



## Training for Trainers Integrated Flood Management for Sustainable Development

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# Legal and Institutional Aspects of IFM

Dr. W.E. Grabs  
Associated Programme on Flood Management  
WMO

WMO Climate and Water Department

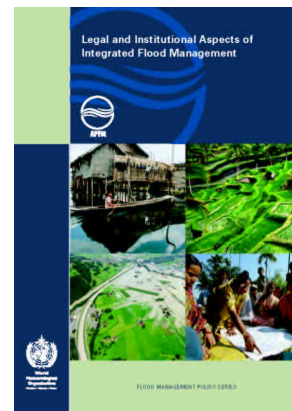
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## About this Presentation

This presentation:

- Focuses on IFM with special reference to Legal and Institutional Aspects of the concept
- Provides a rational and balanced way of addressing legal issues in flood management
- Aims at promoting understanding of the involved issues between flood managers and lawyers/legislators





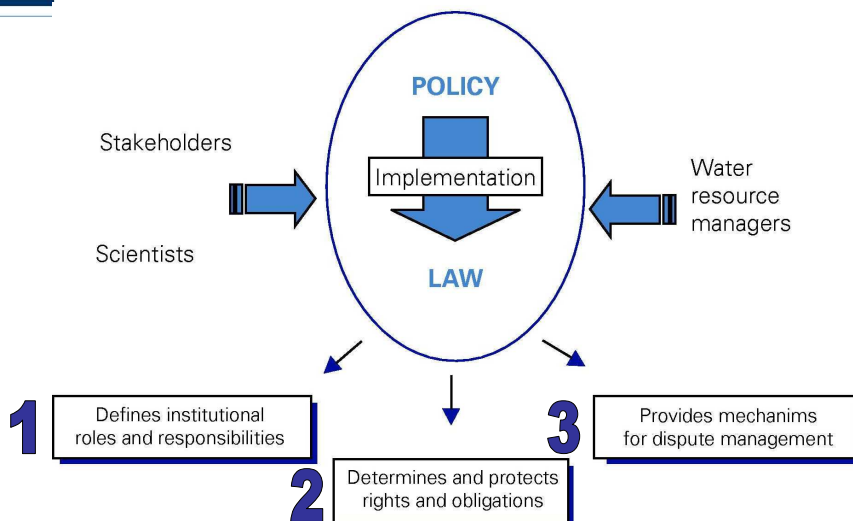
## Law: Definition

*“Is a set of rules or norms of conduct which mandate, proscribe or permit specified relationships among people and organizations, provide methods for ensuring the impartial treatment of such people, and provide punishments for those who do not follow the established rules of conduct.”*

Source: Wikipedia



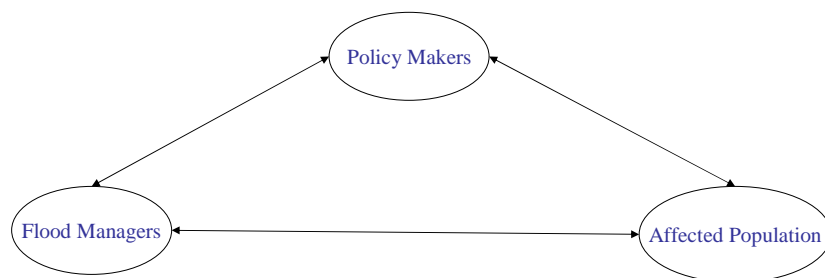
## Roles of Law in Flood Management



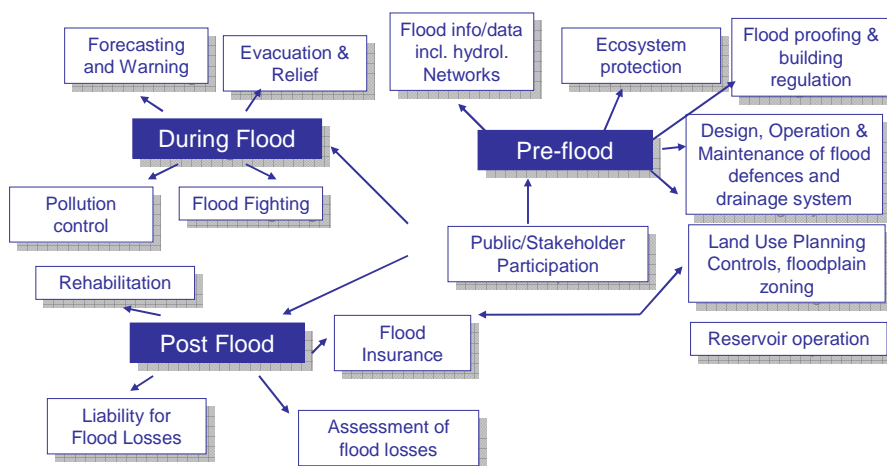


## Role of Flood Managers

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



## Overview of functions in IFM





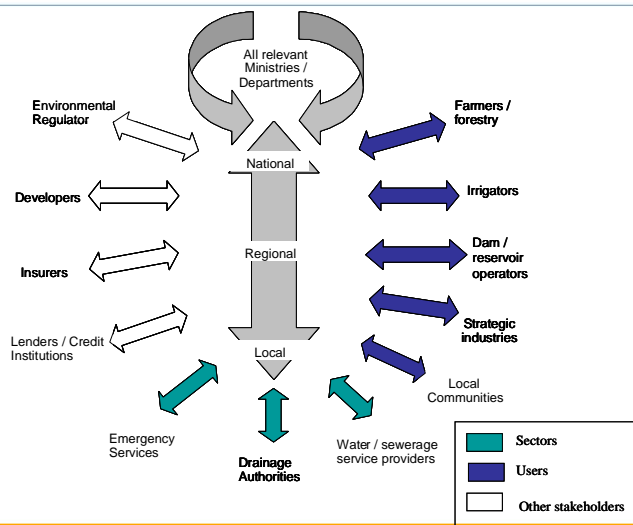
## Central Legal Themes in IFM

1. Ensuring coordination and integration across institutional boundaries
2. Information generation and sharing
3. Enabling stakeholder participation
4. Rights, powers and obligations



## 1. Ensuring coordination and integration

The challenge of integrating national public planning processes





## 1. Ensuring coordination and integration (cont.)

Example Land use planning controls:

- Flood risk identification (risk maps)
- Regulated development of flood plains (spatial planning/ land use legislation)
- Introduction of flood risk assessment to development activities (urban, forestry, agriculture)
- Flood proofing of structures (building codes)
- Guidance on best practice for agriculture
- Regulation through incentives and disincentives (insurance)



## 2. Information generation and sharing

- Creating institutional mandates and obligations for information generation
- Mandating relevant institutions to exchange data in necessary quality and timeliness
- Exposing plans, strategies, programmes and projects to public scrutiny
- Linking information to intended users in
  - Preparedness planning (hazard, exposure and vulnerability information)
  - Emergency response (forecasting, warning, flood fighting, evacuation etc)





## 2. Information generation and sharing (cont.)

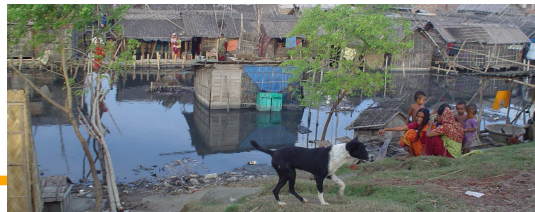
Example: Flood Forecasting and Warning

- Define responsibilities for provision of flood forecasting, warning and emergency response
- Rights of access to relevant data and ensuring their availability (basin wide)
- Obligatory broadcasting of flood warnings on the mass media
- Liability issues in cases of failure (warn too late, inaccurately or where no warning is required)



## 3. Enabling stakeholder participation

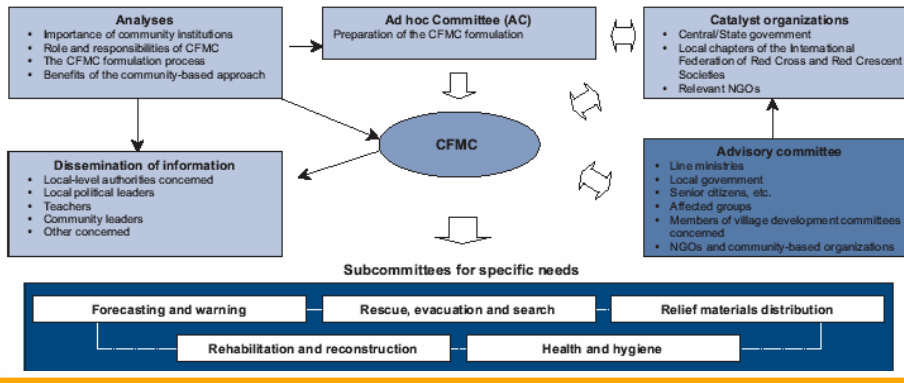
- Granting rights of access to adequate information to the public for informed decision-making
- Institutionalizing community participation in flood management activities on the local level
- Providing for flood preparedness of the population (e.g. emergency drills)





### 3. Enabling stakeholder participation (cont.)

#### Example of Community Flood Management Committees (CFMC)



### 4. Rights, powers, obligations

Must be appropriate for functions to be carried out.

- E.g. agency responsible for maintaining infrastructure will need access rights
  - Is there corresponding right of compensation for property owners?
- Does flood management agency have right to destroy flood defences incompatible with flood plan?





## Recent legal reform related to flood management on the national level

- South Africa
  - National Water Act 1998
  - Disaster Management Act 2002
- France
  - Law on Natural and Technological Risks 2003
- India
  - Disaster Management Bill 2005
- Germany
  - Act to Improve Preventive Flood Control 2005
- United States
  - WARN Act 2006



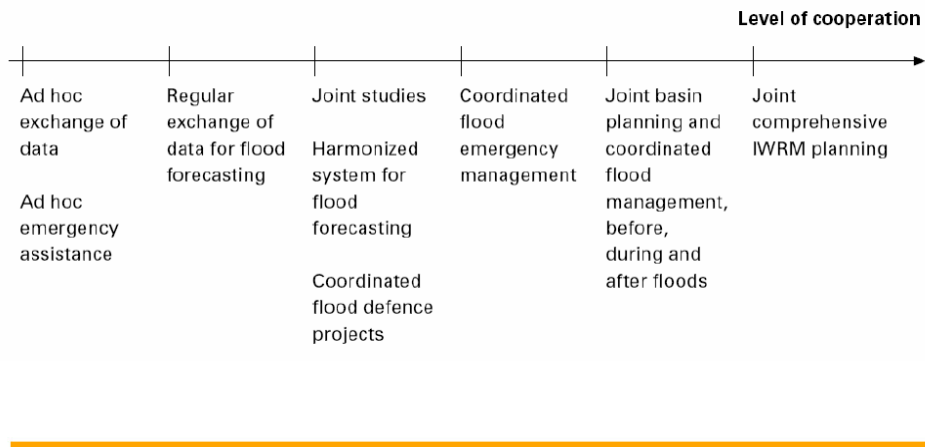
## The European Flood Directive



- Adopted by the EC 2007
- Framework for the reduction of risk to human health, the environment and economic activity associated with floods in the European Community
- Main elements:
  - Preliminary flood risk assessment
  - Flood risk maps and Flood risk management plans for river basins, sub basins or stretch of coastline for which it is concluded that potential significant flood risks exist or might reasonably be considered likely to occur.



## Flood Management Cooperation Continuum



## Rapid Legal Assessment Tool (RLAT) (1)

- The overall objective in using the RLAT is to identify the areas where reform to the legal and institutional system would be required and to create a basis for a substantiated consultation among decision makers and stakeholders about possible reform steps.



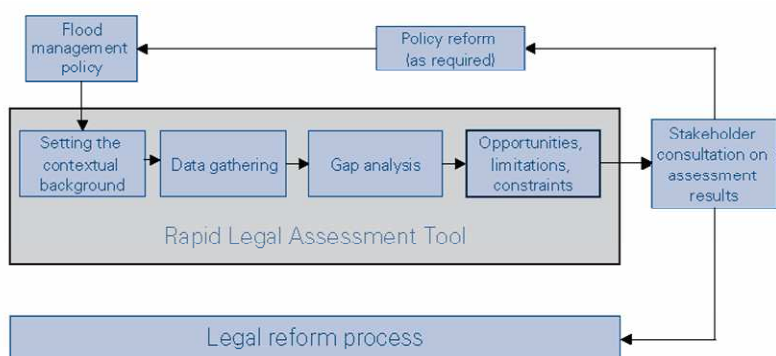
## Rapid Legal Assessment Tool (2)

*The RLAT provides a methodology in four steps:*

- **Contextual Background**, seeks to analyze the flood issues that affect the country in question, along with the broader legal and political environment.
- **Data Gathering**, provides a method by which to identify all the relevant existing laws within a country relating to flood management. Various national and international legal instruments, having implications on flood management issues, form the source of the basic data.
- **Gap Analysis**, seeks to compare the existing laws with the concept of Integrated Flood Management, and to identify gaps between what is required and what is available on ground.
- The fourth component seeks to identify **Opportunities, Limitations and Constraints** on the implementation process in order to guide a reform process.



## Rapid Legal Assessment Tool (3)



Best to be applied by a team consisting of a

- Flood manager/ water resources engineer
- Water/Natural Resources Lawyer
- Political Economist with in-depth understanding of “floodplain economics”

[http://www.apfm.info/pdf/ifm\\_legal\\_aspects.pdf](http://www.apfm.info/pdf/ifm_legal_aspects.pdf) (from page 51)



## Legal Aspects and Flood Insurance

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- Without defined legal basis i.e. Landuse Planning, Building Codes, Property laws, Disaster Prevention & Mitigation.... Risks cannot be ensured as there is no legal base for enforcement or even determining insurance.
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## Legal Aspects and Flood Insurance

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**Requirements to develop an insurance scheme:**

**Legal Base!**

**Information on (amongst others):**

*Flood hazard, frequency and probability of return, flood mapping, lives/properties at risk, financing of insurance*

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## Example US National Flood Insurance Programme

### National Flood Insurance Program (NFIP)

- Self-supporting program
- Offers federally backed flood insurance
- Communities must adopt and enforce floodplain management ordinances
- *Flood insurance is required for all secured Loans made by a federally regulated or backed lending institution*

SOURCE: FEMA



## US - NIFP

### NFIP Floodplain Ordinance Criteria

- Development permits
- Development plan and subdivision review
- Protection of water supply and sewage systems
- Use all base flood elevation data
- Maintenance of flood carrying capacities within watercourses

SOURCE : FEMA



## US - NIFP

### NFIP Building Standards

- Elevate new structures in the 100-year flood zone  
Subdivisions designed to minimize exposure to flood hazards
- Additional standards for high-hazard coastal zones  
Construction standards also imposed during “substantial improvement”, including reconstruction

SOURCE: FEWMA



## US - NIFP

### Flood Insurance Study (FIS)



Source: FEMA



## A word on politics

- Political windows of opportunity after floods
- Considering the transboundary level as an option to add value to flood management
- Experts and practitioners to be prepared with a balanced approach before the flood



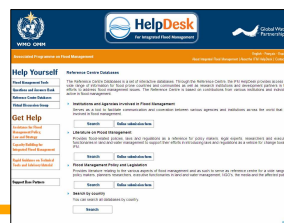
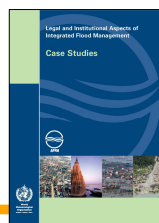
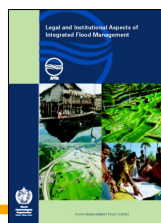
## Concluding Remarks

- Provisions to be mainstreamed into a broad range of sectoral legislation on all administrative scales
- Due consideration of enforceability
- Issues of wider sustainability to be mainstreamed into flood policy and legislation
- Policy, legal and institutional arrangements to be harmonized and flexible enough to provide for changing environment
- Legislative arrangements to be complemented by other available mechanisms (economic, social and cultural)
- Transboundary basin management need legal and institutional arrangement amongst member states



## Further Reading

- IFM Concept Paper
- IFM Legal and Institutional Aspects
- Case studies: Flood Management and Law in India, Japan, Serbia and Switzerland
- <http://www.apfm.info/publications.htm>
- National Laws and International Instruments (see Flood Management Reference Centre)
- <http://www.apfm.info/databases/policy/index.php>



Where are we going?  
IFM should lead to a brighter future

Thank you for your attention

For More Information [www.apfm.info](http://www.apfm.info)