World Water Development Report III, Side Publication on Water-related Disaster Risks - turning risk into opportunities

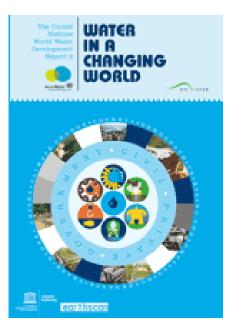
joint publication by the IFI members

IFI Special Session at the 2nd Session of the Global Platform for Disaster Risk Reduction 13:00-14:45, 19 June 2009

UN World Water Development Report

One of the major UN Water activities coordinated by the World Water Assessment Programme, housed in UNESCO

New Side Publications Series: - provide more focused, in-depth information and scientific background knowledge discussed in the WWDR-3, and take a closer look at some less conventional water sectors (3 out of 17 were published in Istanbul during the WWF-5).





Joint work by WMO, UNESCO, UNU, ICHARM, and UNISDR and IFI partners

Title:

World Water Development Report III, Side Publication on Water-related Disaster Risk

Sub-title:

- turning risk into opportunities

Targeted audience:

This report is not a scientific paper although scientific and technical information is provided where necessary to support policy recommendations. Water managers, disaster managers, and policy makers are the main targeted audience.

To be published - Summer 2010

Agreed Structure and Chapter Lead Agencies

Introduction and executive summary (by all)

- I. Risk as an issue: Why risk matters (UNU)
- **II. Pressures and driving forces (ICHARM)**
- **III.** The basis for action (ICHARM)
- **IV. Elements of effective risk management (ICHARM)**
- V. Ways towards more effective water risk management (ISDR)
- **IV. Conclusion (by all)**

Key messages

- Galvanize and mobilize before disaster strikes

 (governments to reduce risks before disaster strikes in a
 coordinated way with various sectors at all levels)
 - invest today for safer world tomorrow
- Disaster risk management is not only humanitarian issues but also development issues. Secure the gains of development
- When implementing disaster mitigating methods, consider environment and eco-system (it could lead another disaster)
- Stress the importance of social capital, human network, community togetherness, resilience, and coping capacity
- Secure the gains of development
- Turning risk into opportunities

(Draft) Outline of the Report

Introduction and executive summary

- Purpose, audience, rational, history....

- Key messages (e.g. High-Level Panel Recommendations) in a box as part of the executive summary

- Hyogo Framework for Action

Chapter I. Risk as an issue: Why risk matters

(=Explaining the need for risk management [and this side publication] in the context of general water issues/WWDRIII) (*Proposed Lead: UNU*)

1. Key definitions around water risk management

- Risk and extreme events
- Definition of disaster and vulnerability
- Causes and types of disasters
- Need for managing floods and managing droughts (WMO) Water cycle, etc

2. Conceptual frame (Drawing on previous reports/take the strands further/evolution of conceptualization)

- Geographical outreach Geographical balance (Risk mapping...)
- Climate variability and Climate change (Overarching) (WMO)
- Development in the area of Climate Change (latest research on effects,
- UNFCCC Process, other CC related processes, including adaptation)
- Lessons learned (opportunities)

Chapter II. Pressures and driving forces (Lead: ICHARM)

- 1. Risk Impacts
- Water risks as an issue outside the water sector (integrated approach across sectors) "Externalities"
- Impact of water uses on risk
- Social, economic and demographic impacts
- Development challenges
- Population growth
- Poverty reduction vs. Market Forces
- Securing and facilitating MDGs
- Environmental consequences, including Coastal vulnerability (example Sri Lanka, Indonesia) *(UNU)*
- Impact of risk on water availability and use (including human rights)
- Technological impacts
- Accidents and technological disasters
- Responses
- Gaps and Innovation

2. Growing Concerns (UNU)

- Patterns and trends including case examples (ICHARM)
- Political concerns (transboundary, conflict, health, food, energy, upstream, environment including

quality issues, economic)

- Rural/urban/coastal/mountain concerns
- Technological concerns

Chapter III. The basis for action (Lead: ICHARM)

<u>1. Who's who in water and water risk management: Existing Policy Frameworks, Laws,</u> International Mandates and Processes (ISDR on basis of Dushanbe paper)

International mandates and processes: Actors in water management

- HFA (ISDR/ICHARM)
- Other policy frameworks (Bali Action Plan/UNFCCC Process regarding risk management, etc)
- Laws and legislation, guidelines (e.g. UNESCO guidelines on flood management)
- Cross-sectoral linkages (health, agriculture, environment...)
- 2. Existing technological mechanisms and tools (WMO)
 - Existing infrastructure: early warning, national platforms, etc
 - Main technical approaches and tools
 - The effects of technological innovation
- 3. Practical effective practices and lessons learned (UNU)
 - Case examples e.g. Mekong, Germany, Sri Lanka

4. Transboundary issues (also opportunities)

Chapter IV. Elements of Effective Risk Management (Lead: ICHARM)

- Principles of disaster management and risk reduction (ICHARM/ISDR)
- Vulnerability and risk assessment (including "hotspots" and coping capability)
- IWRM (multiple factors)
- Mitigation and adaptation (Water and Climate ICHARM)
- Capacity Building (UNESCO)
- Financing

- Critical infrastructure (i.e., next to hard infrastructure, investment in infrastructure, including associated institutions, human capacity, information systems) Case example Germany *(UNESCO, UNU*)

- Management-indicators/monitoring of effectiveness/accountability (UNESCO, WMO)

-- Expect outcomes from the Indicator Workshops by WWAP

Chapter V. Ways towards more effective water risk management (*Proposed Lead: ISDR*)

1. Roles and responsibilities (ISDR)

Actors-multiple tiers (ISDR) Sector roles (ISDR) Space and Time Frames (WMO, UNESCO)

2. Policy recommendations (ISDR) Progress in thinking WWDR I-III Targeted advice for different groups Water risks and climate change – options for action (UNFCCC process?) **Cross-sectoral integration** Community involvement Private sector role Data and data foundations for policy and management practices Time scales and choices in decision making

3. Technological solutions (UNESCO, WMO)

Sources of support (information and institutions)

Updating/good practice database

Prospects of new technologies (e.g. forecasting and management tools) (UNESCO) Helpdesk idea/toolbox (include institutional, technological, policy, economic, etc. aspects)

development of a matrix of the degree of risk factors, generic management response and risk management characteristics/"tool to set priorities" (WMO)

Chapter VI. Key messages

- Conclusions and recommendations (key message -already mentioned)
- IFM Help Desk