



# **Integrated Flood Management:** *Global effort for Local actions*

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## Settling on floodplains has enormous advantages



[www.gaestehaus-loreley.de](http://www.gaestehaus-loreley.de)



SPIEGEL ONLINE 2004

## and at the same time it poses great risks



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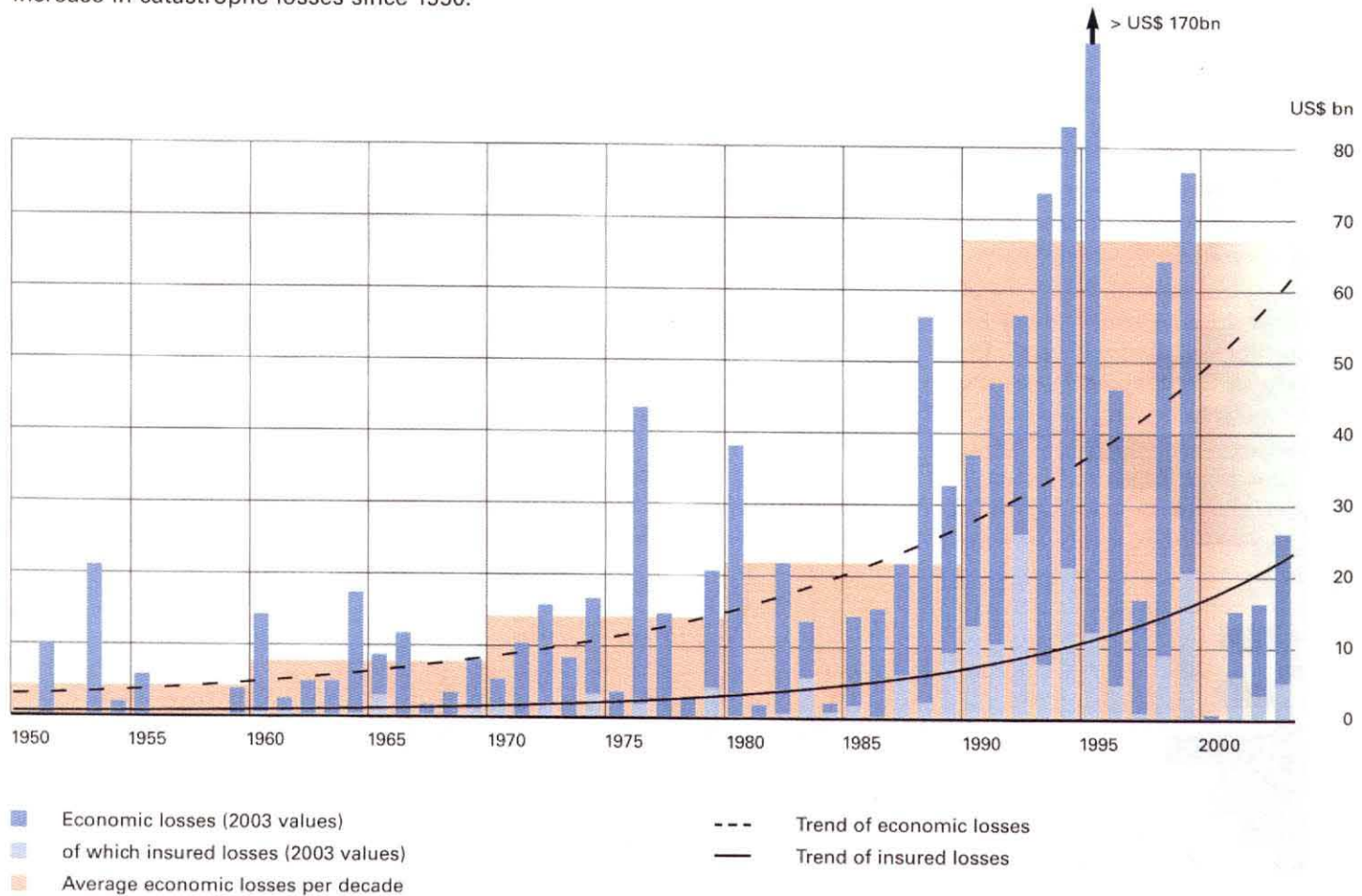
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# Flood damages are increasing

The chart presents the economic losses and insured losses – adjusted to present values. The trend curves verify the increase in catastrophe losses since 1950.



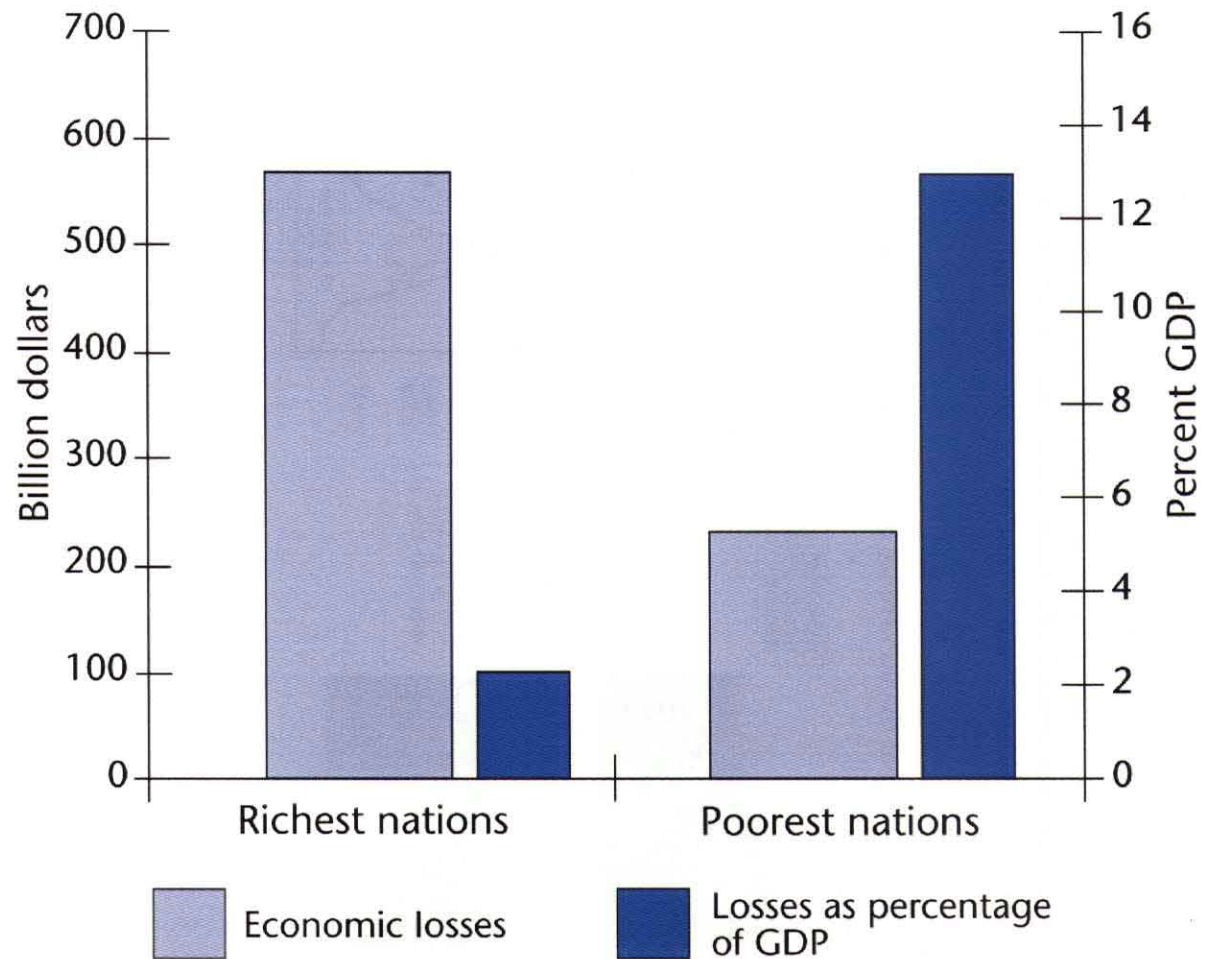
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# Developing Countries are Hit the Hardest







## Shortcomings of traditional FM Practices

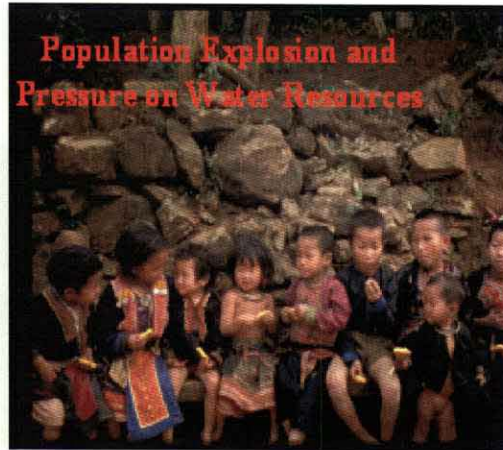
- Ad-hoc and stand alone
- Reactive rather than proactive
- Emphasis on structural measures
- Monodisciplinary
- Lessons from past failure

**Flood policy is a neglected policy issue on the international as well as, in many cases, the national level**





# Challenges of Flood Management



**Population increase**

**Securing livelihoods**



**Absolute safety from flooding is a myth**



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# Challenges of Flood Management

## Climate Variability and Change



## Ecosystem Conservation

**Changes in the decision making processes**  
(Community Participation)



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# **IFM: a holistic flood management**

## **■ Integration of**

- Land and Water Management**
- Upstream and Downstream**
- Structural and Non-structural**
- Short term and Long-term**
- Local and basin level measures**
- Top down and Bottom up decision making**
- Development needs with ecologic and economic concerns**
- Functional Integration of Institutions**







# Characteristics of IFM

**Improvements in the functioning of the river basin as a whole without just fixing local problems**



**Climate, basin characteristics, ecology and socio-economic conditions in a region are linked factors determining the flood management options that are appropriate.**





# **Integrated Flood Management: Objectives**

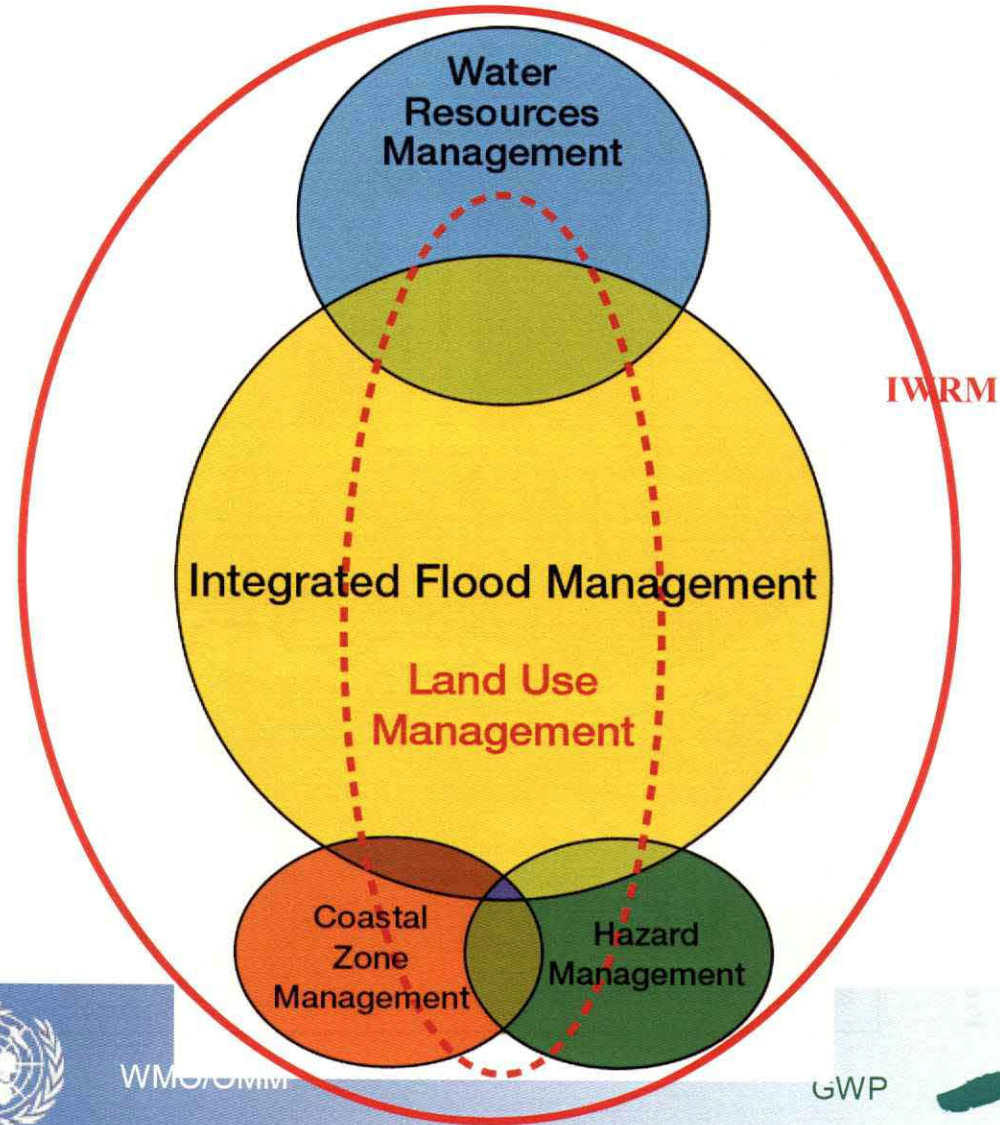
- Sustainable development: balancing development needs and flood risks**
- Maximising benefits: ensure livelihood security and poverty alleviation thereby reducing vulnerability**
- Minimising loss of life**
- Environmental preservation**







# Water Resources Management and IFM



Integrated flood management



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# Requirements of IFM

**Clear and objective policies  
with a multidisciplinary approach**

**supported with appropriate**

- **Legislation and regulations;**
- **Institutional structures for proper coordination and appropriate linkages;**
- **Economic instruments;**
- **Enabling participatory processes; and**
- **Information management and exchange mechanisms.**







# Mission of APFM

**“to support countries in the integrated management of floods within the overall framework of integrated water resources management.”**







# Pilot Projects: Principles

- **Demonstrate IFM elements**
- **Demand-driven**
- **Distributed geographical coverage**
- **Potential for up-scaling and outreach**

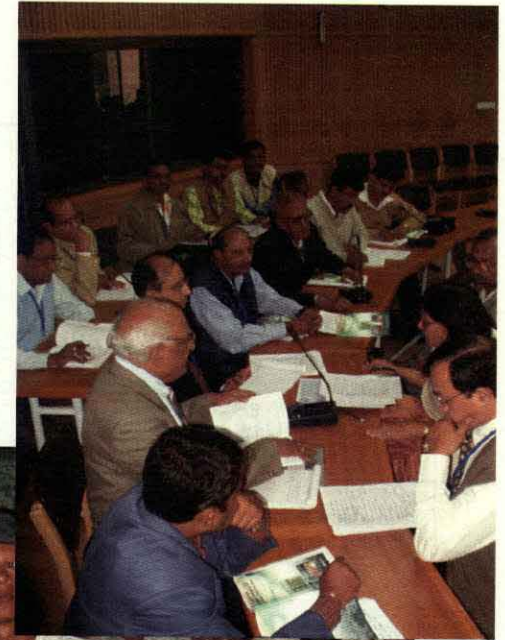






# South Asia

## •Community based approaches to Flood Management



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# Quarai transboundary basin

- Establish a mechanism for coordinated bi-national management
- Launch joint risk assessment in a transboundary basin







## Central and Eastern Europe

“Increase the **preparedness and response capacity** of the local authorities and population in flash flood prone pilot communities and **reduce the vulnerability** of the affected population.”



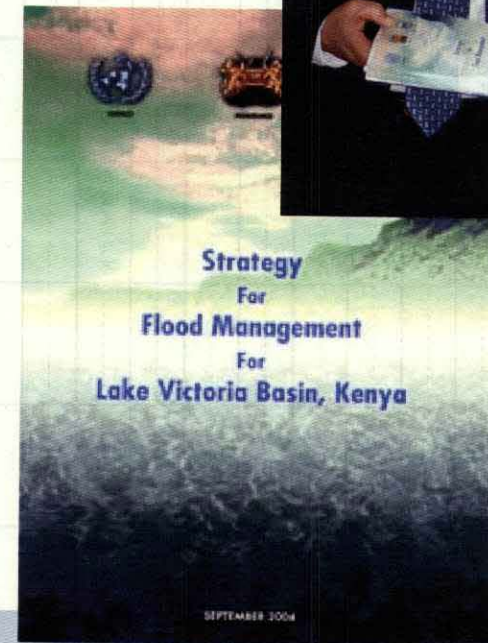




# Flood Management Strategy

## Lake Victoria Basin, Kenya

**Objective:** put in place a Flood Management Strategy for the Lake Victoria Basin to prevent flood disasters hampering development processes



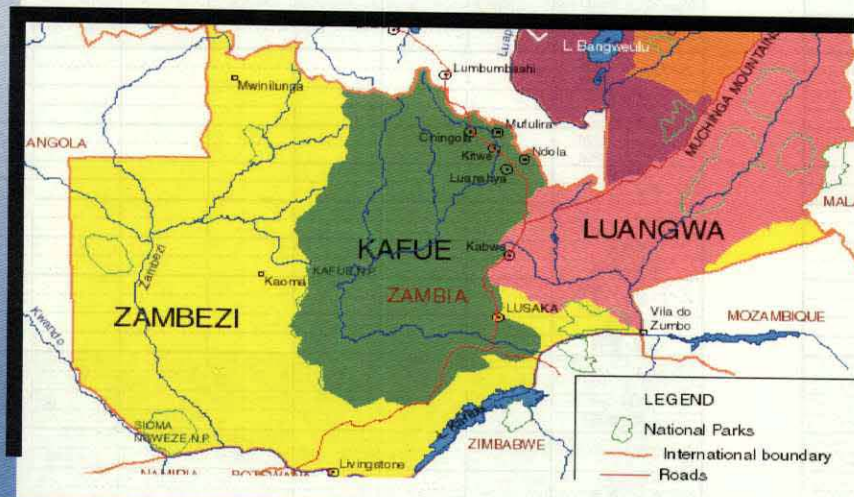




# Flood Management Strategy

## Kafue Basin, Zambia

**Objective:** put in place a Flood Management Strategy for the Kafue Basin to prevent flood disasters hampering development processes



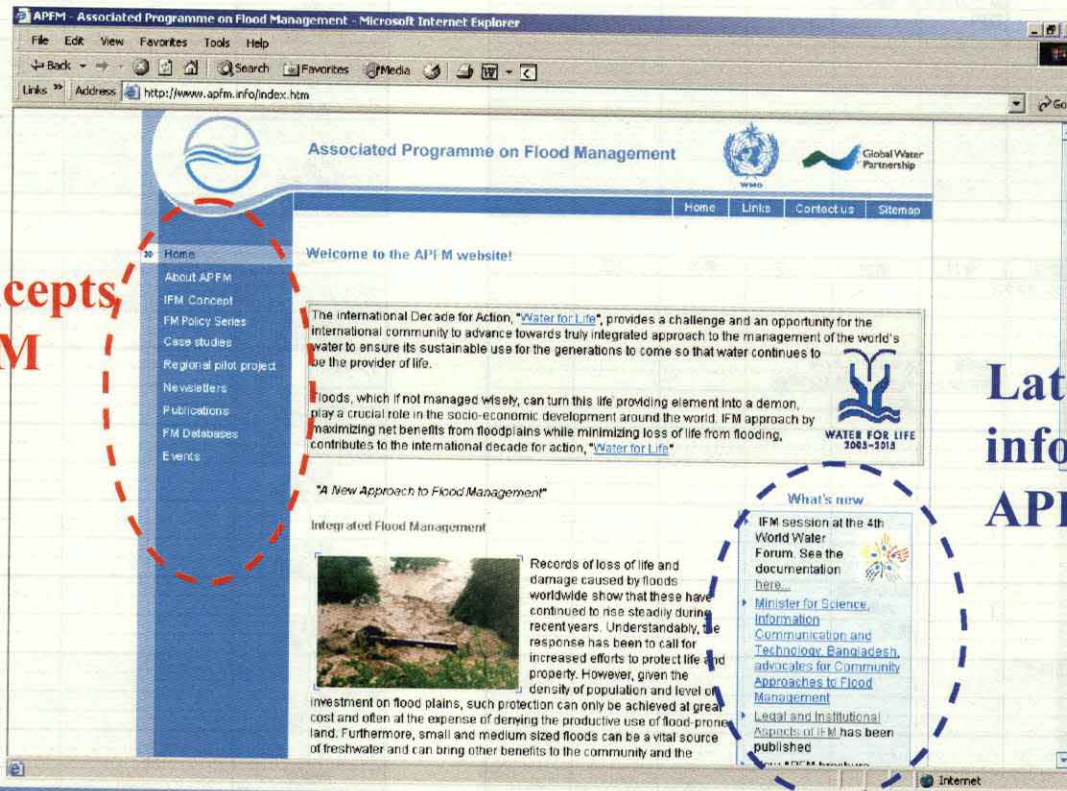




# Information Services

The APFM website serves as the central access point for information on programme activities and its information services

IFM Concepts and APFM activities



Latest information on APFM activities







# **Associated Programme on Flood Management Phase II**



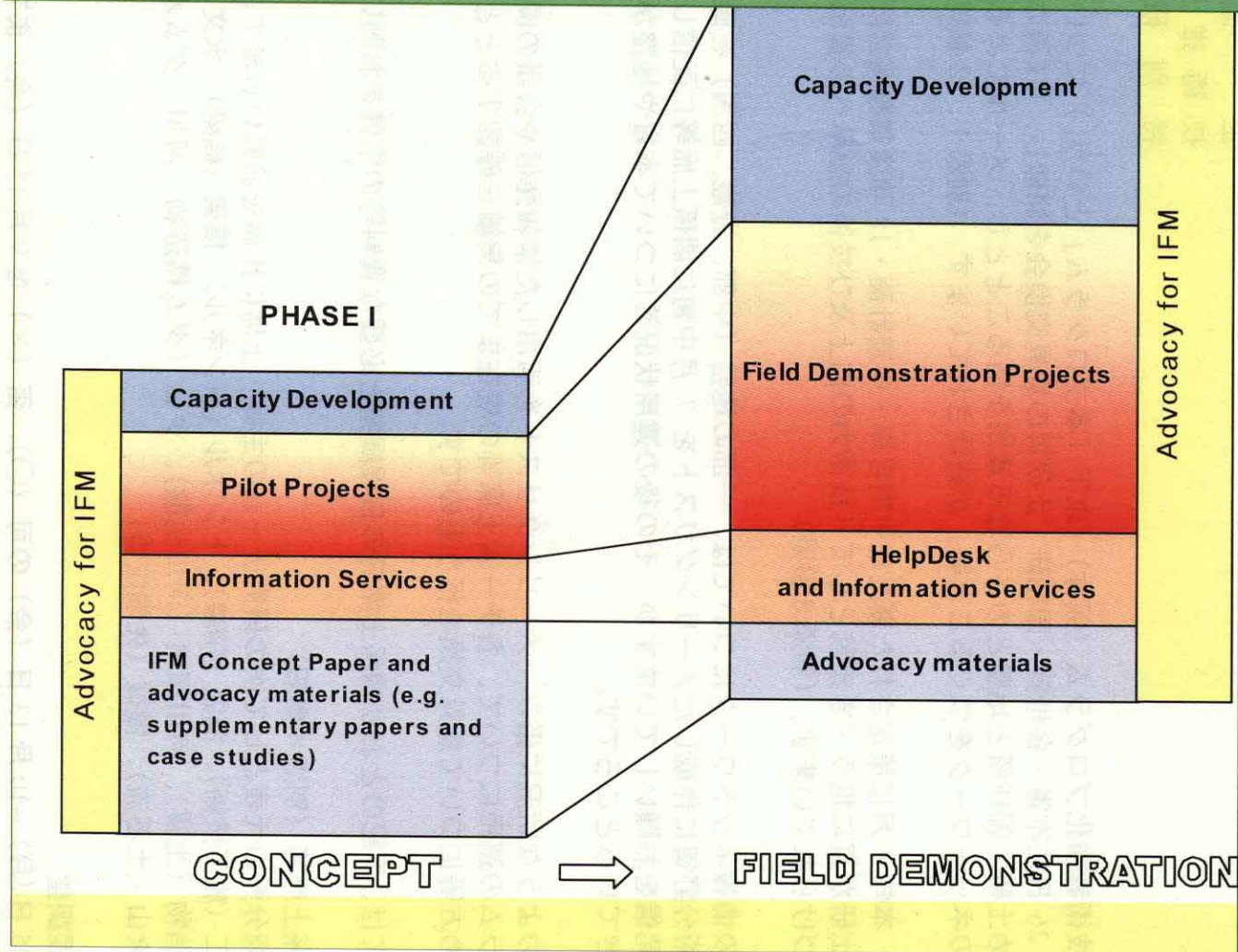
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# from CONCEPT to FIELD DEMONSTRATION







# Outputs

- **Field Demonstration Projects**
  - Capacity building
  -
- **Strategic advice on flood management through a HelpDesk**
  - Developing decision making tools
  - Developing training and advocacy material
  - Building a network of institutions supporting multi-disciplinary approach





# Field Demonstration Projects

- **Take up new field demonstration projects under APFM**
- **Support follow up on the Pilot Projects taken up under phase I and upscale the impacts**
- **Provide technical support to flood management projects with third party funding**







is “a facility that will provide guidance on flood-related issues to countries that want to adopt the IFM concept in a ‘hand holding’ mode”.

- Provide quick access to relevant flood management information;
- Provide guidance and momentum for reform activities in the countries or river basins;
- Serve as a link between flood management practitioners or decision makers and required experts in various fields;

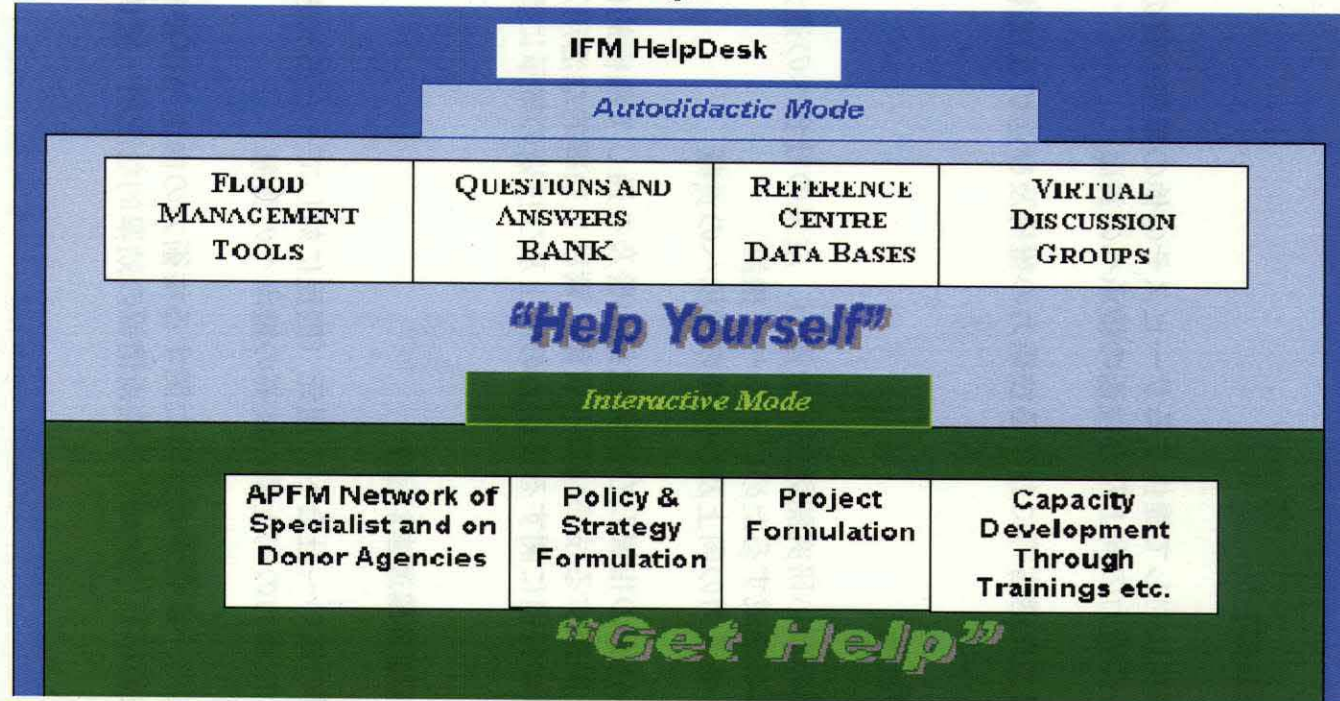
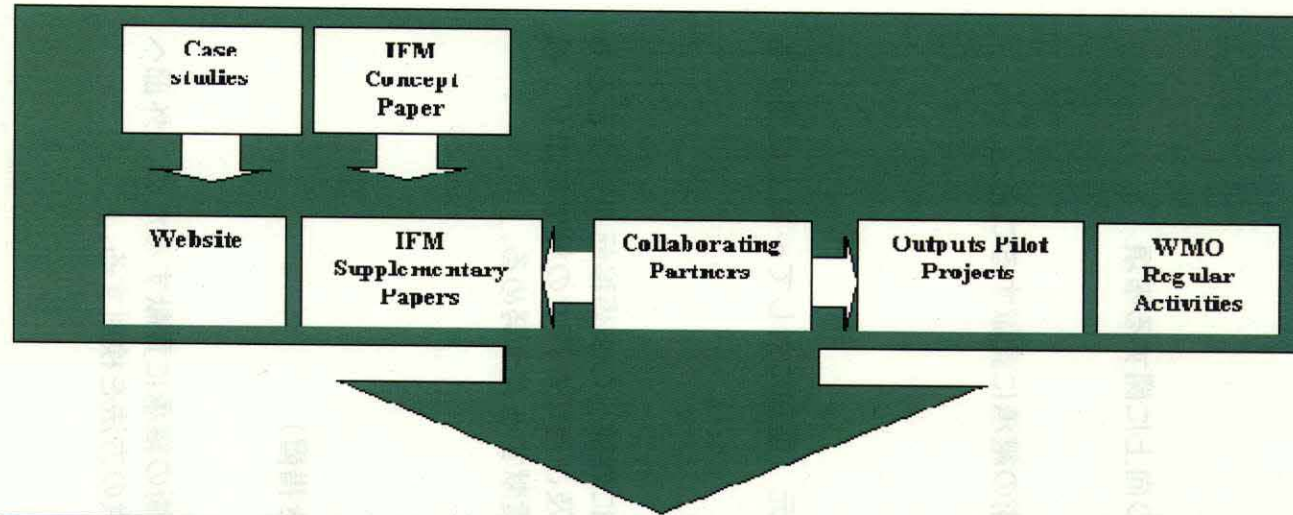
**Serve as link between various technical and financial partners.**







# HelpDesk







**For more details**

**<http://www.apfm.info>**

**[apfm@wmo.int](mailto:apfm@wmo.int)**

**Thank you!**



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