



## RAPID CLIMATE RISK ASSESSMENT (RCRA) FOR URBAN ADAPTATION AND RESILIENCE

# Marrakech, Morocco

## INTRODUCTION

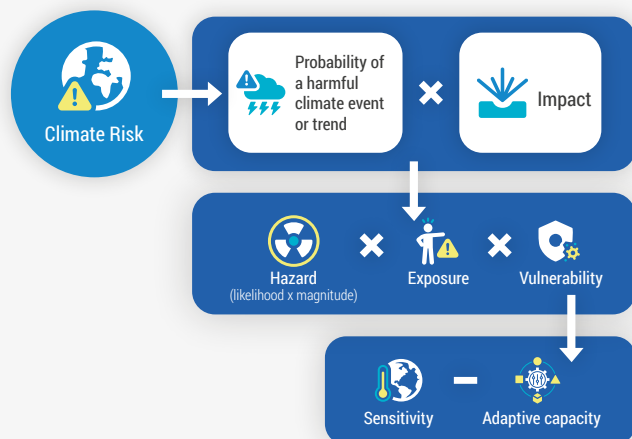
Food and water supply challenges, rising cases of respiratory diseases and loss of livelihoods due to drought, extreme temperatures and flooding are some of the impacts of climate change that Marrakech City residents are experiencing. While these impacts are getting worse, according to the results of a Rapid Climate Risk Assessment undertaken by the Global Center on Adaptation, risk management and adaptation actions required to make Marrakech resilient were also identified.

## CLIMATE CHANGE RISKS

Marrakech's leading climate change hazards are drought, extreme temperatures, flooding, and sand and dust storms. These hazards have resulted in the following risks, which are projected to worsen:

- Health complications
- Constrained labor productivity
- Water scarcity
- Drop in food production
- Ecosystem destruction

### What is climate risk?



Risk results from the interaction of climate hazards, exposure over time, and vulnerability (of the affected system)

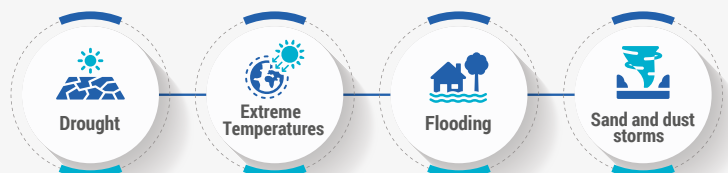
Adaptation actions and policies ↑ **Marrakech RESILIENT** ↑ Risk management actions and policies



Building Resilience in Marrakech

Adapted from Groupe Huit (2022)

### Main Risks






## VULNERABILITY

Economically, Marrakech is heavily dependent on tourism. Rising temperatures, drought and the other hazards are likely to discourage visitors, leading to loss of livelihoods.

Population growth and major social inequalities have contributed to high social vulnerability in the city, with young people, women and migrants being more vulnerable to the risks.

## ADAPTATION ACTIONS

National and local public policies focus mainly on mitigation rather than adaptation to climate change. In addition, a sectoral approach to climate change is favored, focusing on issues of access to water. The following actions would boost Marrakech's adaptation to climate change:

-  Develop a guide for integrated and participatory architecture and urban planning
-  Implement the Médina pilot project for more resilient public spaces
-  Establish a climate academy for those involved in public action

-  Create a climate change and health observatory to create better understanding of the impact of climate change on health
-  Establish a scientific advisory board to improve climate change data access and availability
-  Develop a tourism sector adaptation plan

