Managing Resilience Across Sectors

"The Morocco Integrated Risk Management Experience"

The World Bank

July 2014

Different exogenous shocks are impeding Morocco's economic development, i.e. natural disasters

Agadir 1960 and Al-Hoceima 2004 Earthquakes

12,000 and 600 dead respectively

Tsunamis

Repeat of 1755 Lisbon earthquake > 10 meter waves in Casablanca

Tangier Floods 2008

30 dead; economic loss in industrial zones

Extreme Economic Losses are Possible!

Morocco National Hazards Probabilistic Risk Assessment (MnhPRA)

	Worst Case Impact * (US$)	AAL (MAD)	GDP**	Budget**
Earthquakes	5.4 billion	98 million	5.5%	17.1%
Floods	3.9 billion	485 million	4.0%	12.4%
Tsunamis	6.8 billion	14 million	6.9%	21.4%

* 10,000 event

** Based MhnPRA; I-O model and a CGE model data also available

Commodity Price (Energy) Volatility

Cost of Subsidies-Actual versus Budgeted

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Subsidy expenditures are now the second line item in the budget of the government, after employee salaries, and, in 2012, reached a high of 6.2% of GDP.

Risks in the Agriculture Sector

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Risks in the agricultural sector which constitutes 15% of GDP and 40% of employment matter significantly

INTEGRATED APPROACH TO RISK MANAGEMENT IN MOROCCO (2008 - ONWARD)

Overview of Morocco - Bank Partnership

Phase I
Risk Identification*
(2008)

High level risk identification, including:

- Natural hazard risk
- Commodity price risk
- Agriculture sector risk

Phase II
Risk Assessment*
(2009-2012)

- Probabilistic **Disaster Risk** Assessment & Model
- Institutional Risk Management Assessment, including at the:
  - National level
  - Community level
- Disaster Risk Financing Assessment

- **Commodity** (energy) price risk: Needs assessment

- **Agriculture** Sector Risk: Ongoing dialogue

Phase III
Risk Management
(2013 -)

- Analytical/ TA work**:
  - Integrated Risk Management Strategy
  - Commodity Price Risk Management Strategy
  - Disaster and Agriculture Risk Financing

- Operational work:
  - **2015 Project on Integrated Risk Management**

*Financed by a variety of donors, including GFDRR, the Swiss Development Corporation (SDC), the FIRST Initiative, and the Trust Fund for Environmentally and Socially Sustainable Development (TFESSD)

** Financed by the CMI, Bank BB and SECO (tbd)

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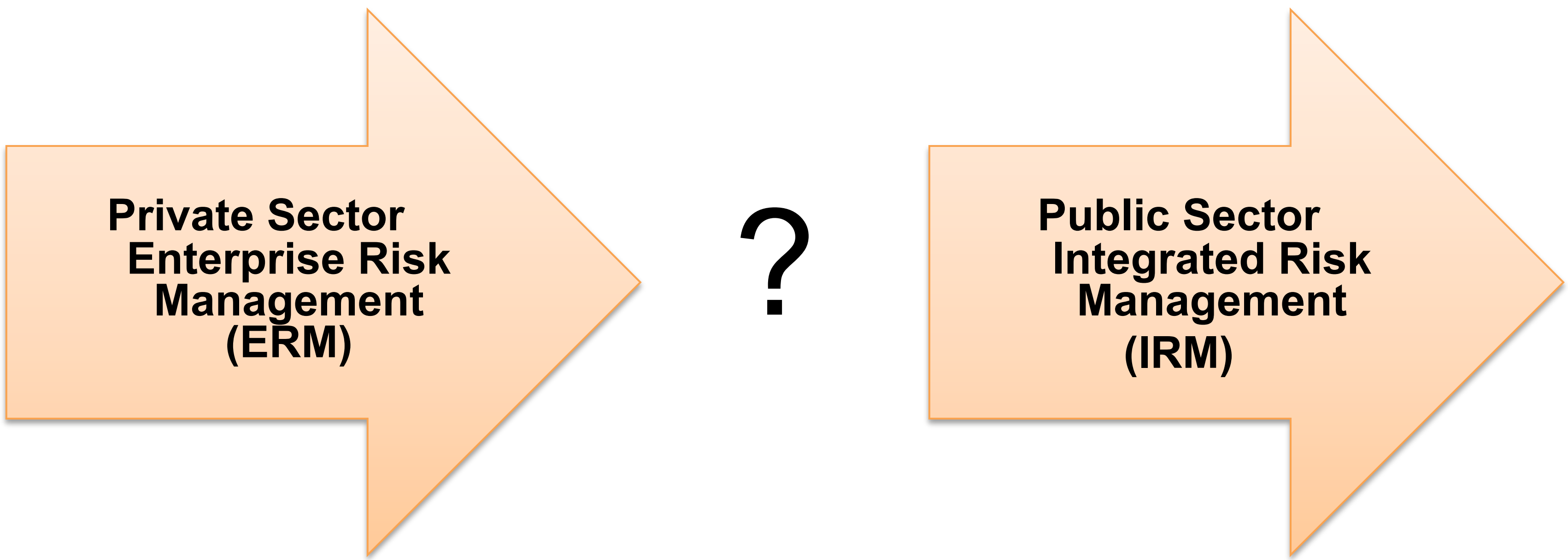
Towards a Public Sector "Integrated Risk Management (IRM)" Model

- **Traditional Risk Management in the Public Sector**
  - Fragmented information sources
  - Risk management often conducted in silos
  - Risk management rarely coordinated and risk interdependencies not recognized
  - Focus on the "ex-post" disaster response instead of "ex-ante" risk mitigation activities



Morocco "Risk Management and Resilience Fund"

Objective is to improve integrated decision making and finance high priority risk mitigation activities

1) National Steering Committee across Line Ministries

2) Financing Mechanism: Fonds de Lutte Contres des Catastrophes Naturelles

3) Systematic Decision Making and Investment Allocation Process

Significant Opportunities and Benefits of IRM….

- Identifying Risks and Preparedness
  - ✓consistent identification and prioritization of key risks facing a country
- Improving understanding of risk interdependencies
  - ✓ risks are too often treated in silos but they are becoming more and more interdependent—i.e., climate change/ urbanization
- Enhancing communication and coordination
  - ✓ enhances vertical and horizontal integration within the government and involves other key stakeholders
- Making Informed and Cost-Effective Decisions
  - ✓ helps answer questions on "biggest bang for the buck" in terms or risk reduction by looking at risks cross sectorally

➢ *Based on good risk analytics can thus providing top decision makers with a more complete "dashboard" of exposure and possible solutions*

….But Many Challenges and Questions Remain

- Data availability/ consistency challenge for "risk analytics"
  - ✓ Easiest for natural hazards, but other sectors
  - ✓ What is the common metric?
- Lead agency and coordinator for risk management across sectors
  - ✓ What is the most appropriate institutional set-up
  - ✓ National Steering Committees (a la Singapore, Netherlands)
  - ✓ Dedicated national risk management office (a la Japan/ UK)
  - ✓ Central fiscal risk unit in Ministry of Finance (a la Columbia)
- Most appropriate role for Line Ministries/ Local Governments
  - ✓ Even with central coordination Line Ministries/ Local Governments remain key
- Best mechanisms to incentivize risk mitigation actions
  - ✓ Dedicated financing windows/ conditional grant making mechanisms
- Complex stakeholder engagement and coordination!!!

New 2015 World Bank financed project in support of Integrated Risk Management in Morocco

World Development Report 2014: Risk and Opportunity

Morocco Approach to Risk Management Fully Consistent with WDR 2014 on Risk and Opportunity

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