



# Legal and Institutional Aspects of Integrated Flood Management

by

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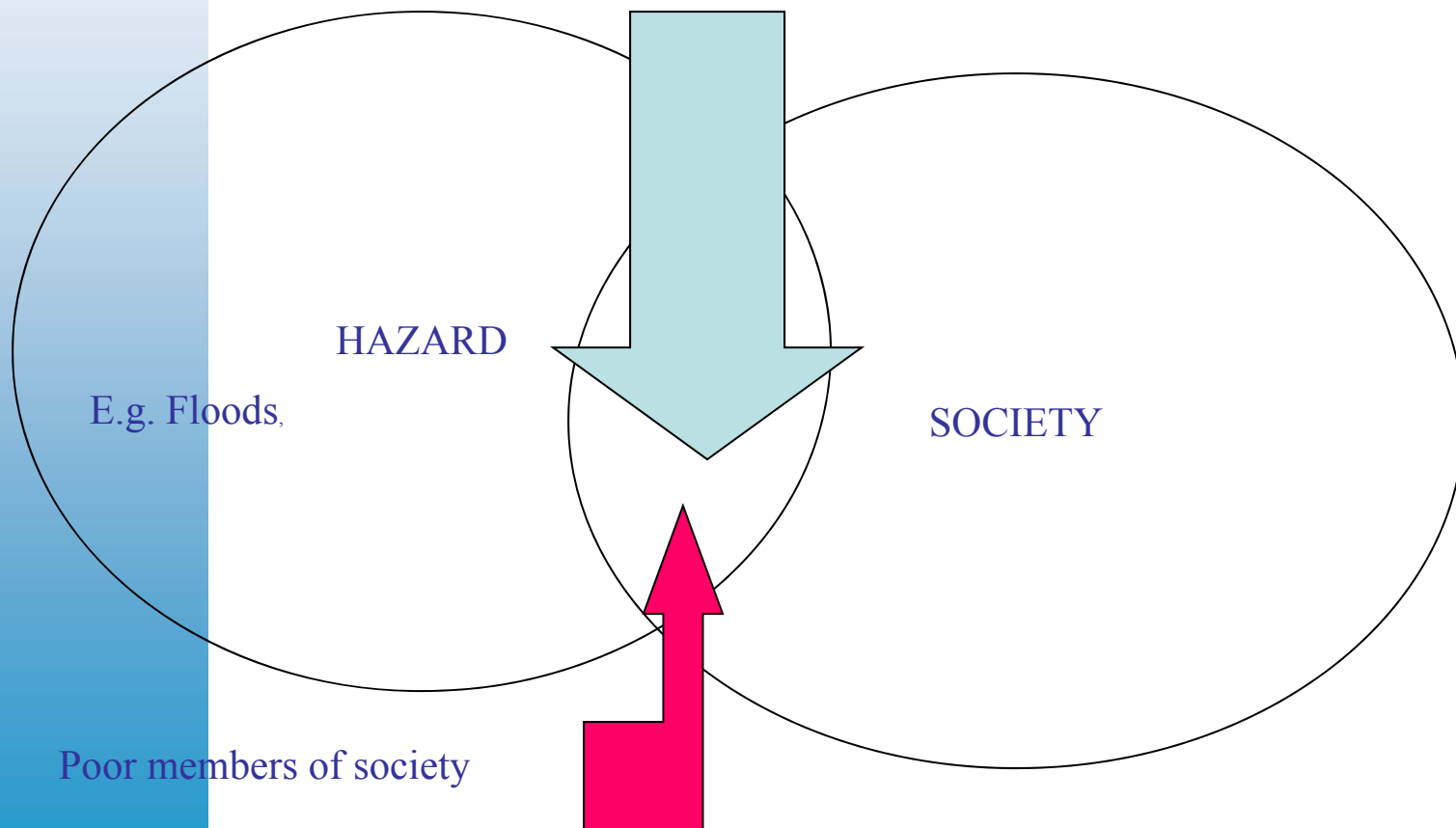
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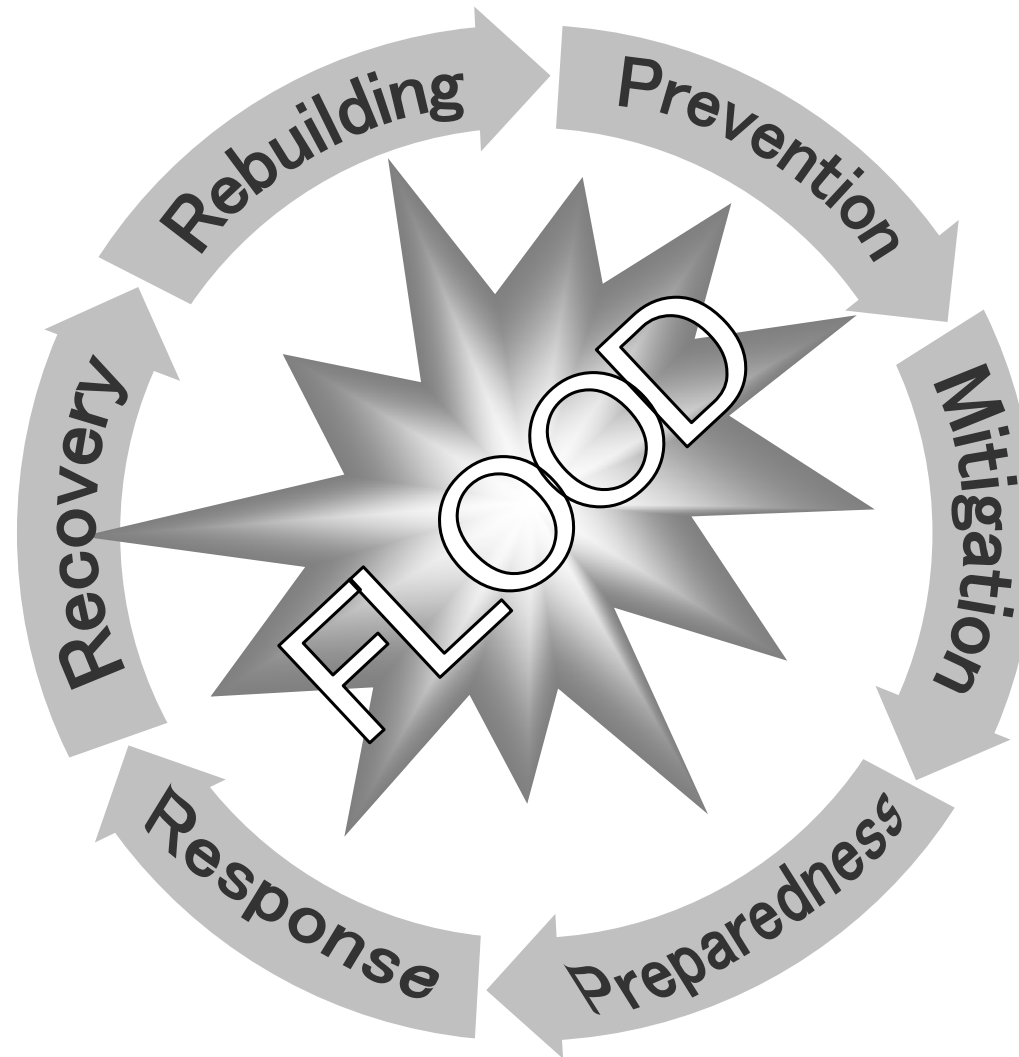


## OCCURRENCE

**DISASTER** occurs when **SOCIETY** interacts with **HAZARD** – so, where there is a society there is need for rules



# DISASTER **MANAGEMENT WHEEL** – the rules are necessary in any orderly management



## Shortcomings of past Flood Management Practices

- Emphasis has been on 'Control' rather than 'Management'
- Flood control measures have been Ad-hoc and stand alone
- Reactive rather than proactive
- Emphasis has been largely on structural measures
- Monodisciplinary
- River morphological behaviour is not factored
- Lessons from past failures have rarely been learnt
- Transboundary collaboration is an underutilized tool to
- Improve flood management policies can broaden the available options for flood management and risk sharing

## What is Integrated Flood Management?

- Integration is the act of forming or blending items which regularly interact (interdependent group of items) into a whole.
- So then what is IFM ?
  - ✓ A process
  - ✓ Integrating water resources and land development in a river basin (*IWRM*).
  - ✓ **Maximizing net benefits** : from flood plains.
  - ✓ **Minimizing losses** due to flooding.
  - ✓ Holistic ( integration)– consider socioeconomic, ecological, water resources mgt, & all other dimensions.

# What are Net-Benefits from Flood Plains?

**Benefits** derived from using the flood plains, such as increased crop yields in agriculture, opportunities for subsistence/recession agriculture, available space for development, readily available transport links etc.

Minus

**Losses** suffered from flood damages and economic losses due to floods (\*)

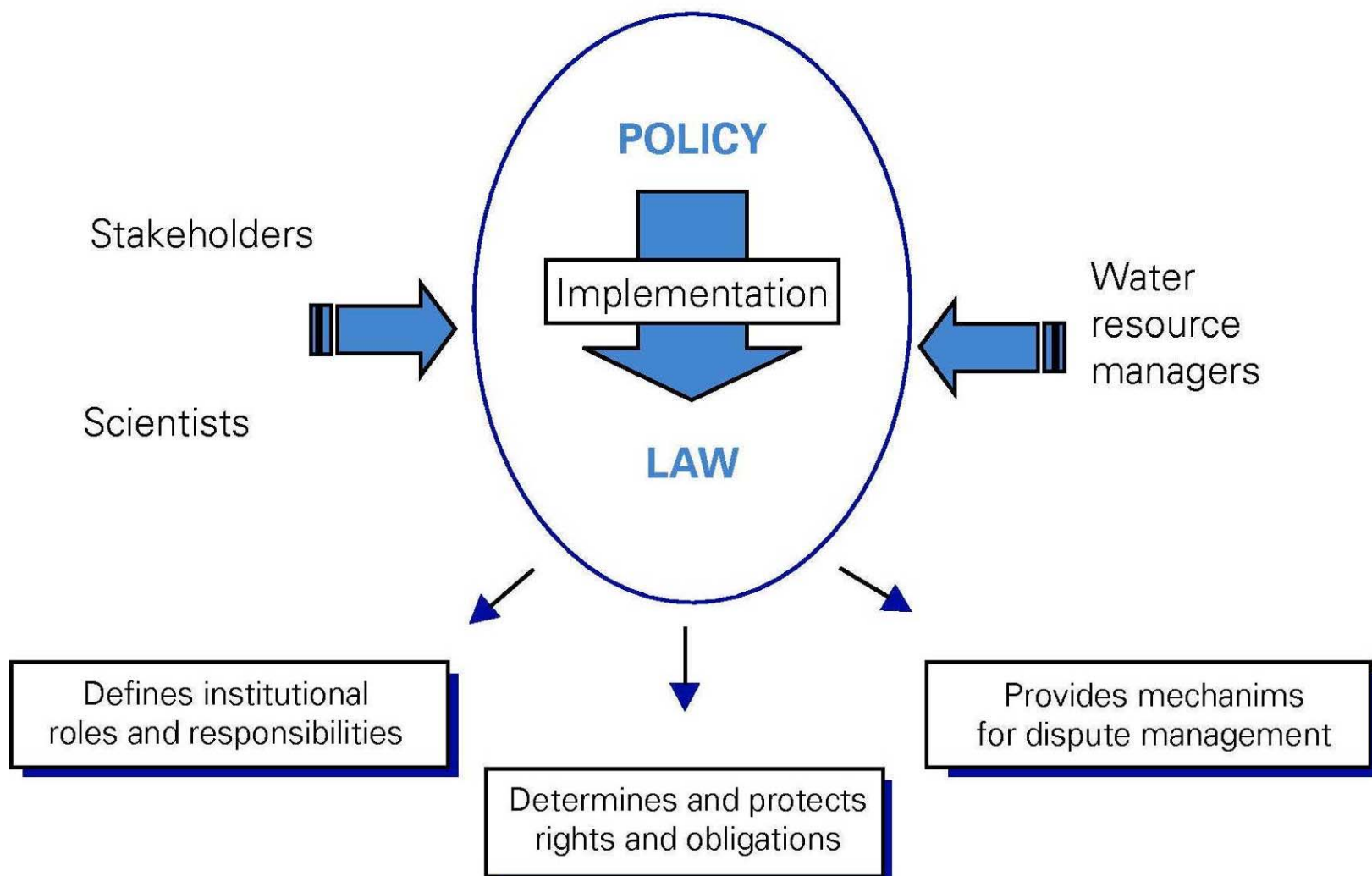
(\*) Human losses of life, biodiversity losses or losses of cultural heritage are not sufficiently quantifiable in economic terms but co-determine our policy options.

# Law: Definition

“Law is a system of rules, usually enforced through a set of institutions.”

Source: Wikipedia

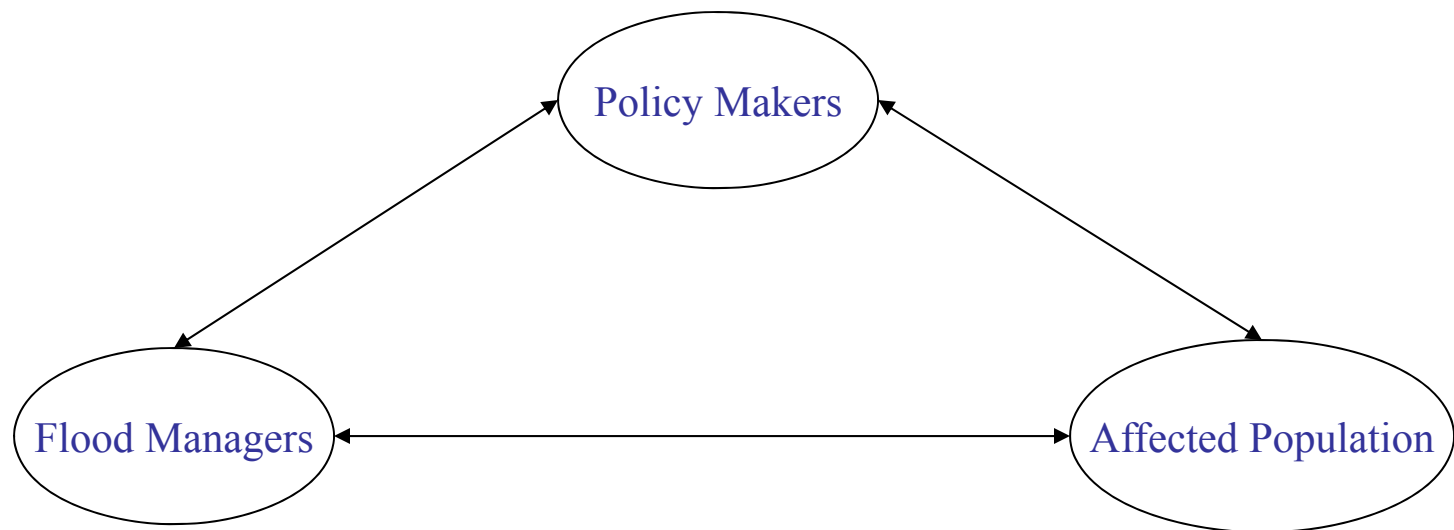
# Roles of Law in Flood Management





## Role of Flood Managers – they need laws to be effective

- Implement flood management policies within the given legislative framework
- Inform policy-making and legal reform processes about the realities of flood management



# Central Legal Themes in IFM

- Ensuring coordination and integration across institutional boundaries
- Information generation and sharing
- Enabling stakeholder participation
- Rights, powers and obligations

## Example of Horizontal institutional integration

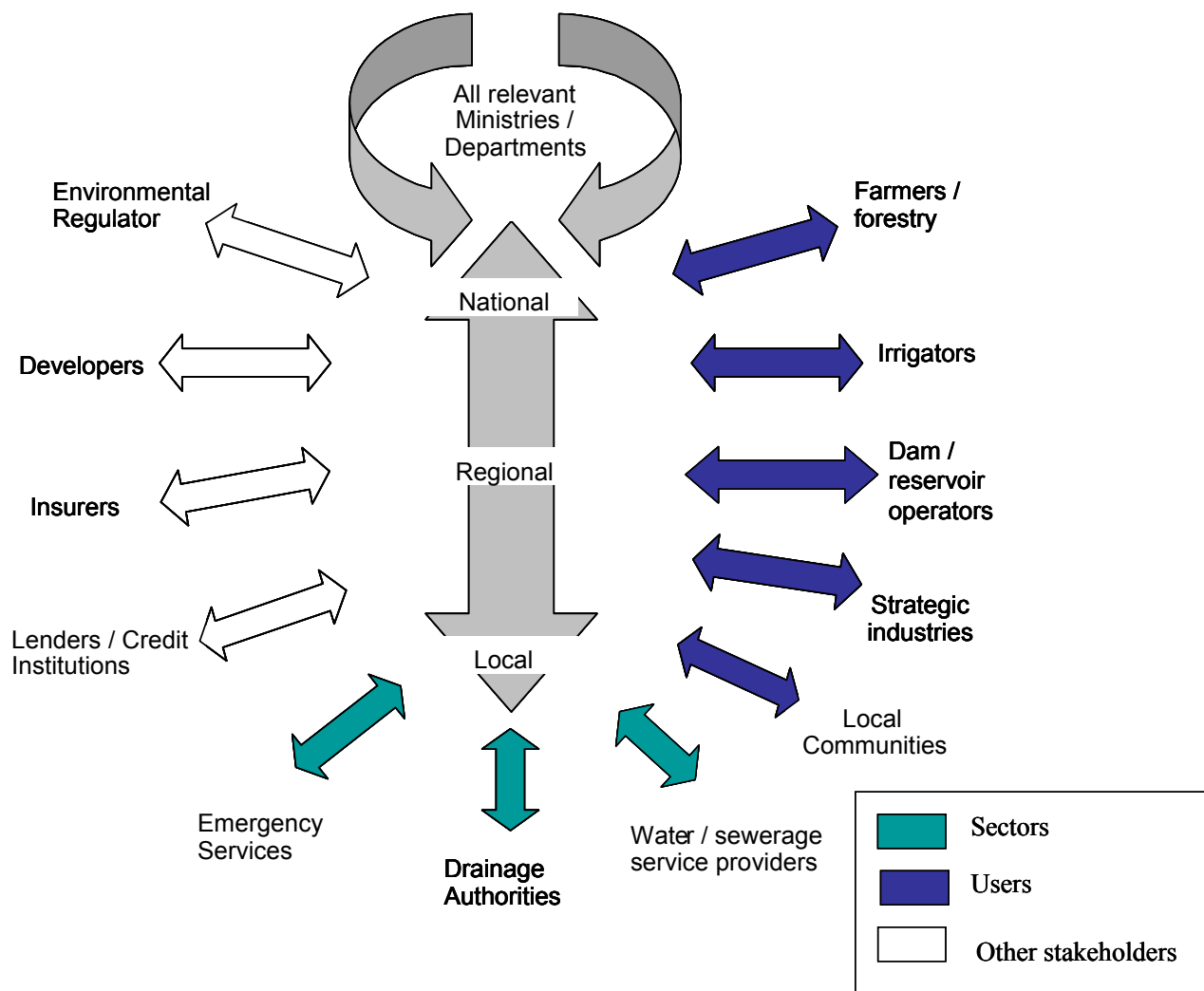
- Government ministries operating under various acts whose activities may potentially affect flood management differ with different countries, however examples are: Environment, Water, Health, Agriculture, Forestry, Lands, Physical planning, Defense, Internal security, Humanitarian organization, Public works, Transport, Local authorities etc. The question is who is the lead agency in case of flood disaster ? And who coordinates their long term plans to mitigate floods ? So the need of guiding law
- International river basins –flood management issues are more complicated in shared basins due to different levels of disaster laws, institutional arrangements, protocols, agreements etc. Who is in charge in case of emergency ? Need for regional institutions and regional agreements to promote coordination of IFM in shared basins.

## Example of Vertical institutional integration

- International to National to Regional command systems in flood disasters.
- Consistency in the policy and planning processes and implementation at different levels of government, that is, from the local level up, plans should be consistent with those produced at the next higher level

# Ensuring coordination and integration

## The challenge of integrating national public planning processes



## Information generation and sharing

- Many developing countries are still fighting their governments for freedom of information, this state of affairs works negatively in case of disasters - Do you remember a case of recent disaster response failure in this light ?
- Creating institutional mandates and obligations for information generation i.e. mandating relevant institutions to exchange data in necessary quality and timeliness
- Exposing plans, strategies, programmes and projects to public scrutiny
- Linking information to intended uses in:
  - Preparedness planning (hazard, exposure and vulnerability information)
  - Emergency response (forecasting, warning, flood fighting, evacuation etc)

## Enabling stakeholder participation

- The realization that the participation of stakeholders in flood management is necessary leads to a number of questions, as follows:
  - ✓ Who are the stakeholders?
  - ✓ In which decisions should they be involved?
  - ✓ What information should be provided, and how, if effective participation is to be achieved?
  - ✓ How much consideration should be given to stakeholder views?
  - ✓ What rights, powers and obligations should the stakeholders and the decision-making authority have?
- **THE BASIC QUESTION IN ALL THESE IS, CAN PRESENCE OR ABSENCE OF LEGAL ARRANGEMENT AFFECT STAKEHOLDERS PARTICIPATION ?** For example, Institutionalizing community participation in flood management activities on the local level –Community flood management committees

## Rights, powers, obligations

- From an IFM standpoint, it could be instructive to examine the nature of legal liabilities and State obligations in pre-flood, during-flood and post-flood situations. It may also be important to have a rights-based understanding of the legal framework in all three situations.
- It is essential that rights are associated with correlative powers and procedures for enforcement. Without this, rights are not enforceable and consequently worth little.



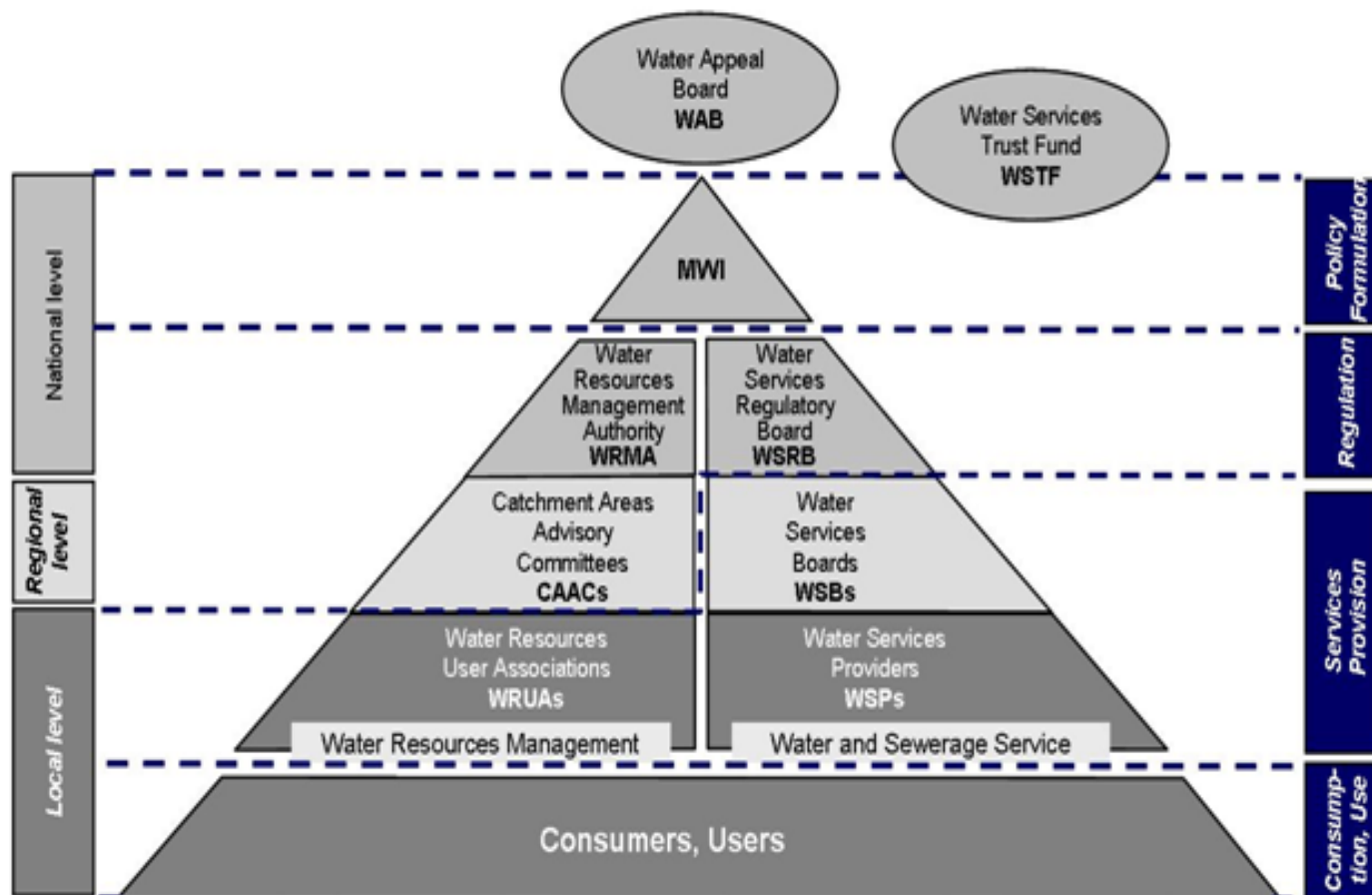
## Examples of Qs about rights, powers and obligations to be supported by laws

- Does the agency responsible for maintaining infrastructure have access rights to private property during emergency ?
- Does the insurance industry have the obligation of compensating flood related losses?
- Does flood management agency have powers to destroy flood defences incompatible with flood plan? etc

## Recent legal reform related to flood management at the national and international level

- Kenya – Has been handling disaster coordination thro’ National Disaster Operation Center in the Office of the President since 1998, however, this is an ad hoc arrangement. Current effort is to debate and adopt disaster national policy whose draft was created in 2002 and yet to be debated in parliament.
- The closest legal provision which can help in IFM is right of passage for authority for monitoring of water resources (section 90) of water act 2002
- South Africa – has elaborate legal framework
  - National Water Act 1998
  - Disaster Management Act 2002
- Other countries with well developed legal framework are India, Japan, Serbia, Switzerland – See distributed publications in your possession.

## Institutional set-up as a result of Water Act 2002: Source MW&I - Kenya



## The roles and responsibilities of Water institutions in Kenya as previously illustrated in a triangle

Institution		Roles and responsibilities
1.	Ministry of Water and Irrigation (MWI)	<ul style="list-style-type: none"> <li>Development of legislation, policy formulation, sector coordination and guidance, and monitoring and evaluation.</li> </ul>
2.	Water Resources Management Authority (WRMA)	<ul style="list-style-type: none"> <li>Planning, management, protection and conservation of water resources.</li> <li>Planning, allocation, apportionment, assessment and monitoring of water resources.</li> <li>Issuance of water permits.</li> <li>Water rights and enforcement of permit conditions.</li> <li>Regulation of conservation and abstraction structures.</li> <li>Catchment and water quality management.</li> <li>Regulation and control of water use.</li> <li>Coordination of the IWRM Plan.</li> </ul>
3.	Catchments Area Advisory Committees (CAACs)	<ul style="list-style-type: none"> <li>Advising WRMA on water resources issues at catchment level.</li> </ul>
4.	Water Resource Users Associations (WRUAs)	<ul style="list-style-type: none"> <li>Involvement in decision making process to identify and register water user.</li> <li>Collaboration in water allocation and catchments management.</li> <li>Assisting in water monitoring and information gathering.</li> <li>Conflict resolution and co-operative management of water resources</li> </ul>
5.	Water Services Regulatory Board (WSRB)	<ul style="list-style-type: none"> <li>Regulation and monitoring of Water Services Boards.</li> <li>Issuance of licenses to Water Services Boards.</li> <li>Setting standards for provision of water services.</li> <li>Developing guidelines for water tariffs.</li> </ul>
6.	Water Services Boards (WSBs)	<ul style="list-style-type: none"> <li>Responsible for efficient and economical provision of water services.</li> <li>Developing water facilities.</li> <li>Applying regulations on water services and tariffs.</li> <li>Procuring and leasing water and sewerage facilities.</li> <li>Contracting Water Service Providers (WSPs).</li> </ul>
7.	Water Service Providers (WSPs)	<ul style="list-style-type: none"> <li>Provision of water and sewerage services</li> </ul>
8.	Water Services Trust Fund (WSTF)	<ul style="list-style-type: none"> <li>Financing provision of water and sanitation to disadvantaged groups.</li> </ul>
9.	The Water Appeals Board (WAB)	<ul style="list-style-type: none"> <li>Arbitration of water related disputes and conflicts.</li> </ul>
10.	National Water Conservation and Pipeline Corporation (NWCP)	<ul style="list-style-type: none"> <li>Construction of dams and drilling of boreholes</li> </ul>
11.	Kenya Water Institute (KEWI)	<ul style="list-style-type: none"> <li>Training and Research</li> </ul>
12.	National Irrigation Board (NIB)	<ul style="list-style-type: none"> <li>Development of Irrigation Infrastructure</li> </ul>

## SPECIAL LEGAL & INSTITUTIONAL REQUIREMENTS FOR INTERNATIONAL WATERCOURSES

- **Acknowledgement of the magnitude of the problem:**  
About 263 international river basins covering almost half the world's land surface are shared by 145 countries.
- **Are there issues in management of these shared basin ? - YES**
  - ✓ Water use priorities of riparian states are conflicting and generate a number of disputes
  - ✓ Most economic groupings as currently constituted are not providing leverage to water issues
  - ✓ Classic diplomacy as we know it has no water component - No water attachés
  - ✓ The term independence as implied by most states is not conducive to international integration initiatives like IFM

**THEREFORE, WATER COOPERATION AMONGST STATES NEED A  
NEW APPROACH IF WE ARE TO ACHIEVE IFM IN SHARED BASINS**

## Regulating bi-and multi-lateral cooperation in shared basins – Existing attempts

### Box 5. International legal instruments related to flood management

#### Law of international watercourses

- Convention on the Protection and Use of Transboundary Watercourses and International Lakes, United Nations, 1992
- Convention on the Law of the Non-navigational Uses of International Watercourses, United Nations, 1997

#### Other related international laws

- Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 1971
- Convention Concerning the Protection of the World Cultural and Natural Heritage, UNESCO, 1972
- United Nations Framework Convention on Climate Change, 1992
- Convention on Biological Diversity, United Nations, 1992
- Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, UNECE, 1998
- London Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 1999
- Charter of the United Nations

#### Non-governmental and other expert group recommendations

- Helsinki Rules, ILA Report of the Fifty-Second Conference
- International Law Association (ILA) conferences and resolutions
- International Law Commission

#### Treaty practice

#### Case law

# Basic Principles of most water convention and declarations

- Equitable and reasonable use
- No significant harm
- Precautionary principle

## pertinent issues in existing bi-and multi-lateral regulations for shared basins

- **Scope Issue** -whether the law adequately takes into account the interaction between the causes and effects of floods – some laws are limited to water courses and not basin.
- **Principle of equitable and reasonable use, which is the spirit international legal principles** -The application of the rule of equitable and reasonable utilization arises where the quality and quantity of water in an international watercourse is insufficient to satisfy the needs. The contention sometimes arise when each member state define “reasonable use” selfishly.
- **No significant harm principle** - While the rule of equitable and reasonable utilization focuses on balancing competing interests, the focus of no significant harm is on the management of risk.
- **Protection of ecosystems** – ecosystem also raise a lot of conflicting interest amongst stakeholders e.g. floods may benefit one country while degrading the environment of another .



# Key Considerations for International Water Courses

- IFM as part of wider legal frameworks for protection and utilization of int. water courses
- Reconciliation of conflicting interests through principle of “Equitable and reasonable utilization”
- Procedural rules for
  - Exchange of data and information
  - Public participation
  - Dispute settlement
  - Specifying the role of joint institutions

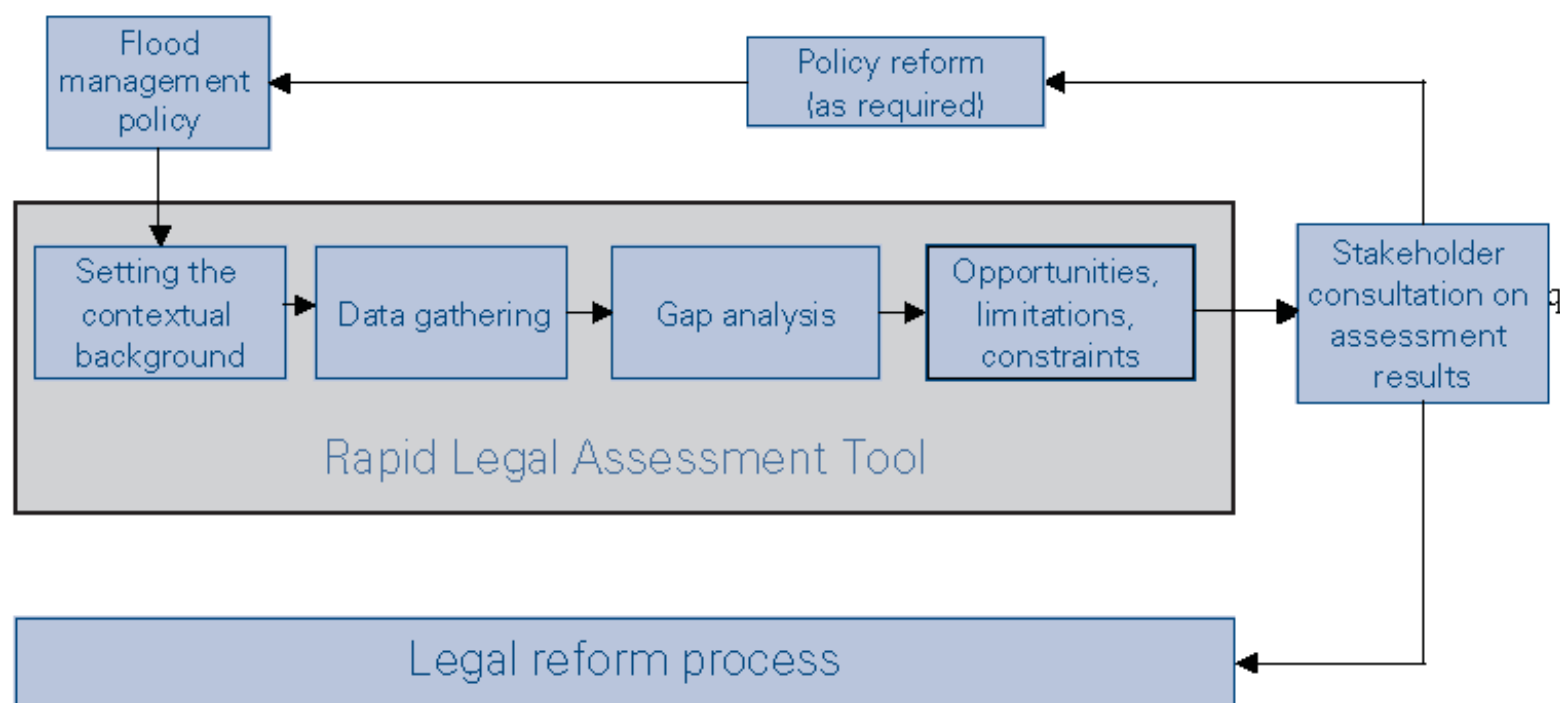
# Opportunity windows for legal reforms - IFM

- Occurrence of disaster – post disaster activities requires that population be reassured by creating some changes (soft or hard options)
- Taking opportunity of slotting in IFM issues whenever legal reform window opens e.g. the current constitutional review in Kenya
- Pressurizing nations to join global communities in ratifying IFM compliant rules

# THE RAPID LEGAL ASSESSMENT TOOL(RLAT)

- RLAT broadly prescribes the steps that could be used by States as a first step towards establishing or reforming a legal framework as part of the enabling environment for Integrated Flood Management.
- RLAT can also be used to test the existing legal frameworks for compatibility with the concept of Integrated Flood Management.

# Overview of the legal reform process using RLAT



# Methodological steps of RLAT

## Box 8. Methodological steps of the Rapid Legal Assessment Tool

### *Preliminary step:*

Explore in detail the existing national policy framework relating to floods.

### Contextual background

**Step 1:** Obtain a complete picture of flood issues, the role of floods and flood plains in the context of the country's development and of the overall legal-political environment.

### Data gathering

**Step 2:** Check on bilateral and multilateral water-related and other agreements and determine whether the country is signatory to any international and regional conventions listed in Table 1.

**Step 3:** Check constitutional provisions in respect of water, land, environment and other related subjects.

**Step 4:** Check and list national and subnational laws on flood-related subjects in Table 2 with the aid of Table 3.

### Gap analysis

**Step 5:** With the aid of Tables 4 and 5 carry out a gap analysis and identify the areas that need to be addressed.

### Opportunities, limitations and constraints

**Step 6:** Identify opportunities, limitations and constraints of legal reform.

**Step 7:** Draw out the legal reform process based on the identified reform areas.

## Concluding Remarks

- Legal and institutional reforms compatible with principles of IFM is necessary for all countries to create a conducive environment for practicing IFM.
- Transboundary basin management need legal and institutional arrangement amongst member states in a similar manner most states have embraced economic blocks.
- Existing legal and institutional arrangement should be tested for adequacy by RLAT





# Thank

# You

