# "Actionable" Early Warning: One of the key ingredients of Preparedness Systems

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#### "Actionable" Early Warning System

- First link in the chain for people's protection and community resilience
- "Action" to
  - Protect life
  - Protect livelihoods and assets
  - Drinking water resources

# Preparedness for Protection requires that Household and Livelihoods must be resilient

- Safe house or safe emergency shelter
- Evacuation routes
- "Killa" or loft in house or shed
- Well or Bore well Raised above flood level

#### Moving from Forecast to "Actionable" Warning requires clarity on

- Whom to inform administrative level, department responsible
- When to inform frequency of communication of Outlooks, Alerts and Graded Warnings
- What to inform what action needs to be taken, based on the level and extent of likely impact

#### We Must

- Learn from
  - Good Practices
  - Bad Practices
  - Best Forgotten Practices
- Respect Local Indigenous knowledge and ancient wisdom
- Respect animals' instinct and watch animal behaviour
- Use nature's Early Warning Systems

## Warnings, like all risk communication, be must be:

- Understandable
- Hazard and location specific
- Enable People to Act
- Cope with inherent undertain
- Deal with "warning fatigue" factor
- Culturally and socially sensitive
- Reach Segmented audiences



#### **Local Good Practices in Asia**

- Flood Referencing project Prey Veng,
   Cambodia
- Cyclone Preparedness Program Cox's
   Bazaar, Bangladesh
- Actionable Volcano alerts and warning,
   Mount Mayon, Philippines







#### **Local Good Practices in Asia**

- Landslide warning and preparedness program, Ratnapura, Sri Lanka
- Animal behaviour based systems in Anhui Province, China





#### Success Stories of Protective Evacuation

- Pondicherry India 2004
- Kenya and Seychelles 2004
- Florida 2004
- Dong Thap, Vietnam 2000
- China 1988
- West Virginia 1985
- Hirokawa, Japan 1854 "Fire of Rice Sheaves"



# Respecting the Kobe spirit, to make a difference, Early Warning Systems must have:

- Working Partnerships (Cyclone Preparedness Program)
- Credible Champions (Mr. Disaster)
- Committed Volunteers ('Mike' and Rescue Youth Union)
- Listen to community elders

#### **Good Practice**

#### Regional

- Tropical Cyclone Panel and Typhoon Committee – WMO/ESCAP
- Mekong River Commission Regional Flood Forecast and Flood Mitigation and Management Program
- Famine Early Warning System (Africa)

#### Global Catalytic Action

- WMO's World Weather Watch (1972)
- EWC Potsdam (1998) and Bonn (2003)
- Platform Promoting Early Warning 2004
- International Early Warning Program 2005



#### **Best-Forgotten Practices**

- National Flood Warning faxed to an ex-minister
- Marine Cyclone warnings not understood by local population

#### Learning from community elders

"We must dare to imagine the unthinkable, or we will always be surprised"

- Prof. Ginkel, Rector, UNU, 18 Jan '05

## "The disaster you plan for is not the one that will happen"

- Col. Brian Ward, Director Emeritus, ADPC at DMC – 1, 1986



## An Apocalyptic Early Warning from India

"Another 'Bhopal' will happen on the Mumbai-Goa Highway in the next decade. At least two tankers carrying Petroleum products will have a road accident and kill at least 150 villagers each"

- 2<sup>nd</sup> Main Committee for Goa, India, 1994



### An Apocalyptic "Early Warning" Challenge from Kobe

Disaster Reduction needs your personal response as a leading manager

"In the first half of the 21st Century, it is sure we will experience the Tokai; To-Nankai and Nankai earthquake disasters. A magnitude 8.6 accompanied by a gigantic Tsunami will create a catastrophe, unprecedented in densely populated urban area with 40 thousand mortalities and One Thousand Billion US Dollars loss.

Let me ask each one of you, at this moment, what could and what should you do to protect you and your family"

10<sup>th</sup> Anniversary Exhibition at the Great Hanshin-Awaji Memorial Museum, 17 Jan '05

## Possible SMART Target/Wish-list for EWS for the coming decade

- "Actionable" Early Warning and
   "Workable" Preparedness Plan prepared in each 'at-risk' community by 2008
- Developed through leadership of local (District/Sub-District) DM committee/team in close partnership with community
- Operationalized and well-resourced by 2014