YEMEN



BACKGROUND

emen is highly exposed to a number of natural hazards (floods, droughts, desertification, and earthquakes), with floods being the most recurrent. Yemen's approach to managing disasters in the past has been mostly reactive, focused on post-disaster relief and recovery activities. Recently, with help from the international community, Yemen has taken important steps to improve the country's resilience and to move from ex-post disaster relief to ex-ante preparedness and risk reduction.

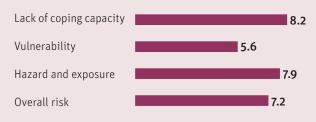
In recent years, Yemen has advanced its disaster risk management (DRM) agenda. Nation-wide risk and water-management studies provided the basis for designing DRM planning and mitigation measures. As a result, there is now better understanding of the country's main disaster risks as well as stronger determination by government officials to work more collaboratively with partners and donors. In addition, national DRM stakeholders have completed disaster risk mapping and risk-reducing programs for key sectors such as food

QUICK FACTS

COUNTRY INDICATORS¹

GDP per capita (PPP)	\$3,959
Total Population	24,407,381
Income Level	Lower middle
Poverty ²	35%
Urban Population	33%

RISK PROFILE³



KEY PRIORITIES

- 1. National DRM fund
- 2. Water harvesting and flood retention system
- 3. Multi-hazard and risk mapping unit
- 4. Early warning system
- 5. GFDRR e-learning infrastructure
- 6. Risk assessments

- ² Poverty rates at national poverty lines, World Bank Open Data.
- ³ INFORM: a global, open-source risk assessment for humanitarian crises and disasters. INFORM uses a scale from 0-10 (10 is the highest level of risk) http://www.inform-index.org/



¹ World Bank: free and open access to development data in countries around the globe. http://data.worldbank.org/

security, water, and urban development. A national DRM plan was drafted in 2006 and updated in 2010, but has not yet been approved by the government.

In cooperation with the international community, Yemen aims to focus interventions on the following priorities:

(i) reinforcement of financial protection capacity; (ii) development of measures to reduce risks in flood-prone regions; and (iii) development of risk identification and preparedness, including civil protection and early warning systems.

GFDRR PROGRESS TO DATE

The World Bank involvement, through GFDRR, was initiated after a request for assistance following the floods in Al-Hadramout in late 2008. The World Bank performed a post-disaster needs assessment (PDNA); mobilizing funding for implementation of the Yemen Flood Protection and Emergency Reconstruction Project (US\$41 million). These funds were instrumental in helping Yemen rehabilitate and rebuild critically damaged infrastructure, ensuring that the new infrastructure is "flood-proof."

The PDNA also catalyzed national debate on proactive disaster risk management (DRM), resulting in nation-wide risk and water-management studies—supported by GF-DRR. These studies were performed by an internation-

al risk monitoring firm and led to the incorporation of disaster risk reduction elements in urban, climate, food security, and water sector development policies.

Additionally, a water harvesting and flood retention study was completed, as part of the GFDRR grant, resulting in identification of sites for water retention structures, a US\$10 million multi-sectoral DRM program was developed. A proposed package for the next phase of the GFDRR Country Program was developed in 2010 but was held in abeyance due to political unrest. The World Bank resumed activities in March 2012 but, with the political situation, the DRM agenda has suffered and was only continued partially through the Yemen Pilot Program for Climate Resilience (PPCR).

LOOKING AHEAD

In 2014, GFDRR planned to support the government to:

- (i) establish a national DRM fund to address disaster preparedness, response, and reconstruction
- (ii) design water harvesting and flood retention systems in Hadramout and Al-Mahara
- (iii) operationalize civil defense management operations center
- (iv) develop a multi-hazard and risk mapping unit using modern technology
- (v) establish an early warning system for the capital city

- (vi) transferring GFDRR e-learning infrastructure and creating a DRM laboratory at the University of Sana
- (vii) organize a South-South workshop exchange
- (viii) dissemination of three GFDRR risk assessments studies

Implementation of this work is of critical importance; however the political and social situation on the ground is fragile and unpredictable, and the World Bank Yemen Country Office is currently closed and operations are suspended.

PROJECTS AWARDED BY GFDRR 2007-2015

Project Description

Disaster Risk Reduction in Priority Country – Supported the development and implementation

(I)

Yemen

US\$164,539 | 2010-2012 (Completed)

Supported the development and implementation of the GFDRR Country Program. Activities included: (i) implementation of risk assessments; (ii) a national disaster risk reduction system, including necessary legal and strategic frameworks to ensure inter-ministerial and inter-sectoral coordination; and (iii) a series of innovative pilot activities at the local level within specific sectors as well as crosscutting national initiatives such as public awareness campaigns, climate change adaptations options.

Strengthening Yemen National System in DRM



US\$968,344 | 2007-2012 (Completed)

Supported the development of an overall strategy for DRM and recovery. Activities included: (i) development of a country-wide risk assessment and water harvesting feasibility study and (ii) incorporating disaster risk reduction elements in urban, climate, food security, and water sector development policies.

Yemen Disaster Risk Reduction Institutional Mainstreaming - Strategy and Priority Intervention Areas in Sana'a





US\$229,000 | 2008-2011 (Completed)

Implemented a flood modeling analysis that contributed to the development of Sana'a flood protection plans. Activities included: (i) feasibility study and design for flood protection infrastructure and priority works; (ii) resettlement policy framework for Sana'a Municipality; and (iii) mainstreaming of DRM responsibilities within the local government's institutional framework.

Comprehensive Damage and Loss Needs Assessment – Strengthening Yemen National System for Disaster Risk Reduction Assessed losses and damages of the country. Activities included: (i) establishment of the Yemen Recovery and Reconstruction Fund; and (ii) and leveraging of funding for implementation of the Yemen Flood Protection and Emergency Reconstruction Project (US\$41 million).



US\$199,000 | 2008-2009 (Completed)











GF	DRR	KEY	PAR'	TNERS

UNDP

The United Nations Development Programme (UNDP) provides support to community-based DRM, with priority given to rock- and landslide-prone areas. It also supports the Ministry of Environment in systematic collection and analysis of disaster-related impacts and losses.

The following projects are part of the World Bank's efforts to mainstream DRM:

World Bank

- Road Asset Management Project: Improves road conditions in four regions (Al-Hodeidah, Ibb, Taiz and Lahj) and strengthens capacity in road asset management.
- Climate Information System and PPCR Coordination: Improves the quality of hydro-meteorological and climate services provided to end-users.
- Taiz Municipal Development and Flood Protection Project: Construct flood control structures that will channel flash floods, and also the development of a badly needed solid waste strategy in the city.

GFDRR STAKEHOLDERS

National Services

Prime Minister's office, government agencies: Ministry of Interior (Civil Defense- National Disaster Management Unit), Ministry of Public Works and Highway, the Ministry of Water and Environment, Ministry of Energy, Ministry of Education, Ministry of International Cooperation and Development, Geological Survey and Mineral Resources Board, Public Works Program, National Water Resources Agency, Social Fund for Development, The National Seismological Observatory Center, and Civil Aviation and Meteorology Authority.

International Organizations

World Bank, United Nations Office for Disaster Risk Reduction (UNISDR), United Nations Development Programme (UNDP), United Nations Children's Fund (UNICEF), International Federation of Red Cross and Red Crescent Societies (IFRC), The Arab Fund for Economic & Social Development.