# PROJECT HIGHLIGHTS

## **Protecting Morocco** through Integrated and **Comprehensive Risk Management**

#### Background

A national risk management plan is key to making a country—its economy and the communities—more resilient. This can be achieved by investing in comprehensive risk identification and addressing the findings through appropriate policies and regulations (such as building codes and and-use planning) and targeted investments (such as infrastructure retrofitting, emergency response equipment, and early warning systems). A country can also identify and prepare for financial risks through contingency planning, assessing and reducing contingent liabilities, budget appropriations, and innovative financing instruments.

Morocco's Integrated Risk Management Project includes all of these approaches in a holistic and cross-cutting program. In this way, the Kingdom is proving to be a unique and excellent example of best practice in national risk management planning. To begin, every ministry is engaging in a risk assessment exercise and then incorporating DRM in its planning process. To understand the vulnerabilities within each sector, the ministries are conducting risk assessments. With this knowledge, the ministries are collaborating to addresses the country's challenges together.

#### Challenges

Due to its geographical position and geological characteristics, Morocco is at risk of earthquakes, floods, torrential rains, desertification and drought, and locust invasions. With over a third of both its population and its GDP at high risk, Morocco ranks 58 among the 85 most vulnerable countries. The increasing rate of urbanization and influence of climate-change related meteorological events (rising average temperature, heat waves, increased intensity and frequency of floods) are only adding to the country's vulnerability. In response, the Ministry of General Affairs and Governance, in close collaboration with the Ministry of Finance and the Ministry of Interior, is implementing a risk management approach to develop an integrated and comprehensive National Risk Management Strategy and a Risk Management Action Plan.

#### Approach

Through a combination of risk mitigation measures and financial instruments, the government of Morocco is working with the World Bank and GFDRR to prevent or reduce the socioeconomic impact of three key risks:

- Commodity price volatility;
- Natural disaster risk; and
- Risks in the agricultural sector.

To address the risk of commodity price volatility, the government is reviewing existing financial mechanisms and analyzing possible solutions to address and manage the volatility. The government is addressing natural disaster risk through a national probabilistic risk assessment, which will lay the foundation for integration of DRM into national planning. In addition, the Ministry

Region: Country:



#### Middle East and North Africa Morocco Focus Area:

Risk Identification Risk assessments (communitybased, probabilistic model-

based, probabilistic modeling); risk mapping; information campaigns, public outreach, etc.



# Highlights

• Assessment of a disaster risk management insurance mechanism to provide financial options to the government and the communities.

• Innovative and integrated risk management that identifies the key risks of price volatility of commodities, natural hazards, and risks in the agriculture sector.

• Identifying risk and mitigation options through a probabilistic hazard risk assessment.

• Identification of at-risk areas through community-based approaches, risk mapping, information campaigns, and public outreach.

• Inclusion of disaster risk management in community development plans and integrating community members into the planning process through a risk perception survey.



of the Interior is designing community-level resilience plans based on field surveys of perceptions of community risk. The information from the assessment and surveys will be integrated into the country's community development plans. The program includes an assessment of catastrophe risk insurance and technical assistance for the Department of Insurance and Social Protection in the Ministry of Finance. Finally, the Ministry of Agriculture and Marine Fisheries is assessing risks and vulnerabilities in the agriculture sector, some of which are linked to the insurance sector.

#### Results

Based on this cooperative and multi-sectoral approach, Morocco's National Strategy for Disaster Risk Management is emerging. To identify gaps and unmet needs, the approach includes a review of the existing legislative and institutional frameworks. The national probabilistic hazard risk assessment identifies risks and defines the appropriate next steps. The community risk perception survey, while focusing on the most vulnerable communities will lead to the CBDRM pilot which will provide recommendations for the government's Community Development Plans; thereby leading to a sustainable approach. Finally, the assessment exercise of an insurance mechanism focuses on ensuring financial protection for the country. Once the integrated risk management initiative is completed, there will be increased awareness of risks among all stakeholders of the potential impacts of natural hazards for communities and the economy in addition to the options to mitigate such risks.

#### Partnership

The initiative analyzes several types of risks simultaneously in order to provide a comprehensive risk management review for a given middle-income country. Hence, a large number of partners came together in a truly 'integrated' approach: the World Bank, including funding and technical assistance from GFDRR, the Swiss Agency for Development and Cooperation (SDC), the First Initiative, GIZ, Morocco Red Crescent Society, and United Nations agencies, which provided invaluable technical and informational guidance.

#### **Next Steps**

• The government is utilizing the probabilistic risk modeling software delivered to make future investments across sectors.

• The government requests assistance from the World Bank to implement the strategy and related action plans. This support will include technical assistance and financing options for risk prevention strategies, as well as World Bank financial and hedging products, and investment instruments.

#### GLOSSARY

Disaster risk management (DRM) is the systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

Community-based Disaster Risk Management (CBDRM) is a well-established methodology for building local resilience that has its roots in the good practices developed over several decades of community-focused development and poverty-reduction programming. A holistic approach to disaster risk management recognizes the links among vulnerability, poverty, and socio-economic development.

#### CONTACT

Aditi Banerjee, Disaster Risk Management Specialist, The World Bank • abanerjee4@worldbank.org

\* Having lost his newlywed wife, mother and brothers in the horrible tragedy, this survivor, like many others in Morocco, is seeking solutions to unexpected natural hazards. Many in the Al Hoceima community are looking to implement risk reduction activities and are seeking guidance based on international best practices. Assessments must be the first step to identifying risks in the communities to then be able to address them appropriately.

Produced and edited by Aditi Banerjee, Eric Palladini, Rob Reid and Christina Irene, The World Bank.

http://go.worldbank.org/DT45JDVOK0

www.gfdrr.org



To understand vulnerability, the first step is to identify the risk.

# "Only 4 members of my family of 10 survived..."

says a resident of Imzouren, Al Hoceima (a community in northern Morocco), as he is unable to control his tears, after more than eight years of the Al Hoceima Earthquake of 2004; destroying villages like his, killing hundreds and devasting families.\*

### Lessons Learned

• Cost-benefit analysis of mitigation options leads to well prioritized investments on the part of the government, which is typically dealing with multiple national priorities.

• It is extremely important to engage communities from an early stage of CBDRM planning, since they are often the first responders at the time of a disaster.

- Risk perception surveys lead to a better understanding of the needs of the communities, given their economic, social and cultural settings.
- The concept of 'integrated' risk management is crucial because most risks are interlinked and overlapping.

