

# STRENGTHENING URBAN RESILIENCE IN MOROCCO

## Building capacity and identifying risk to better protect cities and manage disasters

### AT A GLANCE

**Region** Morocco

**Risks** Floods, landslides, earthquakes, droughts, tsunamis

**Area of Engagement** Scaling up city resilience, Promoting open access to risk information

Building urban resilience in Morocco at both the local and national level has helped to increase the application of risk information in public policy and investment planning, informed government policy and strategies, and improved performance of national and city agencies in the quality and timeliness of emergency response.

## URBAN MIGRATION INCREASES VULNERABILITY AND RISK

The world is urbanizing rapidly with 55 percent of the world's population currently living in urban areas, a proportion that is expected to increase to 68 percent by 2050. The world's city dwellers have grown from 746 million in 1950 to 3.9 billion in 2014 alone. Cities are the world's engines for economic growth, generating more than 80 percent of global GDP, and over 60 percent of the land projected to be urban by 2030 has yet to be developed. This is the case in Morocco as well, where the urban population is anticipated to increase by 4 million people by 2025. In a country of 30 million people, where 60 percent of them (18 million) live in urban areas, the urban population has increased almost fivefold since 1960: its share was approximately 29 percent in 1960; however, because of migration into the cities and the expansion of the urban perimeter, it reached 67 percent in 2015.

In addition to rapid urban migration, Morocco remains vulnerable to several risks. Natural hazards such as earthquakes and associated tsunamis, floods, and droughts have disproportionate negative impacts on low-income populations, in terms of both impact and the ability to adapt. With increased urbanization and the threats brought by climate change, addressing this vulnerability remains a high priority. Moreover, poverty, inequality, and vulnerability continue



With a high number of urban dwellers in vulnerable settings, Moroccan cities pose a higher risk to natural disasters. Photo: Curt Carnemark / World Bank

to constitute development challenges in Morocco. This vulnerability is reflected in the built environment, both as a consequence of population trends and because of Morocco's exposure to hazard risks. As countries monitor the trends and disaster risks associated with urban migration, the government of Morocco is taking the necessary steps to prepare cities to respond better to disasters. Aligned with the Sendai Framework's target to 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, the project seeks to address the Sendai Framework's priorities to (1) Strengthen disaster risk governance to manage disaster risk and (2) Invest in disaster reduction for resilience. According to the United Nations, resilient cities are better positioned to protect and enhance people's lives, secure development gains, foster an investible environment, and drive positive change. In addition, investing in resilience contributes to long-term sustainability by ensuring that current development gains are safeguarded for future generations.

## BETTER INFORMATION FOR BETTER DECISION-MAKING

To build urban resilience in Morocco, the government of Japan, through the Japan–World Bank Program for Mainstreaming Disaster

Risk Management (DRM) in Developing Countries managed by GFDRR, provided a US\$400,000 grant during 2018–20 to support resilience-building technical assistance and capacity-building initiatives in Morocco. These activities feed into the national-level DRM strategy and inform policy changes and future investments for a safer and more resilient nation. The government of Morocco supports Moroccan cities in designing and preparing their urban resilience strategies and prioritized three-to-five-year financeable action plans that strengthen the cities' overall resilience to natural disasters.

The government followed a logical process broadly through (1) the formation of a Steering Committee, (2) the creation of a vision for each Moroccan city to build urban resilience, (3) the implementation of resilience diagnostics, (4) the development of action plans, and (5) providing emergency assistance during the COVID-19 pandemic to provide support the recovery strategy and action plan. In order to develop the plans, the government first created resilience diagnostics, called risk profiles, that allow the local government to make evidence-based decisions to strengthen the overall resilience of their systems, institutions, and services. Specifically, the project gives Moroccan decision-makers a clear view of city-level shock events, risk factors, and medium- to long-term stresses that currently affect the communities of Fez and Mohammedia and are replicable throughout the country. Through the generation and utilization of hazard and vulnerability data, the project developed a macro-level risk and hazard assessment that provides city-level data to the national DRM strategy and improves the preparedness and response capacity of cities.

This technical assistance project proposes an adaptation of a Comprehensive Urban Resilience methodology to the context of Morocco. This provides a scalable model that more cities can benefit from at a later stage by determining the resilience demand, resilience capacity, and resulting type of resilience strategy that can be developed at their level, depending on their size and the context. Additionally, municipalities were supported through trainings, workshops, twinning arrangements across municipalities, and support in diagnostics and in developing macro-level urban resilience plans.

With this project, Moroccan cities—and 20,000 city inhabitants—are now better protected through improved identification and understanding of disaster risks as well as enhanced warning and managing of disasters at national, local, and community levels. The project was also supported by inputs from Japanese counterparts in Morocco from the Japan International Cooperation Agency (JICA) regarding the Japanese Yokohama urban resilience strategy, which was closely studied by the project's implementation team and has informed the design of the activity. This grant has also helped mobilized US\$200 million of additional financing for resilient investments from the World Bank in Morocco through the World Bank's Integrated Disaster Risk Management and Resilience Program.



### CITY-LEVEL HAZARD AND RISK PROFILES CREATED

Tables and maps created within city-level hazard and risk profiles contains the degree of the city's vulnerability to the set of hazards, as well as their degree of resilience, for a consolidated understanding of key hazards at the municipality level, a deepened knowledge of risk identification, and an increased capacity for local and national government stakeholders. The city-level hazard and risk profiles helped ground the resilience strategy and actions plans in data and evidence, resulting in an evidence-based linear process. The data highlighted the main hazards, risks, and vulnerabilities in each municipality. This information fed into the resilience strategy and the action plan, and consequently supported the Steering Committee to identify five actions they wanted to prioritize over the next five years.

### COMPREHENSIVE URBAN RESILIENCE ACTION PLANS DEVELOPED

City-level comprehensive resilience action plans offer a coherent DRM plan, in line with the national DRM strategy, that constitutes a holistic approach toward addressing the social, economic, institutional, physical, and environmental factors that contribute to vulnerability to disasters. This plan contributes to the understanding of resilience at the municipality level, assists with engagement for the preparation of resilience implementation and recovery frameworks, and informs the government DRM and policy strategy.