



Reducing Social Vulnerability to Flood Risks

**“Stakeholder involvement in flood Management
for the best use of early warning”**

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WMO/OMM





Early warning is a trigger to induce actions in Integrated Flood Management (IFM)

(Challenge)

- How warning message can be reached to the people
- How warning message will be understood
- How people can act upon warning message

→ Necessity of considering the Social Aspects and Stakeholder Involvement in the process

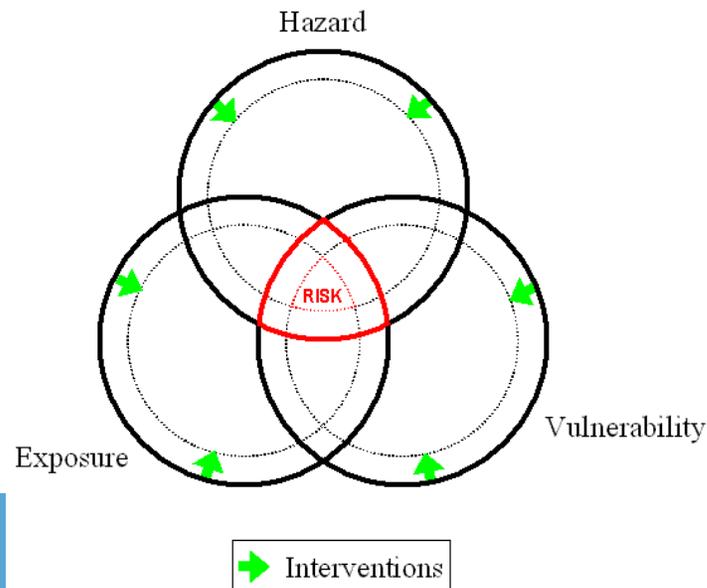




Reduce Flood Risks through the Information Management

- Understanding Flood Risks

Flood risks are a function of the magnitude of the hazard expressed in terms of frequency and severity; exposure of the human activities to the hazard; and vulnerability of the elements at risk





Risk Perception

- Perception of risks due to floods among communities and within community differ considerably
 - Requirement of the knowledge of local hazard conditions and existing flood management practices
- Large scale structure may generate a false sense of security
 - Recognize the level of protection and their limitation and be aware of the residual risks





Vulnerability of Society

- **Physical/Material**
- **Constitutional/Organizational and**
- **Motivational/Attitudinal**

(Key issues: Poverty, Livelihoods, Cultural beliefs, Human Rights, Gender)

These factors can be the hindrance in reducing flood risks

→Challenge: whether community can precisely perceive and react to the message of early warning





Flood Risk Reduction

- **Reducing vulnerability and enhancing resilience**
 - **Proper analysis of vulnerability**
 - **Identification of underlying factors contributing to increased vulnerability**
 - **Improve the capacity or the ability of the individual or community**
- **Flood Management Plan**
- **Flood Emergency Management Plan**





Flood Emergency Management Plan

- **Preparedness:** measures to ensure effective response
- **Response:** measures to reduce adverse impacts during the flooding, and
- **Recovery:** measures to assist affected community rebuild itself

Continuous, timely and precise information flow is vital for handling emergency situation and mobilization of resources





Flood Emergency Preparedness

- **Raising public awareness of existing risk**
(Education and regular training)
- **Development of preparedness plan**
(Public participation in the process)
(A common platform should be established)
- **Coordination among stakeholders**
(Governments at all levels share responsibilities)

Requirement for Legal and Institutional arrangement





Flood Emergency Response

Early warning

- Precise knowledge to understand its meaning to avoid panic
 - Enough lead time to induce appropriate reaction
 - Secure to inform the message to all people
- Warning must be provided and conveyed in an unambiguous, easily understandable manner and in local language through a legally designated single authority
- In the dissemination, there should be a tool which is available to the poor people





Response to Early Warning

- **Establishment of the disaster management system**
 - **Coordination between the responsible agencies with well-defined duties and obligations**
 - **Support for Judgment of threshold condition**
- **Evacuation**
 - **Evacuation planning with involving the communities**
 - **Special care for the weak groups (e.g. secure safe place for women and young girls from sexual harassment and abuse)**
- **Rapid assessment of latest situation**
 - **Assess the immediate needs (e.g. aid materials)**





Requirement of Multi Stakeholder Involvement

- **Harmonize the varied objectives of each stakeholders**
- **Enhance the understanding between stakeholders**
- **Identifies public concerns and values**
- **Ensures the effectiveness of measures**
- **Enhance resilience in communities through cooperation and coordination**
- **Ensures the sustainability of measures as stakeholders feel the ownership of the approach**





Enhancing the sustainability of participatory planning

(Challenge)

- **Political will**
- **Financial commitment and budget allocation**
- **Attitude toward flood management**
- **Risk perception**





(Strategy for ensuring sustainability)

Capacity building of stakeholders

- To facilitate the cooperation with other agencies**
- To participate as a stakeholder in the process**
- To undertake the planning**
- To undertake the implementation**





For more details will be available in the paper on “Social Aspects and Stakeholder Involvement in Integrated Flood Management” at

<http://www.apfm.info>

Thank you !

