



An-Najah National University
Faculty of Graduate Studies

**ASSESSING CITY RESILIENCE USING CITY
RESILIENCE PROFILING TOOL
CASE STUDY: NABLUS CITY**

By
Laila Bilal Ibrahim Abu Baker

Supervisor
Prof. Jalal Al-Dabbeek

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Laila Bilal Ibrahim Abu Baker

This thesis was Defended Successfully on 16/02/2025 and approved by

Prof. Jalal Al-Dabbeek
Supervisor


Signature

Dr. Salem Thawaba
External Examiner


Signature

Dr. Ali Abdelhamid
Internal Examiner


Signature

Dedication

To my unwavering support system, Amro, whose love, patience, and encouragement have been my constant source of strength throughout this journey.

To my beautiful Zeina and Saif, whose joy, laughter, and warmth have brought balance to my life.

To my three angels, who will forever be in my heart.

To all of you, I dedicate this work. May it serve as a reflection of the strength, love, and support you have given me.

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Thank you all for being an integral part of my journey.

Declaration

I I, the undersigned, declare that I submitted the thesis entitled:

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I declare that the work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's Name: **Laila Bilal Ibrahim Abu Baker**

Signature: *Laila Abu Baker*

Date: 16/02/2025

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Abstract

This study evaluates the resilience of Nablus City by assessing the implementation of its Sustainable Development Investment Plan (SDIP). Using the UN-Habitat “City Resilience Profiling Tool” as a foundation, the research develops a comprehensive framework that integrates Disaster Risk Reduction (DRR) with sustainable development principles, tailored to both global standards and local needs. Central to the evaluation is a comparative review of the two SDIP cycles: 2018–2021 and the ongoing 2023–2026 plan. The analysis applies a customized monitoring and evaluation matrix and includes a stakeholder analysis, highlighting the roles and engagement levels of various actors, such as government bodies, private sector entities, and community-based organizations (CBOs).

The research also emphasizes aligning local efforts with the DRR-related Sustainable Development Goals (SDGs), using the Sendai Framework’s seven targets to develop measurable indicators. Findings indicate that while Nablus Municipality demonstrates strong commitment and has made progress in resilience-based planning, key challenges persist. These include inconsistent integration of resilience across sectors, limited fiscal and institutional capacity, and the absence of a robust monitoring system, which hinders the tracking of DRR progress and affects data availability. Notably, CBOs remain underrepresented in the planning process, despite their critical role in fostering community participation.

The study proposes a framework to support local authorities in tracking SDIP implementation, measuring DRR efforts, and enhancing stakeholder engagement. As one of the few studies of its kind in the Palestinian context, it offers a replicable model for other cities. Key recommendations focus on improving municipal governance, financial resources, and institutional capacity. Suggested actions include establishing a comprehensive monitoring system, real-time data tools, staff training, and ensuring

inclusive participation—particularly from CBOs. Additionally, the study advocates for integrating resilience into urban planning, adopting climate adaptation strategies, leveraging technology, and fostering knowledge exchange through partnerships and peer learning with other cities.

Keywords: Resilience, sustainability, risks, good governance, planning.

Chapter One

Introduction and Theoretical Background

1.1 Introduction

Disasters, defined as a series of disruptive changes in the functions of a society or a community regardless of its scale, have generated a variety of impacts and losses (United Nations Office for Disaster Risk Reduction, 2024). Tangible impacts like the numbers of losses in lives, affected people and the economy are increasing every year. Mortality rates caused by disasters in 2022 have significantly increased, reaching 168 percent of the 2021 rates. Subsequent impacts like long term social and economic losses are often hard to be assessed, yet these impacts worsen the after-math situation and result in more losses in a variety of sectors (United Nations Office for Disaster Risk Reduction, 2023). Cities act as a major key contributor to climate change and thus, cities as well as large, populated communities, face rising patterns of hazards and disasters, be they man-made or natural. Estimates predict that around 70 per cent of the population worldwide will be living in urban areas by 2050 (United Nations, Department of Economic and Social Affairs, 2018). This means more people are exposed to disasters and hazards given all the pressure the growing population imposes. On a positive note, the average intensity of global disasters has decreased in comparison to the past years (Academy of Disaster Reduction and Emergency Management National Disaster Reduction Centre of China International Federation of Red Cross and Red Crescent Societies (IFRC) Beijing Normal University, 2023). Still, world leaders and governments stress the urgency to fight the widespread adverse impacts of disasters, especially those generated by climate change.

Investing in a resilient future should be seen as an opportunity not a challenge, especially in the time where our abilities to manage climate change impacts cannot cope with the fast pace of its increasing risks. Past events and experiences demonstrate that proper integration of resilience concepts in planning regimes results in more sustainable solutions than traditional planning methods. More lives will be protected, and recovery costs will functionally and economically be reduced.

Building a resilient future should be bundled with promoting sustainable development. Risk-informed sustainable development has become a necessity for all cities and

communities to achieve prosperity and safety. Cities and communities should be transformed into safer places to live. This new paradigm of development, which adopts resilience-based sustainable development, will translate the aspirations of the local communities and contribute towards achieving a better, safer, more sustainable future for all segments of the community.

1.2 Problem statement

Palestinian cities, as the rest of the cities worldwide, face a wide range of stresses and shocks. Palestinians are exposed to a variety of risks, and thus, their vulnerability levels are increasing. Besides the sensitive geopolitical situation Palestinians experience, climate change imposes additional loads on the Palestinian cities.

Nablus City, a Palestinian city located in the north of the West Bank, is the center of Nablus governorate with an estimated population of 177,638 inhabitants (PCBS, 2024). Known for its commercial and strategic importance, its religious diversity and unique location between two mountains provides a solid example to assess its capacity as a Palestinian city to foster resilience within its current system and positively transform its way towards sustainability.

In this study, the researcher will assess the resilience level of the selected Palestinian city; Nablus City by reviewing the Strategic Development Investment Plan (SDIP) and setting a unified assessment framework that would assist local governments in measuring their achievements, in SDIPs, toward a more resilience-based sustainable development. More specifically, this research will answer the following questions:

- To what extent Nablus Municipality was committed to implement disaster risk reduction (DRR) measures listed in the previous SDIP (2018-2021)
- What are the reasons behind the shortcomings in the implementation of the DRR measures in the previous SDIP (2018-2021)?
- Are disaster risk reduction measures properly integrated into the current SDIP (2023-2026)
- How can the stakeholders' network in Nablus city contribute towards the implementation of the proposed DRR actions?
- Are sustainable development goals (SDGs), especially those related to DRR integrated in the current SDIP (2023-2026)?

- What measures should be taken to enhance the implementation of DRR-related SDGs in the current SDIP (2023-2026)?

1.3 Study Objectives

The main goal of this study is to promote the concept of resilience-based sustainable development and contribute towards the achievement of the seven targets of the Sendai Framework for Disaster Risk Reduction especially target E: “Substantially increase the number of countries with national and local DRR strategies”. This will be accomplished by reviewing the current approach adopted in the Palestinian context for formulating strategic developmental plans, building on the United Nations Human Settlement Programme (UN-Habitat) framework: City Resilience Profiling Tool (CRPT) and the United Nations Office for Disaster Risk Reduction (UNDRR) international framework of Disaster Resilience Scorecard for Cities and to propose curative measures to comprehensively enhance the implementation of DRR measures in the context of Nablus city as well as strengthening the integration of DRR-related SDGs into these plans.

In more details, the study pursues the following objectives:

- Review the previous SDIP, in terms of integrating DRR related measures in the SDIP and assess the reasons behind the shortcomings in the achievements of the proposed DRR measures.
- Build on existing international frameworks; UN-Habitat framework, CRPT and UNDRR Disaster Resilience Scorecard for Cities to propose a monitoring and evaluation (M&E) framework for assessing the integration of DRR measures and strategies into the proposed in the SDIP.
- Assess the current stakeholder network of Nablus City and propose a road map for enhancing their engagement in the design and implementation of the SDIP and other related frameworks.
- Measure the achievement in the DRR-related SDGs in reference to the current SDIP (2023-2026) and propose measures to enhance the integration of these SDGs in the current and future SDIPs.
- Propose recommendations for enhancing the planning framework of establishing local strategies that seek to achieve a resilience-based sustainable development.

1.4 Importance of the study

- Lack of studies addressing both disaster risk management and sustainable development particularly within the Palestinian context and the necessity to promote the concept of resilience-based sustainable development considering the various challenges and obstacles the Palestinian communities face.
- The applicability of the study and the potential to implement its recommendations since they are specifically tailored to fit the context of Nablus city whilst could be adjusted to fit another related context.
- Need for enhanced planning modules to encounter the challenges the local government unit (LGU) faces in general and Nablus municipality in specific while pursuing resilience-based sustainable development.
- Addressing the vital role that stakeholders play in implementing the DRR measures and contributing towards the application of resilience-based sustainable development.
- Absence of integration among various national and international development frameworks addressing resilience and sustainable development.

1.5 Literature Review

1.5.1 Disasters

Before introducing the concept of “risk”, it is fundamental to understand the notion “disaster”. Both notions are interlinked, yet significantly different. “Disaster” refers to a series of disrupted events affecting the function of the community or the society at a variety of scales consequently to hazardous events. Characteristics like exposure, vulnerability and capacity affect the intensity of the disasters leading to losses in different sectors: human, materials, environmental and economic impacts and losses. “Risks” on the other hand refers to the outcome’s probability of having a negative impact on the surroundings; people, assets, environment ...

Initially, disasters were classified as natural disasters; those are caused by a natural hazard like earthquakes, volcanos, or man-made disasters; those are triggered by one or several human actions like deforestation and wildfires, etc. Recent studies are now refuting this assumption; implying that there are natural hazards like earthquakes and volcanos, but there are no natural disasters. This argument is built on the assumption that

natural hazards can in no way affect any community, even if they exist adjacent to the hazard, unless the community is not well prepared. The argument also indicates that affected communities are often significantly vulnerable due to their inadequate capacities. This is often the result of poor social and economic disadvantages like high poverty rates. (UN Office for Disaster Risk Reduction, 2024)

There are other aspects that are used to classify disasters (UNDRR, 2024):

- In terms of scale, disasters are categorized into small-scale and large-scale disasters. Small-scale disasters that affect local communities. At this scale, the assistance required to overcome the disaster is often beyond the capacity of the local community. Large scale disasters are those affecting a society which calls for national and, in some cases, international aid and assistance.
- In terms of frequency of occurrence, disasters are classified depending on the occurrence's probability accompanied by the return period of the given hazard as well as its impacts. Thus, disasters are classified into frequent and infrequent disasters.
- In terms of the time of emerging, those disasters that gradually emerge over time are classified as slow-onset disasters. At the same time, disasters that suddenly emerge or triggered by hazardous events are classified as sudden-onset disasters.

Since all disasters are linked to human behaviors, it is up for communities and governments to step in with proactive measures to prevent or at least mitigate the implications of disasters. The disaster management cycle, is a planning process aiming at reducing the impacts of disasters and providing guidance for governments, urging decision-makers and stakeholders to take significant part, based on their capacities, in building resilience-based sustainable development (Vasilescu & Khan, 2008).

1.5.2 Risks and Disaster Risk Management

Risks are the outcomes of the decisions governments and decision makers take. When not taking risks into consideration, people and assets are exposed to higher intractable impacts of hazards. Governments pay an expensive toll to deal with the impacts of risks, thus, it is necessary to break down the cycle of risks and disasters. Instead of just dealing with emergencies and unavoidable disasters, it is more feasible to invest in “building forward better”. Governments should work on reducing the current sources of risks

parallel to avoid creating new ones. Most approaches followed to tackle different kinds of risks are built on previous observations and historical records. This is important, but it is not enough. The world is a set of dynamic and interconnected systems, circumstances changing at a fast pace. Hence, the relation between the past and the future needs to be revisited. Understanding and anticipating risks need to be built on detailed systematic approach to cope with the ramified nature of risks (UNDRR, 2024).

Before setting ambitious targets and goals, efforts to invest in risk reduction should be linked with policy and planning on the national level. Disaster risk reduction (DRR) aimed at reducing the current levels of existing disaster risks and also, preventing new sources of disaster risks and managing residual risks. DRM are the policies and strategies set to achieve what disaster risk reduction aims at (reducing current risks, preventing new ones and managing residual risks. DRM contributes towards the enhancement of resilience of governments and countries under the guidance of Sendai Framework for Disaster Risk Reduction 2015-2030 with links made to the 2030 Agenda for Sustainable Development and climate change adaptation plans as possible (United Nations, 2015).

Based on the time of occurrences of disasters, there are three phases that dictate the actions required to handle disasters and their associated risks (United Nations Office for Disaster Risk Reduction, 2024):

Pre-disaster:

- **Prediction:** The act of anticipating the occurrence of disasters, through advanced technology and data collection looking for patterns in data that would assist them in obtaining deeper knowledge and understanding of these events, their intensity and frequency.
- **Mitigation:** The act of preventing the of hazards' adverse impacts and lessening their scale or severity through various actions and strategies. Mitigation measures consist of not only physical engineering techniques such as hazard-resistant construction but goes on to include improved social and environmental policies and public awareness.
- **Preparedness:** Capacities and knowledge developed by governments, communities and individuals to anticipate, respond to and recover from disasters, emergencies and their impacts and achieve sustainable recovery. Since preparedness is generally linked with early warning systems; it includes activities related to contingency

planning such as: equipment's stockpiling and supplies, establishing of coordination systems, associated trainings regarding evacuation and public information.

During Disaster:

- **Response:** immediate and short-term Actions that are directly taken before, during or immediately after a disaster or emergency for the sake of saving lives, reducing disaster impacts, and delivering the essentials needs of the people affected. The efficiency of the response mainly relies on risk-informed disaster measures to serve and protect people. It is not always easy to distinguish between the response efforts and the consecutive phase; recovery, since some activities may extend from this phase to the recovery phase.

Post-disaster:

- **Recovery:** The efforts of improving health, livelihoods, economic, social, physical, cultural and environmental assets of affected communities and systems in line with the sustainable development principles and “build forwards better”, to reduce or even avoid future disaster risk.
- **Rehabilitation:** The efforts of restoring basic services and facilities to ensure the functioning of the affected community or society.

Recently, a new concept has been trending “Community-based DRM” promoting the inclusive involvement of potentially targeted communities with DRM activities at the local level. This includes: the assessment of hazards and the vulnerability and capacity of these communities. Under this concept, all segments of local people, especially vulnerable groups, are involved in the planning, execution, monitoring and evaluation of DRM activities (United Nations Office for Disaster Risk Reduction, 2023).

1.5.3 Resilience

Resilience as a notion has become a huge part of many disciplines, practices and even policies. Originally, the term resilience emerged in the 1970s by the researcher C.S Holling who defined resilience as the measurement of the persistent of a system to absorb disturbance or change and still preserve the existing relationships between surrounding variables and populations (Pisano, 2012). In general, it is the capability of an individual, community or system to respond to disasters and sustain development in the face of

expected and unexpected changes or crises. Resilience is used as an approach for analyzing and studying complex adaptive system dynamics focusing on the social-ecological systems. Other researchers interpret the term resilience as the “return rate to equilibrium” upon a disorder. It is also defined as maintaining stability, bouncing-back and sustaining development to that original situation before a disturbance occur (Folke, 2016). UNDRR defines resilience as the ability of any community or system to absorb, adapt to and recover from the effects of hazards and preserve the basic structures in an efficient and timely manner (United Nations Office for Disaster Risk Reduction, 2024).

Disasters and hazards cities face are unpredictable. Governments are obligated to protect their citizens as they are the frontal of responding to its disasters and potential risks (Jha, Miner, & Stanton-Geddes, 2013). They need to quickly and effectively respond to those threats to minimize and anticipate the potential consequences and costs. As a result, building urban resilience (Gonçalves & Ribeiro, 2019) and bundling those efforts with promoting sustainable development (Leichenko, 2011) have caught the attention of researchers, governments and decision makers. Building resilience has become a necessity for all cities and communities in the face of climate change (Meerow, Newell, & Stults, 2016).

Urban resilience is a dynamic concept, it refers to the urban system’s ability to withstand shocks and stresses and timely return to its previous stable function (Leichenko, 2011). The notion provides insights to the complex urban systems as well as their sustainable management across a variety of spatial scales (Meerow, Newell, & Stults, 2016). Urban resilience is categorized into four main groups, each group focusing on diverse aspects of the urban system: urban ecological resilience, urban economical resilience, urban hazards, DRM and urban governance promoting resilience concepts. Still, there is a disagreement on the characteristics and the analytical unit of measuring resilience (Leichenko, 2011). Researchers have concluded that there is an absence of the tools and methods used to evaluate resilience in addition to an urging need to develop a holistic approach to study and assess urban resilience (Gonçalves & Ribeiro, 2019).

1.5.4 Disasters and Sustainable Development

Sustainability is a very debatable concept. Formerly, sustainability was defined as the ability of a community to exist through managing local resources and assuring the survival of both the community and the environment. Researchers criticized similar definitions and models of sustainability as they only describe it as an end-result, opposed to the concept of sustainable development which is introduced as a strategic framework aiming to achieve long lasted prosperity whilst ensuring social equity between generations.

Sustainability is the ability to fulfill the requirements of the current generations without risking or compromising the ability of the posterities to meet their needs (University of Alberta, Office of Sustainability, 2013). According to the Brundtland Commission and their final report released in 1987; the notion of sustainability is interlinked with three main important pillars: social, economic and environment, forming one holistic approach (Virtanen, Siragusa, & Guttorm, 2020).

The term sustainability is contextual; it is strongly linked with urbanization, the population shift from rural to urban areas, and the need to adapt to a new paradigm of development. Urbanization has brought various benefits to communities and countries. Urban areas force pressure on the environment due to their quite dense population, reduction in green areas, high consumption patterns, the activities associated with urban areas and the increase levels of the Green House Gas (GHG) emissions. All have profoundly affected and are still affecting the environment causing vast environmental uncertainty (Rosales, 2011).

1.5.5 New Paradigm of Development

In the last decades, sustainable development has gained more attention, especially as a coping mechanism to face climate change. As many risks related to climate change are not clearly reflected in the national and local plans and policies, new techniques and instruments were proposed by researchers and decision makers (UN-Habitat; UNDP Asia-Pacific Regional Centre;, 2015). Furthermore, governments and community leaders do not deal with stable systems and do not have full control over changing circumstances, especially those connected to social and ecological systems.

From here rises a pivotal issue, communities and governments world-wide should have the same understanding of the concept of resilience (Mallick, 2021) and its strong linkages with sustainability (Virtanen, Siragusa, & Guttorm, 2020), regardless of the existing significant gap between urban resilience and sustainable development (Mallick, 2021).

Achieving resilient sustainable development should be seen as a joint global goal to enable communities and governments to adapt and cope with future and unpredictable changes (Pisano, 2012). However, and due to the uniqueness, heterogeneous and dissimilar patterns of growth each community face and the diverse risks and hazards each community experience, implementing resilience should build on the essence and the identity of each community (Mallick, 2021). The resilience approach is less about controlling and more about planning (Chapin, et al., 2006). Each community should be influenced to draft its own paradigm of resilient sustainable development. It is essential to design, build and implement self-regulated systems for communities and cities that encompass sustainable development (Rosales, 2011) and anticipate change. The concept of sustainable resilience will remain irrelevant unless it is adapted on the local level and specifically formulated to fit each case (Benson & Craige, 2014).

Obstacles to achieving responsive and accountable integration of resilience in governance are immense and highly expected (Galperin & Wilkinson, 2015). This is why it should be achieved in line with active community participation. As they are the core of development, citizens should be empowered to voice their concerns and translate their aspirations for the future into developmental programs and interventions. On a positive note, a sense of ownership and social responsibility would be created among the citizens of the community in addition to promoting the concepts of local democracy, leadership and innovation (Brundtland Commission, 1987).

1.5.6 Strategies for Building Resilience

Historical Background

Nations frequently stress a need for international framework to limit the risk of disasters and catastrophes with the motivation of “disaster response alone is not sufficient”, and to shift the paradigm away from reacting to disasters to moving forward way before their occurrence. To address disasters and the indirect factors that increase the impact of these

disaster, countries have opted to include policies and regulations in their laws and frameworks aiming to lessen the severity of the damage and the number of casualties and to strengthen national capacities and capabilities. Various countries have endorsed and are now committed to these frameworks.

First: Yokohama Strategy for a Safer World (1994)

As a result of the “International Decade for Disaster Risk Management Initiatives” (1990-2000), this agreement was adopted by the First World Conference on DRR, which took place in Yokohama, Japan, from July 23 to May 27, 1994, by General Assembly Resolution 188/48 of December 1993. In collaboration with non-governmental organizations, international organizations, and scientific, commercial, and industrial circles, member states of the United Nations (UN) and other countries hoped to lessen the misery associated with disasters. They also recognized the significance of the involvement of local communities in mitigating disaster risks. This initiative was an opportunity to offer instructions on a global scale for anticipating, averting, and lowering the impact of disasters. This framework has a particular emphasis on the following (Yokohama Strategy and Plan of Action for a Safer World, 1994):

- Institutional and human capacity-building and strengthening.
- Technology sharing includes the collection, the dissemination and the utilization of data and information.
- Mobilization of resources.

Second: Hyogo Framework for Action: Building the Resilience of Nations and Communities to Disasters (2005-2015)

Following the 2005 Indian Ocean tsunami that took millions of lives, 168 nations committed to putting Hyogo's framework for action's strategic goals into practice. During the “Second World Conference on Disaster Reduction in Kobe, Hyogo, Japan”, from 2005 to 2015, Hyogo's was appointed by the UN General Assembly aiming to build the resilience of nations and communities to disasters. This framework came to fulfill some objectives that the Yokohama strategy was unable to accomplish. In contrast to earlier decades' emphasis on response and recovery, this statement lays a greater focus on risk preparation and prevention with the goal of "significantly reducing disaster losses by the year 2015 by building the ability of communities to cope with disasters”.

The conference decided on the following five action priorities in light of the findings of the Yokohama strategy review as well as the identification of gaps and challenges (United Nations, 2005):

- Ensure that DRR is a national and a local priority with a strong institutional basis for implementation.
- Identify, assess and monitor disaster risks and enhance early warning.
- Use knowledge, innovation and education to build a culture of safety and resilience at all levels.
- Reduce the fundamental risk factors.
- Strengthen disaster preparedness for effective response at all levels.

Third: Sendai Framework for Disaster Risk Reduction (2015-2030)

To stop new disaster risks from emerging and lessen current ones, this framework emphasizes the necessity of moving from disaster management to disaster risk management. It emphasizes measures tackling various sectors; legal, social, health, cultural, educational, environmental, technological, political, and institutional. These measures prevent, or at least mitigate, the exposure to risks and vulnerabilities in the face of disasters and strengthen the readiness to respond to disasters and recover from them. The Sendai Framework works in an integrative manner with other 2030 Agenda agreements, including the Paris Agreement on Climate Change, the New Urban Agenda, the Addis Ababa Action Agenda on Financing for Development, and most importantly the SDGs. This framework was endorsed by the UN General Assembly following the 2015 Third UN World Conference on Disaster Risk Reduction.

Catalyzing previous experiences gained through implementing former frameworks, the Hyogo Framework for Action and Yokohama Strategy for a Safer World, and in fulfilling the expected outcomes and goals. Sendai Framework promotes four main priorities focusing on all sectors at all levels: national, regional and local:

- Priority 1: Understanding disaster risk.
- Priority 2: Strengthening disaster risk governance to manage disaster risk.
- Priority 3: Investing in disaster risk reduction for resilience.
- Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

On a global scale, seven targets were agreed upon to assist in the assessment of global progress and achievements of the Sendai Framework (United Nations, 2015):

Target A: Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rates in the decade 2020–2030 compared to the period 2005–2015.

Target B: Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015.

Target C: Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.

Target D: Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.

Target E: Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.

Target F: Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030.

Target G: Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.

1.5.7 Disaster Resilience Scorecard for Cities

The disaster resilience scorecard for cities was published in 2017 at the Global Platform for DRR in Cancun, Mexico. It is a planning tool used to establish disaster resilience in cities. This tool was developed by the UNDRR, a number of donors and cities participating in the campaign; “Making Cities Resilient 2010-2020”. The scorecard was established to provide a set of measurements that allow local governments to assess their level of disaster resilience, structured around the ten essentials for Making Cities Resilient. It also assists the progress of monitoring and review as well as the challenges in the implementation of the Sendai Framework for Disaster Risk Reduction: 2015-2030 while setting the baseline for building DRR and resilience strategies.

The scoring mechanism is set to provide assessment at two levels:

- **First Level (Preliminary Assessment):** aiming to respond to the targets and indicators of the Sendai Framework, this model is built based on critical 47 question indicators with a 0 to 3 score, discussed with the city multi-stakeholders in a one- or two-workshop.
- **Second Level (Detailed Assessment):** This multi-stakeholder exercise may take one to four months, forming the base for a detailed city resilience action plan. The detailed assessment includes 117 indicator criteria, each with a score of 0 to 5.

For the sake of initiating discussions on resilience and DRR among relevant stakeholders in the city, the preliminary assessment is largely considered by local authorities and governments. As an advanced approach, the detailed assessment could be completed by focusing on a number of key essentials requiring special attention. As a requirement, the hazards and risks facing the city should be considered. The scorecard promotes the identification of the “most probable” and “most severe” of these actual or potential risks (UNDRR, 2024).

1.5.8 City Resilience Profiling Tool

The way cities are planned and managed is crucial more than ever. Cities and urban areas face unprecedented challenges due to the continuous increase in their population (UN-Habitat, 2018).

UN-Habitat, which is mandated to meet the needs of the growing urban world, has started investing in the field of urban resilience. Urban Resilience has gained increasing significance in the international discourse of development, being one of the core principles of sustainable development. As part of its urban resilience agenda, UN-Habitat has developed the CRPT to serve as a comprehensive approach for building the resilience of the cities (UN-Habitat, 2022). CRPT is a self-assessment tool that aids planners and researchers in exploring the concept of urban resilience and its various elements. It supports local governments and decision makers in upgrading the current planning systems to achieve resilient based-sustainable development.

CRPT is a more advanced framework in terms of methodology and outcomes. As for data profiling, all urban elements are being profiled through four main categories, namely

SETs. The information gathered is used to create the city profile which will be used to calibrate the urban system into a more resilient one. Furthermore, a systematic data assessment will be prepared at the end to assess the ability of the decision makers to identify and fill the gaps in the urban profile. This is highly vital as accuracy leads to reliable decisions and, consequently, avoiding false and ineffective decisions. Additionally, a fit-for-purpose resilience action plan is produced as an output. It aims to improve the capacity and preparedness of the targeted city against shocks and stresses and set the base for achieving sustainable development. Moreover, this action plan is linked to a specific timeframe that will assess the targeted local government in allocating its resources to achieve resilience more efficiently.

Another output produced is stakeholder mapping. This output is directly linked with the resilience action plan as it identifies and categorizes the stakeholders involved in the process. It also provides better understanding of the volume of the required resources.

CRPT establishes linkages with international and national frameworks. These linkages reinforce the decision-making process and assess targeted local government to create a more holistic and complex resilient perspective.

1.5.9 Building Local Strategies

Governments must lead the attempt to integrate DRR measures and strategies within the planning system at all levels. This has become a necessity since communities are the frontier of facing risks and their citizens and bear the fundamental responsibility of ensuring their citizens' safety while working on achieving a sustainable future.

In light of Target E of the Sendai Framework: "Increase the number of countries with national and local DRR strategies", there is a consensus that DRR should be mainstreamed into the general development process, including all sectors and aiming for sustainable development. Local governments should be advised to develop and implement an integrated local DRR strategy that contributes to building resilience-based sustainable development at the local scale and accommodating a national strategy whenever one is in place. Local strategies are best described as "specific" and tailored to reflect the local context and the hazard profile of each community. Both the planning and implementation phases are significant in strategically mapping out the roles and

responsibilities of relevant parties, as well as successfully and efficiently guiding the execution of the proposed interventions at the micro level (UNDRR, 2019).

Strategic Development Investment Plans

Governments, on their own, cannot encounter risks or any associated impacts. All actors at all levels have a role to play in the planning, decision making and execution of disaster risk strategies. May they be: citizens, civil society organizations, professional associations, academics, the private sector, and international donors. Engaging all actors, unrelated to their degrees of responsibility and varying capacities, will subsidize the positive impact on building city resilience. Clearly defining all roles and responsibilities, accompanied by the inclusive involvement of all segments of society, will ultimately result in reducing exposure and even vulnerability contributing to improved management of risks. One crucial consideration is the conflicting power between actors, if not carefully controlled by the local government, the political contradictions will orient the discussions and actions into the wrong direction (UNDRR, 2019).

In the Palestinian context and as part of its framework, the Ministry of Local Government (MoLG), a governmental institution overseeing the local government sector in Palestine, has turned into strategic planning in the face of unemployment, scarce resources and other challenges imposed by the Israeli occupations on the Palestinian communities. The main goal is to maximize the limited resources of the Palestinian communities as a means of assisting them in enhancing the local governance and improving the level and quality of municipal services (MoLG, 2009).

One of the key objectives of integrating SDIP into the Palestinian planning system is to set the basis of an integrated development approach to ensure the achievement of development among different governing levels.

SDIP is designed as a four-year participatory development planning process to steer local development in an integrated multi-theme and multi-stakeholder approach. SDIP allows for economic, social, environmental, (even political), and other broader themes that go beyond the core mandate of the LGU, which local stakeholders (civil society, private sector, etc.) would use as the main development reference.

Based on a participatory approach, SDIP is comprised a five-phase process (MoLG, 2009):

- Phase One: Where are we now? Preparation and Analysis
- Phase Two: Where do we want to go? Strategic Development Framework
- Phase Three: How do we reach there? Implementation and Monitoring Plans
- Phase Four: What will make us reach our destination? Implementation
- Phase Five: Did we reach? Evaluation and Update

Since strategic planning requires an innovative perspective of thinking, planners and decision makers are obligated to revisit the current approach adopted in the Palestinian context. Even though SDIPs are designed to sustainably implement the vision of the local community and achieve resilience, concrete DRM measures are still not properly integrated in its actual plans. Even if this is the case, local governments still face diverse challenges in the implementation of these measures. Competing priorities, for example, are a significant challenge faced by local governments. They are more directed towards the provision of services and short-term needs of their communities (Satterthwaite, 2011) rather than investing in long-term solutions that address risk drivers.

Investing in building the institutional and societal capacities of the local governments is crucial for creating a unified model that promotes resilience-based sustainable development. Local governments need to be more aware of the fact that they cannot handle DRM on their own. All actors on all levels need to play their part in the decision-making, and planning of the disaster risk measures. To achieve this goal, building knowledge among all involved parties should be a priority for the local government. Implementing principles of good governance such as accountability will positively contribute towards the meaningful mainstreaming of DRR strategies and measures (UNDRR, 2019).

Integrating Resilience in Local Governance in West Bank and Gaza

A local initiative funded by the World Bank is being implemented by municipal development and lending funds through the Urban Planning and Disaster Risk Reduction Center at An-Najah National University. The project aims to build resilience on the local level and invest in local governments through the development of guidelines on local resilience planning, formulation of resilience plans for pilot local governments, and

formulation of resilience standards for critical infrastructure. A multi-hazard risk assessment and mapping will be conducted to guide the efforts of the local governments and form the baseline for risk-informed decision-making. On the national level, the National Disaster Risk Management Center will be targeted with capacity-building interventions that will equip its staff with the required skills to implement the second phase of the project, which will include preparing a national strategy for DRM in Palestine (2023-2027) and preparing a public awareness campaign to build knowledge among the public and encourage collective community-driven decision-making processes (Urban Planning and Disaster Risk Reduction Center at An-Najah National University, 2024).

Tomorrow's Cities: Urban Risk in Transition

As a pioneering step towards risk-informed and sustainable urban development, Nablus city has joined the Tomorrow's Cities initiatives. This initiative was welcomed with warm acceptance and recognition of its importance in achieving sustainable development and mitigating future risks. This initiative aims to enrich the planning tools used in the Palestinian context with the best and most updated global practices to create a better future for the Palestinian people. Focusing on the expansion areas in Nablus city, this initiative emphasizes avoiding the devastating impacts of natural disasters through developing people-centered and risk-sensitive strategies. Several future scenarios for the expansion areas of Nablus city are drafted, discussed, and assessed with inter-sectoral lenses to assist the planners and decision-makers in strategically guiding risk-informed planning practices and transitioning from a reactive approach to proactive planning modules (UKRI GCRF Urban Disaster Risk Hub, 2024).

1.6 Previous Studies

This section aims to showcase the efforts that have been made in regard to disaster risk reduction measures, the development in implementing the Sendai Framework through the "Disaster Resilience Scorecard for Cities" along with other studies that discussed the implementation of the UN-Habitat framework; CRPT. The studies provide a wide perspective addressing local, Arab and foreign plans for a number of cities.

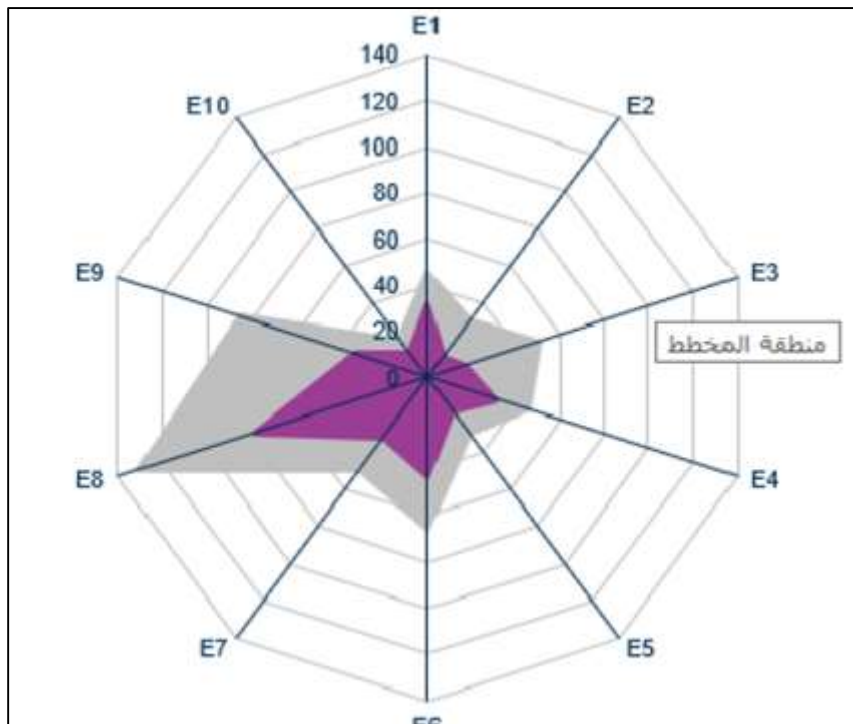
1.6.1 Nablus Resilience Action Plans

Study by Dr. Jalal Al Dabeek (2018): "Disaster Risk Reduction and Resilience Action Plan for Nablus City, Implementing the Sendai Framework 2015-2030."

Nablus is one of four Arab cities, and twenty cities worldwide selected by the UNISDR in an initiative titled "Making Cities Sustainable and Resilient: Implementing the Sendai Framework for Disaster Risk Reduction 2015-2030 at the Local Level," aimed at building more sustainable cities capable of confronting disasters. This initiative supported the adoption of local resilience action plans, contributing to the increase of the total number of countries with national and local strategies for disaster risk reduction in accordance with the Sendai Framework, aiming to reduce the global disaster losses by the year 2020 and paving the road towards the achievement of the Sustainable Development Goals. In 2018, the process started by conducting a community workshop which was attended by representatives from various governmental and non-governmental institutions, ministries, as well as the Nablus Municipality, private sector representatives, some engineering companies, and university professors. The Disaster Resilience Scorecard for Cities – A detailed assessment was carried out to identify the gaps and required actions. The results of the assessment are shown in Figure 1.1.

Figure 1.1

Final Assessment of the Detailed Performance Indicator Card for Nablus City



Source: (Nablus City Resilience Plan, 2018)

After analyzing and compiling actions for the various sub-indicators, the following projects were proposed (Al-Dabbeek, 2018; Al-Dabbeek & El-Kelani, 2008):

- P01: Establishing and developing laws related to disaster risk reduction.
- P02: Developing risk maps and creating a computerized database for disaster losses.
- P03: Resilience budget (financial resources).
- P04: Enhancing resilience to disasters.
- P05: Developing infrastructure to strengthen resilience.
- P06: Early warning systems.

1.6.2 Al Aqaba Resilience Action Plan

A study by Dr. Jalal Al-Dabeek (2016); “Aqaba Resilience Action Plan”.

Al Aqaba city is considered one of the most important Jordanian cities. Being the only coastal city and a center for import and export, Al Aqaba is a destination for tourism and economic activities. Al Aqaba city faces various types of risks such as floods, earthquakes, sandstorms, temperature fluctuations, and industrial hazards. One of the notable events Al Aqaba city has faced is the earthquake that hit the city in 1995 with a magnitude of 6.2. This earthquake resulted in the deaths of 11 people and injuries to 47 others. The earthquake has caused additional damage and losses to buildings and hotels along the coast side. Another recent event is the flood in 2006 which took the life of six people and resulted in significant damage to water pipes, wells, and Aqaba Airport.

The municipality of Al Aqaba has decided to adapt its strategy according to the Sendai Framework for Disaster Risk Reduction and its ten new essentials with the aim of:

- Conducting a realistic assessment of the city’s current and future needs and comparing that with the level they have reached.
- Involving multiple stakeholders in determining the required goals and strategies.
- Integrating disaster risk reduction into planning procedures to enable the city to face disasters.

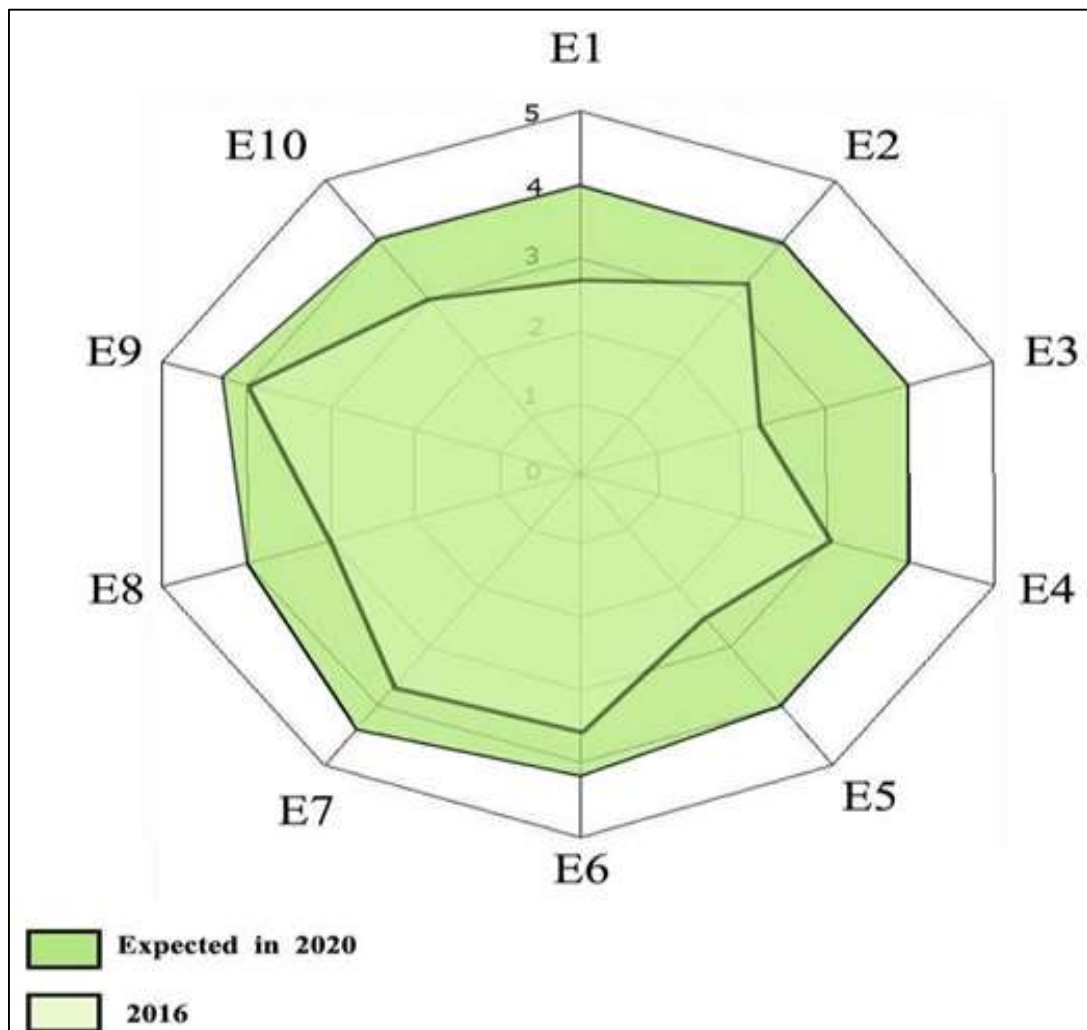
The Disaster Resilience Scorecard for Cities – Preliminary Assessment was utilized to identify the gaps and the actions required to achieve the specific goals. The results of the assessment are shown in Figure 1.2.

After the analysis was conducted, a number of projects were proposed within the time frame of 2016-2020:

- P01: Public awareness, education, and sharing lessons learned.
- P02: Developing a flexible data platform and determining and implementing a city resilience strategy.
- P03: Integrating disaster risk reduction into local government budgets, fund raising and budget allocation for resilience strategic projects.
- P04: Assessing and analyzing risks and testing scenarios as a tool for simulating reality.
- P05: Creating a smart sensor network.

Figure 1.2

Final Assessment of the Detailed Performance Indicator Card for Al Aqaba City



Source: (Al Aqaba City Resilience Action Plan, 2016)

1.6.3 Barcelona, from Pilot City to Resilience Hub

A study by the municipality of Barcelona in partnership with UN-Habitat (2022): “Resilience Profile – Barcelona”

The municipality of Barcelona views urban resilience as a key factor for sustainability and enhancing the quality of life of its residents. As a pilot city, Barcelona has been instrumental in developing the CRPT, evolving through seven years of implementation and contributing to the calibration of the tool and developing its methodology. With its strong record in integrating resilience into diverse policy areas, Barcelona and in partnership with UN-Habitat, continues to assist other cities in fostering resilience and sustainability like Maputo and Dakar through peer-to-peer initiatives. This collaboration has established Barcelona as a global leader in resilience efforts. Recently, the city was designated a Resilience Hub by UNDRR, emphasizing its commitment to climate and disaster risk reduction (UN-Habitat, 2022).

The Barcelona Resilience Framework, collaborating with the CRPT implementation, has identified several key areas in the evaluation of the resilience profile. The main findings of this comprehensive profiling are the three priority issues (Municipality of Barcelona, 2022):

- Right to Adequate Housing and Access to Basic Services.
- Public Spaces (Accessibility, Health, Uses and Social Cohesion).
- Ageing Population and Demographic Shift.

The recommendations regarding the actions for resilience for Barcelona city have not been released yet. However, this process has influenced a number of key outputs (Municipality of Barcelona, 2022):

- Barcelona Resilience Atlas: Evidence-based knowledge: During the generation of the Barcelona Resilience Preliminary Profile, a number of indicators were drafted, and relevant data was collected using disaggregated information at the district and neighborhood levels. This was the basis for the Barcelona Resilience Atlas, which it covered a variety of topics such as climate change, housing and public spaces.
- Impact analysis of critical events: Since early 2019, the Barcelona Resilience Department has been developing a methodology to analyze critical events impacting

the city and its systems, aiming to assess their effects on various urban services. This methodology, created in collaboration with the Resilient Cities Network (formerly 100 Resilient Cities) and building on UN-Habitat's approach to urban programming, offers significant resilience benefits by measuring the impact of hazardous events and identifying key opportunities for resilience enhancement in the short, medium, and long term.

- **Barcelona SDGs strategy - Localization of Sustainable Development Goals:** Barcelona City Council has conducted extensive research on various urban goals and indicators related to the SDGs in line with the main international development agenda. As part of the Voluntary Local Review, Barcelona's Agenda 2030 takes into consideration the three priority issues outlined earlier as crucial elements for achieving sustainable development by 2030.
- **Barcelona Municipal Resilience Committee:** In response to the Covid-19 pandemic and informed by initial findings from the Barcelona resilience assessment, Barcelona City Council has relaunched its Municipal Resilience Boards. This cross-departmental initiative aims to identify urgent risks and vulnerabilities while fostering proactive policy actions across various municipal sectors. This committee gathers top representatives from various sectors, including Urban Ecology, Mobility, Security, Social Rights, and more. The ongoing reflections generated by this committee will ensure the resilience model is continually revised and updated.

1.6.4 Developing mechanisms to Integrate Disaster Risk Reduction within the Development Plan – Tulkarem City.

A study by Eng. Rama Al Shanteer (2022).

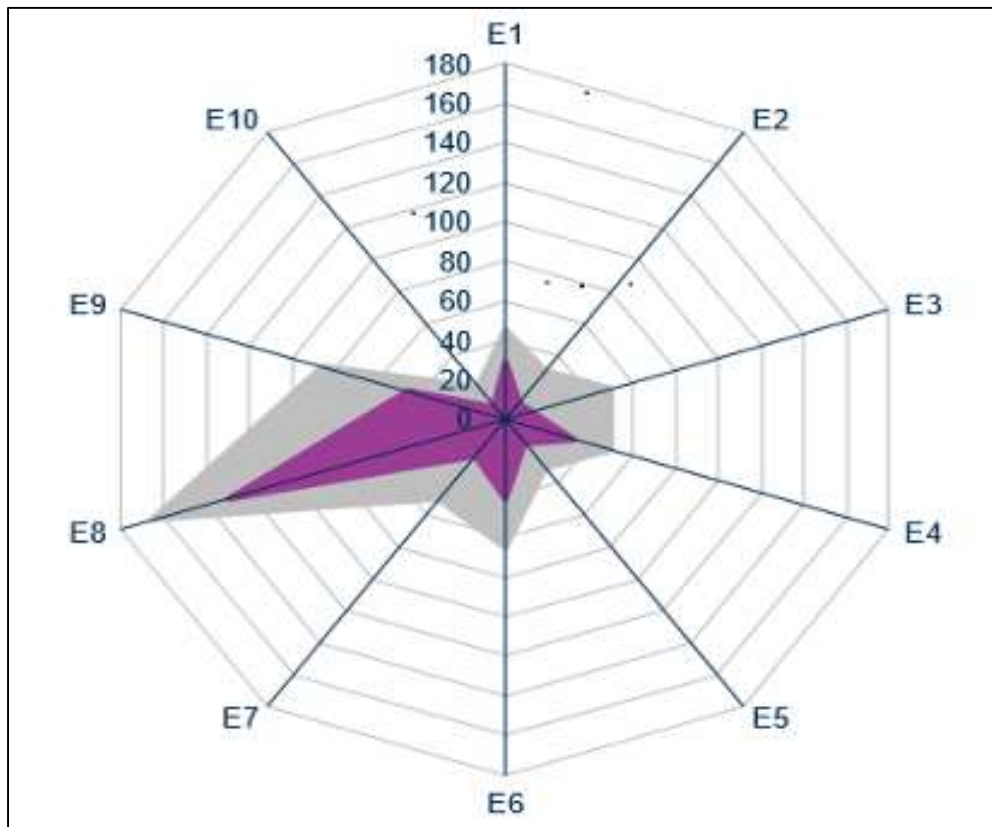
Tulkarem city is located in the northern part of the West Bank. Due to its location between valleys and springs, the city is characterized by a moderate climate. Tulkarem city is exposed to a number of hazards, such as floods and droughts. The most recent event that affected the city was the flood that hit the city in the winter of 2013. It resulted in the death of three people and the damage and losses in the houses, shops and greenhouses. Additionally, the city is exposed to industrial hazards generated by the Israeli factories; , Jishori which result in smoke and harmful emissions. The Israeli occupation enforces a number of constrains affecting the daily life of the citizens, ; this

includes lack of security, movement restrictions and a number of impeded socio-economic characteristics such as high unemployment rates.

This study aimed to review the SDIP of the city and assessing the risk reduction measures proposed within the plan. The Disaster Resilience Scorecard for Cities – A detailed assessment was carried out to identify the gaps in the SDIP and the required actions. The results of the assessment are shown in Figure 1.3.

Figure 1.3

Final Assessment of the Detailed Performance Indicator Card for Tulkarem City



Source: (Tulkarem City Resilience Action Plan, 2022)

After the analysis was conducted, a number of projects were proposed:

- P01: Public awareness and enhancing the coordination between stakeholders
- P02: Implementation of the city resilience strategy and integrating it among all initiatives of the city.
- P03: Allocating budget for financing the resilience strategy of the city.
- P04: Establishing a unified database.
- P05: Risk mapping and assessment.

The study has also identified the obstacles facing the municipality of Tulkarem in the implementation of the proposed strategies and projects as well as a brief assessment of the achievement in the DRR-related SDGs.

1.6.5 Key Conclusions and Recommendations

- Three of the four studies; Nablus, Al Aqaba and Tulkarem, are based on the Disaster Resilience Scorecard for Cities. However, the Tulkarem study has additional aspects covered under this study, including assessing the achievement of the DRR-related SDGs. This was a significant addition to the main approach, but the assessment produced was general and required additional depth.
- Similarities between local studies; Nablus and Tulkarem: despite the relatively short distance between the two cities which subjects both to a large number of similar vulnerabilities, their local characteristics lead to different risks and accordingly different mitigation measures.
- Both the Nablus and Al-Aqaba studies primarily emphasize planning-related issues and considerations. In contrast, the Barcelona study extends beyond planning aspects by placing a significant emphasis on good governance at the local level addressing key socio-economic issues such as housing policies and age-responsive interventions, ensuring that urban resilience strategies account for demographic shifts and social inclusivity.
- Among all studies, community awareness was essential to build a census among the community regarding resilience.
- All studies highlight the importance of strong engagement of different stakeholders through all stages of the process.
- The study of Barcelona provides a solid example of building resilience based on the catalytic interventions that have been previously initiated.
- It highlights the importance of building on previous interventions and utilizing the accumulative experience to build resilience.
- Additionally, it is important to conduct a detailed stakeholder mapping to assist in proposing vital engagement strategies.
- Tulkarem study highlights the importance of adopting a more in-depth approach to assess the achievement of DRR-related SDGs as part of assessing the linkages between sustainability and resilience.

Chapter Two

Methods

2.1 Introduction

Palestinian cities, as the rest of the cities, face a wide range of stresses and shocks. As a result, Palestinians are exposed to a variety of risks and thus, their vulnerability levels are increased. In 2020, the urban population growth in Palestine was 2.85 percent in 2020. This is a significant indicator of the increased demand across various sectors, especially since the urban population constitutes over 85 percent of the total population in Palestine. (MoLG, 2023). Furthermore, climate change imposes additional loads on Palestinian cities. Even though the overall GHG emissions in Palestine account for less than 0.01 per cent of the total contribution to global emissions, in 2006 and over the course of six years, the total GHG emissions in Palestine have almost doubled. The main contributors to this increase in emissions are energy, transportation, and waste management consecutively. This is accompanied by the sensitive geopolitical situation Palestinians experience, especially the restrictions on access to land and resources (Environment Quality Authority, 2021).

2.2 Study Area

2.2.1. Background

Nablus is a Palestinian city located in the northern part of the West Bank. Being the only city in Nablus Governorate, it is located 60 kilometers to the north of Jerusalem city (An-Najah National University, 2024). Nablus city is bounded by 'Asira ash Shamaliya, Al Badan, Ijnisinya and Talluza to the north, 'Azmut, Deir al Hatab, Salim and Beit Furik to the east, Rujeib, Awarta, Kafr Qallil, Burin, 'Iraq Burin and Till to the south, Sarra, Beit Wazan, Beit Iba and Zawata to the west Figure 2.1 The city lies between the two mountains: Mount Ebal and Mount Gerzim. The total administrative area of Nablus city is around 41 Kilometers (PCBS, 2017) with an estimated population of 177,638, 49.4 per cent (PCBS, 2024) of which are women. As for age groups, 39.7 per cent of them are less than 15 and 3.76 per cent are over 65. The total number of families in the city of Nablus is 58,759 (Nablus Municipality, 2023). The average annual population growth of Nablus city exceeds 2 per cent (UKRI GCRF Urban Disaster Risk Hub, 2024).

The city of Nablus experiences a moderate climate. During January, the coldest month of the year, the maximum temperature reaches 13.1 centigrade and the average minimum temperature reaches 6.2 centigrade. As for August, the average maximum temperature is 29.4 centigrade and the average minimum temperature is 19.5. In general, north-west wind blows on the city with an average speed of 10 km/hr. The average humidity in the city of Nablus is 61 per cent (Nablus City, 2022).

Nablus is known for its religious diversity where Muslims, Christians and Samaritans live in harmony (Nablus City, 2022). The city was formed in the Roman era and over the years, it was ruled by various rulers and regime (UNESCO, 2024). Nablus city is famous for its old city, where the rich history of the city lies in (UNESCO, 2024). Known for its commercial and cultural strategic importance, Nablus is known as a business incubator for the northern part of the West Bank. Many governmental and local institutions and associations are located in the city (Nablus City, 2022). The city is governed by a municipal council formed of 15 elected members.

The old city of Nablus lies in the heart of Nablus consisting of eight major quarters: Yasmina, Aqaba, Qaryun, Qaysariyya, Habala, Faqous, Naser and Gharb. The old city is densely populated and rich with landmarks and historical monuments such as Turkish Baths (hammams), souqs, pottery, textile workshops, Khan al-Tujjar and the Manara Clock Tower (An-Najah National University, 2024).

Nablus is also home to many of Palestine's commerce and industries. The city is famous for a number of crafts and industries such as Kunafa, and Nabulsi soap. Regardless, the employment rate in Nablus city is relatively high with a percentage of 62 per cent. The workforce in Nablus city consists of 65,998 people distributed among the sectors as per the following: agriculture sector: 4.5%, trade and services: 18.5%, industry and crafts: 16.4%, while the number of government employees makes up the vast majority with a percentage of 55.7% (Nablus Municipality, 2023).

2.2.2 Urban Characteristics

In the Palestinian context, the terminology “urban” is set based on the definition of the Palestinian Central Bureau of Statistics (PCBS) that breaks the communities in the West Bank and Gaza Strip into three categories: urban, rural and refugee camps (PCBS, 2017). Accordingly, Nablus city is classified as an urban community. Nablus has an administrative area of 29 Km (Nablus Municipality, 2023). As per the PCBS projected mid-year population for the year 2024, the projected population of Nablus city is 177,638 (PCBS, 2024) with an average density of 5,869 person/Km².

Nablus city attracts an additional population, especially from the north area of the West Bank given its role as an incubator for commerce, industry and other services. The study: “*Defining Spatial Structure for Public Service Centers in the West Bank and Gaza Strip – A Conceptual Framework*”, conducted by the Ministry of Planning in 2007, defines and sets centers in three levels according to their population and functionality in relation to services. Each center influences certain areas and draws customers and activities. According to this study (Ministry of Planning, 2007), Nablus city is considered a regional center serving the functions of the upper order: universities, hospitals, hotels, and cultural institutions. Accordingly, the city has witnessed unparalleled rapid growth in the built environment leading to more than 80 per cent increase in the number of buildings between 1997 and 2017.

The distinctive geographic location of the city, being located in the valley between mount Jerzim and mount Ebal, has forced a linear expansion. Even after the 1927 earthquake that hit the city and caused massive destruction, buildings were reconstructed and sometimes with different architectural styles, but the linear structure of the city was maintained (UKRI GCRF Urban Disaster Risk Hub, 2024).

The total area of the master plan of Nablus city is 29 Km while the urban area of the city is 8,700 km which is 30 per cent of the total area of the city. According to MoLG; the average built-up area of Nablus city is 19,159 dunum (MoLG, 2017). As per the master plan of Nablus city, the total area designated for residential use accounts for 59.1 per cent. However, and due to the constant population growth and the strategic importance of the city, the total area of Nablus city has become insufficient to accommodate the growth and expansion of the city. The city has expanded on parts of the adjacent villages;

To the west: Zawata, Beit Wazan, Al Jneid and Sarra, and to the east: Balatah, Iraq el Tayeh and East Askar (Nablus Municipality, 2022).

The Master Plan for Nablus City was approved in 2013, but it failed to adequately meet the actual needs related to population growth, development, and urbanization. Furthermore, it was not developed using risk information. This is accompanied by poor construction quality, improper site management and unregulated land use that hinders the safety of the population of the city and highlights critical gaps in the existing policies, standards, and technical capacities (UKRI GCRF Urban Disaster Risk Hub, 2024).

2.2.6 Hazards and Risks

Over the years, Nablus City has been susceptible to a number of significant hazards that expose its population and environment to significant risks. It is essential to distinguish between two important notions: Acute shocks and chronic stresses. Acute shocks are defined as extreme localized events such as flash floodings, earthquakes, and volcanos, ... chronic stresses on the other hand are exacerbations of existing risks occurring over longer time scales such as deforestation, ground water depletion, and socio-economic issues such as unemployment (UNDRR, 2024). Below are the main hazards facing the city of Nablus:

- **Environment-related Hazards:** Over the years, Nablus City has been prone to multiple natural hazards that expose its population and environment to significant risks, such as: earthquakes, which are considered the most serious hazard facing Nablus City due to the immediate vicinity of the active Dead Sea Transform Fault Zone. As for landslides, several landslides that hit the city of Nablus were induced by either earthquakes or rainfall. One important factor increasing the vulnerability of the city to landslides is the geomorphology of the city itself. Flooding is also a serious hazard formed due to extreme weather conditions, usually followed by flash floods leading to destructive impacts on people and the environment (UKRI GCRF Urban Disaster Risk Hub, 2024). The recent incidents that occurred in Nablus in January 2013 caused damage to farmlands and losses of life.
- **Health-related Hazards:** In March 2020, the first case of COVID-19 was discovered in Bethlehem, West Bank. Later, the virus spread all over Palestinian territory including Nablus city. The city experienced multiple lockdowns that resulted in a

decrease in economic activities and employment and paralyzed a huge part of the services and establishments across all sectors (PCBS, 2021). Nablus city is still partially experiencing turmoil situations because of COVID-19.

- Geopolitical Hazards: According to the Oslo II Interim Agreement – 1995, the area of Nablus city is classified as the following: 62 per cent is classified as Area A, 21 per cent is classified as Area B and 17 per cent is classified as Area C (ARIJ, 2014). The city of Nablus served as a refuge for the Palestinians who were forced out of their communities as a result of the Israeli occupation in 1948. Those refugees settled in three refugee camps: Camp No 1 Camp (known as Beit el May), Balata Camp and Askar Camp (UNRWA, 2022).
- Urban-related hazards: The master plan of Nablus city was approved in 2013, during the past eleven years, the city has witnessed a population peak which resulted in a need for updating the master plan to meet the needs of its citizens, specifically that the urban sprawl is taking place spontaneously without taking into consideration the potential risks and their effects on the different segments of the population. On another note, and since being a crucial part of the urban fabric of Nablus city, most of the Palestinian refugee camps experience a high vulnerability to earthquakes and other natural disasters. This is the result of weak building practices and not complying with requirements. This is combined with the absence of national legislative regulations and laws for protection against earthquakes, landslides and other risks as well as the lack of effective control and implementation mechanisms especially in the refugee camps. The lack of awareness plays a huge role in exposing the residents of those refugee camps to major and additional risks, and the social risks such as overcrowding, increased poverty rates and the inability to utilize proper construction materials in refugee camps in comparison to the city itself (Al-Dabbeek & El-Kelani, 2008).

Risk Assessment:

The likelihood and severity of the hazards facing the city of Nablus are classified based on Table 2.1. Accordingly, the consecutive risks are assessed and ranked as listed in Table 2.2. Each score was assigned based on discussions with experts, and the researcher's knowledge of Nablus City as well as the technical background in DRR.

Table 2.1
Criteria of Assessing Severity and Likelihood of Risks

<i>Severity Ranking</i>		<i>Likelihood Ranking</i>	
<i>Hazard Severity</i>	<i>Points</i>	<i>Hazard Likelihood</i>	<i>Points</i>
Very High	5	Inevitable	5
High	4	Highly likely	4
Moderate	3	Possible	3
Slight	2	Unlikely	2
Nil	1	Remote possibility	1

Table 2.2
Risk Assessment Matrix

Hazards	Severity	Likelihood	Risk
Earthquake	5	3	15
Flashfloods	4	3	12
Landslides	3	3	9
Spread of COVID-19 Pandemic	5	3	15
Lack of security	4	4	16
Movement restrictions	4	4	16
Lack of accessibility to natural resources	4	4	16
No control over the borders	4	4	16
Land tenure	4	3	12
Refugee camps and their slum-like conditions.	4	3	12
Unemployment	4	3	12
Insufficient expansion area	3	3	9
Unreliable infrastructure	3	3	9
Traffic	3	3	9

The actions to be taken upon the risk classification are classified as listed in Table 2.3:

Table 2.3
Actions to be taken Based on Risk Assessment

Risk Rating Score	Risk Classifications	Actions
1-4	Acceptable	No action required
5-9	Moderate	If reasonably applicable, reduce risks
10-15	High	Priority action to be taken
16-25	Unacceptable	Immediate actions must be taken

2.3 Methodology

2.3.1 Approach

This research is built based on a mixed approach. The theoretical framework of this study is designed to provide a holistic review of the concept of DRR and how it is integrated into the planning frameworks to achieve sustainable development, mainly through utilizing the UN-Habitat framework CRPT and the Disaster Resilience Scorecard for Cities. This is achieved through an analytical framework that incorporates both qualitative and quantitative data through a customized M&E framework. Other crucial aspects are taken into account such as stakeholders' assessment and achievement of

DRR-related SDGs. Customized matrixes were developed to achieve the mentioned reviews. The main goal is to establish a tailored framework that serves as a guiding tool for identifying gaps, measuring progress, and informing the decision-making process to enhance the overall effectiveness of the SDIP while promoting resilience-based sustainable development.

2.3.2 Data Collection

The researcher will collect qualitative and quantitative data related to Nablus City, which will be utilized to obtain a better understanding of the situation in the city. This also includes collecting and reviewing the results and findings of the previously prepared frameworks, such as the Disaster Resilience Scorecard for Nablus City and the master plan of Nablus City, which will influence the analysis and assessment conducted in this study.

The data collected in this study is classified into two main types: primary data: directly collected by the researcher for the first time and specifically for the purpose of carrying out this study and secondary data which was collected previously by another researcher. In this study, the researcher collected the primary and secondary data using the following resources:

- Primary Data: Observations and interviews (Annex A).
- Secondary Data: Books, articles, journals, reports; governmental database, websites and online publications.

2.3.3. Analysis and Assessment

The CRPT is an integrated and comprehensive instrument designed to support urban planners and decision-makers in achieving resilience-driven, sustainable development across various sectors. It provides a robust framework for assessing resilience in urban environments, offering valuable insights and actions points on how to move forward towards resilience-based sustainable development.

The CRPT facilitates a cross-cutting evaluation of resilience-based urban development to identify gaps and opportunities. Its uniqueness falls in its flexibility to fit all contexts. The tool collects data aiming to produce a resilience profile for the city. Since this is already collected by the municipalities in the Palestinian context through the SDIP. In

this study, the researcher has referred to the SDIP as a baseline to move forward with the assessment. To further assess the local government's progress in fostering resilience, the researcher has developed a monitoring and evaluation matrix. The matrix evaluates resilience achievements across multiple sectors and revisits all relevant components outlined in the CRPT, as well as the Cities Disaster Scorecards. By doing so, a holistic perspective of the city's resilience is obtained, providing a solid foundation for future interventions and recommendations.

A key deliverable of the CRPT is the stakeholder roadmap, which aims to enhance stakeholder engagement and foster public ownership of resilience initiatives. To this end, the researcher has conducted comprehensive stakeholder mapping, followed by an in-depth assessment to categorize stakeholders based on several critical factors. This process enables the identification of tailored, context-specific mechanisms that ensure the effective involvement of all relevant parties.

At its core, the CRPT seeks to establish linkages between sustainability and resilience. Given the importance of evaluating the local government's progress in achieving resilience, the researcher has devised a robust mechanism for measuring these achievements. The seven targets of the Sendai Framework, which align with DRR-related SDGs, have been utilized as primary indicators for this assessment. The scoring system applied mirrors the Disaster Resilience Scorecard, using a scale from 1 to 3 to assess progress.

To achieve the above, the researcher will follow the following steps:

Previous SDIP Evaluation

- Examining DRR measures in the previous SDIP:

Conduct a thorough review of the previous SDIP of Nablus City. This involves examining the vision of the SDIP as well as the DRR measures listed in the previous SDIP.

- Commitment to implementing the planned DRR-related activities:

Measure the achievements in the implementation of DRR-related measures. This includes analyzing the extent to which the planned DRR activities were executed and their effectiveness in reducing disaster risks.

- Reasons behind shortcomings in the implementation of DRR-related activities:

Identify the reasons behind any shortcomings in the implementation of DRR-related measures.

Current SDIP

- Review of the approach adopted in formulating the SDIP:

Review the approach adopted in formulating the SDIP and the main deliverables, including identifying any changes that took place. This includes the assessment of the sectors outlined in the SDIP.

- Review of the main deliverables of Nablus SDIP:

This includes reviewing the main deliverables which are: the vision, the developmental issues and accordingly the proposed developmental programmes and projects.

Developing the M&E Matrix

The best means to assess the resilience of a city like Nablus is to create a robust M&E matrix. This matrix systematically assists in evaluating various dimensions of resilience based on established tools: the UN-Habitat CRPT and the Disaster Resilience Scorecard for Cities. Below is a detailed breakdown of the approach the researcher adopted to establish the M&E matrix:

- Defining Key Resilience Dimensions:

This includes stating the crucial pillars that affect achieving resilience-based sustainable development. The researcher delved into the two main frameworks; CRPT and the Disaster Resilience Scorecard for Cities to define relative dimensions the M&E matrix was built upon and reflected them upon the sectors forming the SDIP; environment and infrastructure, development of local economy, social development, administration and good governance. The researcher analyzed whether the four selected sectors adequately provide a comprehensive coverage of the dynamic situation in Nablus city through the examination of the key dimensions included in the proposed frameworks, which are detailed below:

CRPT focuses on a number of dimensions, mainly:

- The identity of the city: formulating a comprehensive narrative on various topics and aspects.
- Local Government and Stakeholders: providing a cross-analytical approach for the local government at several levels as well as the totality of the stakeholders.
- Shocks, stresses and challenges: assessing the proneness of the city to stresses, shocks and future challenges.
- Urban elements: including all elements that frame the urban part of the city.

The Disaster Resilience Scorecard is structured around the ten essentials of the Sendai framework. The Scorecard is structured around the “Ten Essentials for Making Cities Resilient”. The ten essentials for making cities resilient offer extensive coverage of the many challenges cities need to address for the sake of being more resilient:

- Essentials 1-3: cover governance and financial capacity.
- Essentials 4-8: cover the many dimensions of planning and disaster preparation.
- Essentials 9-10: cover the disaster response itself and post-event recovery.

Based on the assessment above, the proposed key resilience dimensions are:

- Governance and financial capacity
- Planning and disaster preparation
- Disaster Response and Post-Event Recovery
- Developing Evaluation Criteria and Indicators:

For each dimension, several criteria were set to assess the level of resilience in Nablus City. These criteria are measurable and relevant to the context of Nablus City. The indicators assist in quantifying the proposed criteria by measuring the achievement of the desired targets in reference to the baselines. Data will be collected for the relevant indicators through interviews and document reviews. The proposed indicators are listed in Table 2.4, Annex B:

- Feedback Mechanisms:

Encouraging participation and input from all relevant stakeholders is essential to inform decision-making, improve practices, and enhance overall outcomes. Utilizing reliable feedback mechanisms to suit all segments of the community is crucial for the efficiency of the process. The researcher will propose proper feedback mechanisms for each key dimension that is relevant and attainable for all community members and delivers the message.

Stakeholders

- Stakeholders Mapping:

The process of mapping out stakeholders comprises identifying a diverse array of entities and parties who are directly or indirectly involved in the DRR process in Nablus City. This strategic approach ensures a proper understanding of their roles, interests, influence, and interrelationships. By leveraging the characteristics of each stakeholder, the efficiency of integrating DRR measures in the planning frameworks and achieving sustainable development will significantly increase. This includes the following six main categories:

- Governmental Entities

Governmental bodies, at different levels, national, regional or local, are involved in the process of formulating and implementing DRR measures.

- Community-Based Organizations (CBOs)

Local associations, community groups and volunteer organizations have a role in grass-rooting the knowledge of DRR among the community.

- Private Sector

Business owners, companies and industry groups.

- Research and Academic Institutions

Research centers, think tanks and universities that contribute to developing the knowledge of DRR in an innovative approach.

- NGOs and Donor Community

Mapping NGOs relevant to the DRR field that have community connections and beneficial local knowledge, as well as donor agencies involved in funding and supporting the capacities and policy advocacy for DRR.

- Media

National and local media outlets that can aid in information dissemination and public awareness.

- Stakeholder Analysis

Stakeholder analysis is important for the successful integration of DRR measures in SDIPs. By identifying and assessing the roles, interests, and influence of all relevant stakeholders, a fit-for-purpose engagement strategy will be formulated to contribute to the achievement and fostering of resilience-based sustainable development. A number of factors need to be taken into consideration when assessing the stakeholders:

- Roles

Understanding the role each stakeholder plays in the DRR framework; either in the planning and design of DRR strategies or in the implementation of these initiatives or both stages.

- Interest

Understanding their level of interest and motivation. This will assist in aligning the proposed DRR measures with the goals of each stakeholder, contributing to a higher commitment and better engagement.

- Influence

Understanding the influence of each stakeholder encompasses assessing their capacities and strengths, including their technical expertise, resources, authority and networking.

- Proposing Engagement Strategies

Proper engagement strategies contribute towards improving the role stakeholders play by fostering effective communication channels. By ensuring that all stakeholders are well informed, and their voices are heard, a trustful foundation is established. Tailored engagement strategies upsurge stakeholder commitment and ownership, leading to increased participation and support for initiatives. The collaborative approach encourages diverse perspectives, enriching decision-making processes and improving outcomes. These strategies include recommendations for improving communication and coordination among different stakeholders as well as proposing strategies for enhancing their capacities.

Integration of SDGs:

- Identifying relevant SDGs:

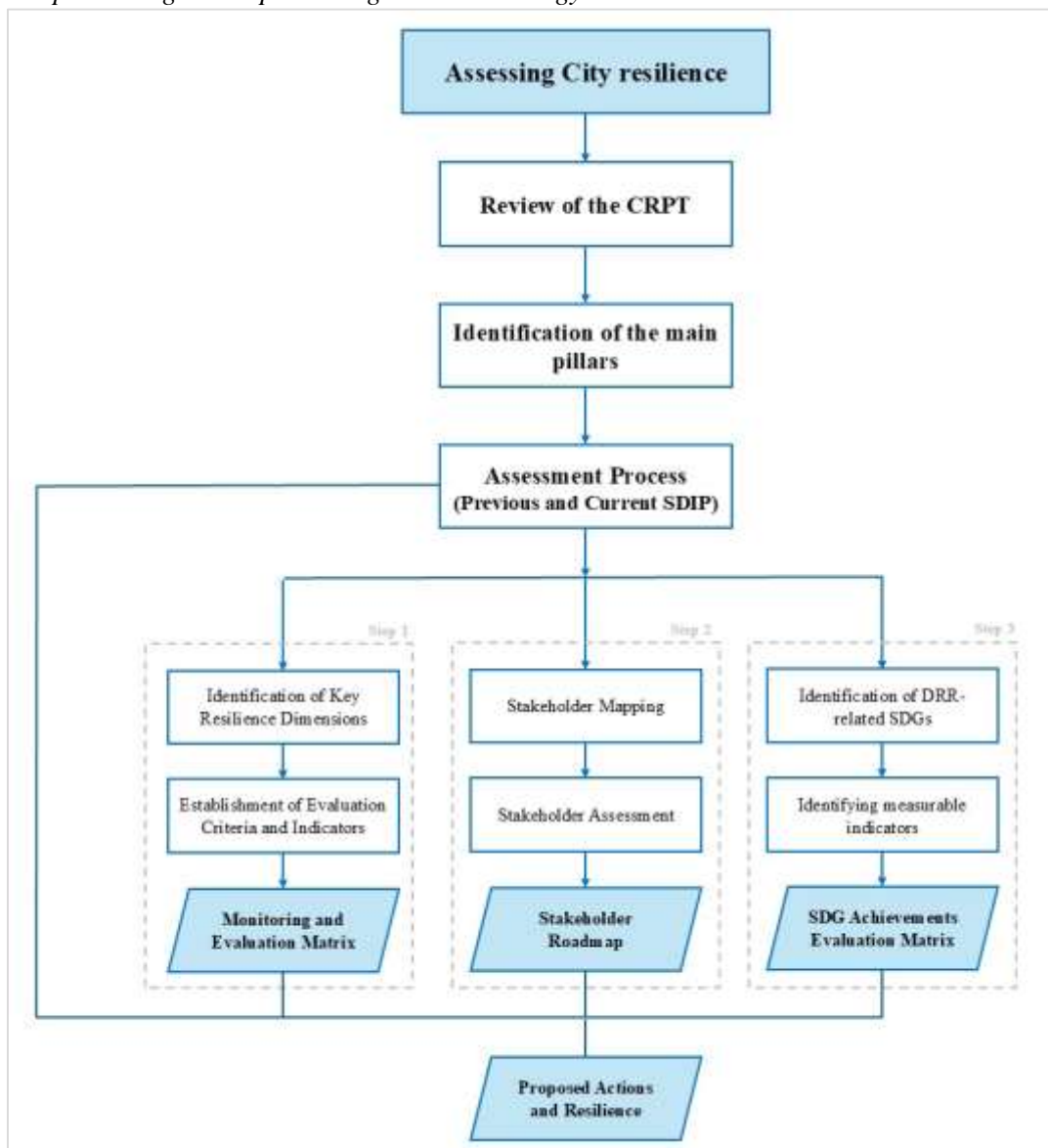
The interlinkages between DRR and the SDGs accentuate the importance of a holistic approach to establishing sustainable development. Achieving this integration will enable the city to foster resilience, mitigate risks, and enhance its capacity to withstand and recover from disasters while pursuing its efforts towards achieving sustainable development. This includes identifying relevant SDGs that are directly related to DRR as well as their contribution to achieving resilience-based sustainable development. These typically include SDG 1 (No Poverty), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action).

- Establishing measurable indicators

The researcher has referred to the seven targets of the Sendai Framework for Disaster Risk Reduction to formulate a set of measurable indicators. Below are the proposed indicators that illustrate the linkages between the DRR-related SDGs and the Sendai Framework for Disaster Risk Reduction, through its seven targets, reflecting both the outcomes and impacts of DRR activities:

- Number of deaths, missing persons and persons affected by disaster per 100,000 people.
- Direct Disaster economic loss in relation to global gross domestic product (GDP).
- Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services.
- Number of countries with national and local disaster risk reduction strategies.
- Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with Sendai Framework for Disaster Risk Reduction 2015-2030.

Figure 2.2
Conceptual Diagram Representing the Methodology



2.4 Terminology

The following terminology was used in the study as per the following:

- Hazard: Any process, phenomenon or human activity that would cause a loss of life, health impacts, social and economic disruption, property damage, or even environmental degradation.
- Risk: The combination of the probability of an event occurring and the negative consequences that would take place accordingly.
- Disaster: A significant disruption of the functioning of a community or a society, at different scales, generated because of hazardous events interacting with exposure

conditions, vulnerability and capacity. This would lead to the loss in human life, fixed assets and materials, economy and environment.

- Disaster Risk Reduction: focuses on preventing new, reducing existing disaster risk and managing residual risk, which will directly contribute towards strengthening resilience and achieving sustainable development.
- Vulnerability: The conditions determined by the physical, social, economic and environmental characteristics that increase the susceptibility of an individual, communities, systems or even assets to the impacts of hazards.
- Exposure: The condition of people, infrastructure, production capacities and other tangible human assets located in areas prone to hazards.
- Disaster Management: The act of organizing, planning and applying measures set to prepare for, respond to and recover from disasters.
- Strategic Development Investment Plan (SDIP): a voluntary strategic planning tool. Based on an inclusive approach, this systematic process aims at achieving sustainability by reflecting the local strategic objectives of the communities and allocating budgets to fund developmental projects and interventions that are in line with the communities' vision and plans.

Chapter Three

Results and Discussion

3.1 Review of Previous Nablus SDIP (2018-2021)

Reviewing the previous SDIP of Nablus City is an essential step for ensuring that the proposed strategies are informed, relevant, and aligned with both past experiences and future goals. This step will allow decision-makers to take more informed, efficient, and effective actions, reducing the likelihood of repeating previous setbacks and catalyzing past successes.

3.1.1 Examining DRR measures in the previous SDIP

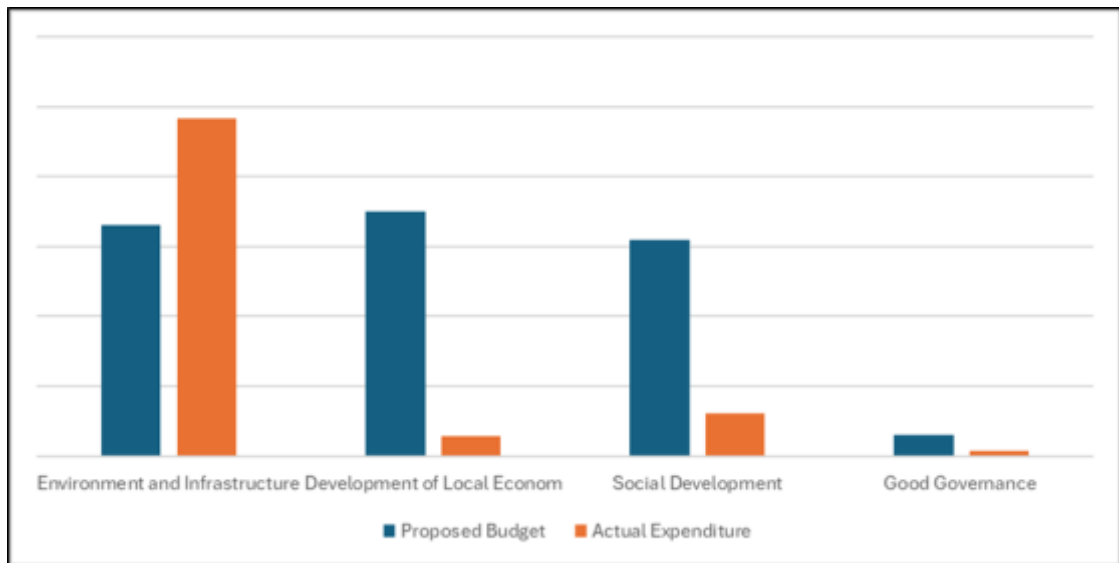
To start with, the vision of the previous SDIP of Nablus city was: “Nablus with its people, capital of economy, an incubator of education, a symbol of resilience, and address of authenticity”. The vision addresses resilience as a crucial pillar, especially since this edition of SDIP for the city of Nablus was the first SDIP to address resilience. This is mainly reflected in the fourth sector of the SDIP, “Security and Disasters”. This edition has identified the gaps in understanding and implementing DRR-related interventions, especially those related to the planning and preparation phase as well as emergency response and recovery.

3.1.2 Commitment to implementing the planned DRR-related activities

It is essential to assess the extent to which the planned DRR activities were executed during the previous period. As reported by the municipality of Nablus City, a number of projects with an allocated budget of 56 per cent of the overall SDIP budget were executed. The majority of these projects were related to the environment and infrastructure. Figure 3.1 below shows the proposed budget in comparison to the actual expenditure per each sector of Nablus SDIP (2018-2021) in millions USD \$ (Nablus Municipality, 2022).

Figure 3.1

The Proposed Budget in Comparison to The Actual Expenditure Per Each Sector of Nablus SDIP (2018-2021) in millions USD \$



Source: Nablus Municipality (2022)

When zooming in to the good governance sector, it was noticed that the budget allocated to this sector was the least. This highlights the need to invest in this sector in addition. Only a few projects were executed under the good governance sector and, more specifically, the security and disasters sub-sector. Regardless of the detailed disaster risk management plan, the implemented projects were limited to the provision of firefighting equipment, conducting awareness campaigns, and capacity-building sessions. Additionally, there are some efforts related to the establishment of the e-municipality system and the rehabilitation of infrastructure related to the electronic systems in the municipality. On another note, most projects and activities under other sectors indirectly contribute towards the achievement of resilience-based sustainable development. But still, additional efforts should be made to institutionalize a systematic, risk-informed approach to assessing the needs under sectors and proposing proper projects and interventions that serve the interlinkages between resilience and sustainability (Nablus Municipality, 2022).

As for the effectiveness of these measures in reducing disaster risks, the municipality of Nablus does not have a proper data collection mechanism to assist in measuring the performance and achievement of the SDIP.

3.1.3 Reasons behind shortcomings in the implementation of DRR-related activities

The main reasons behind these shortcomings in the implementation of the DRR-related measures are:

- COVID-19 and its negative impacts on the implementation of the proposed projects.
- Resource constraints.
- Lack of awareness among the community.
- Policy and institutional barriers.
- Inefficient execution of proposed interventions, regardless of the technical expertise available in the municipality.

3.2 Review of the Current Nablus SDIP (2023-2026)

Understanding the main SDIP Framework involves examining the strategies adopted during the preparation of the SDIP, as well as the main deliverables including the vision and issues proposed for each sector.

3.2.1 Review of the approach adopted in formulating the SDIP

The same approach was adopted in formulating this version of the SDIP. Following the manual of strategic planning issued by MoLG and building on previous experience of working in the strategic planning field. Nablus SDIP (2023-2026) focused on the diagnosis and analysis of four key development sectors: Environment and Infrastructure Sector, Local Economic Development Sector, Social Development Sector, and Administration and Good Governance Sector.

Nablus municipality was keen to meet the aspirations and needs of its people. Thus, it stressed the adoption of a community-led planning process. The municipality ensured the representation of all relevant stakeholders, especially marginalized groups such as women, youth and people with disabilities, in the planning process various stages. On another note, integrating their needs and priorities into the SDIP by translating them into programs and projects in various sectors of development.

3.2.2 Review of the main deliverables of Nablus SDIP

The main deliverables of the strategic plan are the vision of the community, its developmental issues and accordingly, the proposed developmental programs and projects.

The vision of Nablus city:

The updated vision of Nablus city; “Nablus: the safe city, capital of economy, an incubator of culture, the homeland of resilience, and address of authenticity”. When reviewing the changes in comparison with the previous vision, there are a number of changes highlighting both continuity and subtle shifts in focus:

- Removal of "with its people": This phrase in the previous vision conveyed a strong sense of community highlighting the importance of local partnership and engagement in shaping the identity of Nablus city. It would be preferred to keep this phrase as is in the recent vision since resilience cannot be achieved without the community.
- Addition of "the safe city": The inclusion of "the safe city" in the recent version is significant. Safety marks the growing importance of security and stability in any environment, which is also essential for achieving sustainable development. This change reflects the focus on safety as a core component of the identity of Nablus City, likely in response to either internal or external challenges.
- Change from “Incubator of Education” to “Incubator of Culture”: The shift from education to culture expands the role of Nablus City as a hub for nurturing not just academic growth, but also broader cultural heritage. Culture as a notion encompasses history, traditions, arts, and the overall way of life. This change reflects the desire to position the city of Nablus as a guardian of its rich cultural heritage, fostering a stronger local identity.
- From “Symbol of Resilience” to “Homeland of Resilience”: the notion; "homeland of resilience" reflects a fundamental connection to resilience, emphasizing the core part of resilience deeply rooted in the identity of the city.

The developmental issues and programmes:

The developmental priorities identified in this edition of the SDIP cover the four main sectors. In general, these priorities focus on the achievement of the community’s needs. Only one developmental priority among the Administration and Good Governance sector

directly addresses resilience: “Weak disaster risk reduction and management infrastructure”. The rest of the issues indirectly contribute towards a more resilient community. This will be assessed in the following sections by evaluating the four main sectors.

3.2.3 The M&E Matrix

The monitoring and evaluation matrix, Table 3.1, Annex B, is built based on the three main key resilience dimensions:

- Governance and financial capacity
- Planning and disaster preparation
- Disaster Response and Post-Event Recovery

Each score was assigned based on discussions with experts, and the researcher's knowledge of Nablus City and the technical background in DRR. Figure 3.2 shows the achievement of Nablus SDIP in reference to the baseline and proposed target, as per the main three key resilience dimensions. It is noticed that the contribution in the first key dimension, governance and financial capacity, is relatively weak. The second key dimension focuses on the preparation and planning for achieving a resilient community: planning and disaster preparation, which focuses on the preparation and planning for achieving a resilient community. Planning and disaster preparation are also in need of additional interventions. Some crucial aspects under this key dimension, such as land tenure and mobility, are considered solid in comparison to other important aspects, such as green infrastructure, public awareness and information dissemination that require additional attention and investment. The last key dimension, disaster response and post-event recovery, addresses the ability of Nablus municipality to act in times of disasters. This of course, is not a spontaneous act. On the contrary, it requires previous planning, preparation and coordination among different stakeholders, mainly the Nablus Government. The assessment shows a huge achievement in this field, especially in emergency response and recovery planning.

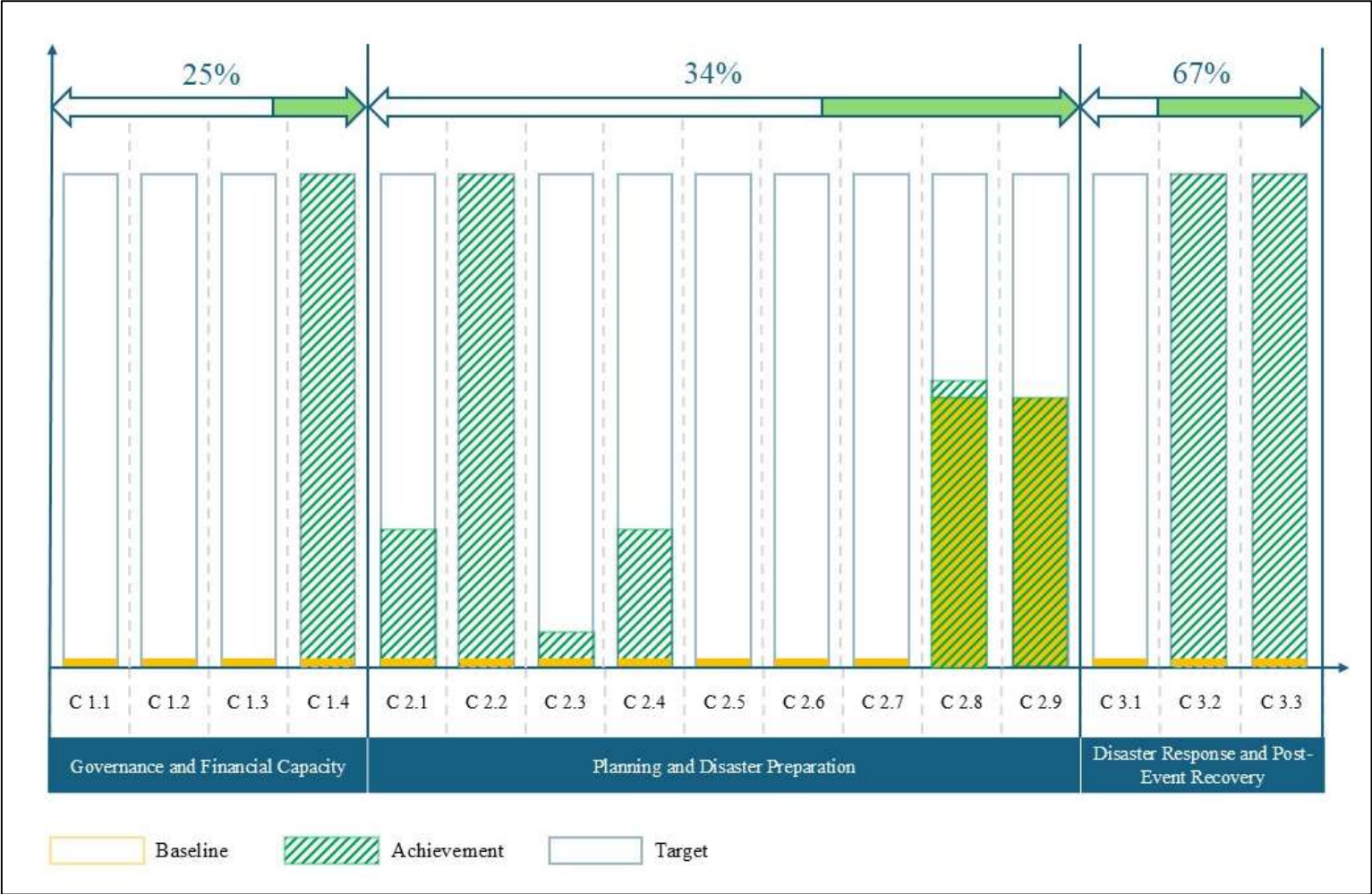
Feedback Mechanisms

Feedback mechanisms are vital for effective monitoring and evaluation since they provide organizations with the required tools to assess their performance and continuously adapt to and improve based on informed perceptions.

Examples of feedback mechanisms are surveys and questionnaires, focus groups, regular check-ins and interviews, social media and online platforms.

Figure 3.2

The achievement of Nablus SDIP in reference to the baseline and proposed target, as per the main three key resilience dimensions



3.3 Stakeholders

Stakeholders are the individuals and organizations involved in the project or activity, who could be either positively or negatively affected by or affecting the execution of the project (Friedman & Miles, 2006). Engaging stakeholders is fundamental for the effective execution of DRR integration in planning frameworks. By identifying key players in the field and understanding their roles and capacities, DRR initiatives will be enhanced in an effective manner ensuring that resilience-based sustainable development is achieved.

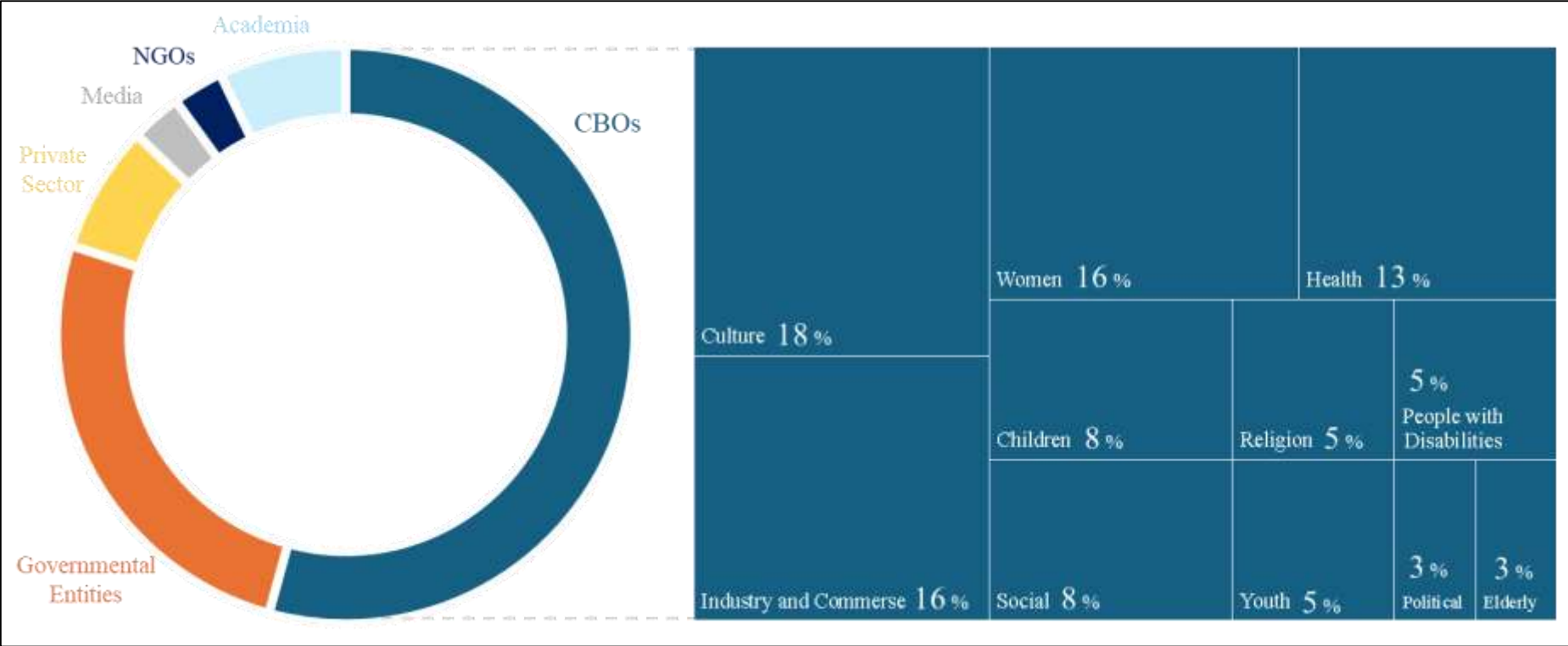
3.3.1 Stakeholders Mapping

The stakeholders of Nablus City are classified into the main six categories listed earlier, please refer to Table 3.2, Annex B:

- Governmental Entities
- Community-Based Organizations (CBOs)
- Private Sector
- Research and Academic Institutions
- NGOs and Donor Community
- Media

Figure 3.3 shows that the majority of the stakeholders, regardless of their role, interest or influence are CBO, and their breakdown is shown in the figure below, followed by Governmental entities, the private sector and academia, NGOs and Media.

Figure 3.3
Classification of Stakeholders as listed in Nablus SDIPs



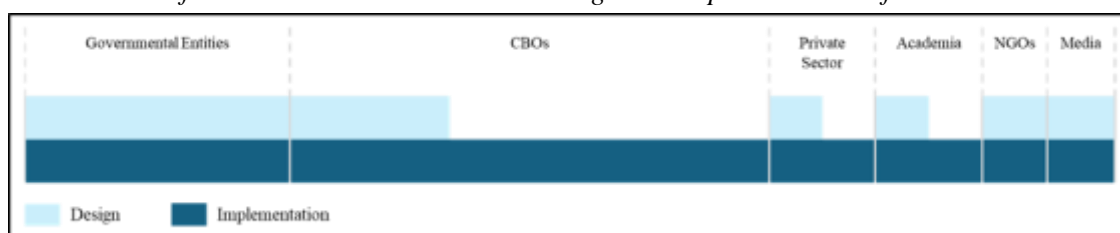
3.3.2 Stakeholder Analysis

The stakeholder analysis was conducted through a multi-dimensional array that assesses the factors identified earlier: the role, interest and influence of each stakeholder. Below is a list of stakeholders involved in the preparation of Nablus SDIP (2023-2026) grouped as per the categories listed previously and analyzed as per their roles, interest and influence, please refer to Figure 3.4 and Table 3.2. Each score was assigned based on discussions with experts, the focal point of Nablus municipality and the technical background in DRR.

First, all stakeholders were mapped according to their role, whether in the design or implementation phase. This served as a guide for proposing engagement strategies and enhancing the contribution of each class in building a resilient SDIP.

Figure 3.4

Contribution of each stakeholder class in the design and implementation of Nablus SDIP



On the other hand, the interest and the influence of each stakeholder were rated; High, medium and low, Figure 3.5 Each class was assigned a number: High: 3, Medium: 2 and low: 1. According to the score each stakeholder achieves: (Interest X Influence), a class was assigned:

- **Key player:** Those who achieve top scores of 9 and account for 14 per cent of the total stakeholders. The majority of those stakeholders are the main players in disaster risk management activities, mainly emergency response and early recovery phase such as Nablus governorate, the civil defense, the police, the Ministry of Public Works and Housing. Other stakeholders under this category are involved in the preparation phase, such as the Ministry of Local Government, and academic institutions such as An-Najah National University.
- **Keep satisfied:** Those who achieve a score of 4-6 and account for 40 per cent of the total stakeholders. The main classes under this category are governmental entities,

CBOs, the private sector, NGOs and Media which are interested and involved in the preparation and execution of Nablus SDIP.

- **Keep informed:** Those who achieve a score of 2 and account for 39 per cent of the total stakeholders. The majority of those who are classified under this class are mainly CBOs, private sector and academic institutions who are less interested and involved in the preparation of and implementation of Nablus SDIP.
- **Minimal effort:** Those who achieve a score of 1 and account for seven per cent of the total stakeholders; mainly CBOs who are not directly involved in the formulation and implementation of the SDIP as well as some governmental entities that play the same role.

3.3.3 Proposed Engagement Strategy

Based on the stakeholder assessment, each stakeholder has been assigned a class to determine the optimal engagement strategies based on influence and impact. Key players, such as key government agencies and high academic institutions, hold high power and interest, requiring regular consultations, strategic partnerships, and inclusion in decision-making bodies. Other less relevant governmental bodies, major private sector entities, and key NGOs with high to medium power and interest are satisfied through informative briefings, policy alignment, and occasional consultations. Medium to low power and interest stakeholders, including CBOs, other academic institutions, and local media, are informed with regular updates, community meetings, and capacity-building workshops. Lastly, smaller community groups with low power and interest require minimal effort, typically receiving periodic newsletters and public information campaigns.

In terms of enhancing the role of stakeholders, each stakeholder listed in the matrix is committed to the implementation of the SDIP and its proposed interventions. However, not all of them are properly involved in the design process. Mainly, the CBOs. It is essential for the LGUs to support the active engagement of CBOs since they reflect a local perspective, create a sense of ownership among different groups of the community and increase the likelihood of successful implementation of any initiative.

Figure 3.5
Distribution of Stakeholders based on their interest vs influence



3.4 Integration of SDGs

3.4.1 Identification of DRR-related SDGs

Several SDGs are directly related to enhancing resilience and reducing disaster vulnerability. “Sendai Framework for Disaster Risk Reduction’ has identified three SDGs that directly contribute to DRR, as listed below:

- **SDG 1 - No Poverty:** Poverty is a key driver of vulnerability in disaster contexts. By addressing poverty, the number of vulnerable people and those who are exposed to hazards will be reduced. SDG 1 also emphasizes economic growth and access to social protection systems. Improved economic stability enhances the capacity of communities to recover more swiftly from disasters.
- **SDG 11 - Sustainable Cities and Communities:** SDG 11 focuses on making cities inclusive, safe, resilient, and sustainable. Effective urban planning incorporates DRR strategies to minimize risks associated with hazards. SDG 11 also promotes resilient infrastructure which is crucial for DRR. This includes building codes that ensure safety and durability against disasters and create green spaces that can absorb excess rainfall. On another note, promoting inclusive decision-making processes ensures that vulnerable populations are considered in urban planning, enhancing their capacity to cope with disasters.
- **SDG 13 - Climate Action:** Climate change increases the frequency and intensity of disasters. SDG 13 emphasizes both mitigation of greenhouse gas emissions and adaptation strategies, which are essential for effective DRR. Implementing climate action strategies will increase the capacity of the communities to adapt to changing environmental conditions, thereby reducing their vulnerability to climate-related disasters.

3.4.2 Measuring Progress in DRR-Related SDGs

Indicators assist in ensuring accountability and properly guiding resource allocation toward initiatives that will effectively reduce disaster risk and promote resilience. Decision and policy makers can also benefit from utilizing these indicators to prioritize initiatives, formulate policies and implement best practices.

Figure 3.6 Annex c, Table 3.3, Annex B indicates the progress achieved in each indicator as per the total score from all relevant projects contributing to the achievement of DRR-related SDGs. Each score was assigned based on discussions with experts, the focal point of Nablus municipality and the technical background in DRR. The scoring is as follows: NA: 0, Low: 1, Medium: 2 and High: 3. It is noticed that the achievement in each indicator is relatively low. The maximum achievement was direct economic loss, which included damage to critical infrastructure and disruption of basic infrastructure. This goes in line with the fact that the majority of the expenditures in the previous SDIP is in the environment and infrastructure sector. The municipality of Nablus is derived by the pressing needs of the community and their preferences.

However, one important factor to consider is the availability and desegregation of required data. Unfortunately, there is no sufficient data available on the municipal level, but nevertheless on the national level, to measure these indicators. Instead, the researcher has used a qualitative scale; High, medium and low to assist in measuring the achievement in the selected indicators.

Chapter Four

Conclusions and Recommendations

This study evaluates the resilience of Nablus City, specifically examining its SDIP using the UN-Habitat tool; CRPT. The study aimed at establishing an assessment framework to assist Nablus municipality in measuring its progress toward achieving resilience-based sustainable development. The study focuses on three main components to be reviewed and assessed that contribute to achieving resilience. For starters, a revision of the previous SDIP (2018-2021) was carried out to assess the level of the implementation of Disaster Risk Reduction measures in the SDIP. This review also aimed to identify the factors contributing to the shortcomings in the implementation of the previous SDIP vision. Moving to the current version of SDIP (2023-2026), a monitoring and evaluation matrix was established to measure the integration of DRR measures and strategies into the SDIP building on existing international frameworks, UN-Habitat framework, CRPT and the Disaster Resilience Scorecard for Cities of UNDRR. The second component this study focuses on is the stakeholders. A stakeholder mapping was conducted, followed by an analysis to examine the current stakeholder network of Nablus City and propose a road map for enhancing their engagement in the design and implementation of the SDIP and other related frameworks. Since this study focuses on achieving synergy between resilience and sustainability, measuring the achievement of DRR-related SDGs was an essential component. Given the lack of a concrete instrument to assess these linkages, the researcher drew upon the seven targets outlined in the Sendai Framework for Disaster Risk Reduction to create a set of quantifiable indicators. The proposed matrix serves as a starting point to starting point which is intended to be refined and expanded to better capture the complexities and evolving dynamics of sustainability efforts on the local level.

4.1 Conclusion

In conclusion, Nablus Municipality has shown a strong commitment and willingness to integrate resilience into its development plans. While the municipality has taken serious steps to create a more resilient urban environment that can withstand environmental, economic, and social risks and challenges, additional efforts are needed to fully

implement a comprehensive resilience framework. The assessment of the Nablus SDIP reveals the following:

Review of Nablus SDIP

- **Vision:** The SDIP introduced a solid vision setting for building a holistic foundation for resilience embedded among all different sectors. However, this was partially met, primarily due to a variety of constraints: fiscal, communal and institutional constraints such as resource limitations, external challenges like COVID-19, and gaps in community awareness and institutional capacity.
- **Commitment to implementing the planned DRR-related activities:** Progress was achieved in the identification of resilience given the commitment of Nablus municipality. Still, there is an urgent need for improvement, regarding the achievement of resilience-based sustainable development, across all sectors.
- **Integration of SDGs:** the integration of DRR-related SDGs across various sectors remains inconsistent, with only a few direct interventions addressing DRR concerns.

The established monitoring and evaluation framework demonstrates a need for improvement, especially in governance and financial capacity, disaster preparedness, and public awareness, without neglecting the need to adopt a risk-informed approach to contribute to the achievement of a holistic resilience foundation.

Stakeholders Assessment

- **Stakeholders Analysis:** The stakeholder analysis categorizes stakeholders into six main groups: governmental entities, community-based organizations (CBOs), the private sector, research and academic institutions, NGOs and donor communities, and the media. The majority of stakeholders, especially CBOs, governmental entities and the private sector have a significant interest in the development process. The analysis highlights the different and critical roles various stakeholders play in shaping the city's resilience and development.
- **Engagement Strategies:** Based on the assessment, the researcher proposed various engagement strategies suggesting that stakeholders must be classified based on their level of influence and interest, guiding how they should be involved in the SDIP process. Key players, such as government agencies and academic institutions, require active involvement and regular consultations, while other stakeholders with moderate

influence and interest should be kept informed through briefings and workshops. Notably, CBOs, despite being crucial for local engagement and ownership, are often underrepresented in the design process. Strengthening their involvement will be essential for ensuring the SDIP's success, fostering community buy-in, and enhancing the sustainability of resilience-building initiatives.

Integration of SDGs

- **Achievement:** As for the integration between the SDGs and Sendai Framework, given that measurable indicators are essential for tracking progress and guiding policy decisions, the analysis reveals that Nablus's achievements in these areas remain relatively low. Indicators related to disaster risk reduction are not yet at optimal levels, primarily due to the lack of a robust municipal monitoring system.

Given the above observations and findings and in reference to the study objectives, the researcher has established an enhanced tailored-fit framework for assessing the resilience of Nablus City, through its SDIP, aiming to promote the concept of a resilience-based sustainable development in the absence of an integrated framework addressing national and international resilience and development framework. This framework with its three main pillars, M&E matrix, stakeholders roadmap and SDG achievements evaluation matrix, serves as a guiding tool that decision makers utilize in making risk-informed decisions, measure the achievement of sustainable development and evaluate other crucial aspects such as stakeholder engagement. It will serve as a model for other cities, facing different challenges in resilience and sustainability with the applicability to be customized to fit other contexts.

4.2 Challenges

The main challenge that the researcher faced when conducting this study was the data availability and quality:

- The huge gap in local data collection systems. The municipality of Nablus and regardless of its efforts, is lacking an accurate and comprehensive data collection system, especially on the performance of Nablus municipality on disaster risk reduction (DRR) measures and the implementation of SDIP was very limited. The researcher While qualitative data is readily available, there is a notable lack of

structured quantitative data necessary for a comprehensive assessment of urban resilience. Consequently, the researcher was required to systematically quantify a large volume of qualitative information to enable a more detailed and objective evaluation of progress.

- The lack of structured quantitative data measuring the performance of Nablus Municipality in specific indicators. The researcher had to quantify a large volume of qualitative data in order to assess the progress in more detail.

Other challenges included the lack of awareness among the staff of Nablus Municipality stakeholders and society in regard to resilience and comprehensive sustainable planning. This hinders the effective integration of resilience-based approaches into urban development strategies, as decision-makers and community members may not fully grasp the long-term benefits of proactive disaster risk reduction and sustainable planning. Additionally, the lack of awareness also impacts stakeholder engagement, reducing the effectiveness of collaborative efforts needed to implement resilience-driven initiatives.

4.3 Recommendations

After conducting the assessment, the researcher proposes several key recommendations in the face of evolving challenges:

On the short term:

For Nablus Municipality in specific:

The recommendations below are proposed specifically for the municipality of Nablus and based on the detailed assessment conducted for the context of Nablus city. However, All these recommendations could be amended to be fit other cities in the Palestinian context.

The Monitoring and Evaluation Matrix:

- Adopt and enhance the proposed frameworks to track the efforts of Nablus municipality towards achieving resilience-based sustainable development in the city of Nablus. With focus on the real-time data collection (including gender- and age-disaggregated data), assessment tools, and clear reporting mechanisms to facilitate transparent monitoring of progress and setbacks.

- Strengthen the role of the Strategic Planning Department in the municipality of Nablus to conduct regular reviews and assessments for the key departments to ensure alignment with international best practices and local needs. More specifically, reporting on the SDGs achievements and Sendai Framework.
- Strengthen governance mechanisms within the municipality to ensure that resilience-based policies are consistently enforced across all sectors and departments and embedded within any decision making process to ensure compliance with the risk-informed approaches.
- Strengthen financial and institutional capacity through the provision of targeted training programs for municipal staff, local authorities, and community leaders to improve institutional capacity and fund raising channels for implementing resilience-based sustainable development. This should include both technical and management skills.

Stakeholder Engagement and Participation

- Strengthen the participation of stakeholders especially the CBOs and Local Communities in all stages of the SDIP: design, implementation and evaluation, as well as decision-making process as listed in the stakeholder roadmap and through community consultations, participatory workshops, and local resilience action plans. This will promote collaborative efforts and ensure mutual ownership of the SDIP's goals.
- Leverage the media sources in raising public awareness about resilience and disaster risk reduction, ensuring that both local and national populations understand their role not only in the successful achievement of SDIP, but also in assisting residents in understanding how they can contribute to resilience building.

On the medium term:

For Governmental Bodies: Risk-Informed Approach in Urban Planning

- For Governmental bodies, MoLG in specific: Integrate resilience measures and climate change adaptation strategies into urban planning practices especially strategic planning on the local level. This include: land use, housing and social and physical interventions.

- Upgrade the Strategic Planning approaches adopted by MoLG to ensure detailed monitoring and evaluation processes take account of resilience practices and report to international frameworks such as SDGs and Sendai Framework for Disaster Risk Reduction.

For Donors and International: Community Resilience Funding:

- Given fiscal constraints, Nablus municipality should seek diversified funding sources through partnerships with international donors, private sector investments, and collaborative programs with other municipalities. Establishing a dedicated resilience fund programmes and modules will contribute to achieving financial sustainability of disaster risk reduction and resilience projects.

For Policy and Decision Makers on National and Local levels: Synergies Between Resilience and Sustainable Development Goals (SDGs):

- Align local goals with international frameworks by closely working on aligning the local SDG and DRR targets with national and international frameworks. By investing in developing and expanding the monitoring and evaluation framework, the city can measure its progress more effectively and attract national and international support for sustainable development. As a starting point, a voluntary local review could be conducted to assess the municipality and identify the priorities and gaps that require immediate action.
- Mainly MoLG, Establish specific indicators for different sectors (e.g., water, energy, health, education, economy) that align with the SDGs and DRR. These indicators should track resilience improvements while directly linking to the SDIP's overall objectives.

On the long term:

For Researchers and Academic Institutions, in partnership with the LGUs:

Technology and Innovation for Resilience-Based Sustainable Development

- Utilize Geographic Information Systems (GIS) and remote sensing technologies to conduct detailed risk mapping and monitor environmental changes. These tools can help in identifying vulnerable areas and planning disaster response strategies more effectively.

- Invest in implementing smart city solutions to improve urban management and resilience.

Continuous Research and Knowledge Sharing

- Encourage research collaborations with academic institutions and research centers to generate data, share best practices, and continuously innovate in the field of disaster risk reduction and sustainable development.
- Knowledge exchange with other cities that have successfully implemented resilience-based sustainable development strategies. This could involve knowledge-sharing platforms, webinars, and peer-to-peer exchanges.

List of Abbreviations

Abbreviation	Meaning
CRPT	City Resilience Profiling Tool
CBOs	Community-Based Organizations
DRM	Disaster risk management
DRR	Disaster Risk Reduction
GHG	Green House Gas
LGUs	Local Government Units
MoLG	Ministry of Local Government
M&E	Monitoring and Evaluation
NDC	Nationally Determined Contributions
NGOs	Non-Governmental Organizations
SDIP	Strategic Development Investment Plan
SDGs	Sustainable Development Goals
UN-Habitat	United Nations Human Settlement Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UN	United Nations

References

- Academy of Disaster Reduction and Emergency Management National Disaster Reduction Centre of China International Federation of Red Cross and Red Crescent Societies (IFRC) Beijing Normal University. (2023). *2022 Global natural disaster assessment report*.
- Akter, A., Khalilia, A., Heylighen, A., Pereira, C., Ipek, C., Jyothi, C., . . . Rahman, W. (2022). *Heritage and the City: Values and Beyond*. Istanbul, Turkey: Cinius Yayinlari.
- Al-Dabbeek, J. (2016). *Aqaba Resilience Action Plan*. Aqaba.
- Al-Dabbeek, J. (2018). *Making Cities Sustainable and Resilient, Nablus City*. Nablus.
- Al-Dabbeek, J., & El-Kelani, R. (2008). Rapid Assessment of Seismic Vulnerability in Palestinian Refugee Camps. *Journal of Applied Sciences* 8, 137-1382.
- An-Najah National University. (2024, July 27). *Nablus City*. Retrieved from An-Najah National University: <https://www.najah.edu/en/about/history-and-traditions/nablus-city/>
- Benson, M. H., & Craige, R. K. (2014, July 8). *Opinion: It's Time to Move Past the Concept of Sustainability*. Retrieved from Ensia: <https://ensia.com/voices/the-end-of-sustainability/>
- Brundtland Commission. (1987). *Our Common Future*. Oxford University Press.
- Chapin, F., Lovcraft, A., Zavaleta, E., Nelson, J., Robards, M., Kofinas, G., . . . Naylor, R. (2006). Policy strategies to address sustainability of Alaskan boreal forests in response to a directionally changing climate. *The National Academy of Sciences of the USA*, 16637–16643.
- Dundee-Nablus Twinning Association . (2022, 10 01). *History of Nablus*. Retrieved from Dundee-Nablus Twinning Association: <http://www.dundee-nablus.org.uk/history/nablushistory.aspx>
- Environment Quality Authority. (2021). *Palestine's Nationally Determined Contributions (NDC) implementation plans*.
- Environmental Quality Authority . (2016). *National Adaptation Plan to Climate Change*. Ramallah.
- Folke, C. (2016). Resilience (Republished). *Ecology and Society*.
- Friedman, A., & Miles, S. (2006). *Stakeholders: Theory and Practice*. New York: Oxford University Press.
- Galperin, A., & Wilkinson, E. (2015). *Strengthening Disaster Risk Governance*. UNDP.

- Gonçalves, L., & Ribeiro, P. (2019, October). Urban Resilience: A Conceptual Framework. *Sustainable Cities and Society*.
- Jha, A., Miner, T., & Stanton-Geddes, Z. (2013). *Building Urban Resilience: Principles, Tools, and Practice. Directions in Development*. Washington DC: The World Bank.
- Leichenko, R. (2011, May). Climate Change and Urban Resilience. *Current Opinion in Environmental Sustainability*, pp. 164-168.
- Mallick, S. K. (2021). Prediction-Adaptation-Resilience (PAR) approach- A new pathway towards future resilience and sustainable development of urban landscape. *Geography and Sustainability*, 127-133.
- Meerow, S., Newell, J., & Stults, M. (2016, March). Defining Urban Resilience: a Review. *Landscape and Urban Planning*, pp. 38-49.
- Ministry of Planning. (2007). *Defining Spatial Structure for Public Service Centers in the West Bank and Gaza Strip-A Conceptual Framework*. Ramallah: Ministry of Planning.
- MoLG. (2009). Policy Note: Strategic Development and Investment Planning for Palestinian Cities and Towns. Ramallah, Palestine.
- MoLG. (2017). Built up Area 2017 - Shapefile.
- MoLG. (2023). *National Urban Policy for Palestine*. Ramallah.
- Municipality of Barcelona. (2022). *Resilience Profile Barcelona*. Barcelona: UN-Habitat.
- Nablus City. (2022, October 02). *Nablus City*. Retrieved from Nablus Municipality: <http://nablus.org/index.php/en/nablus-city>
- Nablus Municipality. (2022, October 03). *Area*. Retrieved from Nablus Municipality: http://nablus.org/index.php/ar/index.php?option=com_content&view=article&id=111
- Nablus Municipality. (2022). *Evaluation of Nablus SDIP 2018 - 2021*. Nablus: Nablus Municipality.
- Nablus Municipality. (2022, September 08). *Nablus Municipality*. Retrieved from Nablus City : <http://nablus.org/index.php/en/nablus-city>
- Nablus Municipality. (2023). *Strategic Development Plan for Nablus City 2023-2026*. Nablus.
- PCBS. (2017). Localities 2017. Ramallah.
- PCBS. (2017). *Palestinian Localities Profile 2017*. Ramallah: PCBS.

- PCBS. (2024, July 20). *Projected Mid -Year Population for Nablus Governorate by Locality 2017-2026*. Retrieved from Palestinian Central Bureau of Statistics: https://www.pcbs.gov.ps/statisticsIndicatorsTables.aspx?lang=en&table_id=698
- Pisano, U. (2012). *Resilience and Sustainable Development: Theory of resilience, systems thinking and adaptive governance*. Vienna,; European Sustainable Development Network Office.
- Rood, J. (2006, 25 11). The Time the Peasants Entered Jerusalem: The revolt against Ibrahim Pasha in the Islamic court sources. *Jerusalem Quarterly*(27), 28-27.
- Rosales, N. (2011). Towards the modeling of sustainability into urban planning: Using indicators to build sustainable cities. *Procedia Engineering*, 642-647.
- Satterthwaite, D. (2011). Why is community action needed for disaster risk reduction and climate change adaptation? *Environment & Urbanization*, 339-349.
- Shanteer, R. (2022). *Developing mechanisms to Integrate Disaster Risk Reduction within the Development Plan – Tulkarem City*. Tulkarem.
- UKRI GCRF Urban Disaster Risk Hub. (2024, July 27). *Nablus City, Palestine, joins Tomorrow's Cities*. Retrieved from Tomorrow's Cities: <https://tomorrowscities.org/nablus-city-palestine-joins-tomorrows-cities>
- UKRI GCRF Urban Disaster Risk Hub. (2024, July 27). *Tomorrow's Nablus*. Retrieved from Tomorrow's Cities: Urban Risk in Transition: <https://tomorrowscities.org/tomorrows-nablus>
- UN Office for Disaster Risk Reduction. (2024, June 11). *Why are disasters not natural?* Retrieved from UNDRR: <https://www.undrr.org/our-impact/campaigns/no-natural-disasters>
- UNDRR. (2019). *Local Disaster Risk Reduction and Resilience Strategies*. Geneva, Switzerland.
- UNDRR. (2024, July 21). *Breaking the cycle of risk*. Retrieved from UNDRR: <https://www.undrr.org/building-risk-knowledge/understanding-risk#:~:text=UNDRR%20wants%20to%20break%20the,on%20people%2C%20systems%20or%20assets>.
- UNDRR. (2024, July 21). *Disaster*. Retrieved from UNDRR: <https://www.undrr.org/terminology/disaster>
- UNDRR. (2024, July 20). *Disaster Resilience Scorecard for Cities*. Retrieved from UNDRR: <https://mcr2030.undrr.org/disaster-resilience-scorecard-cities#:~:text=A%20tool%20for%20disaster%20resilience%20planning&text=The%20Scorecard%20provides%20a%20set,Essentials%20for%20Making%20Cities%20Resilient>.
- UNESCO. (2024, August 02). *Old Town of Nablus and its environs*. Retrieved from UNESCO: <https://whc.unesco.org/en/tentativelists/5714/>
- UN-Habitat. (2018). *City Resilience Profiling Tool*. UN-Habitat.

- UN-Habitat. (2022, September 07). *Building Resilience*. Retrieved from Urban Resilience Hub: <https://urbanresiliencehub.org/building-resilience/>
- UN-Habitat. (2022, April 4). *News: Barcelona, from pilot city to resilience Hub*. Retrieved from Urban Resilience Hub: <https://urbanresiliencehub.org/barcelona-from-pilot-city-to-resilience-hub/>
- UN-Habitat; UNDP Asia-Pacific Regional Centre;. (2015, July 27). Urbanization and Climate Change. *Asia-Pacific Issue Brief Series on Urbanization and Climate Change No. 1*.
- United Nations. (2005). *Hyogo Framework for Action Building the Resilience of Nations and Communities to Disasters*. Hyogo, Japan: International Strategy for Disaster Reduction.
- United Nations. (2015). *Sendai Framework for Disaster Risk Reduction 2015 - 2030*.
- United Nations Office for Disaster Risk Reduction. (2023, October 19). *Prevention Web - Understanding Disaster Risk*. Retrieved from UNDRR: <https://www.preventionweb.net/understanding-disaster-risk/disaster-losses-and-statistics>
- United Nations Office for Disaster Risk Reduction. (2023, 01 May). *Sendai Framework Terminology On Disaster Risk Reduction - Disaster Risk Management*. Retrieved from United Nations Office for Disaster Risk Reduction: <https://www.undrr.org/terminology/disaster-risk-management>
- United Nations Office for Disaster Risk Reduction. (2024, July 21). *Sendai Framework Terminology On Disaster Risk Reduction - Disasters*. Retrieved from UNDRR: <https://www.undrr.org/terminology/disaster>
- United Nations, Department of Economic and Social Affairs. (2018, May 18). *News*. Retrieved from United Nations: <https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html>
- University of Alberta, Office of Sustainability. (2013, July). *What is Sustainability?* Retrieved from McGill University: <https://www.mcgill.ca/sustainability/files/sustainability/what-is-sustainability.pdf>
- Urban Planning and Disaster Risk Reduction Center at An-Najah National University. (2024). *Integrating Resilience in Local Governance in West Bank and*. Nablus.
- Vasilescu, L., & Khan, H. (2008). Disaster Management CYCLE – a theoretical approach. *Management & Marketing*.
- Virtanen, P. K., Siragusa, L., & Guttorm, H. (2020). Introduction: toward more inclusive definitions of sustainability. *Environmental Sustainability*, 77-62.
- Yokohama Strategy and Plan of Action for a Safer World. (1994). *Yokohama Strategy and Plan of Action for a Safer World. World Conference on Natural Disaster Reduction*. Yokohama, Japan.

Appendices

Appendix A

List of Interviews

Interviews Details	
1	<p>Date: 24 October 2022 Interviewee: Dr. Amal Al Hudhud Position: Head of Strategic Planning Department – Nablus Municipality Action Points:</p> <ul style="list-style-type: none"> • Orientation on CRPT
2	<p>Date: 01 November 2022 Interviewee: Dr. Amal Al Hudhud Position: Head of Strategic Planning Department – Nablus Municipality Action Points:</p> <ul style="list-style-type: none"> • Discussion on Nablus SDIP (2018-2021)
3	<p>Date: 01 November 2022 Interviewee: Mr. Abdul-Afo Al Aker Position: Head of Public Relations Department – Nablus Municipality Action Points:</p> <ul style="list-style-type: none"> • Discussion on the Institutional situation of Nablus City and stakeholders
4	<p>Date: 11 November 2022 Interviewee: Mr. Alaa' Al Jitan Position: Public Relations Department – Nablus Municipality Action Points:</p> <ul style="list-style-type: none"> • Discussion on the Institutional situation of Nablus City and stakeholders
5	<p>Date: 11 November 2022 Interviewee: Dr. Hafez Shaheen Position: Water Expert and Previous Council Member at Nablus Municipality (2018-2022) Action Points:</p> <ul style="list-style-type: none"> • Discussion on the Shocks and Stresses Nablus city face
6	<p>Date: 14 November 2022 Interviewee: Eng. Ibrahim Hamouz Position: Planning Expert, MoLG Action Points:</p> <ul style="list-style-type: none"> • Discussion on Strategic Planning Practices in Palestine
7	<p>Date: 20 November 2022 Interviewee: Dr. Ahmed El-Atrash Position: Senior Urban Planning Officer, UN-Habitat Action Points:</p> <ul style="list-style-type: none"> • Discussion on CRPT Integration in Strategic Planning
8	<p>Date: 02 December 2022 Interviewee: Eng. Adli Ya'ish Position: Previous Head of Nablus Municipality (2018-2022) Action Points:</p> <ul style="list-style-type: none"> • Discussion on the efforts Nablus Municipality has put over the years in regards with resilience • Discussion on the Shocks and Stresses Nablus city face
9	<p>Date: 16 December 2022 Interviewee: Eng. Rama Shanteer</p>

	<p>Position: Researcher</p> <p>Action Points:</p> <ul style="list-style-type: none"> • Discussion on measuring resilience on the local level in similar contexts; Tulkarem City.
10	<p>Date: 20 November 2023</p> <p>Interviewee: Dr. Ahmed El-Atrash</p> <p>Position: Senior Urban Planning Officer, UN-Habitat</p> <p>Action Points:</p> <ul style="list-style-type: none"> • Discussion on Measuring SDGs achievements on the Local Level
11	<p>Date: 06 June 2024</p> <p>Interviewee: Eng. Ibrahim Hamouz</p> <p>Position: Planning Expert, MoLG</p> <p>Action Points:</p> <ul style="list-style-type: none"> • Discussion on stakeholder assessment in Nablus City
12	<p>Date: 18 June 2024</p> <p>Interviewee: Dr. Hafez Shaheen</p> <p>Position: Water Expert and Previous Council Member at Nablus Municipality (2018-2022)</p> <p>Action Points:</p> <ul style="list-style-type: none"> • Discussion on measuring the achievement in DRR-related SDGs on the local level

Appendix B

Tables

Table 2.4
Proposed M&E Criteria and Indicators

Aspect	Criteria	Indicator
Governance and financial capacity		
Planning	Hazard Assessment	% of high-risk areas with mitigation plans
	multiple risk scenarios	# of risk scenarios
Financial Capacity	Master Plan	% of land use allocated based on risk information
	Financial capacity for resilience	# of financial plan/budget allocated for resilience
Planning and disaster preparation		
Urban Development	Expansion areas	% of expansion areas planned based on resilient approaches
Protective Functions	Land Tenure	# of land administration systems
	Green Infrastructure	% of green buffer zones in reference to the total open spaces
Institutional Capacity	Investing in the capacities of the technical staff	# of training sessions for staff
Societal Capacity	Public Awareness	# of Awareness session for public
	Information Dissemination	# of Platforms used to share DRR related information
Resilient Infrastructure	(Per Sector)	% of infrastructure implemented based on risk information
	Mobility	% of roads still accessible after a disaster
	Health	% of population with access to emergency healthcare
Disaster Response and Post-Event Recovery		
Effective Disaster Response Recovery	Early Warning	# of Early warning systems
	Emergency response	# of Emergency response plans
	Recovery planning	# of strategy/process for recovery

Table 3.1
Proposed Evaluation and Monitoring Matrix

Aspect	Criteria	Indicator	Baseline	Target	Achievement	Score	Data collection method	
Governance and financial capacity								
Planning	1.1	Hazard Assessment	% of high-risk areas with mitigation plans	0	100%	0	0	Municipality Reports
	1.2	multiple risk scenarios	# of risk scenarios	0	3	0	0.0	Municipality Reports
	1.3	Master Plan	% of land use allocated based on risk information	0	100%	0	0.0	Municipality Reports
Financial Capacity	1.4	Financial capacity for resilience	# of financial plan/budget allocated for resilience	0	1	1	1.0	Municipality Reports
Planning and disaster preparation								
Urban Development	2.1	Expansion areas	% of expansion areas planned based on resilient approaches	0	100%	30%	0.3	Municipality Reports
	2.2	Land Tenure	# of land administration systems	0	1	1	1.0	Municipality Reports
Protective Functions	2.3	Green Infrastructure	% of green buffer zones in reference to the total open spaces	0	15%	0.9%	0.1	Municipality Reports
Institutional Capacity	2.4	Investing in the capacities of the technical staff	# of training sessions for staff	0	4	1	0.3	Municipality Reports
Societal Capacity	2.5	Public Awareness	# of Awareness session for public	0	4	0	0.0	Surveys/Interviews
	2.6	Information Dissemination	# of Platforms used to share DRR-related information	0	1	0	0.0	Surveys/Interviews

Aspect	Criteria	Indicator	Baseline	Target	Achievement	Score	Data collection method	
Resilient Infrastructure	2.7	(Per Sector)	% of infrastructure implemented based on risk information	0	100%	0	0.0	Municipality Surveys/Reports
	2.8	Mobility	% of roads still accessible after a disaster	50%	80%	58%	0.73	Municipality Surveys/Reports
	2.9	Health	% of the population with access to emergency healthcare	50%	90%	50%	0.6	Municipality Surveys/Reports
Disaster Response and Post-Event Recovery								
Effective Disaster Response	3.1	Early Warning	# of Early warning systems	0	1	0	0	Municipality Reports/Surveys
	3.2	Emergency response	# of Emergency response plans	0	1	1	1	Municipality Reports/Surveys
Recovery	3.3	Recovery planning	# of strategy/process for recovery	0	1	1	1	Municipality Reports/Surveys

Table 3.2
Stakeholders Assessment

	Stakeholder	Role		Interest	Influence	Score	Class
		Design	Implementation				
Governmental Entities							
1	Civil Defense	X	X	High	High	9	Key Player
2	Police	X	X	High	High	9	Key Player
3	Nablus Governorate	X	X	High	High	9	Key Player
4	Ministry of Local Government	X	X	High	High	9	Key Player
5	Ministry of Public Works and Housing	X	X	High	High	9	Key Player
6	Ministry of Agriculture	X	X	Medium	Medium	4	Keep Satisfied
7	Ministry of Culture	X	X	Medium	Medium	4	Keep Satisfied
8	Ministry of Economy	X	X	Medium	Medium	4	Keep Satisfied
9	Ministry of Health	X	X	High	High	9	Key Player
10	Ministry of Higher Education	X	X	Medium	Medium	4	Keep Satisfied
11	Ministry of National Economy	X	X	Medium	Medium	4	Keep Satisfied
12	Ministry of Social Development	X	X	Medium	Medium	4	Keep Satisfied
13	Ministry of Transportation	X	X	Medium	Medium	4	Keep Satisfied
14	Ministry of Tourism and Antiquities	X	X	Medium	Medium	4	Keep Satisfied
15	Environmental Quality Authority	X	X	Medium	Medium	4	Keep Satisfied
16	Palestine Standards Institution	X	X	Low	Low	1	Minimal Effort
17	Palestinian Custom Police	X	X	Low	Low	1	Minimal Effort
18	Land and Water Settlement Commission	X	X	Medium	Medium	4	Keep Satisfied
CBOs-Children							
19	Child Care Society		X	Medium	Low	2	Keep Informed
20	Children's Amusement Center		X	Medium	Low	2	Keep Informed
21	Little Hands Society		X	Medium	Low	2	Keep Informed
CBOs-Culture							
22	Development Center		X	Medium	Low	2	Keep Informed
23	Nablus Municipality Cultural Center - Hamdi Mango		X	Medium	Low	2	Keep Informed
24	Nabulsi Diwan		X	Medium	Low	2	Keep Informed
25	Old City Associations		X	Medium	Low	2	Keep Informed
26	Palestinian Cultural Forum 'Tanweer'		X	Medium	Low	2	Keep Informed
27	Project Hope		X	Medium	Low	2	Keep Informed

28	Seeds Association for Development and Culture	X	Medium	Low	2	Keep Informed
CBOs-Elderly						
29	دار المحبة والوثام	X	Medium	Low	2	Keep Informed
CBOs-Health						
30	Atadamon Philanthropy Association	X	Medium	Medium	4	Keep Satisfied
31	Palestine Medical Technology Association	X	Medium	Low	2	Keep Informed
32	Palestine Red Crescent Society	X	High	High	9	Key Player
33	Palestinian Dental Association	X	Low	Low	1	Minimal Effort
34	Women's Union Hospital	X	Medium	Medium	4	Keep Satisfied
CBOS-Industry and Commerce						
35	Engineers Associations	X	Medium	Medium	4	Keep Satisfied
36	Nablus Businessmen Forum - Palestine	X	Medium	Low	2	Keep Informed
37	Nablus Chamber of Commerce and Industry	X	Medium	Medium	4	Keep Satisfied
38	Palestinian Contractors Union	X	Medium	Medium	4	Keep Satisfied
39	Palestinian Society for Consumer Protection	X	Low	Low	1	Minimal Effort
40	Union of Stone and Marble Industry in Palestine	X	Low	Low	1	Minimal Effort
CBOs-People with Disabilities						
41	Association for the Care of Children with Special Needs, Nablus	X	Medium	Low	2	Keep Informed
42	General Union of People with Disabilities	X	Medium	Low	2	Keep Informed
CBOs-Political						
43	التنسيق الفصائلي	X	Medium	Medium	4	Keep Satisfied
CBOs-Religion						
44	A representative of the Christian community	X	Medium	Medium	4	Keep Satisfied
45	A representative of the Samaritan community	X	Medium	Medium	4	Keep Satisfied
CBOs-Social						
46	Al Thurayya Center for people with disabilities	X	Medium	Low	2	Keep Informed
47	Civil Society of Nablus Governorate	X	Medium	Medium	4	Keep Satisfied
48	Nablus Image	X	Medium	Low	2	Keep Informed
CBOs-Women						
49	Eve Association for Culture and Arts	X	Medium	Low	2	Keep Informed
50	Palestinian Working Women Society for Development	X	Medium	Low	2	Keep Informed
51	Union of Palestinian Women's Committees	X	Medium	Low	2	Keep Informed
52	Women Corner - Nablus Municipality	X	Medium	Low	2	Keep Informed

53	Women Cultural Forum		X	Medium	Low	2	Keep Informed
54	Women's Studies Center		X	Medium	Low	2	Keep Informed
CBOs-Youth							
55	Askar Youth social center		X	Medium	Medium	4	Keep Satisfied
56	Sharek Youth Forum		X	Medium	Low	2	Keep Informed
Private Sector							
57	Arab Palestinian Investment Company (APIC)		X	Medium	Low	2	Keep Informed
58	Business Owners		X	Medium	Medium	4	Keep Satisfied
59	Paltel Group	X	X	High	Medium	6	Keep Satisfied
60	Nothern Electricity Distribution Company	X	X	High	Medium	6	Keep Satisfied
61	Palestine Exchange	X	X	Medium	Medium	4	Keep Satisfied
Academia							
62	An-Najah National University	X	X	High	High	9	Key Player
63	Hisham Hijjaw - NNU	X	X	High	High	9	Key Player
64	Al Quds Open University		X	High	High	9	Key Player
65	Al Rawda College		X	Low	Medium	2	Keep Informed
66	Tala'e Al Amal Secondary School		X	Low	Medium	2	Keep Informed
NGOs							
67	GIZ	X	X	Medium	High	6	Keep Satisfied
68	Welfare Association - Taawon	X	X	Medium	High	6	Keep Satisfied
Media							
69	Haya Radio	X	X	High	Medium	6	Keep Satisfied
70	Holy Qu'ran Radio	X	X	High	Medium	6	Keep Satisfied

Table 3.3*The achievement in DRR-Related SDGs*

Sector	Proposed Programme	“Number of deaths, missing persons and persons affected by disaster per 100,000 people”	“Direct Disaster economic loss in relation to global gross domestic product (GDP)”	“Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services”	“Number of countries with national and local disaster risk reduction strategies”	“Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with Sendai Framework for Disaster Risk Reduction 2015-2030”
		Target A, B SDG 1.5, 11.5, 13.5	Target C SDG 1.5	Target C, D SDG 11.5	Target E SDG 1.5, 11.b, 13.1	Target E SDG 11. b
Environment and Infrastructure	Development and Rehabilitation of Water System	Medium	Medium	High	NA	NA
	Development and Rehabilitation of Sewage System	Medium	Medium	High	NA	NA
	Development of Rainwater System	Medium	Medium	High	NA	NA
	Development of the Transportation Sector	Medium	Medium	High	NA	NA
	Electricity and Energy Sector	Low	Low	Medium	NA	NA
	Integrated Management for Solid and Medical Waste	Medium	Medium	High	NA	NA
	Rehabilitation and restoration of the Old City	Low	Low	Medium	NA	NA

	Establishment of a complex for government services related to investment	NA	NA	Low	NA	NA
Development of Local Economy	Development of the handcrafts area	NA	NA	NA	NA	NA
	Development of the Eastern and western industrial area	NA	Low	Low	NA	NA
	Rehabilitation and development of municipal slaughterhouse and central vegetable market	NA	Low	Low	NA	NA
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Social Development	Developing infrastructure and providing safe and stimulating spaces for youth creativity	NA	Low	Medium	NA	NA
	Establishment of expertise and competencies forum	NA	NA	NA	NA	NA
Social Development	Women's Empowerment Program	NA	NA	NA	NA	NA
	Support Persons with Disabilities in Obtaining their Rights Program	NA	NA	NA	NA	NA
	Urban Planning and Cultural Heritage Project	NA	NA	NA	NA	NA
	Rehabilitation of existing health facilities	High	Low	Low	NA	NA
Social Development	Construction of new health facilities	High	Low	Low	NA	NA
	Awareness – Health and Education	Low	Low	Low	NA	NA
	Construction of New Schools	Medium	NA	NA	NA	NA

	Rehabilitation of existing schools	Medium	NA	NA	NA	NA
	Training and sensitization of teachers on the rights of persons with disabilities	NA	NA	NA	NA	NA
	Vocational Education Integration Program in Government Schools	NA	NA	NA	NA	NA
	Developing and updating the current “Organizational structure in the municipality to align with the standard structure of local governance, in collaboration with an external consultant”.	NA	NA	NA	NA	NA
Good Governance	Development of financial resources in the municipality	Low	High	High	NA	NA
	Digital transformation program	Low	High	High	NA	NA
	Entimaa’ program	NA	NA	NA	NA	NA
	Disaster Risk Reduction	High	High	High	Yes	Yes
Good Governance	Joint planning and development for the urban area of Nablus.	High	High	High	Yes	Yes
	Total	47	44	63	12	12

Appendix B

Figures

Figure 3.6

The Progress Achieved in Each Indicator as per The Total Score from All Relevant Projects That Contribute to The Achievement of DRR-Related SDGs and the Seven Targets of Sendai Framework





جامعة النجاح الوطنية
كلية الدراسات العليا

تقييم مرونة المدينة باستخدام أداة تقييم مرونة المدينة دراسة حالة: مدينة نابلس

إعداد

محمد جواد بدرية

إشراف

أ. د. جلال الديبك

قدمت هذه الرسالة استكمالاً لمتطلبات الحصول على درجة الماجستير في إدارة مخاطر الكوارث، من كلية الدراسات العليا، في جامعة النجاح الوطنية، نابلس-فلسطين.

2025

تقييم مرونة المدينة باستخدام أداة تقييم مرونة المدينة دراسة حالة: مدينة نابلس

إعداد

ليلى بلال إبراهيم أبو بكر

إشراف

أ. د. جلال الديبك

الملخص

تهدف هذه الدراسة إلى تقييم مدى منعة مدينة نابلس من خلال تحليل الخطة الاستراتيجية لمدينة نابلس وبالاستناد إلى "أداة تقييم مرونة المدينة" التابعة لبرنامج الأمم المتحدة للمستوطنات البشرية. طورت الدراسة إطاراً تقييمياً شاملاً يحقق التكامل بين إدارة مخاطر الكوارث وأهداف التنمية المستدامة، بما يتماشى مع المعايير العالمية والاحتياجات المحلية. كما وتركز الدراسة على مراجعة الخطة الاستراتيجية لمدينة نابلس في الدورتين: الأولى للفترة 2018-2021، والثانية للفترة 2023-2026. هذا وقد تم استخدام مصفوفة مخصصة للمتابعة والتقييم، إلى جانب تحليل أصحاب العلاقة، يبرز أدوارهم ومستوى مشاركتهم، بما في ذلك الجهات الحكومية، والقطاع الخاص، ومنظمات المجتمع المحلي.

من جانب آخر تسلط الدراسة الضوء على أهمية مواءمة الجهود المحلية مع أهداف التنمية المستدامة المتعلقة بإدارة مخاطر الكوارث، من خلال استخدام الأهداف السبعة لإطار سندي لتطوير مؤشرات قابلة للقياس. وتكشف النتائج أن بلدية نابلس أحرزت تقدماً ملحوظاً وأظهرت التزاماً كبيراً، إلا أن هناك تحديات أساسية ما زالت قائمة، مثل ضعف التكامل في تطبيق مفهوم المرونة عبر القطاعات المختلفة، والقيود المالية والمؤسسية، وغياب نظام رصد فعال، مما يعيق تتبع التقدم في جهود الحد من المخاطر ويؤثر على توفر البيانات وجودتها. علاوة على ذلك، فإن مشاركة منظمات المجتمع المحلي لا تزال محدودة، رغم دورها المحوري في تعزيز المشاركة المجتمعية.

كما وتقدم الدراسة إطاراً لدعم السلطات المحلية في متابعة تنفيذ الخطة الاستراتيجية، وقياس جهود إدارة المخاطر، وتعزيز مشاركة أصحاب المصلحة. وتُعد هذه الدراسة من الدراسات القليلة في السياق الفلسطيني التي تقدم نموذجاً لتحقيق التكامل بين مفهومي المنعة والاستدامة بحيث يكون قابلاً للتطبيق في مدن أخرى. تشمل الدراسة على توصيات رئيسية لتحسين الحوكمة البلدية، وتطوير القدرات المؤسسية، وتوفير الموارد المالية. كما وتشمل مقترحات أخرى مثل: إنشاء نظام متابعة وتقييم شامل، وتطوير أدوات لجمع البيانات بطريق تفصيلية، وتدريب الكوادر البلدية، وضمان المشاركة الشاملة خاصة من قبل منظمات المجتمع المحلي. بالإضافة إلى ذلك، تدعو الدراسة إلى دمج مفهوم المنعة في مبادئ وأساليب التخطيط العمراني، وتبني استراتيجيات التكيف مع تغير المناخ، والاستفادة من التكنولوجيا، وتعزيز تبادل المعرفة والتعاون مع مدن أخرى لتحقيق التعلّم المشترك والتقدم المستدام.

الكلمات المفتاحية: المنعة، الاستدامة، المخاطر، الحوكمة، التخطيط.