



Global Workshop
on Droughts in Transboundary Basins
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Executive Summary

An EPIC Response: Innovative Governance for Flood and Drought Risk Management

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An EPIC Response:

Innovative Governance for Flood and Drought Risk Management



Challenge Floods and Droughts

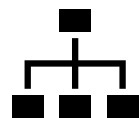
- Wreaking social and economic havoc across the globe
- Adverse effects on 1.65 billion people (floods) and 1.43 billion people (droughts)
- Damages of more \$764 billion
- Climate change is changing the game: severity, frequency, less predictability
- Floods/Droughts typically managed by agencies that rarely communicate/collaborate
- Innovative governance structure needed! → EPIC Response



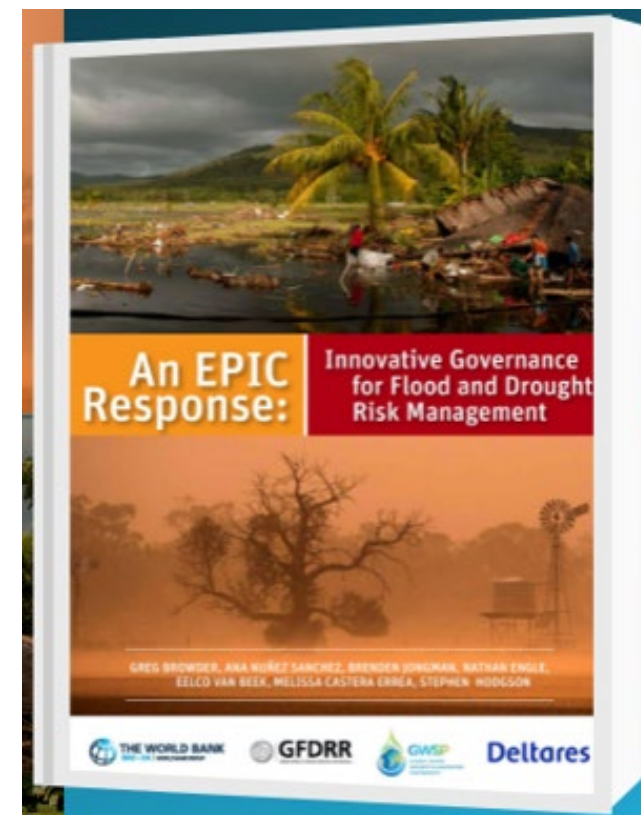
Objective: bring awareness of this enormous challenge and the potential solutions to a broad audience, as well as offering a practical and detailed guide to help governments improve their flood and drought management systems.



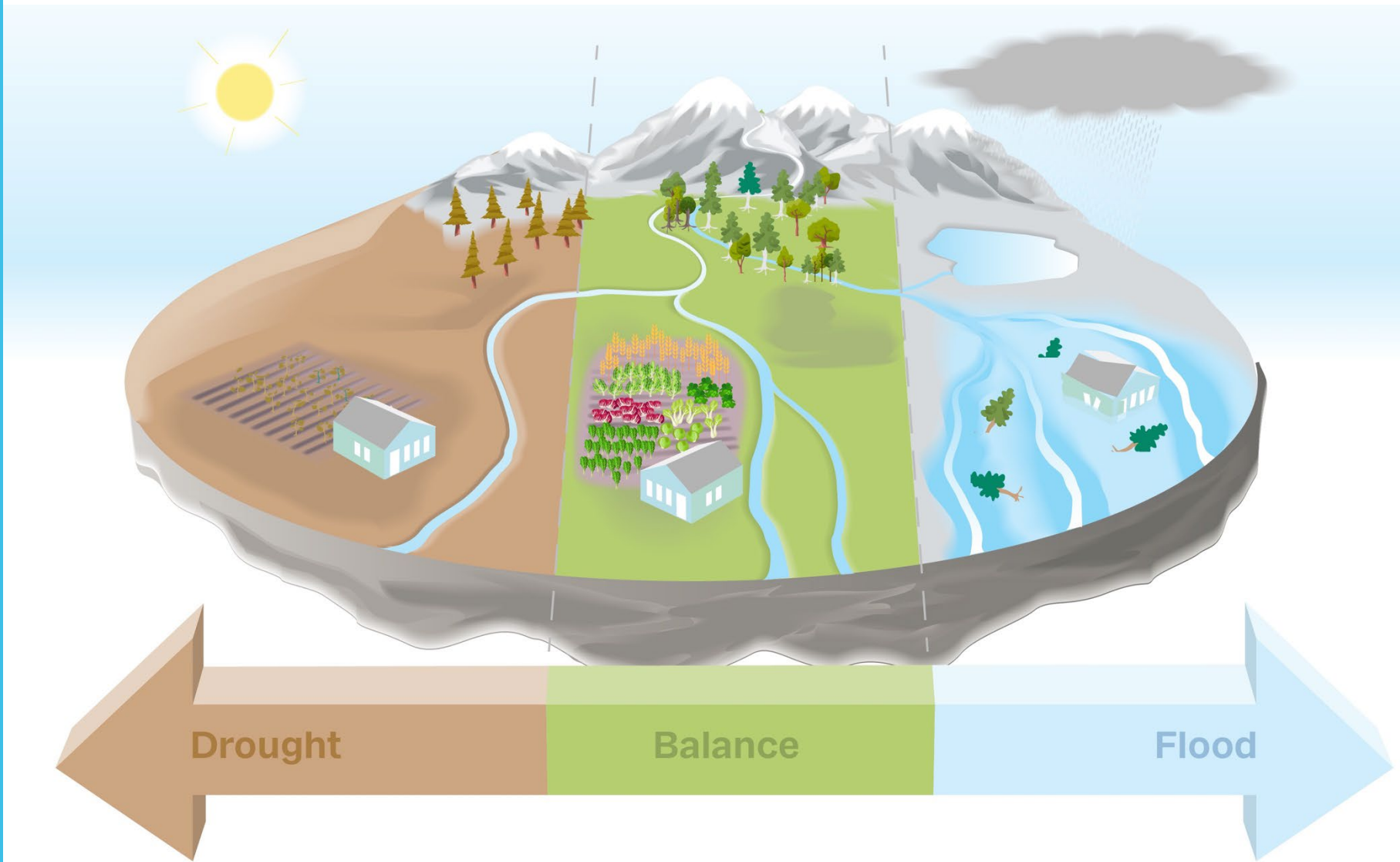
How: The EPIC Response Framework combines existing flood and drought approaches into a unified framework that allows hydro-climatic risk to be synergistically managed and promotes collaboration between agencies



Structure: 3 guiding principles, 5 key elements, 11 program areas



Principle 1
Hydro-Climatic
Spectrum



Principle 2 Agency Collaboration “Joined Up Government”

National Agency Roles for Hydro-climatic Risk Management

Hydromet

Provides information for water resources and floodplain management. Leads flood and drought forecasting. Supports agriculture with agro-hydro advisory services.



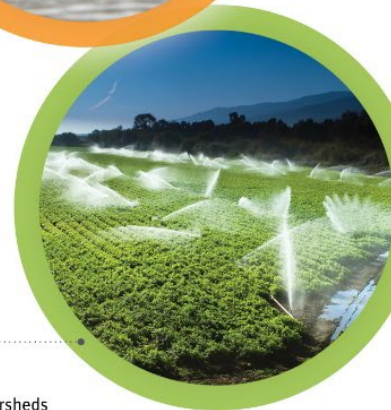
WRM

Oversees planning and operation of water resources infrastructure. Regulates water allocations and strategic use of groundwater to help mitigate droughts. Key role in flood and drought response.



DRM

Lead coordinating agency for flood, and sometimes drought, disaster response. Provides leadership in floodplain management. Works with other agencies to mitigate risks.



Agriculture

Promotes healthy watersheds through sound agricultural policies and climate-smart agriculture. Helps boost farmer incomes and resilience. Key role in drought response. Collaborates with natural resources and WRM on watershed management

Natural resources management

Promotes healthy watersheds by sustainably managing forests, wetlands, and coastal barriers. Collaborates with agriculture and WRM on watershed management.

Principle 3
Agencies Must
Mobilize
Whole of Society



Local government



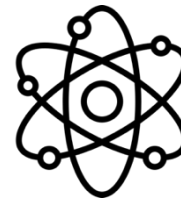
Public participation



Social inclusion



**Education and risk
communication**



**Scientific
collaboration**



Open information

The EPIC Response Framework

PROGRAM AREAS

ENABLE

PLAN

INVEST

CONTROL

RESPOND

IMPACT



Programs for Disaster Response and Recovery

Immediate Imperative



Programs for Controlling Land and Water Use: Reduce Exposure and Vulnerability



ENABLE

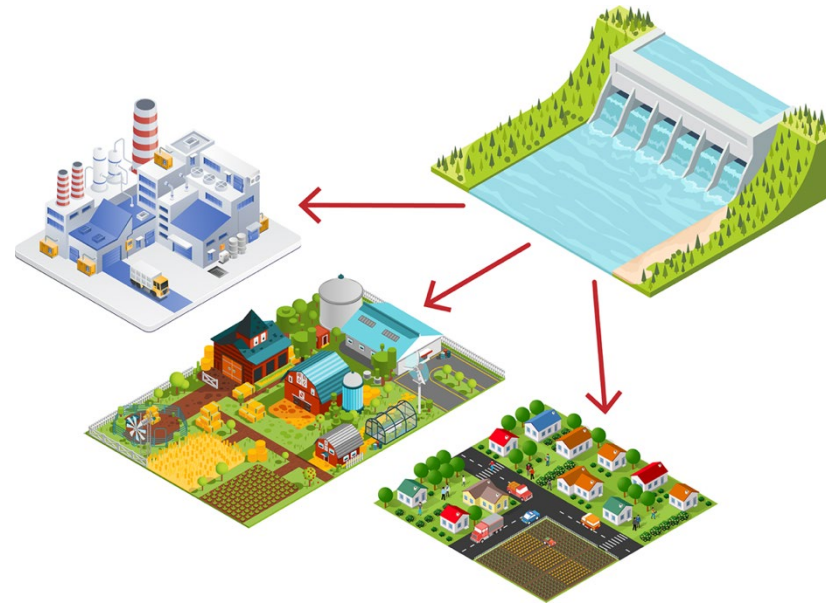
PLAN

INVEST

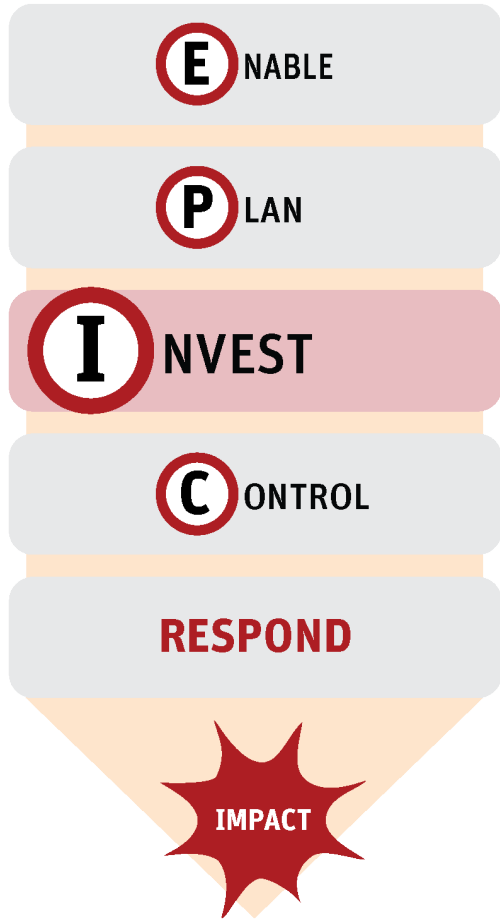
CONTROL

RESPOND

IMPACT



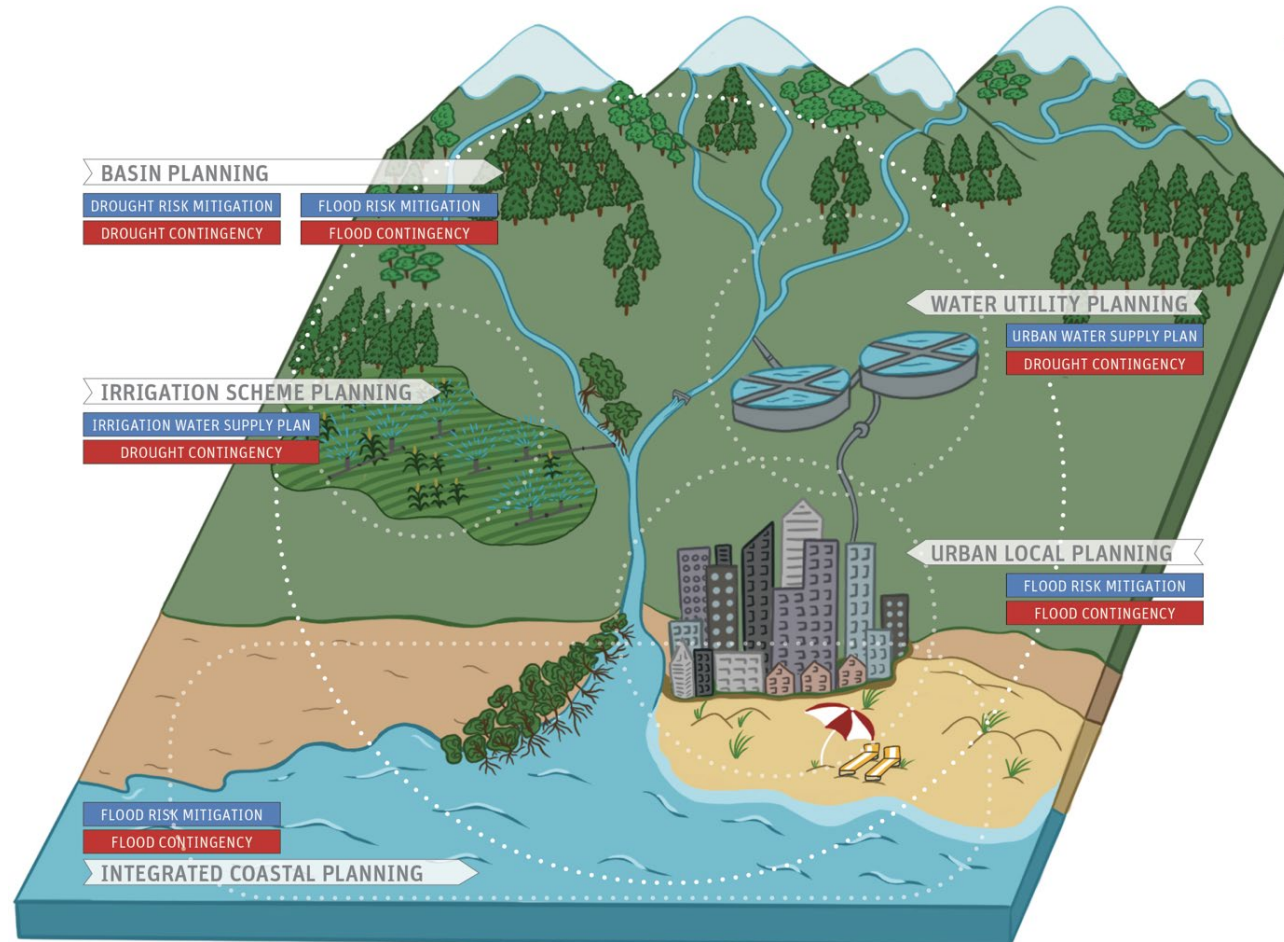
Programs for Investing in Green and Grey Infrastructure: Reduce Hazards



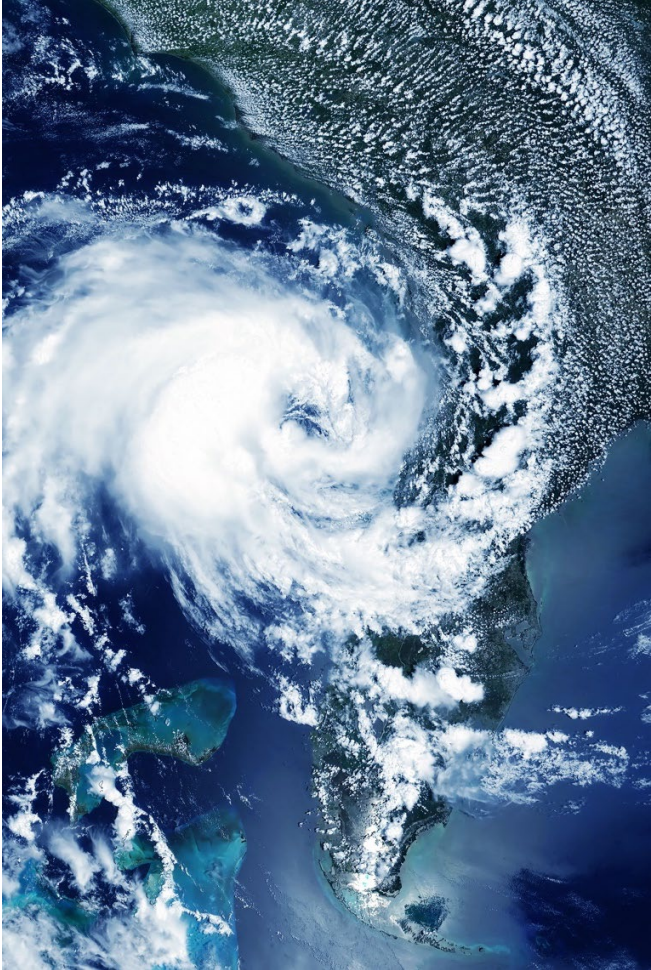
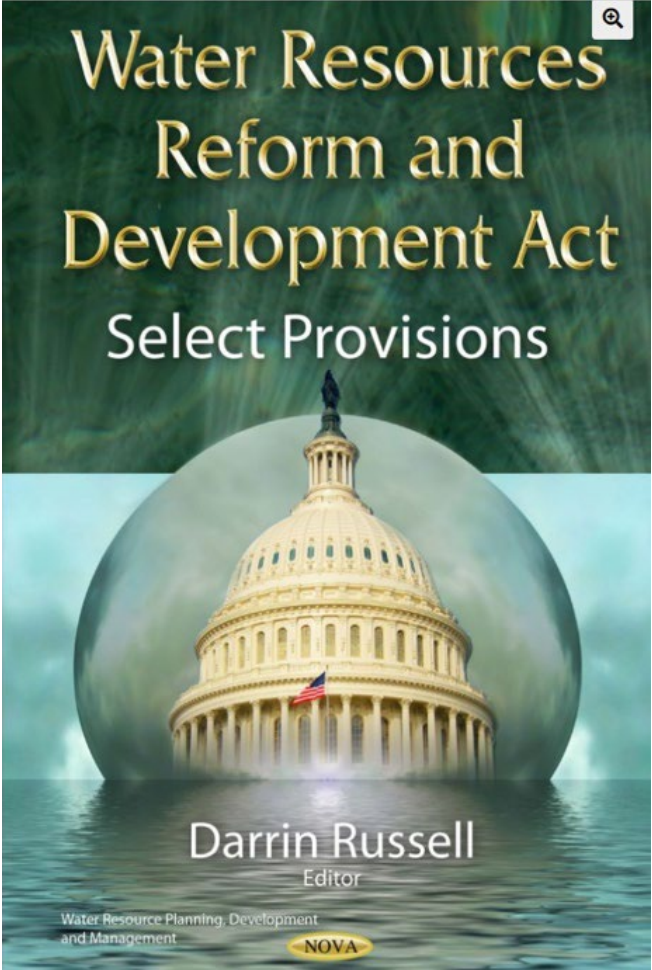
Programs for Planning at Multiple Nested Levels: Smart Investments and Land& Water Control



FIGURE 5 Overview of Plans for Hydro-Climatic Risk Management



Enabling Policies, Laws and Information: Enhances Every Level



PROGRAM AREAS

ENABLE

- National Frameworks: Laws, Agencies, Strategic Plans
- Facilitating Whole-of-Society Approach
- Hydro-Met Services

PLAN

- Flood and Drought Risk Mitigation and Contingency Planning

INVEST

- Healthy Watershed
- Water Resources Infrastructure

CONTROL

- Water Allocation and Groundwater Management
- Floodplain Management

RESPOND

- Drought Monitoring, Response, and Recovery
- Flood Monitoring, Response, and Recovery
- Disaster Risk Financing

IMPACT



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Examples of how the report can be used:

- Informing a country's national climate adaptation plan.
- Structuring discussions for policy loans offered by multi-lateral development banks that focus on climate resilience and disaster risk management.
- Providing a framework for national strategic plans, particularly for water resources, disaster risk management, and drought management.
- Assisting in project appraisal by identifying connections outside a particular sector that can affect the performance of that project.

Thank you



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EPIC Publication

