



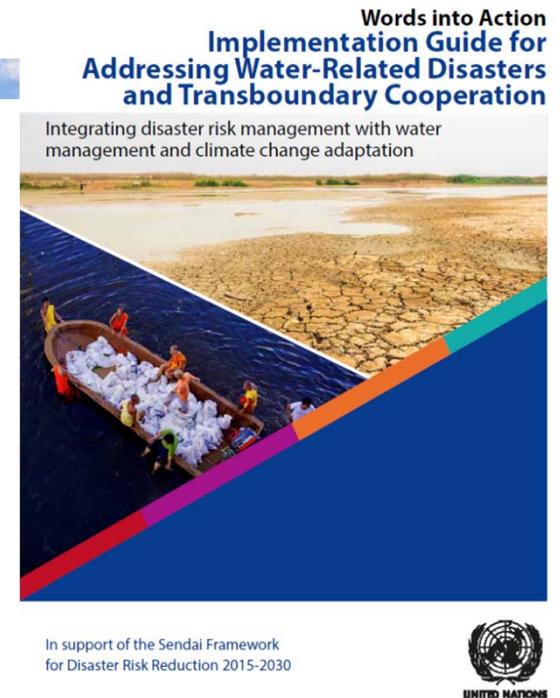
Implementation Guide for Addressing Water-Related Disasters and Transboundary Cooperation

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Words into Action

Implementation Guide for Addressing Water-Related Disasters and Transboundary Cooperation –

*Integrating disaster risk management with water
management and climate change adaptation*



Aims and scope

- Support to the implementation of the Sendai framework in (transboundary) basins
 - Ensure that IWRM issues are considered at all levels including the international level
 - Ensure that the role of water and basins is taken into account
- Taking into account various international commitments including the Paris Agreement and the Sustainable Development Goals (SDGs)

Target audience

- Practitioners in DRR and water management
 - Water managers and institutions responsible for water management
 - Authorities and institutions responsible for DRR, at local, regional, national and international level
- Also relevant for, but not specifically target water users, a.o. from the industry, agriculture and energy sectors
- The guide will also be brought to the attention of the humanitarian sector and development aid

Typical steps

Defining goals and scope



Analysing context



Defining stakeholders, roles
and responsibilities



Assessing disaster risks



Developing and prioritizing
measures



Implementing measures



Monitoring and evaluating

Transboundary cooperation elements

Joint goals and agreed scope at basin level,
role of basin organization

Relevant international commitments.
Flexible transboundary agreements

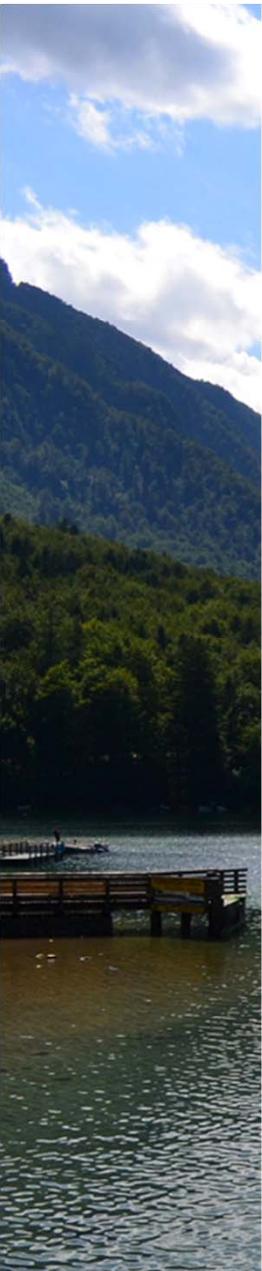
Involve and link to all relevant basin stakeholders

Sharing of data. Basin-wide joint modelling and vulnerability
assessments. Common information and early-warning systems

Agreement of priority measures of transboundary relevance.
Development of basin-wide strategy.

Sharing benefits and costs

Joint (or coordinated) monitoring and evaluation



Contents

- 1 Key messages
- 2 Introduction
- 3 International commitments and legal framework
- 4 Main principles and approaches
- 5 Responsibilities and stakeholders
- 6 Understanding the risks and hazards
- 7 Develop strategies to reduce risk
- 8 Implementation
- 9 Monitoring and evaluation
- 10 Glossary
- 11 References

Illustrations from cases

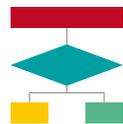
- Mekong River
- Niger River
- Scheldt River
- Mississippi River
- Sava River
- Rhine River
- Danube River
- Dniester River
- Lake Titicaca
- Kyrgistan
- Netherlands
- WMO
- European Commission

From basin level to national and local level

- Align national strategies with basin strategy
- Measures implemented at local level - Communication is essential
- Pilot projects
 - Learning by doing
 - Improve understanding
 - Make midcourse corrections
- Exchange of knowledge and experience

Early warning

- Risk knowledge
- Monitoring and warning service
- Dissemination and communication
- Response capability



1

Real-time data
collection

2

Modelling &
forecasting

3

Early warning
dissemination

4

Decision
support

5

Response to
warning

Ecosystem-based approaches

- Degraded ecosystems are contributing factor for water-related disasters - can propagate downstream in transboundary systems.
- Ecosystems themselves can be heavily damaged from disasters - disturbing ecological balances or even completely turning an ecosystem into a different regime
- DRR and climate change adaptation include:
 - Maintaining / restoring ecosystems to good ecological state
 - Protecting ecosystems from being damaged by disasters
 - Using ecosystems as naturally 'engineered' landscapes to help lessen the impacts of hazards
- Need to integrate DRR (and climate change adaptation measures) into wetlands and other ecosystem management plans and vice-versa

Stakeholder involvement

- Consultation and participation
- Cross-sectoral
- Across levels – national – regional - local
- Need for capacity development

Financing

- Regular budget - especially Operations and Maintenance
- Level of measure – level of budget
- Benefit sharing
 - Payment for benefits – compensation for costs
- External financing
- Attribution
- Insurance and reinsurance
 - Incentive for adaptation