People-Centered Early Warning Systems

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Programme of action sets priorities for five areas of focus

1. Integration of early warning into development processes and public policies
2. Improved data availability for forecasting and managing risks
3. Improved capacities and systems, especially in developing countries
4. People-centred warning systems
5. Mechanisms for sustaining the dialogue on early warning and supporting an international programme*

* Now operational through support from Government of Germany

Objective of people-centered early warning systems

- Empower individuals and communities threatened by hazards to act in sufficient time and in an appropriate manner so as to reduce the possibility of personal injury, loss of life and damage to property and the environment (human security and community empowerment)

The four components of systematic people-centred EWS

Risk Knowledge + Monitoring & Warning Service

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Dissemination & Communication + Response Capability

Early warning system failures typically occur in communication and preparedness, but the case of the Indian Ocean tsunami represented failure in all four elements

Risk Knowledge

- Systematically collect data and undertake risk assessments

- Risks arise from the combination of the hazards and vulnerabilities to hazards that are present at a particular location or region
- Assessments of risk require systematic collection and analysis of data and should take into account the dynamic and variability of hazards and vulnerabilities that arise from processes such as urbanization, rural land-use change, environmental degradation and climate change
- Risk assessments and hazard maps help to motivate people, prioritize early warning system needs and guide preparations for response and disaster prevention activities

Monitoring and warning service

- Develop hazard monitoring and early warning services

- Warning services lie at the core of the system
- They must have a sound scientific basis for predicting and forecasting and must reliably operate 24 hours a day
- Continuous monitoring of hazard parameters and precursors is necessary to generate accurate warnings in a timely fashion
- Warning services for the different hazards should be coordinated where possible to gain the benefit of shared institutional, procedural and communication networks

Dissemination and Communication

- Communicate risk information and early warnings

- The warnings must get to those at risk
- For people to understand the warnings, they must contain clear, useful information that enables proper responses.
- Regional, national and community level communication channels and tools must be pre-identified and one authoritative voice established
- The use of multiple communication channels is necessary to ensure everyone is reached and avoid failure of any one channel, as well as to reinforce the warning message

Response capability

- Build national and community response capabilities

- It is essential that communities understand their risks; they must also respect the warning service and should know how to react
- This requires systematic education and preparedness programmes led by disaster management authorities
- It is essential that disaster management plans are in place and are well practiced and tested and that the community is well informed on options for safe behaviour and escape and on means to avoid damage and loss to property

Local Actions and Good Practices – EWS in the area of water-related disasters

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