showing a lack of development, especially in integration of technology, within this sector (ARIJ, 2014).

Additional challenges faced by this sector include;

- Relocation of Producers: to many producers have moved their operations outside of East Jerusalem due to Israeli authorities restrictions, high taxes, and the availability as well as prices of lands.

- Scaling and Development: Little effort exerted in scaling up and restructuring the manufacturing and agricultural production towards high value-added products, and overcoming the impact of high cost of labor on the competitiveness of EJ products.
- Funding and Financing: Lack of access to funding from Palestinian banks to the sector weakened sector in EJ, the effect of the few financing initiatives to resolve the problem is not sufficient.
- Political Restrictions: The Wall and Israeli policies have raised production costs and sent many companies out of business, turning many business owners into wage-earners.
- Capacity and Skills: Skill development in the city is not focused on what its market needs, which creates an ever-increasing gap in the needed skills.

4.1.4. Feasibility for Green Economy Integration

Despite its small size and the lack of infrastructure as well as development plans for the integration of development projects as most agricultural establishments available rely on traditional operations, this sector in particular holds immense importance in green and circular economy integration. First of all, the agricultural sector yields on of the highest returns in green investments, where financing's social rate of return is one of the highest compared to other sectors. Secondly, as this sector is witnessing one of the harshest restrictions and as a result it is being phased out, it holds high importance to be supported under initiatives that aim to foster resilience and introduction of new efficient methodologies that help farmers and business owners in expanding their businesses.

4.1.4.1. Opportunities

- Technological Advancements: With the rapid advancements in green technology, farmers have access to more efficient and cost-effective solutions, from solar-powered irrigation systems to energy-efficient machinery.
- Sustainable Farming Practices: Introducing organic farming, permaculture, and agroforestry can not only improve soil health and biodiversity but also increase the market value of the produce.
- Water Management: Given the region's water scarcity and the high prices of water, drip irrigation and other water-saving techniques can be introduced to optimize water use through the introduction of smart agriculture.
- Renewable Energy: Solar-powered irrigation systems can reduce the sector's carbon footprint.
- Waste Management: Composting organic waste can enrich the soil, while recycling initiatives can reduce the environmental impact of agricultural activities.

4.1.4.2. Challenges

- **Initial Costs:** Transitioning to sustainable practices might require an upfront investment, which many farmers might find challenging.
- **Cultural Barriers:** Traditional farming practices are deeply rooted, and there might be resistance to adopting new methods.
- **Land Ownership and Access:** The political landscape and restrictions might limit the available land for farming, affecting the feasibility of large-scale green initiatives.
- **Supply Chain Disruptions:** The political situation can lead to disruptions in the supply chain, affecting the availability of green technologies or resources.

4.2. THE SERVICES SECTOR

4.2.1. Background

The service sector produces intangible goods, more precisely services instead of goods, and according to the U.S. Census Bureau, it comprises various service industries including warehousing and transportation services; information services; securities and other investment services; professional services; waste management; health care and social assistance; and arts, entertainment, and recreation⁶. While it is normally considered that countries with economies centered around the services sector are more advanced than industrial or agricultural ones, East Jerusalem portrays a contrary picture, as the thrive of the services sector, namely traditional services, has been due to limitations imposed on other sectors that historically existed within the city, in addition to the fact that the tourism sector, which has historically been one of the city's main economic players, is listed within statistics under services sector. Nevertheless, for the purposes of this report, and as the tourism sector holds a great potential for circular economy integration, particularly green energy initiatives, it is examined independently in section 4.3.

The services sector is a cornerstone of East Jerusalem's economy, encompassing a wide range of activities from tourism and hospitality to finance, education, healthcare, and information technology. Given the city's historical, religious, and cultural significance, the sector has evolved over the years, adapting to the unique socio-political dynamics of the region.

According to PCBS, the services sector includes; trade, transportation, accommodation, restaurants, telecommunications, health, education, liberal professionals, and others (PCBS, 2022). However, prominent sectors that encompass trade and tourism are discussed separately under this report for their importance for the economic fabric of East Jerusalem as well as their historical prominence in the city.

⁶ U.S Census Bureau 2020:

<https://www.census.gov/content/dam/Census/library/publications/2020/econ/snapshot-service-industries.pdf>

4.2.2. Overview

the EJ economy has become largely dependent on the retail and wholesale trade, car repair and the services sector that includes: accommodation, food, administrative services, education, health care and social work. Like the Palestinian general economy which has traditional services contribute to around 85% of the total services sector's GDP, and 98% of the services sector's employment (MAS, 2013). For East Jerusalem, the contribution of these sectors to the city's GDP increased from 55% in 2000-2002 to about 77% in 2014 – 2016 (MAS, 2019), with the services sector comprising an astonishing 53 % by itself. Between 2014 and 2016. According to recent data published by PCBS in their Jerusalem Statistical yearbook, the services sector recorded an increase in J1 areas rising to 55.2% (PCBS, 2023a).

The services sector's statistics have not been updated since 2019, where the 2023 Jerusalem Statistical Yearbook did not present new statistics of numbers of establishments or the characteristics of the sector;

- There were 2,994 establishments operating in Jerusalem Governorate in 2019.
- There was 17,700 employed persons in this sector in Jerusalem Governorate in 2019.
- The output value in Jerusalem Governorate was USD 771.8 million in 2019.

Based on the available statistics, the number of establishments could engulf various fields such as medical clinics, shops, tax and other professional services, education, coffee shops, restaurants, and other intangible services. Nevertheless, it is also stated that 90% of the social services sector is provided and operated by local CSOs and NGOs (Costantini et al., 2011) . Indicating the close relationship between the civil society and the services economic sector.

To materialize the objective of this report, key areas within the services sector are examined which hold the potential for green and circular economy integration, with focus on green energy potential. However, careful consideration needs to be done as various sectors could also intertwine with the Civil Society's (i.e., NGOs) potential and their interventions, where for instance the medical sector which is considered and included under the services sector is predominantly managed and operated by various NGOs within East Jerusalem.

Moreover, the impact of COVID-19 on the various economic domains within the services sector has to be established, as economic activities within the period of 2020 – 2022 have suffered significant shortfalls due to the various closures, movement restrictions, and the variance between the pressure exerted on the economy of East Jerusalem compared to the J1 area which has been governed by Israeli policies, and J2 which had less restrictions given their marginalization by both the Israeli and Palestinian authorities, which enabled less restrictions during the COVID-19 pandemic. This is depicted by one of the biggest recessions on record when the economy shrank by 11.3% in 2020, the growth rate reached 7.1% in 2021. This increase was mainly due to higher consumption in the

West Bank following the easing of COVID-related measures and the increase in the number of Palestinians working in Israel and the settlements⁷.

Business establishments in J1 make up about 50% of the total number of businesses in the Jerusalem Governorate. Their number increased from 2250 in 2000 to 4967 in 2012. In the following years, however, the number fell gradually to stagnate at 4670 in 2017. During this period, more establishments were started in the governorate's towns outside the Wall, reaching 5240 in 2017, an increase of 14% during 2012-2017 periods, which saw many establishments originally operating in EJ moving to the surrounding towns and rest of the West Bank areas outside the Wall.

However, the services sector has indirect employment potential, meaning that employment generated in the services sector results in jobs in non-service (e.g., manufacturing, construction, and agriculture) employment, where it is estimated that the elasticity is 0.33, meaning that an increase in service employment by 1% results in 0.33% increase in employment in non-service sectors (MAS, 2013). Nevertheless, the dominance of traditional (social and distributive) services in terms of GDP and direct/indirect employment at the expense of modern services raises serious economic concerns.

4.2.3. Health Care

The number of primary health care centers in the Jerusalem Governorate reached 51 for the year 2021 in J1 areas (PCBS, 2023) , from a total of 88 for both J1 and J2 (Imam & Hamdan, 2021) most of which are supervised by non-governmental organizations, the United Nations Relief and Works Agency for Palestine Refugees (UNRWA), and the Ministry of Health, while there were 7 hospitals with an operating capacity of 718 beds. The number of discharges in Jerusalem hospitals reached 53,641 patients, and the number of nursing days in the same hospitals reached 196,881. days, while the bed occupancy rate reached 75.1% (PCBS, 2023a). 6 of these hospitals are members of The East Jerusalem Hospitals Network (EJHN) and all are NGOs, which form the main medical pillars of East Jerusalem, in addition to Juabeh geriatric hospital which is a privately owned hospital.

The majority of the 88 clinics are privately owned and serve the population of East Jerusalem, these are contracted by the four main health insurance organizations (Israeli Sick Funds, i.e., Kopat Holim), where a small number of these clinics are operated by the sick funds themselves. Compared to PCBS's report 55 of those are operated by NGOs, UNRWA, and the MoH.

Therefore, in tandem with the Civil Society sector, these NGO operated hospitals, clinics, and medical centers such as St. Benedict's polyclinic, the Arab Health Center, Al Makased, Al Motalla', St. Joseph, and Augusta Victoria, in addition to the Palestinian Red Crescent Clinics form excellent examples of areas where the project could have interventions through firstly awareness and

⁷ World Bank: <https://www.worldbank.org/en/news/press-release/2022/05/09/the-palestinian-economy-will-continue-to-operate-below-potential-without-concrete-policy-actions>

capacity building both for the project and green and circular economy where they can benefit from different interventions within the scope of the project such as energy efficient equipment, solar energy, energy efficiency audits, and technical support.

4.2.4. Education

262 schools exist within East Jerusalem, except for ones that are operated by the Israeli Ministry of Education. PCBS's statistical yearbook for the academic year 2022/2023 stated that there are 127 governmental schools, 15 UNRWA schools, and 120 private schools (PCBS, 2023a). Same as with the medical sector, these private schools are either run by churches or private NGOs (Nuseibeh, 2013).

Higher education comprised of 3 universities by the academic year 2021/2022 dropping from 4 in the previous years, these included universities and university colleges. Nevertheless, the project is not advised to focus its interventions in the educational services sector for universities and higher education, but is still encouraged to engage with these institutions. Nevertheless, the focus is advised to be centered around the privately owned schools as these could demonstrate substantial impact in the adoption of green and circular economy initiative especially related to renewable energy through firstly integrating this culture within their schools in addition to the larger impact such interventions could present at their level.

These entities are further explored under the Civil Society sector and their inclusion within the project could fall under activities targeting CSOs and NGOs.

4.2.5. Transportation and Storage

Transportation constitutes one of the major expenditures of residents of East Jerusalem. Particularly in J1 area, around 15% of consumer expenditures go towards expenditures, superseded by personal care and social protection (16%) , and food and beverage (22%) (PCBS, 2023a). As a sector, transportation accounted for 0.2% of J1's economic activity with a value of 2.6 million USD in 2021, registering a significant drop compared to previous years where it was its highest in 2018 with a 0.4% contribution at 5.8 million USD in 2018. This can be contributed in part to the COVID-19 pandemic. In 2019, there were 184 establishments operating in transport in East Jerusalem employing 804 persons, with the economic output of this sector standing at only USD 7.9 million (PCBS, 2023a).

Jerusalem as whole is served by a decent road infrastructure, busses, trains, and the recent light rail. However examining East Jerusalem, the Arab-run buses serve the city's Arab neighborhoods in Eastern Jerusalem and also some Palestinian towns in the Palestinian Authority and Israeli Arab towns. This system is based out of the East Jerusalem Central Bus Station on Sultan Suleiman Street, though buses also leave from outside the Damascus Gate of the Old City (Kerzhner, 2022).

Data relating to the transport sector, let alone storage, lack significant research and information, available studies are focused on the public transport sector which has been undergoing formalization efforts by the Israeli government agencies as informal transport has dropped from 80% of total traffic in 1998 to 16% in 2005 through strengthening 12 existing companies and the establishment of five new ones (Shlomo, 2016). Nevertheless, data regarding taxis, private transport, and storage are significantly lacking and dedicated studies are needed to explore this underserved sector.

Nevertheless, looking at the scope and objective of this study, interventions relevant to green and circular economy initiatives in this sector are limited with the available funding for each individual / MSME. As examined, previous applications revolved around the purchase of electric vehicles to be used at driving schools or as taxis. Given the underdeveloped sector in East Jerusalem and the scope of interventions of the grant as well as the available grant support, the adoption potential for this sector is limited as well as the speculation that the associated impacts of supporting interventions within this sector are minimized and the Social Return on Investment (SROI) is low for the same CAPEX compared to other sectors. Nevertheless, this sector shows high potential in commitment to the grant amount as the purchased goods in this case, i.e., electric vehicles, are primary operational goods that are required for the business and their procurement and operation do not entail risks such as capacity, knowledge, and operational complexities.

Additionally various factors should be accounted for when estimating the SROI or climate change impact of purchasing electric vehicles, this includes where the battery was manufactured (e.g., Chinese batteries have higher environmental burden compared to EU made) and the source of electricity charging the vehicle.

Therefore, if this sector is to be explored, financing should be directed towards interventions that are innovative and do in fact present an added value in terms of SROI and circular economy adoption, such as simulation driving equipment, shared mobility platforms, and supporting storage businesses through integration of green energy initiatives such as solar energy and energy efficient equipment.

4.2.6. The ICT Sector

There is no single agreed definition for digital economy, which itself is an evolving economic sector. Narrowly, it is defined as online platforms and all activities that related or presence to these platforms, but the broad definition includes all activities that employ digitalized data (MAS, 2018a).

In East Jerusalem, this sector is still underdeveloped compared to the remainder of the West Bank, where the ICT infrastructure is under full Israeli control (Zamleh, 2018). The contribution of the information and communication technology sector (ICT) to the economy of EJ is still insignificant. It added around USD 2 million to East Jerusalem's GDP, and has employed 80 persons in 2016 (MAS,

2018b), this has increased albeit steadily where it grew to USD 2.2 million in 2019 with 94 persons employed (PCBS 2023) with 48 establishments operating in East Jerusalem. However, the ICT sector's contribution to the economic value added of the city is less than 0.1%.

Nevertheless, and due to the role of ICT sector in economy nowadays, especially in boosting productivity and innovation in all economic and social sectors, it should be considered in any development endeavor. Furthermore, the ICT sector in EJ lags behind other cities and governorates in terms of its job creation, contribution to GDP, and exports. In addition, Al Quds university is one of leading Palestinian universities that has a long experience in providing a variety of ICT education programs, and qualify hundreds of graduates every year, who suffer from lack of decent ICT jobs.

Addressing the ICT sector from a circular and green economy point of view needs to firstly address the existing market failure in its core interventions rather than in the secondary development aspects such as circular economy integration. In this regard, it is wise to support the enabling environment rather than individual enterprises and endeavors, that is if they exist, and meet the criteria needed for support under the project. Hence, enablers such business incubator

4.2.7. Feasibility for Green Economy Integration in the Services Sector

East Jerusalem, with its unique socio-political landscape, presents both challenges and opportunities for the integration of green economy principles. The services sector, being a dominant contributor to the local economy, holds significant potential for adopting sustainable practices that can drive both economic and environmental benefits.

4.2.7.1. Potential Areas for Integration

1. **Healthcare:** With a significant portion of healthcare facilities operated by NGOs, there's an opportunity to introduce energy-efficient medical equipment, and waste reduction strategies. Additionally, solar panels on hospital rooftops can reduce energy costs and ensure uninterrupted power.
2. **Education:** Schools and educational institutions can be retrofitted with energy-efficient lighting and HVAC systems. Rainwater harvesting systems and green spaces can be introduced within school premises. Moreover, integrating sustainability into the curriculum can foster a culture of environmental consciousness among students.

Other identified sectors, i.e., Transportation and Storage & ICT, do not seem to show the potential provided by the priority sectors, i.e., healthcare and education. Additionally, it seems that focusing on these sectors as well can introduce a cross-sectoral intervention agenda as both the healthcare and educational sectors are mostly managed from a private sector perspective, by NGOs in East Jerusalem.



4.2.7.2. Challenges and Considerations

- **Initial Investment:** Transitioning to green practices often requires an upfront investment. While the long-term benefits are significant, the initial costs can be a deterrent for many businesses.
- **Knowledge Gap:** There might be a lack of awareness or expertise regarding green economy practices among local businesses.
- **Cultural and Behavioral Barriers:** Changing established practices and behaviors can be challenging. It requires a shift in mindset and values.
- **External Factors:** The political situation and external regulations can impact the feasibility of certain initiatives. It's essential to be aware of these factors and plan accordingly.

4.3. CIVIL SOCIETY SECTOR

4.3.1. Background

Scholars of the past held differing opinions about the concept of civil society, where there is not a clear distinction to squarely define the different organizations that fall under its umbrella. The World Bank Group definition for Civil Society encompasses various organizations that fall under labor unions, the media, NGOs, grassroots associations, CBOs, religious groups and other actors that comprise the dynamic web known as civil society (World Bank Group, 2000). For the purposes of this report, all local actors within the civil society are referred to as Civil Society Organizations (CSOs).

East Jerusalem is a region characterized by its diverse population and unique challenges. Within this context, the local civil society sector, including international organizations, plays a pivotal role, addressing socio-economic issues and providing essential services to the community. These organizations are deeply integrated into the fabric of East Jerusalem, understanding the nuances of its challenges and the aspirations of its people.

This sector in East Jerusalem has its roots in the community's response to various socio-political and economic challenges over the decades. Historically, many emerged as grassroots initiatives, addressing immediate community needs such as education, healthcare, and social welfare. With others being international organizations establishing offices and programmes in East Jerusalem as part of humanitarian relief activities. Over time, as the political landscape evolved and the challenges became multifaceted, the role of NGOs expanded. They began to engage in advocacy, community development, and capacity-building, among other areas.

Beginning in the 1920s, Islamic-Christian labor unions, youth clubs and women's organizations focused on the national issue. However, from 1948 to 1964 Palestinian civil society dispersed. The only NGOs allowed to work in the West Bank were non-political charities, who established a

federation in 1958 but had to follow Jordanian law, obtaining permits for every activity they undertook (Salem, 2012).

The past three decades witnessed the advent of thousands of Palestinian CSOs in the West Bank, the Gaza Strip, and East Jerusalem across a wide spectrum of sector including society, human rights, politics, research, agriculture, and environment. Over the years, Palestinian CSOs have provided society with an array of services, which arose the need to understand the relationship between CSOs and members of the public (Zamleh, 2021).

4.3.2. Overview of CSOs in East Jerusalem

Despite the fact that some studies were previously carried out to produce an overview of Palestinian civil society, especially the Jerusalemite one, the universe of Palestinian CSOs appeared as an “unknown universe”. This is predominantly due to that organizations based in the West Bank and East Jerusalem are intertwined since most large Jerusalem organizations now have their headquarters in Ramallah & Al-Bireh. (Costantini et al., 2011).

Looking at the Palestinian CSOs, one cannot ascertain the number of functioning civil society organizations, NGOs included, for a variety of reasons, as numbers from different resources fluctuate significantly, hence it is hard to determine their categorization, and their thematic areas of intervention as well as locations. For instance, and according to the Arab.org database, which a platform for Arab Countries database on NGOs registered in Jerusalem, around 97 different civil society organizations that encompass international NGOs, local NGOs, CSOs, and CBOs registered with premises in Jerusalem⁸. The NGO Development Center (NDC) on the other hand, through the MASADER⁹ platform, have a total of 45 local CSOs & NGOs registered and active in East Jerusalem.

Nevertheless, a more comprehensive statistical overview is provided by Zamleh through their investigation of the Palestinian Public's Perception of Palestinian CSOs, where their investigation revealed that around 3,223 local NGOs were active in Palestine, with 456 of them located in East Jerusalem constituting 14% of registered Palestinian NGOs divided equally between East Jerusalem (J1); 7% and Al-Ram (J2) ; 7% (Zamleh, 2021). While firstly this number refers to Palestinian local NGOs, which is the focus of this report, the number is significantly low compared to the needed support and interventions these organizations can provide to the marginalized East Jerusalem community, this is due to the Israeli restrictions on Palestinian NGOs in East Jerusalem and its suburbs, Additionally, one can speculate that not all NGOs active in East Jerusalem are registered with the Palestinian Ministry of Interior.

⁸ www.arab.org

⁹ www.masader.ps

Other NGOs active in East Jerusalem are registered with the Israeli Ministry of Justice (IMoJ) Registrar of Associations. Where it is a difficult process and the government generally does not issue the required permits and licenses for every Palestinian organization, especially those providing national services to Palestinian Jerusalemites (Zamleh, 2021). This investigation and review of various resources and literature concerning the civil society of East Jerusalem confirmed the widely adopted statement that there is a lack of comprehensive survey of Palestinian NGOs in East Jerusalem. Even the database of the PCBS for the past 3 years contain specific reports relevant to East Jerusalem, but no available data is available for the Civil Society sector.

A notable union for civil society in Jerusalem is the Union of Charitable Societies-Jerusalem (UCS). UCS is the first Palestinian non-profit and independent union of non-governmental charitable and development societies that was established in Jerusalem in 1958. UCS strives to build an effective Palestinian civil society through advancing the Palestinian civil work in an institutionalized and democratic manner and according to the principles of good governance and accountability in order to contribute to the national development and sustainable development. About 150 local NGOs/CBOs are members in the UCS and operating in various developmental, social and humanitarian fields¹⁰.

4.3.3. Key Areas of Operations

PNA's allocated budget to EJ is significantly below what the city requires. The impact of this reality is somewhat mitigated through established vibrant local and international NGOs which provide support to EJ's institutions, especially in the social sector (health, education, cultural heritage, and social welfare) and which are highly dependent on donor support (MAS, 2018b).

When examining the scope of work, Palestinian community organizations and non-profits in East Jerusalem primarily focus on the cultural domain, extending to youth centers and healthcare, albeit in limited measure. Regarding agriculture, a classification of these Jerusalem-based organizations into J1 & J2 groups, based on their positioning relative to the Separation Wall, reveals a notable absence of agricultural activities among those situated within the wall. On the cultural spectrum, these entities are actively immersed in addressing gender-based violence and fostering awareness on related subjects. Legal-focused non-profits extend their support in the form of humanitarian aid. It's notable that the operations of these organizations are largely contingent on project-based funding, concluding their efforts with the termination of the funding period. The educational realm in East Jerusalem sees a minimal presence of non-profits. For example, the Tamer Institute for Community Education operates in East Jerusalem, and the Burj Al-Luqluq Social Center Society collaborates with educational bodies, marking a restrained yet impactful engagement in this sector (Zamleh, 2021).

¹⁰ www.ucs-pal.org

Reviewing the scope of different NGOs, CBOs, and international organizations operating in East Jerusalem based on the various available resources, literature, and platforms listed within this study, the key areas of operations can be categorized to the following areas;

- Social Welfare; Youth Empowerment, Inclusion, and Community Development
- Cultural Heritage and Arts
- Business Incubation
- Learning and Education
- Healthcare

4.3.4. Challenges Facing the Civil Society Sector in East Jerusalem

Approaching Palestinian civil society has several contexts accompanied by various political, economic, and social trajectories which results in Palestinian NGOs and CSOs' distinct structures and legal frameworks.

Despite the fact that over 90% of social services in the Occupied Palestinian Territories are managed by CSOs. The special context of East Jerusalem produces a two-fold set of challenges for civil society organizations. On the one side, their legitimate existence and activity are at risk; while on the other side the increasing social exclusion conditions create a growing demand for services and for human rights protection activities (Costantini et al., 2011).

Several factors contribute to the special challenges relevant to the context of East Jerusalem, these include;

□ Economic and Social Marginalization:

The disconnection of Jerusalem from the rest of the West Bank has triggered economic and social setbacks, losing access to essential resources, markets, social and safety networks. East Jerusalem experiences a double marginalization due to discriminatory policies from Israeli authorities and inadequate attention from PA policies. This marginalization has led to the increase in negative social phenomena such as drug use, violence, and crime within the Palestinian community in Jerusalem..

□ Political and Civic Representation:

Palestinian residents in East Jerusalem face a representation vacuum, with no Palestinian Authorities representation in the city since the closure of the "Orient House." This lack of representation also extends to a local level where discriminatory practices reduce the chances of participation in policy-making, and a gap exists between Palestinian residents and the municipality perceived as an illegitimate institution.

□ Threat to Cultural Heritage and Property Rights:

The ongoing loss of Palestinian heritage and cultural presence, particularly in Palestinian-populated neighborhoods, along with the risk of eviction due to land property conflicts, occupation, and hostile urban regulations, threatens the identity and stability of the Palestinian community in Jerusalem..

□ Inadequate Funding, Resource Allocation, and Coordination:

The scarcity of reliable and updated information along with an inadequate allocation of resources by donors and the PNA for CSOs and other institutions results in increased conflicts and competition among civil society actors, which in turn affects the effectiveness and sustainability of interventions. Several NGOs act as SPVs for projects and dissolve shortly after, while there is not sufficient data and information regarding the most pressing interventions. Additionally, there is a risk of duplication of efforts due to uncoordinated efforts.

4.3.5. Feasibility for Green Economy Integration

The Civil Society sector is one of the most promising for the adoption of sustainable practices, including circular economy, renewable energy, and energy efficiency measures. Mainly, the Civil Society, with all of its actors, including local NGOs and CBOs, can act as catalysts for wider community adoption, awareness raising, and capacity building.

The global shift towards sustainability has highlighted the potential of the circular economy as a means to address environmental and economic challenges concurrently. For East Jerusalem, the adoption of circular economy principles is not just a theoretical concept but a practical approach to address resource constraints, waste management issues, and economic development.

An NGO must implement circularity in its strategies in order to avoid waste of resources and boost a more sustainable way to achieve its mission. Indeed, due to the lack of resources, mainly financial ones, this aspect of the sustainability is crucial for a non-profit organization to reuse at the maximum level its resources. In particular, it is difficult to generalize this building block due to the different nature of NGOs, but it is important that they are conscious of creating a green Value Proposition through circular management (Dagostino, 2021).

According to the Short- and Medium-Term Sectoral Development Agenda for East Jerusalem (SMSDA) for the year 2019-2023, The scope of the Social Cluster Development Agenda covers four components:

1. "Education in EJ covering pre-school, basic, secondary, vocational, and higher education levels. It will address priority developmental needs in the short, medium, and long term and the challenges for the sector in the J1 and J2 areas."
2. Health Sector provides secondary and tertiary health care to EJ and the rest of the opt It consists of several hospitals run by Palestinian non-governmental health organizations and international organizations.

3. Social Welfare focusing on social services provided by Palestinian NGOs to vulnerable groups, including children, youth, women, elderly, and persons with special needs.

4. Cultural Heritage focusing on the revitalization, documentation, and protection as well as safeguarding activities for all threatened components including historical and religious buildings, monuments, museum collections, and physical artifacts with cultural significance. It also tackles intangible cultural heritage.

As such, and to align efforts needed for the development of the Civil Society within East Jerusalem, it is evident that interventions should fall within the identified thematic areas of the SMSDA that have been confirmed by the findings within this chapter. This thematic areas represent opportunities to amplify the impact of the adoption of green and circular economy practices.

These sectors could be the catalysts to integrate tailored renewable energy, energy efficiency, circular economy, and green initiatives that act as pilot projects for the area, increasing awareness and community engagement, hence amplifying the impact of these interventions.

4.3.5.1. Opportunities

- Deep Community Engagement: NGOs have strong ties to the communities they serve. Their grassroots nature allows them to understand local challenges, needs, and opportunities, making them well-positioned to introduce and promote sustainable practices tailored to the community.
- Capacity for Awareness and Education: NGOs play a crucial role in awareness-raising and education. They can conduct workshops, training sessions, and campaigns to educate the public and other stakeholders about the benefits of the circular economy, driving its adoption at multiple levels. This is also important to integrate in TVET programs, equipping students with skills needed to implement circular economy and green projects such as renewable energy, energy efficiency, and smart agriculture.
- Collaborative Nature: NGOs often collaborate with various stakeholders, including governments, businesses, and other organizations. This collaborative approach can facilitate the integration of circular economy principles across different sectors and levels of society.
- Pilot Projects and Demonstrations: NGOs can initiate pilot projects to demonstrate the feasibility and benefits of circular economy practices. Successful pilots can then be scaled up and replicated in other areas.
- Advocacy and Policy Influence: Given their active role in advocacy, NGOs can influence policy-making to support the circular economy. They can lobby for regulations and incentives that promote sustainable practices.

4.3.5.2. Challenges

- **Knowledge and Communication:** The general lack of knowledge within the local community of the fund and its extension. Where a multitude of NGOs included in sectors such as health and education could benefit from it but this has not been seen within the previous lists of applicants.
- **Scalability and Continuity Issues:** While pilot projects can demonstrate the feasibility of circular economy practices, scaling these initiatives to have a broader impact can pose challenges. This can be due to financial, logistical, or regulatory barriers. Additionally, CSOs typically rely on financing. Hence, there are risks regarding the continuity of such pilot projects.
- **Community Resistance or Inertia:** While NGOs have deep community ties, introducing new concepts or changing established practices can meet resistance. Overcoming skepticism or inertia within the community can be a challenge.
- **Resource Constraints:** While NGOs can mobilize resources, many face financial constraints, limiting their ability to initiate and sustain circular economy projects. Dependence on external funding can also make their operations vulnerable to funding fluctuations.

4.4. TOURISM AND HOSPITALITY SECTOR

4.4.1. Background

In May 2015, the Jerusalem Tourism Cluster held its inaugural conference, aiming to foster innovative ideas for tourism development. The conference highlighted the sector's challenges, notably its management inefficiencies, and underscored the importance of inter-sectoral collaboration to invigorate the business environment. Emphasizing the need for strategic development, the conference advocated for a focus on enhancing the existing tourism infrastructure in East Jerusalem before broadening its scope. This includes raising awareness among younger Palestinians about the city's cultural richness, positioning Jerusalem as a primary local destination, and crafting marketing strategies for diverse audiences¹¹. A significant emphasis was placed on the importance of professional development in the tourism sector to ensure service excellence. (MAS, 2019; UNCTAD, 2013).

Tourism to the West Bank, in particular to East Jerusalem, grew rapidly during 1948–1967, within the framework of Jordanian tourism development programmes. West Bank tourism benefited tangibly from the pronounced improvement in the supportive environment which developed in Jordan at a marked pace as of the early 1960s. Tourist flows previously dominated by Christian pilgrims increasingly included Muslim pilgrims visiting the sacred Islamic sites of East Jerusalem and

¹¹ Jerusalem Tourism Conference (2015): Tourism and Palestinian Culture in Jerusalem: Unlimited Opportunities,

Hebron, while the flow of Jordanian East Bank worshipers to pray on Fridays at Al-Aqsa Mosque became an entrenched ritual in the pre-1967 period. By 1966 the tourism sector, mainly focused on East Jerusalem, contributed around 14 per cent of the West Bank's gross domestic product (GDP), while 70 per cent of Jordanian tourism receipts are estimated to have been generated in the West Bank (UNCTAD, 2013).

Most of the hotels in East Jerusalem were built by local families and few by investment groups. Until 1967, most tourists stayed in East Jerusalem which offered more accommodation facilities than Amman and other West Bank Cities: According to Jordanian statistic's, in 1967 73 out of 87 hotels and accommodation facilities were located in the West Bank with Jerusalem as its main touristic destination. At the beginning of the Israeli occupation of the city in 1967, 50 tour agencies operated in East Jerusalem and the total number of hotels was 41 with a total of 2200 hotel rooms compared to 1200 in West Jerusalem at the time (IPCC & FES, 2020).

4.4.2. Overview

36 Palestinian tour agencies operate from East Jerusalem (28 agencies exist before 1967), the largest ones have existed since before 1967 and specialized in organized religious and pilgrimaging tourism, especially from EU countries USA and Russia. 40% of the organized tourism is estimated to be organized by East Jerusalem tour agencies. The number of tourism transport companies in East Jerusalem amounts to 30 with a total of 400 buses. The number of restaurants and cafes is 43, mostly located in the Old City, Central Business District, and Sheikh Jarah and mainly used by locals, internationals working in Jerusalem and tourists. Quality and variety of cuisine in East Jerusalem is very limited compared to West Jerusalem and Ramallah (IPCC & FES, 2020).

By the end of 2021, 17 hotels have been reported to be operational in East Jerusalem, housing 822 rooms and 1954 hotel beds, with an estimated average number of workers of 562; 424 males and 138 females. Due to the COVID-19 pandemic, room occupancy dropped significantly after having shown a steady increase; where between 2017 and 2019, room occupancy rate increased from 37.9% to 54.1%, dropping to 9.5% between 2020 and 2021. Where the number of hotels also dropped from 20 operational ones in 2017 to 17 in 2021(PCBS, 2023b).

Moreover, the East Jerusalem hotel revenues increased from 165 million NIS (43 million USD) in 2010 to 273 million NIS (76 million USD) in 2019, an increase of 65.3%. The percentage of East Jerusalem revenues in 2019 is 10.7 % of the total revenues of the entire city hotels compared to 10% in 2010.

Additionally, and according to PCBS 2017 economic survey, , the number of handicrafts and souvenirs businesses in East Jerusalem reached 357, mainly operating in the Old City, 7 manufacture of handicrafts enterprises, 2 arts businesses, 20 car rentals and 104 restaurants (UNDP, 2017).

Tourism in East Jerusalem caters to a diverse range of visitors. Most prominently, religious pilgrims, typically older adults, are attracted to significant religious landmarks such as the Western Wall, Al-Aqsa Mosque, and the Church of the Holy Sepulcher, often seeking budget accommodations near these sites. Group travelers, encompassing families and educational groups, gravitate towards historical and cultural sites, preferring accommodations equipped for group stays. Cultural enthusiasts, ranging from young adults to the middle-aged, are attracted to the city's arts, history, and local events, often opting for boutique hotels or unique local stays. Adventure seekers, from solo travelers to thrill enthusiasts, are drawn to outdoor activities and favor hostels. Meanwhile, business travelers prioritize accommodations that offer modern amenities, conference facilities, and are close to commercial hubs.

In terms of visitor demographics;

- **United States:** American tourists comprise approximately 21.3% (969.4 thousand) in 2019.
- **United Kingdom:** British tourists, comprising around 5.2% (235.4 thousand) in 2019.
- **France:** French tourists accounted for approximately 8.1% (367.5 thousand) in 2019.
- **Germany:** German tourists, representing around 6.4% (289.0 thousand) in 2019.
- **Russia:** Tourists from Russia, contributed about 7.0% (318.1 thousand) in 2019.

4.4.3. Challenging Facing the Tourism and Hospitality Sector

When comparing the sector within East Jerusalem to that of the West, it has been noted that the increase in sectoral revenue recorded a mere 0.7% increase over 10 years (i.e., 2010 – 2020). However, for West Jerusalem the number of hotels rose from 47 in 2015 to 60 hotels (from 7952 rooms to 9073 rooms) in 2019. 35 % of the hotels are level 1, 32% level 2 and 26% level 3. The total number of tourists staying in West Jerusalem hotels exceeded one million in 2019 with 3.6 million overnight stays, which implies an increase of 11.8% compared to 2018 and an increase of 26.1% compared to 2017 (IPCC & FES, 2020).

Therefore, it is evident that there is a marginalization of the sector in East Jerusalem with more focus shifted by Israeli authorities on West Jerusalem's tourism sector. Hence, the challenging facing the sector can be summarized to the following;

- Political Complexities: The unresolved political status of East Jerusalem creates an environment of uncertainty. Tourists may be hesitant to visit a region where the political situation is volatile and subject to rapid change, impacting their confidence in the safety of their travels.
- Expansion of Israeli tourism Sector over the expense of the Palestinian one in East Jerusalem: Especially that the Israeli authority has been promoting West Jerusalem as a “safer area” and have been investing in it unequivocally, marginalizing East Jerusalem. In addition to the

sizable investments and financial assistance offered by banks and the Israeli Jerusalem Municipality to construct a number of huge Israeli hotels in East Jerusalem.

- Legal Ambiguities: Legal ambiguities surrounding land ownership, jurisdiction, and development rights further complicate the tourism landscape. Investors and developers may be wary of committing resources to projects due to unclear legal frameworks, stalling essential infrastructural and hospitality developments.
- Access Restrictions: Restrictive measures on the movement of both Palestinians and tourists within certain areas of East Jerusalem hinder the overall tourism experience. Tourists may find their exploration limited, impacting their ability to fully engage with the cultural and historical richness of the region. Additionally, the restrictions impact and impede local Palestinian tourism, where the hotels and overnight stays numbers could significantly increase if such restrictions were not in place.
- Skills and Capacity: Weak hospitality and language skills among workers in the field. Additionally, these hotels and business have old-fashioned accounting and auditing systems that do not comply with the requirements of the Israeli tax and finance departments, and prevents hotels and restaurants from benefiting from maintenance grants and the periodic furnishing grants, granted to Israeli enterprises.
- Competition among Palestinian Hotels and tourism leakage: East Jerusalem's Palestinian hotels have been demonstrated to be unable to compete with the competitive prices of hotels in Bethlehem, which adversely affects demand for hotels in Jerusalem.
- Lack of institutionalized cooperation and collaboration: This is shown at the intra-sectoral level and at the inter-sectoral level, especially with the commercial sector, weakens competitiveness and market share. Furthermore, it hinders collective effort to face arbitrary Israeli hostile policies and measures that negatively impact the sector's businesses. This is in addition to the poor exploitation of domestic and inbound tourism (especially from Arab and Islamic countries) as a protection strategy and for enhancing the political and religious status of Jerusalem and preserving its cultural heritage.

4.4.4. Feasibility for Green Economy Integration

The tourism and hospitality sector in East Jerusalem, with its rich cultural and historical significance, offers a prime setting for the integration of green economy initiatives. Assessing the feasibility of such integration requires a comprehensive understanding of the sector's current landscape, potential areas for sustainable interventions, and the challenges that may arise during this transition.

Key potential areas as well as challenges arise for this sector, firstly as the global pattern is shifting towards environmental conciseness as seen for instance on platforms such as Booking.com that provides sustainability ratings of accommodations, this presents opportunities for East Jerusalem's hospitality sector to enhance their exposure through adopting green and circular economy projects that attract a substantial market segment of eco-conscious tourists. On the other hand, the limitations



on interventions possible due to the nature of the activities within the sector, and various socio-political obstacles present challenges that need to be accounted for.

4.4.4.1. Opportunities

- **Energy-Efficient Accommodations:** Hotels and lodges can retrofit their buildings with energy-efficient lighting, heating, and cooling systems. This not only reduces energy consumption but also offers a unique selling proposition to environmentally-conscious travelers.
- **Solar-Powered Facilities:** Given the region's sunny climate, there's potential for hotels, restaurants, and other tourism establishments to harness solar energy. Installing solar panels can significantly reduce electricity costs and dependence on the grid.
- **Water Conservation:** With water being a precious resource, hotels can implement water-saving fixtures, rainwater harvesting, and greywater recycling systems. Such measures can significantly reduce water bills and ensure a sustainable supply.
- **Eco-Tourism Packages:** East Jerusalem's rich history and cultural heritage offer a unique opportunity to develop eco-tourism packages. These can include guided tours of historical sites, nature walks, and cultural immersion experiences, all emphasizing sustainability.
- **Waste Management:** Establishing effective waste management and recycling practices can reduce the environmental impact of tourism activities. This includes composting organic waste, recycling plastics, and minimizing single-use items.
- **Local and Organic Produce:** Restaurants and eateries can prioritize sourcing local and organic produce, reducing the carbon footprint associated with transporting goods and supporting local farmers and producers.
- **Sustainable Buildings:** Utilize locally sourced, natural materials like stone, wood, and bamboo, blending the cabins seamlessly with the surrounding environment.
- **Energy-Efficient Appliances:** Use energy-efficient LED lighting and appliances to minimize electricity consumption.
- **Capacity Building and Knowledge transfer:** Through conducting water and electricity audits, the hotels and enterprises can identify the most optimal and feasible solutions to reduce their footprint.

4.4.4.2. Challenges

- **Israeli Permits and legal impediments:** the licensing and approvals for the installation of solar energy rooftop systems is a long process that is hindered by the Jerusalem municipality as well as the JEDCO electricity company. The complex political situation in East Jerusalem might result in regulatory challenges or bureaucratic red tape when trying to implement green initiatives.

- Initial Investment Costs: Retrofitting existing infrastructure with green technologies, such as solar panels or energy-efficient systems, requires significant upfront investment, which might be burdensome for many local businesses.
- Lack of Awareness: There might be a general lack of awareness or understanding among stakeholders about the benefits of sustainable practices, leading to resistance or hesitation in adopting them.
- Perceived Return on Investment: Some businesses might perceive the return on investment (ROI) for green initiatives as long-term and uncertain, especially if they are unfamiliar with the potential cost savings and benefits.
- Cultural Barriers: Traditional practices and cultural norms might sometimes conflict with sustainable practices, requiring sensitive and informed approaches to change management.
- Competing Priorities: Given the myriad challenges faced by businesses in East Jerusalem, from political to economic, environmental sustainability might sometimes be viewed as a lower priority.
- Lack of Training and Expertise: There might be a shortage of local experts or training programs focused on sustainable tourism practices, hindering the sector's ability to adopt these practices effectively.
- Infrastructure Limitations: The existing infrastructure, whether it's waste management systems, transportation, or energy grids, might not be conducive to or supportive of green initiatives.
- Market Demand: While there's a growing global trend towards sustainable tourism, it's crucial to ensure that there's sufficient market demand locally and internationally for green tourism offerings in East Jerusalem.

4.5. CONSTRUCTION AND HOUSING SECTOR

4.5.1. Background

Right after its occupation on 5 June, 1967, Israel expanded the area of East Jerusalem by over 10 times from 6,500 to 71,000 dunums that it illegally annexed it and placed under the control of the Municipality of West Jerusalem. Israeli government further confiscated 23,378 dunums (or 32.7%) of the total area of Jerusalem for building colonies, zoned 18,000 dunums (25.2%) as green areas and for the construction of roads, banned construction in an additional 21,795 dunums (or 30.5%) as a preserved area, and allotted some 9,000 dunums (12.6%) as building area for all the Palestinian inhabitants of EJ and its 28 satellite villages (MAS, 2019).

Palestinians in East Jerusalem face restrictive zoning policies, limiting their construction options to existing structures or rooftops. Israel's stringent building permit regulations make it challenging for Palestinians to build or expand legally. As a result, overcrowding is prevalent, and many

Palestinians resort to unpermitted construction, leading to frequent home demolitions by Israeli authorities under the guise of unauthorized building.

One of the major obstacles Palestinians face is land registration, which is a prerequisite for applying for a building permit. Around 85% of the land in EJ and the neighboring towns and villages is not registered in the Land Registry Department. The Israeli authorities do not recognize property rights unless the applicant has title to the land. It rejects permit applications unless the registration process is completed. It further declines applications in residential- zoned areas in EJ, where no construction can actually take place prior to the completion of a process of re-division (new unification and division) which requires the approval and physical presence of all owners. Those applying for building permits have to pay permit fees, development fees, betterment levies and others. The calculation is made on the basis of the area of the entire parcel, and not just the area of the building. For example, the permitting cost for the construction of a small house of 100 square meters on a plot of land with an area of 500 square meters is about USD 22 thousand (MAS, 2019).

4.5.2. Overview

While the average number of rooms in housing units in Palestine for 2021 was 3.6 across the OPT, East Jerusalem had 3.1 on average in 2021. Moreover, building permits are issued for residential and non-residential projects in Jerusalem. According to available data, in 2022, 153 building permits were issued in the Jerusalem district (J2), covering a total area of 164.6 thousand square meters. This includes 144 permits for residential buildings covering 145.0 thousand square meters and 9 permits for non-residential buildings covering a total area of 19.6 thousand square meters (PCBS, 2023a). Additionally, the volume of production achieved from construction activity amounted to approximately 8.0 million US dollars, and the added value achieved by this amounted to Activity for the same year is 6.3 million US dollars during the year 2021.

Scarcity of housing is a chronic problem in East Jerusalem. Palestinian communities in East Jerusalem find it difficult to obtain construction permits from the IJM to build residential and/or trade establishments. In 2015, there was a need for over 10,000 housing units, where this number in 2022 is estimated to have at least magnified by another 50%. As a result, East Jerusalemites are living today in small and overcrowded urban areas. Despite the relatively high gross urban density for Palestinian communities in East Jerusalem, adequate infrastructure and social services are sorely lacking. The same is not true for Israeli settlements in East Jerusalem, or for Israeli communities located in West Jerusalem (UNHABITAT, 2015).

While statistics and data lack for this sector, the PCBS yearbook as well as the analysis of the current socio-political situation provide clarity regarding the situation. As there is a high need in the housing market for construction projects, and as demand should in theory create supply, the restrictions faced in East Jerusalem portray the contrary, with the significant challenged impeding the development of this vital sector, its contribution to the Palestinian economy has been limited due to Israeli restrictions.

A noteworthy plan of the Israeli Jerusalem municipality that confirms the above is the Jerusalem 2000 outline plan. This Plan, encompassing both West and East Jerusalem, addresses various urban development aspects, from housing to transportation. Approved by planning committees in 2009, it never underwent public review or validation. However, planning authorities treat it as an official plan. For residential construction, the plan suggests adding housing units in Palestinian neighborhoods through densification within existing borders and expanding into new areas. The plan favors densification, pushing for a transition from rural-style to dense urban neighborhoods without ensuring infrastructure improvements. Most of the proposed housing additions remain theoretical rather than actionable.

As such, even prospects of reviving this sector within East Jerusalem come at the expense of sound planning, adding more obstacle to this sector's development.

4.5.3. Challenges Facing the Construction and Housing Sector

In relation to what was aforementioned, the struggles and challenges faced by this sector are multifaceted. And they are interlinked between a diverse set of impediments, that most notably include;

- Zoning Restrictions: In addition to restrictions on building permits, Palestinian communities in East Jerusalem also face the challenge of restrictive zoning and building regulations imposed by the Israeli Jerusalem Municipality. In East Jerusalem, the net (building) density (or plot ratio) allowed within Palestinian communities is less than half the ratio allowed for in Israeli settlements.
- Building Permits and Risks of Demolition: The scarcity of building permits and the threat of home demolitions continues to undermine the viability of Palestinian life in East Jerusalem. Statistics show that between 1967 and 1995, more than 88 percent of housing construction in East Jerusalem has taken place in Israeli settlements supported by governmental subsidies.
- Fragmentation of Urban Fabric: The urban fabric of East Jerusalem is fragmented, and it appears spatially as a composition of different communities that lack an appropriate urban connection. This is due to a number of factors, one of the most important being the Israeli policy of 'green control', or alternatively 'political green", which gives "Green Area" designation for areas that will be eventually used to expand or build new Israeli settlements like the case of Harhoma settlement or to restrict the expansion of the Palestinian neighborhoods like the case of National Park and the Isawiyah neighborhood.
- Financial Constraints: The high costs associated with obtaining building permits, coupled with the potential fines and costs of demolition for unpermitted structures, can be prohibitive for many Palestinians. Additionally, limited access to financing or loans can hinder construction projects.

- Unstable Investment Environment: while there have been efforts by the Private firms to revitalize this vital sector, for instance “Lana” project led by Massar Group to be based in Beit Hanina, previous projects have been absent for a few years since the latest interventions by PADICO group and others for instance. The investment environment has been hostile towards the private sector and investors and the absence of governmental support and initiatives has discouraged the private sector for contributing to this sector.

4.5.4. Feasibility for Green Economy Integration

The construction sector accounted for 5% of 2020 CO₂ eq. levels globally, with 10 gigatons of Co₂ equivalent. McKinsey & Company define 10 priority sector in green economy, at the top of the list is the construction sector. However, investment in green economy under the construction sector face various bottlenecks, and when examining East Jerusalem, the current context adds further challan ages to such initiatives.

4.5.4.1. Opportunities

- Recycling Construction Materials: Implementing recycling Initiatives including recycling construction waste, reusing materials like concrete and steel. This reduces the demand for raw resources and minimizes environmental impact. This can also present opportunities to encourage the use of reclaimed materials in construction projects. By repurposing existing resources, new materials' demand decreases, contributing to sustainable construction practices.
- Sustainable Building Practices: This can present significant multi-sectoral development such as the integration of sustainable building practices within the tourism sector. Where the integration of green technologies such as green roofs, solar panels, and rainwater harvesting systems. These practices enhance energy efficiency and promote environmental sustainability. Additionally, this includes designing energy-efficient structures. Incorporating energy-saving features minimizes the long-term environmental footprint, aligning with sustainable construction goals.
- Green Certifications: Encouraging buildings to achieve green certifications can raise the profile of East Jerusalem as a sustainable construction hub and attract eco-conscious investors such as LEED certificates.

4.5.4.2. Challenges

- Initial Costs and Existing High Prices: While green building practices can lead to long-term savings, they often require a higher initial investment, which might be a deterrent given the financial constraints in the region. Additionally, the land and property prices are already high due to the fees, construction costs, and the scarcity resulting in high demand.

- **Perception:** Given the existing situation, investors, developers, and residents alike have their focus on achieving adequate housing and meeting the demand, where such interventions are perceived as “luxuries”.
- **Regulatory Hurdles:** The existing regulatory framework might not be conducive to green building practices, requiring advocacy and potential policy changes.
- **Land Use Restrictions:** Given the stringent land use and building regulations in East Jerusalem, integrating green spaces or implementing certain sustainable architectural designs might be challenging.
- **Economic Viability:** With the economic challenges faced by East Jerusalem, there might be a focus on short-term gains rather than long-term sustainability. Convincing stakeholders of the long-term economic benefits of green construction might be challenging.
- **Infrastructure Limitations:** The existing infrastructure might not support certain green building practices, such as rainwater harvesting or wastewater recycling. Upgrading or modifying this infrastructure can be costly and complex.
- **Political Instability:** The ongoing political tensions and uncertainties can impact the willingness of investors to fund sustainable projects, fearing potential disruptions or losses.

4.6. THE INDUSTRIAL SECTOR

4.6.1. Background

Due to the increasing restrictions on industrial permits and zoning within Palestinian areas of J1, most of the Governorate’s industrial enterprises are located in J2. The latest PCBS data indicate that there were 951 industrial enterprises in the Jerusalem Governorate in 2009, only 16.5 per cent of which were located inside J1 (PCBS, 1999–2011).. The sector ranks fourth when it comes to contribution to employment in the Jerusalem Governorate, trailing behind services, “commerce, hotels and hospitality” and the construction sectors.

As of 2013, less than 10% of establishments were still operating inside the Wall. However, establishments that moved outside the Wall maintained their permits to operate inside, so they can sell a portion of their products in East Jerusalem. The most notable of such products are leather, textiles, building materials, artificial limbs, and artisanal handicraft and traditional industries, which in particular, are essential in the Old City of Jerusalem because of their connection to tourism. One third of East Jerusalem manufacturers work in the food industries. However, due to Israeli restrictions on food products coming into Jerusalem from outside the Wall, as well as the strict Israeli standards (which disapprove many of the products under the pretext of low quality) have enabled the major Israeli food industries to dominate the market in the city. Today, around 20% of businesses work in the leather, bags and footwear industries, 18% in furniture, and the rest in other activities such as textile, printing and publishing.

The market in the Old City of Jerusalem is home to micro and small, family run workshops, producing artisanal handicraft and traditional industries such as furniture, brass, embroidery and ceramics. High wages in East Jerusalem due to the Israeli minimum wage policy, extremely high rent, high taxes, heavy handed municipal restrictions on building permits, and high cost of building permits and construction pushed most East Jerusalem manufacturing workshops to close down and move to cheaper neighborhoods and towns outside the Wall, or to other West Bank cities, mainly to Hebron and Bethlehem. The traditional workshops are also subject to frequent inspections by municipal and fiscal authorities. Oftentimes, tax authorities confiscate production equipment to force workshops to pay the municipal tax (Arnona). Working under such unfavorable conditions most of those industries have not yet begun to utilize modern technology or high-tech design systems in production.

4.6.2. Overview

In terms of employment, the sector employs 11.4% of the workforce in mining, quarrying, and manufacturing, which are collectively here addressed as the industrial sector. In 2019, the value added for this sector to East Jerusalem's economy amounted to 17.4%. Additionally, production volume of industrial activities in the Jerusalem Governorate amounted to approximately \$590.8 million, and the added value achieved by these activities for the same year amounted to \$369.3 million during the year 2021 (PCBS, 2023a). In 2017, out of 10,227 establishments operating in Jerusalem Governorate, 1239 worked in manufacturing (PCBS, 2021). However, the economic contribution of the industrial sector to the Palestinian GDP has dropped from 30% to 20% between 1994 and 2016¹².

Additionally, the establishment of heavy manufacturing industries has not been encouraged in East Jerusalem, in the interest of preserving the traditional character of the city. Combined with transport and marketing difficulties, this has limited the city to a number of small industries. While science-based industries have developed since the 1980s, the percentage of the workforce engaged in the manufacturing industry remains quite small. Notably, East Jerusalem has still artificial limbs manufacturing resilient in the city. In the late 1990s the most important enterprises were chemicals, food, and printing. There are still small workshops producing giftware, religious articles, and printed fabrics, although the manufacture of such items is increasingly outsourced abroad, and locally manufactured ones have moved their premises to outside the wall, where it is estimated that less than 20% of establishments are located in J1.

The manufacturing sector comprises of a significant portion of handcrafted and traditional manufacturing, of these there are embroidery, leather industries, copper industries, brooms and brushes, bamboo, and porcelain and ceramic. Where some are operated by NGOs and some by

¹² ESCWA:

https://www.unescwa.org/sites/default/files/event/materials/excom5_ecri_palestine_industrial_sector.pdf

family businesses. However, it is worth noting that their number is hard to determine given that some are registered in Palestine only, some in Israel only, and some in both. Nevertheless, according to a survey conducted by MAS, embroidery employed the largest number of workers, around 60% of the traditional crafts sector. Where however most of these crafts rely on direct sale to costumers and do not receive support in commercializing their activities beyond that traditional scope, except for brooms and brushes, which are manufactured for the local Palestinian market (MAS, 2012).

4.6.3. Challenges facing the Industrial Sector

As part of the overall trend of the Palestinian economy in the past 20 years, the sustained decrease in the share of agriculture and manufacturing in GDP has been mirrored by an increase in the share of the services and wholesale and retail trade sectors, where both of the later accounted for over 80% of the economic activities in 2021 for J1 (PCBS, 2023a), with the manufacturing sector (mining, water and electricity included) accounted for 17.6% for the same year. The drop in this sector's contribution to the Jerusalemite economy can be attributed to various challenges, including;

- Israeli Restrictions: restriction regarding high taxes, lack of institutional support, and the establishment of the wall has raised the production costs and sent many companies out of business, and have reallocated another segment to outside the wall or to other cities in the West Bank.
- Tourism Impact: Especially for traditional crafts, the influence of tour guides and the tourism sector affects them significantly as some have partnerships with Israeli shops and hence direct tourists to those shops rather than traditional Palestinian shops.
- Competition from Israeli manufacturers: Especially In terms of traditional industries that are supportive to other sectors, mainly tourism, the high and unfair competition as well as the import of cheap and low-quality products have added to the pressure the industrial sector in East Jerusalem faces.
- High Labor Costs: Many Jerusalemite manufacturing establishments report increasing wages due to the high competition in wages offered by Israeli establishments.
- Lack of Strength of Supporting Institutions and Absence of the Role of the PNA: the absence of the role for institutions such as the Jerusalem Chamber of commerce, industry and agriculture weakens the integration of development activities within this sector. The closure of this institution by Israel has weakened these three sectors, manufacturing included.
- Lack of Financing: East Jerusalem manufacturers lack the access to tailored financing schemes and face difficulties in obtaining financing from Palestinian banks.
- Access Restrictions: Limited mobility and complicated permit processes restrict the movement of both raw materials and finished goods, affecting industrial operations. Such roles could assist in creating partnerships between different producers in the West Bank and East Jerusalem.



- **Economic Disparities:** Unequal economic development results in varying qualities of industrial infrastructure, hampering efforts to provide consistent and high-quality products.
- **Infrastructure Challenges:** Limited investment in infrastructure affects logistics and distribution networks, hindering the sector's potential growth.

4.6.4. Feasibility for Green Economy Integration

In the context of East Jerusalem's industrial sector, the feasibility of integrating green economy principles hinges on overcoming existing challenges while capitalizing on the sector's inherent strengths. The shift towards a green economy could potentially revitalize the industrial base, reduce environmental impact, and create sustainable economic growth. However, this transition requires strategic planning to navigate the complex socio-political landscape, leverage local expertise in traditional industries, and harness technological advancements that align with green principles. The focus must be on practical measures that can be implemented within the current constraints, aiming to foster resilience and sustainability in the industrial activities of the region.

Such opportunities rely on exploiting the existing situation and strengthening the role of remaining industrial institutions, particularly in terms of resilience of J1 establishments, and supporting J2 manufacturers.

4.6.4.1. Opportunities

- **Traditional Industries and Artisanal Craftsmanship:** The rich heritage of artisanal craftsmanship in East Jerusalem offers a unique opportunity to integrate green economy principles. These industries can adopt sustainable practices, such as using eco-friendly materials and reducing waste, which can appeal to environmentally conscious consumers and tourists.
- **Energy Efficiency:** Small-scale industrial enterprises can implement energy-efficient technologies and practices. This could include the use of solar panels, energy-efficient lighting, and machinery, which would reduce operational costs and carbon footprints.
- **Waste Management and Recycling:** There is potential for developing recycling facilities that can handle industrial waste, particularly from the food, leather, and textile industries. This would not only mitigate environmental harm but also create secondary markets for recycled materials.
- **Local Sourcing and Supply Chains:** Encouraging the use of locally-sourced materials can reduce transportation emissions and support the local economy. This also includes strengthening the local supply chains to reduce dependencies on external markets. Where it has been reported by traditional sectors that they import around 18% of raw material from China, 12% India, and 17% from Jerusalem and the West Bank, followed by Israel by 7%.



- Capacity Building and Training: Investing in training programs for local entrepreneurs and workers in the industrial sector to build capacity in green practices and technologies can help transition the sector towards more sustainable operations.
- Collaboration with International Partners: Establishing partnerships with international organizations and NGOs that specialize in green technologies can provide access to expertise, funding, and markets.
- Green Certification Programs: Implementing certification programs for green industrial products can open up new markets and increase the competitiveness of East Jerusalem's industrial goods.

4.6.4.2. Challenges

- Political and Administrative Barriers: The political situation in East Jerusalem creates significant administrative hurdles for Palestinian businesses, including restrictions on movement and access, which can impede the implementation of green initiatives.
- Limited Access to Capital: Palestinian enterprises often face difficulties in securing financing, which is crucial for investing in green technologies and infrastructure.
- Infrastructure Deficiencies: The lack of modern infrastructure can hinder the adoption of green technologies. Upgrading existing facilities or building new ones with green standards requires substantial investment.
- Regulatory Constraints: The current regulatory environment may not support or incentivize green practices, necessitating advocacy for policy changes to facilitate green economy integration.
- Market Dynamics: The dominance of Israeli products in the market and the competition from imported goods can put local industries at a disadvantage, particularly when trying to invest in more costly green technologies.
- Technical Expertise: There is a shortage of local expertise in green technologies, which can be a barrier to their adoption. Training and education programs are needed to build this capacity.
- Economic Viability: The additional costs associated with green practices may not be immediately offset by profits, especially in a market where consumers may be sensitive to price increases.
- Cultural and Social Acceptance: There may be resistance to change within the industry, with a preference for traditional methods over new, green practices.
- Environmental Awareness: There is a need to raise awareness among industry stakeholders and the wider community about the benefits of green practices to ensure buy-in and support.

- **Fragmented Industrial Base:** The small and dispersed nature of industrial enterprises in East Jerusalem can make it challenging to implement large-scale green initiatives.

4.7. WHOLE SALE AND TRADE SECTOR

4.7.1. Background

Jerusalem, a city steeped in history and culture, possesses a vibrant internal trade sector that has long been a cornerstone of its economic identity. Despite its historical significance, the sector faces numerous challenges that hinder its growth and sustainability.

According to PCBS, internal trade comprises wholesale, retail, vehicle and repair and fuel trade. The challenges and the deterioration in the trade sector in East Jerusalem is associated with the Israeli isolation of the city from its shoppers/visitors coming from different Palestinian cities and villages in the remainder of the West Bank and occupied territories, who used to shop, work, and pray in the city. In addition, the eruption of clashes triggered by settlers' provocative assaults in the Al Aqsa Mosque courtyard and in the Old City, escalate tension and lead to a slowdown in tourism activities. The spread out of Israeli policemen and border policemen and the increasing tax campaigns launched by tax authorities and the municipality, especially the Arnona tax, and other municipal taxes and arbitrary fines, drive dozens of the city's tradesmen out of business. Some of the city's shops were closed by a court order, for not paying the accumulating tax and fine debits (MAS, 2019).

Being an ancient city filled with ancient gates and narrow alleys, the Old City's roads are made for pedestrian use that is not suitable for commuting with today's transportation mediums. This affects the types of goods and services vendible in its shops. The long- distance shoppers have to walk carrying their shopping bags, makes shoppers prefer buying their daily needs from stores outside the Old City. This problem necessitates helping shop owners to cope with the changing preferences of the Old City's visitors. Shutting down hundreds of shops in EJ, particularly in the Old City, and closing shops in early evening hours debilitated the city's markets and lessened its attractiveness to all types of visitors.

Additionally, the consumer base has shrunk significantly as Palestinians from the West Bank are denied access to East Jerusalem. Israeli restrictions on movement and the requirements for obtaining trade permits have weakened Jerusalemites' ability to obtain relatively cheap goods from the West Bank. Many businesspeople from Jerusalem today invest in the Ramallah market for different reasons, including: relatively low labor wages in the West Bank compared to Jerusalem; cheaper land prices in the West Bank; and higher distribution costs in Jerusalem due to Israeli restrictions on the movement of goods. In the last few years, Jerusalem's trade relations with Palestinians from Israel have seen some improvement as each Arab town or region in Israel has allocated specific days to go to Jerusalem for worshipping and shopping. Buses carried visitors for minimal prices, resulting in accelerated business activity in the city (UNDP, MAS, 2017).



4.7.2. Overview

In 2017, the number of commercial enterprises working in EJ was 5,326, about 52% of the total number of enterprises in the governorate (J1 and J2). The number of workers was 11,318. Total output reached USD 569.7 million in 2016. However, the sector's indicators in Area J1 (the area inside the Wall) exhibit a downward trend; wholesale and retail trade's contribution to GDP declined from USD 414.3 million in 2012 to USD 347.8 million in 2016; the sector's contribution to GDP declined drastically from 41.7% to 26.8% during the same period (MAS, 2018b).

In 2019, the number of commercial establishments dropped from the above figures to 5,127 establishments. However, the number of employed persons by trade sector increased to 12,597. Where the value added by the internal trade activities increased to 380.6 USD million in 2019 (PCBS, 2023a). Where wholesale and retail trade has had a contribution of 28.2% to East Jerusalem's economy by 2019. Nevertheless, in 2021, the share of the whole sale and retail trade sector dropped to 25.6% with a total value added of 333.9 USD million.

4.7.3. Challenges Facing the Whole Sale and Trade Sector

The wholesale and trade sector in East Jerusalem is confronted with a myriad of challenges that impact its performance and potential for growth. These challenges include:

- Access and Movement Restrictions: Israeli policies that limit the movement of Palestinians from the West Bank into East Jerusalem reduce the customer base for businesses, as these individuals historically constituted a significant portion of the shoppers and visitors.
- Taxation and Fines: High levels of taxation, particularly the Arnona tax, and the imposition of arbitrary fines by Israeli authorities place a heavy financial burden on traders, leading to the closure of businesses and a reduction in market vibrancy.
- Transportation and Infrastructure: The ancient design of the Old City, with its narrow alleys and pedestrian roads, is not conducive to modern transportation, affecting the delivery and distribution of goods and discouraging shoppers who prefer more accessible shopping locations.
- Promotional Deficit: The absence of effective public institutions dedicated to tourism promotion in the city results in missed opportunities to draw tourists and shoppers.
- Regulatory Oversight: There is a void in regulatory oversight for managing the operational hours of the trade sector, safeguarding the interests of merchants, and fostering synergies with the tourism industry.
- Market Decline: The Old City's markets, once a bustling hub for local Jerusalemites and visitors from neighboring areas, are experiencing a decline in their competitive edge.
- Funding and Financing and Technical Support: Lack of an authority/body, adequate funding sources, and technical and professional support to maintain the resilience of tradesmen and

shops, especially those that have been closed because of losing their customers and means of sustainability.

- Competition from Other Centers: Many Jerusalem businesspeople are investing in markets outside of East Jerusalem, like Ramallah, due to lower costs and fewer restrictions, which diverts economic activity away from the city.
- Economic Isolation: The isolation of East Jerusalem from its economic hinterland due to Israeli policies has weakened the traditional trade ties and reduced the flow of goods and services.
- Regulatory Hurdles: The difficulty in obtaining trade permits and the stringent regulatory environment make it challenging for new and existing businesses to operate and expand.

4.7.4. Feasibility for Green Economy integration

The wholesale and trade sector in East Jerusalem, while historically robust, now confronts a landscape altered by political dynamics and infrastructural challenges. The feasibility of integrating green economy principles into this sector hinges on leveraging its unique position as a nexus for cultural and economic exchange. Nevertheless, given the nature of this sector, its operational dynamics present a limited potential on the integration of green economy initiatives, where these interventions are confined in nature due to the scope of the sector's operations; relying on shops and traditional trade.

4.7.4.1. Opportunities

- Energy Efficiency: Small shops can adopt energy-efficient lighting and appliances to reduce electricity consumption. This can be facilitated through government incentives or partnerships with energy service companies that provide cost-effective retrofitting services.
- Sustainable Packaging: Transitioning to biodegradable or reusable packaging can reduce plastic waste. This could be particularly impactful in the Old City, where the aesthetic and environmental benefits could enhance the shopping experience.
- Sustainable Sourcing: Shops, especially those selling artisanal and local products, can prioritize sourcing from local producers who follow sustainable practices, thus supporting the local economy and reducing transportation-related emissions.
- Green Certification and Branding: Shops that adopt green practices can be encouraged to obtain green certifications, which can be used as a marketing tool to attract environmentally conscious consumers and tourists.
- Renewable Energy: Although the initial investment may be higher, the long-term benefits of installing small-scale renewable energy solutions, like solar panels, can be significant for shop owners in terms of energy savings and independence.



4.7.4.2. Challenges

- **Limited Space:** The historic and densely populated nature of East Jerusalem, especially the Old City, offers limited space for implementing large-scale green initiatives.
- **Financial Constraints:** Shop owners often operate with tight margins and may find it difficult to invest in green technologies or infrastructure without financial incentives or support.
- **Regulatory Barriers:** The current regulatory environment may not support or incentivize the adoption of green practices, such as the hurdles faced for solar panels approvals and installation.
- **Supply Chain Limitations:** The reliance on external suppliers, who may not follow sustainable practices, can limit the ability of shops to fully integrate green principles.
- **Economic Instability:** Political tensions and economic uncertainty can make long-term investments in green initiatives a lower priority for business owners.
- **Infrastructure Deficiencies:** Inadequate waste management and recycling infrastructure can hinder the implementation of sustainable waste practices.
- **Renewable Energy Difficulties:** Unreliable energy supply may discourage investments in energy-efficient solutions or renewable energy systems.
- **Import Restrictions:** Restrictions on imports can limit the availability of green technologies and materials, making it difficult for businesses to source sustainable options.

5. Conclusions and Recommendations

The economy of East Jerusalem, and the broader Palestinian economy, have been systematically and deliberately marginalized through policies that follow two primary approaches: Firstly, the Palestinian population has been deprived of a significant portion of their natural and economic resources. Secondly, their capacity to utilize the remaining resources has been severely constrained. The consequences of these policies have led to several adverse outcomes, including sluggish economic growth, a high level of dependence on the Israeli economy, and an economy that is vulnerable, disjointed, and distorted. These restrictive conditions have also impeded the integration of green and circular economy practices, which are essential for sustainable development. The limited access to resources and stringent controls have made it challenging to adopt environmentally sustainable and resource-efficient processes that are central to green and circular economic models.

In the intricate economic tapestry of East Jerusalem, the integration of green and circular economy principles stands as a beacon of sustainable development and resilience. The comprehensive analysis of the seven pivotal sectors reveals opportunities and a prioritization potential for the integration of green economy initiatives in several sectors that have been revealed to be most

feasible and adaptable for sustainable development. The following presents the conclusions drawn and recommendations based on the sectoral analysis conducted;

1. The agriculture sector, while historically marginalized and contributing modestly to the overall economic profile, harbors significant potential for the adoption of green and circular economy practices. The feasibility of such integration lies in the sector's inherent connection to natural resources and the potential for implementing sustainable and regenerative agricultural practices.
2. Within the services sector, education and healthcare emerge as the most viable sub-sectors for green economy integration. However, these services are predominantly managed and provided by the NGO sector, necessitating that interventions are tailored to support and enhance the capacities of these organizations. NGOs can lead by example in the services sector, showcasing the practicality of green initiatives in education and healthcare infrastructures.
3. In addition to their contribution to the services sector, the civil society sector (i.e., CSOs and NGOs), with its extensive involvement across various economic domains, plays a pivotal role in community development, capacity building, and the facilitation of cross-sectoral and multidisciplinary collaborations. Strengthening this sector's capabilities and resources is essential to catalyze the widespread adoption of green economy principles, thereby fostering a more cohesive and integrated approach to sustainable development.
4. Tourism stands as a cornerstone of East Jerusalem's economy, with its rich historical and cultural heritage drawing visitors from around the globe. The integration of green economy principles within this sector is not only imperative for preserving the city's unique character but also for ensuring the sustainability of its tourism industry. Initiatives that promote eco-friendly tourism, conservation of historical sites, and community-based tourism can significantly contribute to the sector's sustainable growth.
5. The construction sector, pivotal for infrastructural development, requires substantial and strategic investments to fully embrace green economy principles. It faces numerous challenges, including regulatory impediments and the need for significant capital. However, the potential for incorporating sustainable building practices and materials presents an opportunity for transformative change, aligning the sector with broader environmental objectives.
6. The industrial sector, often marginalized in discussions of economic development, holds untapped potential for the integration of circular and green economy practices. By reimagining production processes, waste management, and resource utilization, the sector can reinvent itself, contributing to economic diversification and environmental sustainability.
7. Lastly, the trade sector, characterized by its operational limitations, presents a more limited potential for green interventions. The focus here should be on optimizing supply chains, reducing waste, and promoting sustainable consumption patterns. While the scope for

intervention may be narrower and primarily focus on facility and premises enhancement in terms of water, waste, packaging, and energy efficiency.

The following table depicts the research outcomes in terms of each sector's potential for green economy integration in terms of limited support under initiatives such as the Green Energy and Sustainability Granting Facility, noting that interventions are achievable and recommended under each sector, yet this prioritization is given under the scope of the programme and in relation to the special context of East Jerusalem.

Sector	Sector General Potential for Green Economy Integration	Impact of MSME level interventions	Severity of Associated Risks at Sectoral Level
Agriculture	High	High	Low
services	High	High	Moderate
Civil Society	High	High	Moderate
Tourism	High	moderate	moderate
Construction and Housing	High	Low	high
Industry	High	High	moderate
Wholesale and Trade	Low	moderate	low

Figure 8: Sector Prioritization of East Jerusalem's Economy in Terms of Green Economy Integration



Bibliography

- Salem, W. (2012). *Civil Society in Palestine: Approaches, Historical Context and the Role of the NGOs*.
- Nuseibeh, R. A. (2013). *Educational Exclusion under an Ethnocratic State: The Case of East Jerusalem*. Durham: Durham University,.
- Kerzhner, T. (2022). *Formalization of East Jerusalem public transport: Mobility, politics and planning*. Elsevier.
- Shlomo, O. (2016). *Sub-formality in the formalization of public transport in East Jerusalem*.
- Zamleh. (2018). *Israel's Control of the Palestinian ICT Infrastructure and Its Impact on Digital Rights*.
- MAS. (2013). *Structure of the Palestinian Services Sector and Its Economic Impact* .
- PCBS. (2022). *Press Report Preliminary Estimates of Quarterly National Accounts (Fourth Quarter 2021)* . Ramallah: PCBS.
- Isaac, J. (2000). *Impacts of Water and Export Market Restrictions on Palestinian Agriculture*.
- ARIJ. (2014). *Locality Profiles and Needs Assessment for Jerusalem Governorate*. Bethlehem.
- MAS. (2013). *Structure of the Palestinian Services Sector and Its Economic Impact*.
- MAS. (2012). *Traiditional Crafts in Jerusalem: Context and Protection Methods*. Jerusalem: MAS.
- UNDP, MAS. (2017). *Local Economic Development (LED) for the State of Palestine: Economic Mapping of East Jerusalem*.
- Zamleh. (2021). *The Palestinian Public's Perception of Palestinian CSOs*. www.zamleh.org
- Asmar, K. (2020). *The impact of the Israeli Separation Wall on Palestinian livelihoods in the West Bank*.
- BIMKOM. (2013). *Survey of Palestinian Neighborhoods in East Jerusalem planning problems and opportunities*.
- Costantini, G., Khaled, J. A., Fedaa, A., & Hussein, A. (2011). *Mapping Study of Civil Society Organisations in the occupied Palestinian territory Final Report*. <http://ec.europa.eu/europeaid/where/neighbourhood/country->
- Dagostino, M. (2021). *The implementation of circular economy in an NGO business model: 2hands Organization's case study*.
- Imam, A., & Hamdan, M. (2021). *Study of East Jerusalem Healthcare Sector*. www.ucs-pal.org

- IPCC & FES. (2020). *TOURISM IN EAST JERUSALEM: Indicators and Implications for Spatial Planning*.
- MAS. (2017). *تشخيص الموارد الاقتصادية المحلية للقدس الشرقية*.
- MAS. (2018a). *PALESTINIAN INNOVATION SYSTEM AND DIGITAL ECONOMY: Challenges and Opportunities*.
- MAS. (2018b). *Short and Medium Term Sectoral Development Agenda for East Jerusalem (SMSDA) 2019-2023*.
- MAS. (2019). *East Jerusalem's Economic Cluster Report*.
- PCBS. (2021). *Jerusalem Statistical Yearbook 2021*.
- PCBS. (2022). *فلسطين دولة فلسطيني للإحصاء ي المركز الجهاز ي السنوي الإحصائي القدس كتاب 2022 ان حزير / يونيو ،*
<http://www.pcbs.gov.ps.2022>
- PCBS. (2023a). *Jerusalem Statistical Yearbook*. <http://www.pcbs.gov.ps>
- PCBS. (2023b). *كتاب القدس الاحصائي السنوي ٢٠٢٣*. <http://www.pcbs.gov.ps>
- UNCTAD. (2013). *The Palestinian economy in East Jerusalem: Enduring annexation, isolation and disintegration*.
- UNDP. (2017). *TOURISM IN PALESTINE RESILIENCE SERIES*. www.developmentmonitor.ps
- UNHABITAT. (2015). *Planning Palestinian Communities in East Jerusalem*.
- World Bank Group. (2000). *Working Together: The World Bank's Partnership with Civil Society FILE COPY*. www.worldbank.org/ngos