

Nablus Impact Story

Navigating Disaster Risk and Urban Growth under Occupation







## Table of Contents

01 Summary

**07** Opportunities



03 Introduction **04** Challenges

**08** Wadi Sarra **09** TCDSE Implementation

**13** Impact **16** In Short

#### Acknowledgments

We extend our heartfelt gratitude to all contributors and partners who have supported the development and publication of this booklet and its content. Your invaluable insights, expertise, and dedication have been instrumental in bringing this project to fruition.

Thank you for your continued commitment to our shared mission.

Published by Tomorrow's Cities September, 2024

**Copyright Notice** 

This booklet is published by Tomorrow's Cities in 2024. All content within this publication is protected by copyright law. Unauthorized reproduction, distribution, or use of any part of this booklet without prior written permission from Tomorrow's Cities is prohibited. For permissions and inquiries, please contact us through our official website. All rights reserved.

DOI:



# Summary

Amid rapid growth and mounting risks, Nablus is building a safer, more resilient future for its communities with the support of Tomorrow's Cities.

A cradle of Palestinian history and culture, the city of Nablus has been undergoing a dramatic transformation. But as its skyline rises, so do the risks that come with unrestrained urban growth, fragile infrastructure, and a precarious political landscape. The city's population has surged over the past two decades, and this expansion is far from over. With an 80% population increase predicted in the next 30 years, Nablus stands at a critical crossroads: How does a city grow while safeguarding its people from disaster?

For years, Nablus, like much of the West Bank, has struggled under the weight of Israeli occupation. Fragmented into administrative zones, development is tightly restricted, forcing rapid urbanisation into hazardous areas prone to landslides, floods, and earthquakes. Many of its buildings are poorly constructed, lacking proper enforcement of safety codes. The sense of insecurity is pervasive—both from the threat of natural hazards and the uncertainties of political instability.

Tomorrow's Cities has brought local communities, policymakers, and national authorities together for the first time to confront this growing risk. For the first time, disaster reduction strategies have been embedded into the city's long-term development plans, ensuring that future growth is shaped by resilience, not risk.

One of the most striking impacts of the project has been its influence on Nablus' master planning process. Since the implementation of the Tomorrow's Cities Decision Support Environment framework, the city's 16-year blueprint now integrates critical data on earthquakes, floods, and landslides, aiming to protect vulnerable communities. The project also empowered marginalised communities, including refugees and women, to have a voice in shaping their city's future, ensuring that disaster risk management in Nablus is a collective effort rooted in the lived experiences of its most vulnerable citizens.

Most importantly, the initiative left behind a legacy of knowledge and local expertise. Over 80 individuals—from city planners to community leaders—have been trained in disaster risk management, creating a local force equipped to carry the work forward. These newly empowered teams are now ensuring that Nablus is not only prepared for the risks it faces today but is also resilient in the face of tomorrow's challenges.







Participants of Tomorrow's Cities Capacity Strengthening Programme



Attendees of Tomorrow's Cities launch event



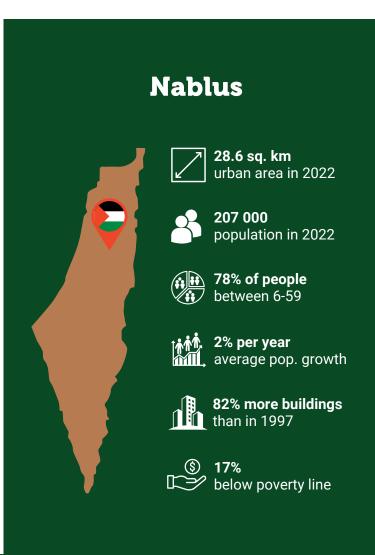
## Introduction

Nablus faces critical challenges as urban growth collides with natural hazards and planning restrictions, heightening disaster risks

Nestled between the ancient peaks of Mount Ebal and Mount Gerizim, Nablus stands as a living testament to Palestinian history and identity. As the second most populous city in the West Bank, it has long been a cultural, commercial, and educational hub. In recent decades, the city has undergone an unprecedented transformation. Between 1997 and 2017, the number of buildings surged by 80%, driven monstly by rapid population growth and rural-to-urban migration. With a population growth rate exceeding 2% annually, Nablus is on a trajectory of continued expansion, with the population expected to rise by 80% in the next 30 years. However, this rapid growth presents significant challenges.

The Israeli occupation has fragmented the West Bank into a complex patchwork of administrative zones, severely restricting urban planning and development. Adding to these challenges are the city's **high earthquake risk** and increasing **vulnerability to flash floods**. Despite these threats, urban development has largely overlooked these natural hazards. Many buildings are poorly constructed, with serious deficiencies in building code enforcement, while populations are increasingly being pushed into areas prone to floods and landslides. This heightens their vulnerability to recurring disasters and exacerbates the prevailing sense of insecurity about the future.

In this complex and challenging context, Tomorrow's Cities has brought together communities and local and national policymakers in Palestine **for the first time**, sparking crucial discussions on strategies to reduce disaster risk and guide future urban development.



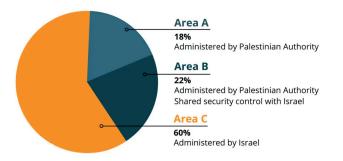
# Challenges

Area A Area B Area C

## 1

#### **Occupation & Land Administration**

The Israeli occupation severely impacts West Bank's residents' daily life, restricting freedom of movement, access to resources, and employment opportunities. Adding to that, land development is severely constrained by a complex system of administration that divides territory into three categories (Figure right). This division restricts Palestinian access to 60% of the land, primarily in Area C, while complicating planning and development in the remaining fragmented 40%. As a result, land scarcity drives up prices, exacerbating inequalities and often forcing communities to settle in areas prone to floods or landslides.



Source: Anera

Faced with limited options and a pervasive sense of insecurity about the future, urban development frequently occurs without proper consideration of natural hazards or the looming impacts of climate change. Communities build wherever possible, prioritising immediate needs over longterm resilience.



#### Earthquake Exposure

The Dead Sea Transform Fault System runs from north to south through Palestine. This fault system connects the Red Sea's spreading ridge with the Arabia-Eurasia collision zone to the north, making the region prone to earthquakes.

Over the past 2,100 years, several major earthquakes have struck the area, the most recent on 11 July 1927.

Earthquake risk in Nablus is aggravated by poor construction quality, environmental degradation, and unregulated land use. Despite increased awareness of disaster risk and the enforcement of seismic design regulations by the Engineers Association in 2013 and the government in 2018, many structures, particularly residential buildings, remain vulnerable. This is largely due to substandard construction practices, inadequate site management, and ineffective monitoring, leading to a dangerous disconnect between design and actual construction, placing hundreds of thousands at risk in the event of an earthquake.



1927 Nablus earthquake. This magnitude 6.3 shake resulted in 69 deaths, over 100 injuries, and the collapse of around 300 houses in Nablus. A smaller earthquake in 2004 with a magnitude of 5.2, despite relatively distant, also caused damage to some of the city's older buildings.



The absence of a land use policy that accounts for natural hazards has contributed to the recurrence of landslides in the White Mountain, with further incidents in 2015 and 2018, triggered by unplanned human development.



#### **Other Hazards**

Nablus is exposed to a range of other natural hazards, including flash floods and landslides. A significant landslide occurred in 1997, causing severe damage to roads connecting Nablus and Tulkarm and disrupting the transportation network.



In January 2013, flash floods affected 12,500 people across 190 communities, damaging 200 homes and displacing 650 residents. Photo: Mohammed Ballas / AP





#### **Refugee Camps**

Nablus is home to four refugee camps, including Balata, the largest in the West Bank, with a population of **32,500** and an extremely high population density of 108,000 people per square kilometre.

Poverty rates in these camps are twice as high as in urban areas, with female-headed households being particularly vulnerable. **23% of the population** falls into agevulnerable groups, including children under five and the elderly over 65, further straining resources.





# Opportunities

The deployment strategy of Tomorrow's Cities in Nablus focused on engaging a pre-existing pool of stakeholders familiar with urban challenges and population needs, including local government, national government, civil society institutions, and the private sector. At the onset of the work, there were several opportunities for impact.

### 2

#### Influencing Nablus' Master Plan

Nablus municipality is preparing a 16-year master plan covering approximately 13 km<sup>2</sup>, offering an opportunity for Tomorrow's Cities to influence local urban planning. By integrating disaster risk reduction strategies and insights from Tomorrow's Cities work, there was the opportunity to influence the design of the master plan to better protect communities from hazards such as earthquakes, floods, and landslides.

## 1

#### Integration of Disaster Risk Reduction into Strategic Development and Investment Plans

The SDIP is a four-year participatory planning tool that addresses several development themes including urban planning, zoning, security, and disaster risk management, while incorporating a 10-year vision for future growth. Currently, these themes are addressed separately. Tomorrow's Cities offered an opportunity to integrate these areas with disaster risk management, creating a cohesive development strategy and introducing innovative approaches to participatory planning for more resilient and sustainable urban development.

### 3

#### Enhancing Sarra's Rainwater Drainage System

Sarra municipality is planning a major rainwater drainage system along the Wadi of Sarra, presenting a crucial opportunity for Tomorrow's Cities to contribute. By using insights on flash flood hazards and factoring in climate change scenarios, Tomorrow's Cities had the chance to help design a more resilient and adaptive drainage system, not only to tackle existing flooding risks but also to prepare the infrastructure to manage future climate challenges, ensuring long-term protection for the community.

# Wadi Sarra Area

Wadi Sarra, an area southwest of Nablus, was chosen as an impact site due to its multi-hazard risks and diverse communities.

Tomorrow's Cities work in Nablus was deployed in a 25 km2 pilot area in located southwest of the city. It was selected for several key reasons:

#### Environmental

It offers the opportunity to address a multihazard context, including earthquakes, floods, and landslides, making it ideal for comprehensive disaster risk management.

#### Social

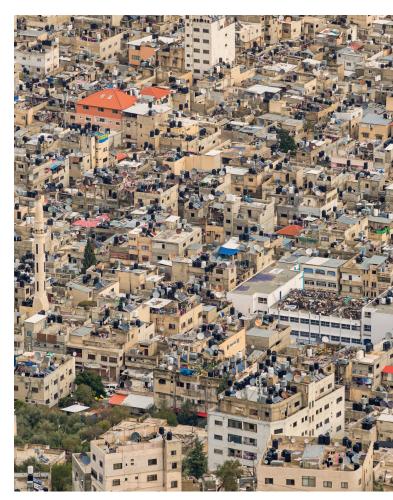
The area integrates both urban and rural communities from Sarra, Quseen, Tell, and Iraq Boreen, and refugee communities fostering inclusivity and ensuring that diverse populations benefit from the project. A key objective was integrating rural communities into urban planning, promoting collaboration between local governments, and providing solutions to cross-boundary disaster risks. Rural areas have vast land but limited capacity, while cities like Nablus have strong capacities but limited space for development.

#### Political

The area covers different land jurisdictions— Areas A, B, and C—enabling communities to envision a safer future without the restrictions imposed by the occupation.

#### Governmental

The project promotes collaboration among local government units — within and beyond Wadi Sarra and Nablus — providing a platform for cross-boundary disaster risk solutions and enhancing regional partnerships.



Aerial view of Wadi Sarra

## TCDSE Implementation

Our city is developing vertically on challenging topography rather than expanding horizontally, in part due to issues with land jurisdiction. This increases the population's risk. With the new master plan, there is a real opportunity to expand horizontally while incorporating disaster risk considerations.

Dr Sami Hijawi, Former Mayor of Nablus.

#### **Expanded Stakeholder Pool**

A large stakeholder pool was activated to include diverse community groups such as refugees, religious minorities, women (the largest and most active group), disabled individuals, youth, and the elderly. All groups maintained gender balance.

For the first time in the Tomorrow's Cities project, a dedicated group for children was also involved in the Tomorrow's Cities Decision Support Environment framework, emphasising their role in shaping the city's future and inspiring other groups to focus on long-term planning.

#### **Collaborative Municipal Engagement**

The municipality's technical staff, including urban and strategic planners, participated in every stage, from preparatory meetings to post-workshop analysis, significantly enhancing their technical capacity. This direct involvement fostered trust, ownership, and accelerated the adoption of the TCDSE framework into the city's strategic and resilience plans

> **80** participants in capacity strengthening activities.

20 team members involved in the TCDSE deployment.

**200** attendees at the launch event.

**10** media interviews on radio and TV.

## **Stakeholders**



#### **Municipality of Nablus**

Responsible for urban planning and developing master plans within the city. Engagement with the municipality has been extensive, including regular meetings and involving several engineers from their planning department in the deployment of the TCDSE across various work packages.

**National Centre for Disaster Risk Management** Collaborates with local institutions to enhance their disaster risk management capacities and sets regulations focused on disaster risk reduction.





**Directorate of Local Governance for Nablus Governorate** & Ministry of Local Governament Responsible for rural communities of Tell, Iraq Boreen, and Quseen.

**Northern Electricity Distribution Company** The utility services company specialising in electricity distribution in the northern area of the Palestinian West Bank.



#### Sarra Municipality

Sarra is a rural municipality in the Nablus Governorate of the West Bank, Palestine, known for its agricultural heritage, especially olive farming.



#### Other Stakeholders included:

- Engineering Association
- Palestinian Civil Defense
- Red Crescent
- Ministry of Media
- Ministry of Education and Higher Education
- Ministry of Social Affairs and Labor
- Ministry of Housing and Public Works
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA)
- Municipal Lending and Development Fund (MDLF)



Stakeholder meeting in Nablus, Palestine.



Local and national institutions, including government bodies, NGOs, the private sector, and civil society organisations, actively engaged.

## **SDIP**

The TCDSE has been successfully incorporated into Nablus' 2023-2026 Strategic Development and Investment Plan.



# Impact

Work in Nablus produced a myriad of positive impacts that demonstrate the success of the Tomorrow's Cities initiative in fostering proactive disaster risk management, building capacity, and engaging a wide range of stakeholders in Nablus and beyond.



#### **Pioneering Proactive Disaster Risk** Planning

Nablus became the first Arab city in the region to deploy Tomorrow's Cities inclusive, disaster risk reduction framework to support multihazard future planning. For the first time, key local and national actors collaborated under a unified strategy, working towards a resilient and sustainable future.



#### Integration of the TCDSE into **Strategic City Plans**

The TCDSE has been successfully incorporated into Nablus' 2023-2026 Strategic Development and Investment Plan (SDIP) and the city's Resilience Plan. The city's existing 10-year development vision will also be extended, thanks to TCDSE's introduction of longer-term planning horizons. This achievement, essential for addressing the long-term impacts of climate change and earthquake risk, bridged the gap between disaster risk management and urban planning, marking a significant milestone in the city's disaster risk reduction efforts.



Tomorrow's Cities workshops



3

#### Improved inclusion and equity

The municipality plans to broaden its participatory approach by including more marginalised groups and integrating spatial planning into future strategic and development plans. This community-driven method, which involves stakeholders from start to finish, proved to be a key factor in the project's success and will be applied in future activities. Additionally, the concept of equity, previously focused on distributing services like healthcare and education, has now been expanded to include the fair distribution of disaster risks, ensuring vulnerable populations are not disproportionately affected by future hazards.



#### New Data Disaster Risk Data and Tools

New knowledge and tools about disaster impacts, including datasets on the scale, intensity, and occurrence of hazards, are now available to local and national urban planning authorities. These have been officially adopted by the Nablus municipality and will inform multiple urban master plans, ensuring data-driven planning for future developments.





We needed the insights from Tomorrow's Cities to enhance our existing land use plans and policies to better mitigate future risks. Additionally, we are seeking to formally integrate An-Najah University into urban planning discussions, as their expertise can provide the essential scientific analysis and calculations to support our efforts.

Raed Muqbel, General Director of Local Governance, Nablus Governorate.

5

#### **Capacity Strengthening Across Regions**

80 participants from across the West Bank, including Ramallah, Tubas, and Aqraba, completed a capacity-building program, benefiting ministries, civil institutions, and students, and helping to spread disaster risk knowledge and planning expertise nationwide.

Tomorrow's Cities workshops in Nablus



When the government proposes new laws to reduce future risk, public resistance often stems from preconceived negative perceptions. However, by bringing the community and decision-makers together, we create a more constructive dialogue, where mutual responsibility is acknowledged, and trust is significantly strengthened.

Jamal Dabbeek, Assistant Professor of Risk and Emergency Management, An-Najah National University, Nablus.



#### **Local Team Empowerment**

A local team of 20 individuals, including university professors, recent graduates (mostly urban planners), and practitioners from Nablus municipality, played a crucial role in deploying the TCDSE in Nablus. This team is now capable of expanding the work within Nablus and introducing the TCDSE approach to other communities, fostering long-term sustainability and impact.





Tomorrow's Cities workshops

## 7

#### **Broad Institutional Engagement**

Around 15 local and national institutions, including governmental bodies, NGOs, private sector, and civil society organisations, were actively involved in the TCDSE deployment. This broad engagement has strengthened institutional partnerships and collaboration for disaster risk management across different sectors.



#### Improved Risk Awareness

By engaging with historical evidence and impact data during the TCDSE workshops, community members and policymakers shifted from focusing on current risks to recognising the need for proactive disaster preparedness, emphasising public awareness, building code enforcement, and future hazard mitigation.

# In Short

The deployment of Tomorrow's Cities in Nablus opened the path to transform the city's planning, embedding a futurefocused, multi-hazard strategy into its core. By uniting local authorities, national stakeholders, and marginalised communities, it has built lasting technical capacity and shared responsibility, positioning Nablus as a model of resilience against climate change and seismic threats.





The deployment of Tomorrow's Cities in Nablus has laid a strong foundation for longterm impact in the city and the region. By integrating disaster risk strategies into the city's SDIP and Resilience Plan, the project has fundamentally shifted the city's planning approach towards an inclusive, equity oriented, future-focused, multi-hazard strategy.

The collaboration between local authorities, national stakeholders, and marginalised communities has not only built technical capacity but also fostered a sense of shared responsibility. New data and tools, such as advanced hazard mapping, have been adopted to inform future urban planning.

Moreover, the capacity-building programs and empowerment of local teams ensure that the positive impact of the project will continue beyond its initial implementation, positioning Nablus to tackle both immediate and future risks, particularly in the face of climate change and seismic threats. This transformation marks a significant step towards resilience for the city and serves as a model for other urban areas in the region.

Tomorrow's Cities workshops



#### Disclaimer

The photographs and figures in this booklet are primarily sourced from the archives of Tomorrow's Cities and its partners, with some images obtained from free-of-rights sources. Every effort has been made to ensure that the images used are free from copyright restrictions. These Impact Stories are produced solely for informational and educational purposes within the context of the Tomorrow's Cities project and are not intended for commercial use. If there are any concerns regarding image use, please contact us for review.

Tomorrow's Cities 2024 https://tomorrowscities.org



To apply the Tomorrow's Cities approach in your city or to learn more about our work worldwide:



https://tomorrowscities.org/

**Contact us** tomorrowscities@nset.org.np

**Key Contacts** 

Mark Pelling Tomorrow's Cities Director mark.pelling@ucl.ac.uk

Hugh Sinclair Principal Investigator hugh.sinclair@ed.ac.uk









Up to September 2024, Tomorrow's Cities was an interdisciplinary Urban Risk Hub funded by the UK Research and Innovation (UKRI) Global Challenges Research Fund (GCRF). From 2024 onwards, Tomorrow's Cities functions as a Global Community of Practice for equitable disaster risk reduction.