



National Warning System Parameters

National All Hazards Warning System Expert Consultation

**Colombo
26 January 2005**

Peter Anderson

Warning System Stages

- Detection and notification
- Emergency management system
- Local dissemination

Warning is a system - not a
technology

Warning System Components

- Hazard identification, risk assessment and vulnerability analysis
- Detection and monitoring
- Deciding to issue a warning
- Framing the warning
- Targeting and disseminating the warning
- Receiving and understanding the warning
- Validating the warning
- Taking appropriate action
- Feedback to assess impacts

Effective Warning Prerequisites

- Planning
- Education
- Testing and evaluation

Disaster Risk Reduction



International - coordination of scientific data and dissemination to points of contact in each country.

National/Regional - legislative framework, mitigation and response strategies

Neighborhood/Community - education, risk assessments, preparedness, response planning.



Bridging the Gap

SCIENTISTS

Two solitudes



**EMERGENCY
MANAGERS**

Bridging the Gap



Bridging the Gap



For effective disaster risk reduction (hazard mitigation and risk management) all groups must work together.

General Observations

- Timely and accurate warnings can empower people to take actions.
- The warning phase contains a limited window of opportunity to capture public attention and encourage appropriate action.
- Appropriate response to warnings is most likely to occur when people have been educated about the hazard well before the warning.

Any system is only as effective
as its weakest links

Contributors to Warning System Failures

- Failure of forecasting/detection
- Ignorance of prevailing conditions of vulnerability
- Failure of warning system infrastructure
- Failure to communicate the threat accurately or in sufficient time
- Failure to understand the warning
- Constrained capacity of the government or community to respond

Observations About Infrastructure

- No single technology can facilitate the effective delivery of warnings.
- One method will not reach all and an infrastructure is needed to integrate and support multiple methods and channels to disseminate messages.
- By adopting common standards for information formatting and telecommunications interfaces warning systems should be flexible enough to adapt to different information delivery systems.

Infrastructure ...

- Warnings are primarily issued by government. But warning distribution systems are often owned/operated by private entities.
- Improvements of warning systems depend on all stakeholders developing standards and systems that are mutually beneficial.

Infrastructure ...

- The telecommunication systems necessary for effective warnings are those that are in place and operational prior to the onset of a hazard.
- Warning systems need to be established and supported throughout normal times.

Integration with Existing Systems

- Ultimately, the added value of technology to enhance accessibility to and increase the understanding of warnings lies in its effective marriage with existing forms of communication.

What warning systems
currently exist in Sri Lanka?