

Integrated Flood Management



Weather Climate Water

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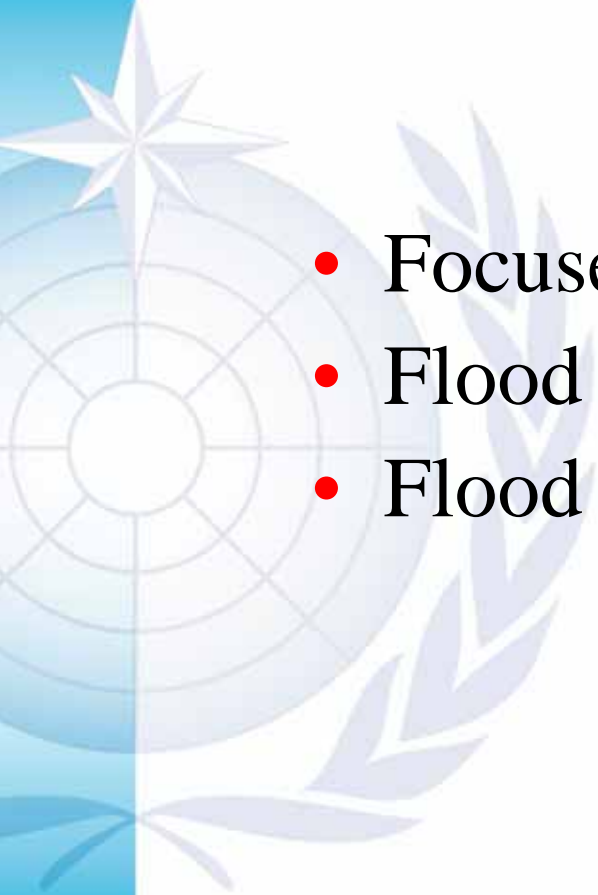
Integrated Water Resources Management

IWRM is a process which promotes the coordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.

(GWP Technical Advisory Committee)

Traditional Flood Management

- Focused on reducing flooding
- Flood alleviation was problem driven
- Flood Risks considered in isolation



Challenges of flood management

- River basin a dynamic system and there are continuous interactions between land and water,
- Population pressure and economic growth
- Enhanced economic activities increases exposure to flooding
- Preserving fragile ecosystem
- Uncertainties caused by climate change
- Total Risk Management

Need for a new approach

There should be an approach to flood management that considers the functioning of the river basin as a whole recognizing that floods have beneficial impacts and that they can never be fully controlled.

Integrated Flood Management

Integrated flood management is a process promoting an integrated- rather than a fragmented approach to flood management within the context of IWRM and aims at maximising the net benefits from flood plains and minimising loss of life.

Integration

Land



Water

Long-term



Short-term

Structural



Non-Structural

Upstream



Downstream

Too much



Too little

Natural



Human

Elements of IFM

- Manage not only the low and medium floods but the extreme also
- Integrate land and water management
- Best Mix of Strategies
- Ensure Participatory Approach
- Integrated Risk Management

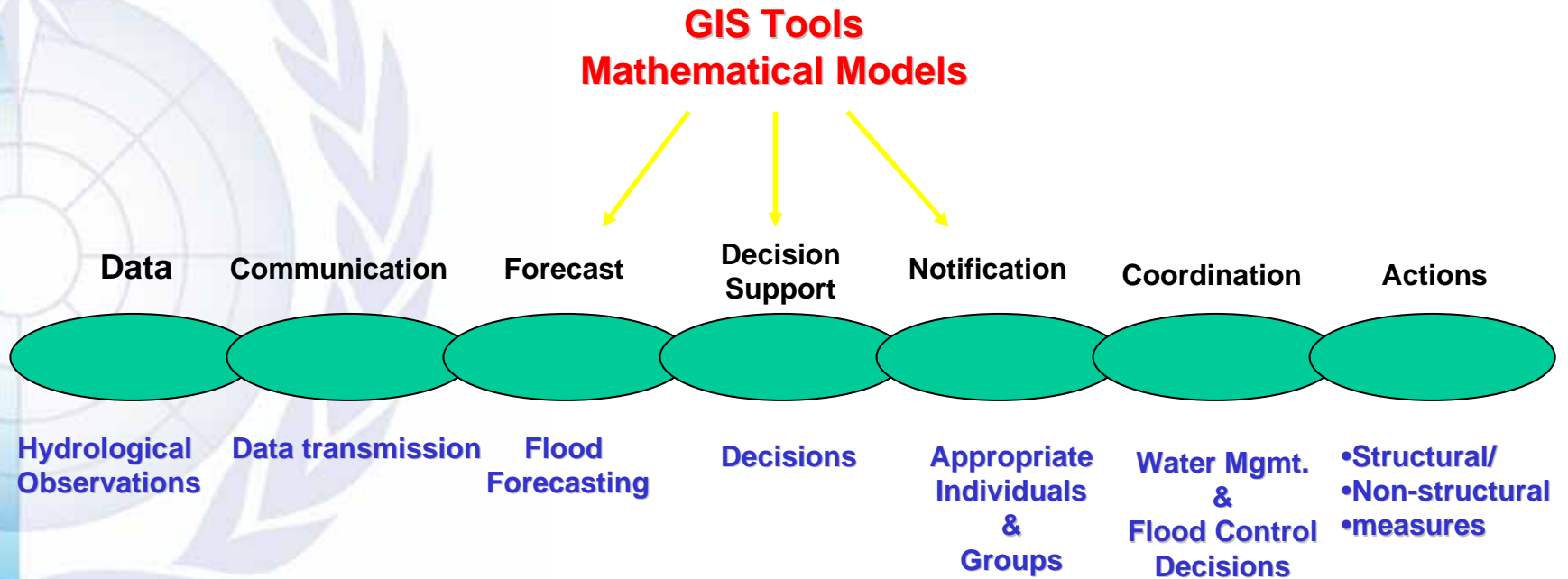
Requirements of IFM

- Clear and objective policies based on risk management principles
- Appropriate legal and institutional framework
- Community based institutions to ensure involvement of all stakeholders
- Information management and exchange
- Appropriate economic instruments

Risk Management

- Preparedness
 - Prevention
 - Monitoring and Early Warning
- Response
 - Emergency action
 - Reconditioning
- Recovery
 - Rehabilitation

Flood Forecasting and Warning: a Critical Chain of Events and Actions



Integrated flood forecasting, warning and response system

Role of IFNet

- Providing early warning for preparedness
- Support with preparedness tools such as flood hazard maps
- Creating Awareness
- Capacity building
- Sharing experiences



Thank you

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