Building Resilient Communities; A Post-Tsunami Experience from Sri Lanka

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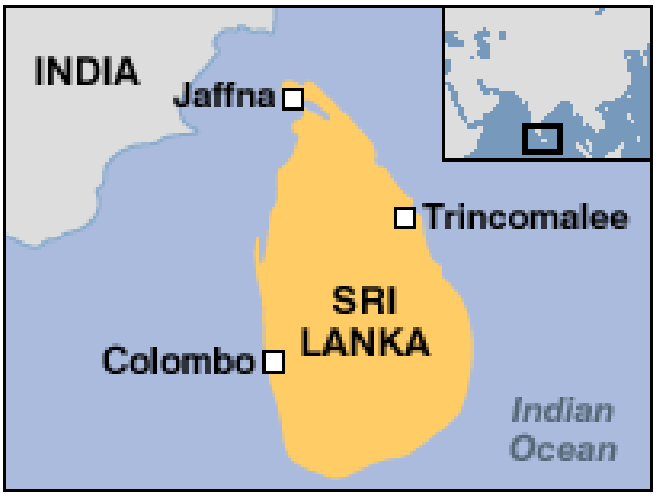
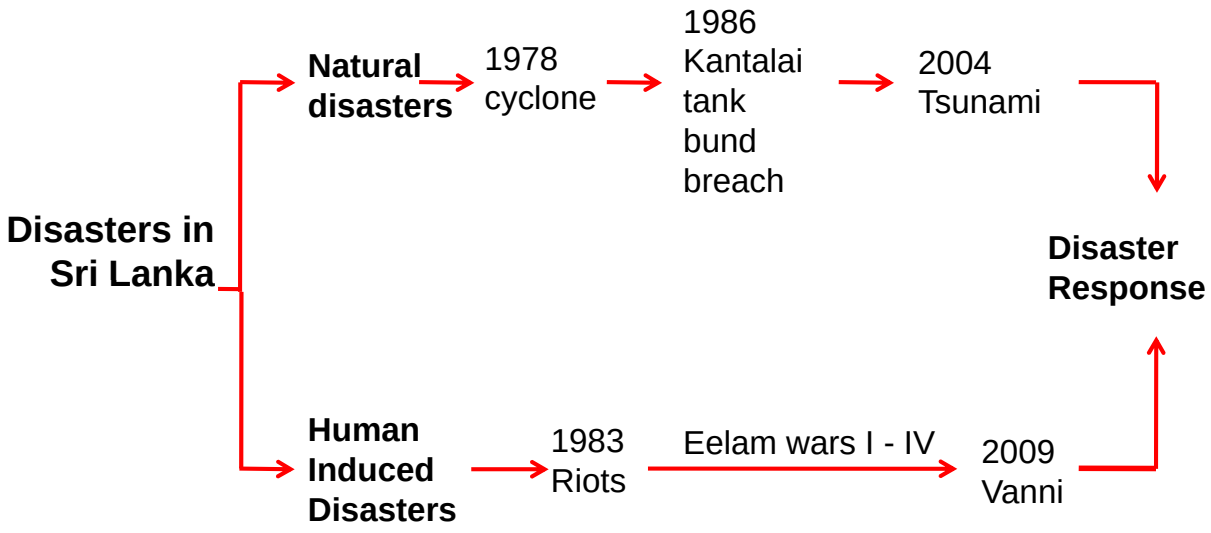
Sri Lanka

- Island in the Indian Ocean
- 65,610 km²
- 20 million people
- Population Density - 305/km² 790/mi²

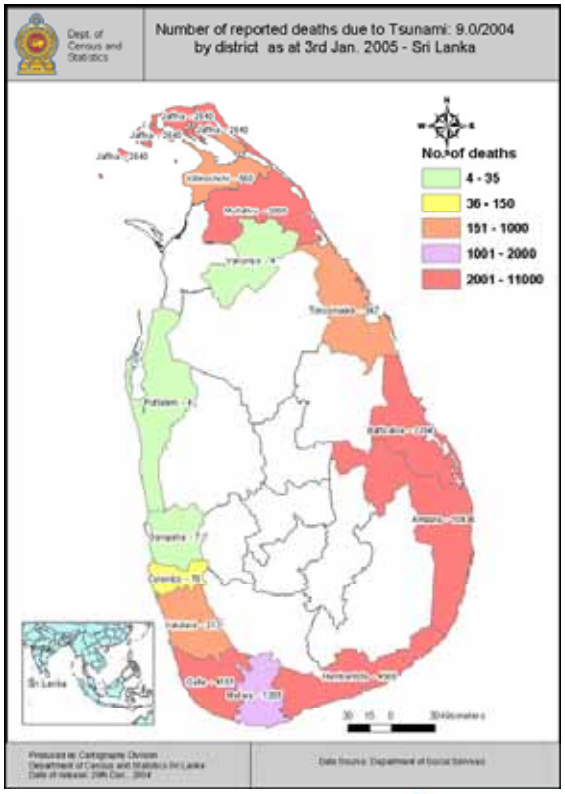


Natural Disasters in Sri Lanka

- Hydro-meteorological disasters
  - Floods
  - Landslides
  - Cyclones
  - Coastal erosion
  - Tsunami
- Drought
- Epidemics



Tsunami - 2004



- Number of deaths 38,000
- Number missing - over 5,000
- One million homeless
- Damage US$ 1.3 billion

"Waves of Compassion"

•Local Community/Religious Leadership/ Local Organizations

•National Organizations/Private Sector

•Government/International Community

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Tsunami - 2004

- Marked a significant change in policy, approach and public perception on natural disasters
- Greater attention received towards mitigation and risk reduction
- Parliamentary Select Committee Appointed

Tsunami Recovery – Generic Lessons learnt

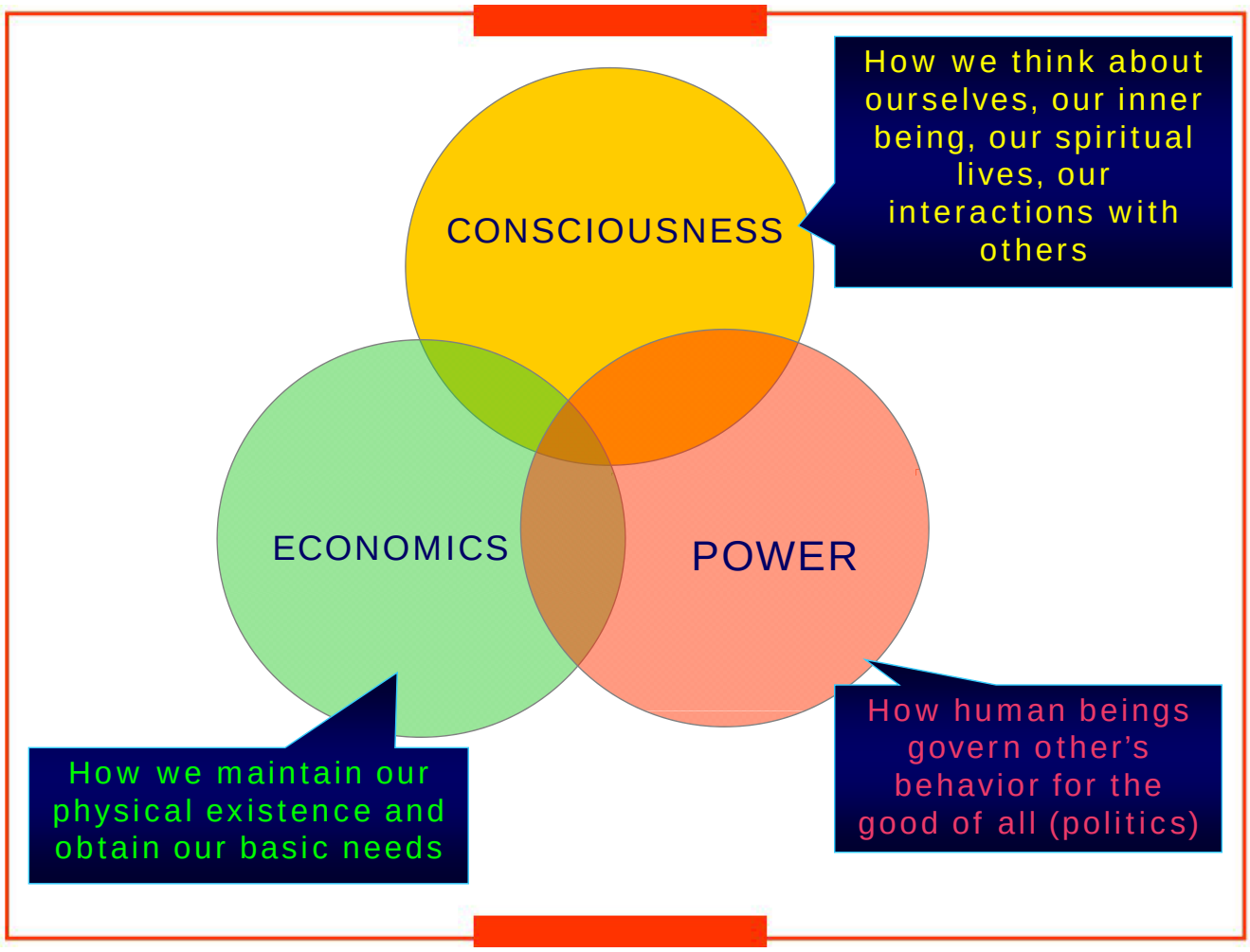
Issue	Description	Need
High Altruism – Low "Technique"	Many issues were addressed with subjective approaches without a scientific basis Gross Overlapping	More internal and external coordination, Information sharing, Regulatory mechanisms, Protocols, Multiple levels
Resources spent on relief and infrastructure building than community level capacity building	Low attention on community level capacity building and lack of positive results	Learn more from the communities, advocate learning by the community for the community.
Ownership and participation	People who actually face the reality got less opportunity to give inputs to planning	Provide community more opportunity for experience sharing and participate in DRR related programs

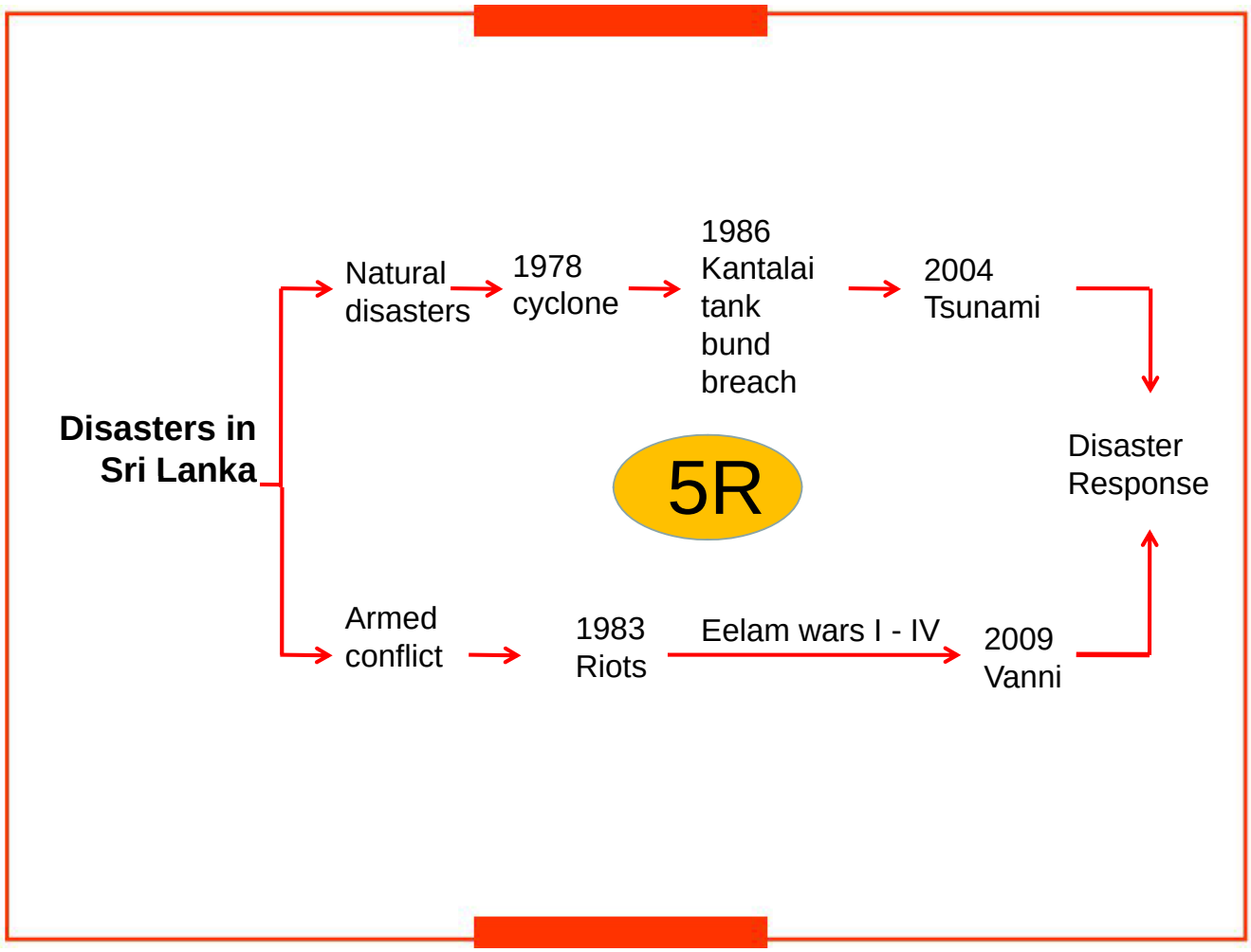
Tsunami Recovery – Generic Lessons learnt

Issue	Description	Need
Who makes the final decision?	Emphasis less on community participation in decision making	Empower the community with adequate information and skills to have their own DRR Plans and Decisions.
Psychosocial Issues disregarded	After suffering with the civil strife for more than 25 years; tsunami and other social issues have increased vulnerability Being sensitive towards other socio-cultural issues when planning DRR activities (ie.religious beliefs)	Hazard X **Vulnerability** (----------)= Risk Capacity Plan to minimize factors increasing Vulnerability

Sarvodaya Approach

- Based on its holistic approach to development


CONSCIOUSNESS
How we think about ourselves, our inner being, our spiritual lives, our interactions with others
ECONOMICS
POWER
How we maintain our physical existence and obtain our basic needs
How human beings govern other's behavior for the good of all (politics)


Disasters in Sri Lanka
Natural disasters
1978 cyclone
1986 Kantalai tank bund breach
2004 Tsunami
5R
Disaster Response
Armed conflict
1983 Riots
Eelam wars I - IV
2009 Vanni

Sarvodaya Approach

- Based on its holistic approach to development
- Post-Tsunami – *"From Tsunami to Deshodaya" (National Reawakening)*
- R Strategy
  - Relief
  - Rehabilitation
  - Reconstruction
  - Reconciliation
  - Reawakening
- Community Based Disaster Risk Management (CBDRM)

Community Based Disaster Risk Management (CBDRM)- Rationale?

- Communities bear the direct impact in a disaster
- They are also the first real-time responders to every disaster
- They are aware of locally available resources
- Have the most authentic knowledge of local risks and vulnerabilities
- They are also the reservoir of time-tested knowledge of coping mechanism

Community Based Disaster Risk Management (CBDRM)

- Communities are the best assessor of disaster damages
- Communities can also be the best evaluator of disaster recovery
- Communities are the ultimate target of any disaster preparedness plan
- Is there true commitment to this approach?
  - Institutional mechanisms
  - Capacity building
  - Resourcing

Sarvodaya Vision and CBDRM approach

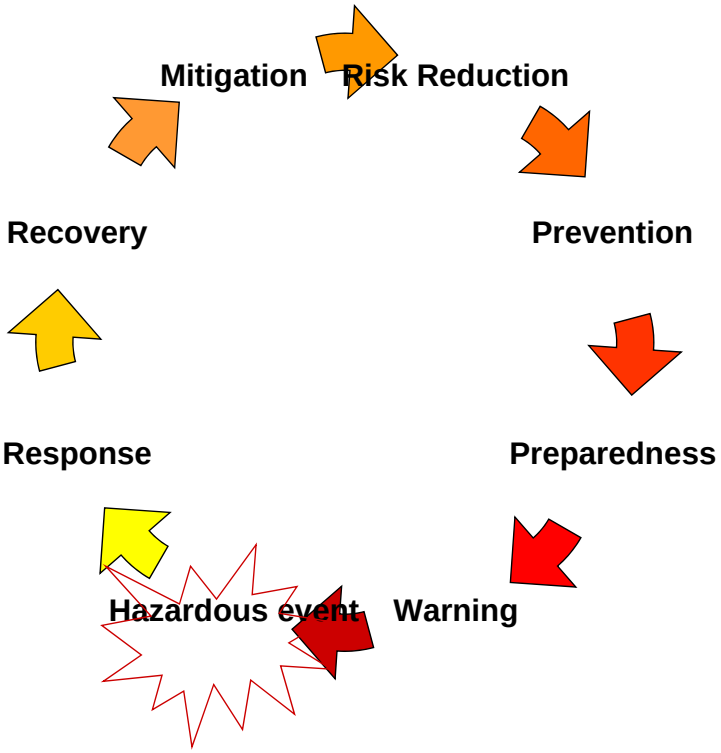
Economy
•Disaster resilient livelihoods
• Addressing total economic wellbeing with Economic development programs, SEEDS

Sarvodaya Holistic Approach

Power
•Empowering communities to take decisions on DRR strategies by providing information and training
•Providing necessary materials

Consciousness
•Developing a culture for DRR
•Knowledge sharing
•Developing resilient communities through spiritual wellbeing

The Disaster Cycle



Sarvodaya Community Disaster Management Centre

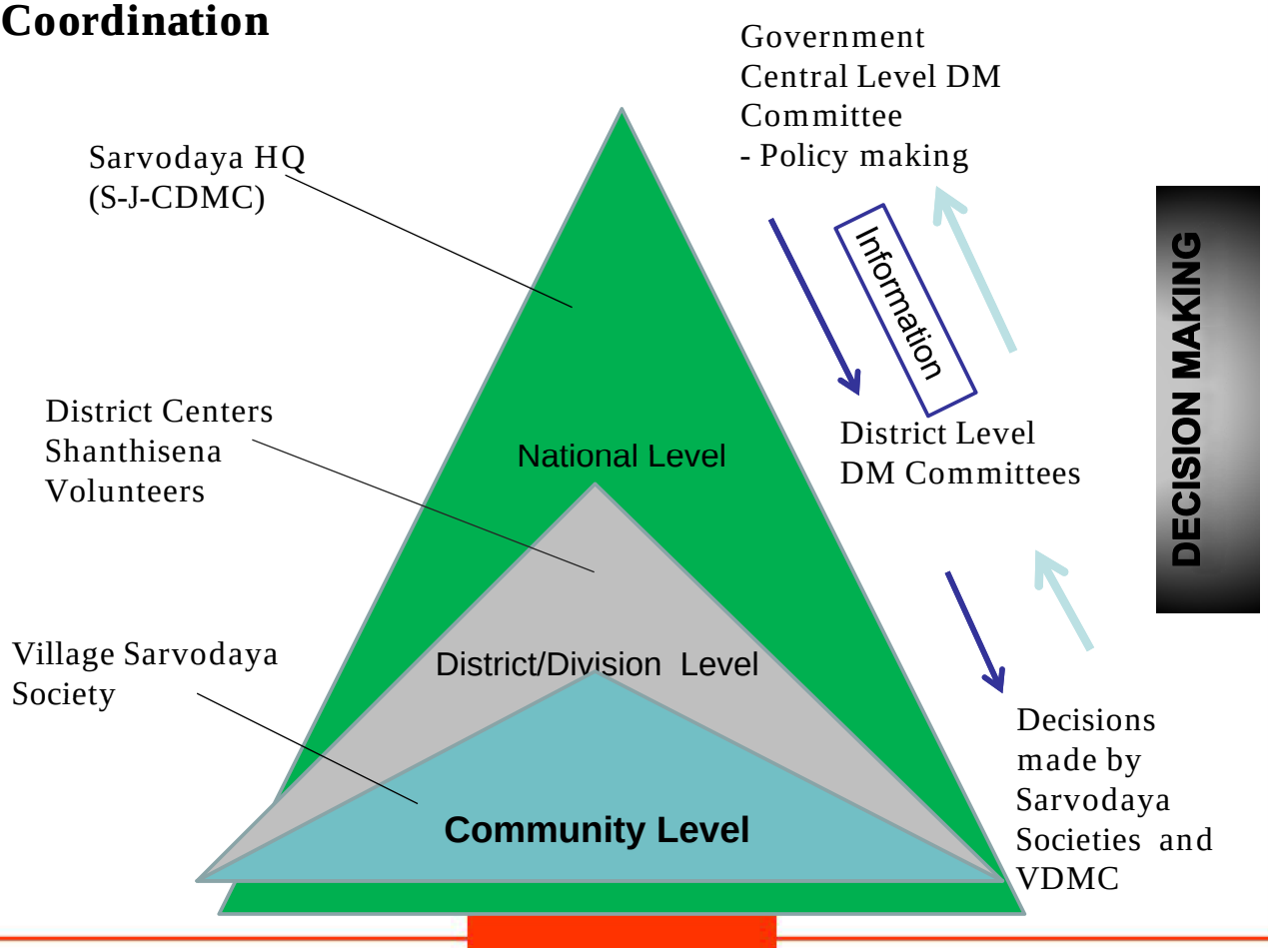
Objectives

- To make all Sarvodaya Service Villages Disaster Resilient and Responsive
- To enhance Sarvodaya Disaster Management Capacity and Practice

Components

- Community-based Disaster Risk Management and Village Resiliency
- Integration of Disaster Management Practice within Sarvodaya
  - Capacity Building
  - Communications and Command Center

Coordination



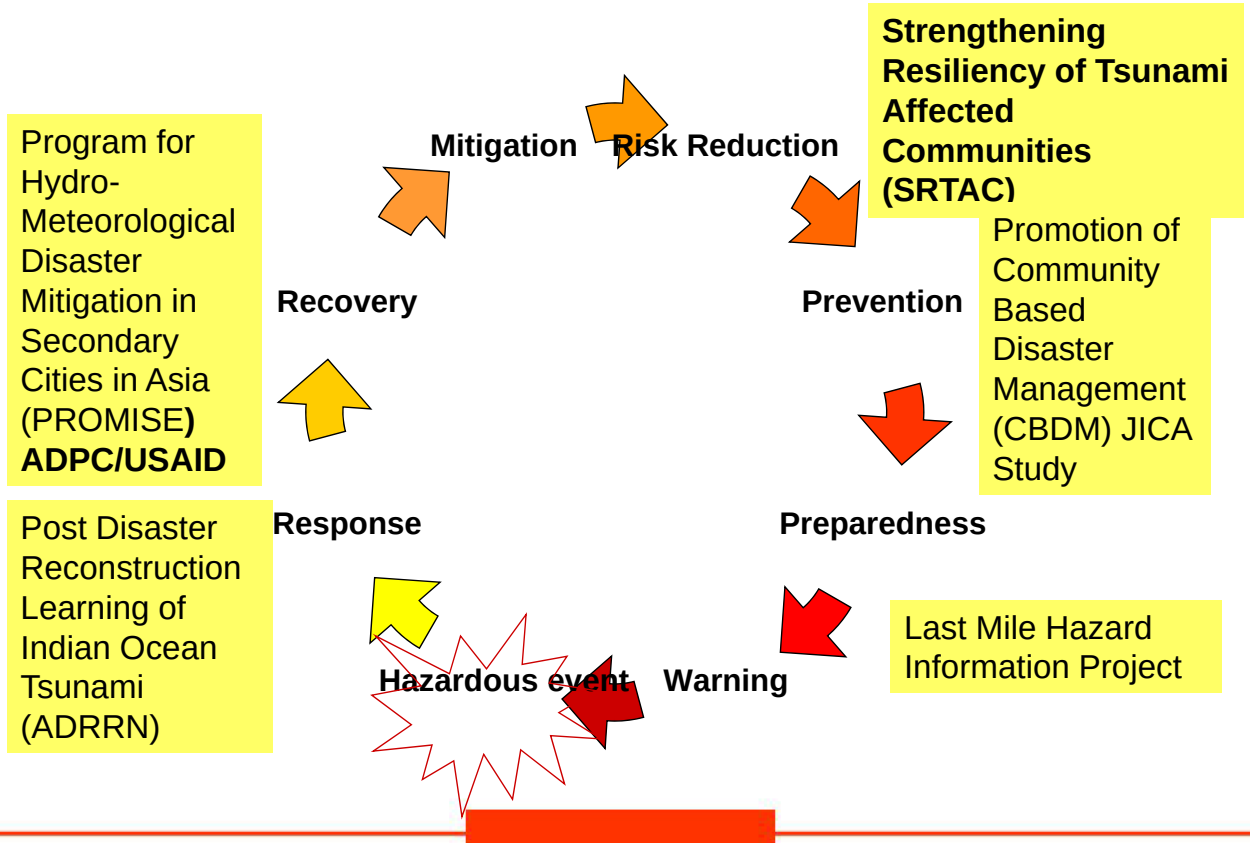
Key Components

- To formulate a *village resiliency model* based upon the five-stage Sarvodaya village development model.
- To further develop existing hazard warning system capability by providing *community disaster management training.*
- To create a viable knowledge and expertise foundation in community-based disaster risk management at the SCDMC so that it can *maintain, disseminate and receive relevant disaster information to and from Sarvodaya communities*.

Vulnerability Context

- Degraded environment – soil erosion, siltation, salination, man made and natural destruction of coastal vegetation and eco system
- Increased vulnerability to natural hazards – settlement in unsafe locations, lack of disaster preparedness measures, lack of appropriate technology in DRR & livelihoods - tsunami, floods, cyclones, sea water intrusion, dengue outbreaks
- Limited/fragile natural resource based livelihood options - fisheries, paddy farming
- Weak marketing linkages
- Limited/weak community institutions and lack of initiatives
- Weaker relationships between the community and local mechanisms & authorities
- Inadequate/poorly maintained livelihood infrastructure

Research & Practice



Bio shield Establishment

Nursery Training

Village Information Centres (VIC)

Disaster Risk Management
Hazard Mapping

Livelihood Development

Case Example: Andaragasyaya

- Flood were an annual recurrence destroying crops making farming a risky proposition
- Previously the canal was 6 feet wide and badly silted
- Using heavy duty equipment the canal was widened to 30 feet width. Flooding of paddy fields have been stopped
- In *addition* alongside 4 acres were opened up for mangrove planting. Canals were dug in the “fish bone” design following the model tested by MSSRF India
- Mangrove seedlings are acquired from Matara Thalalla community known for their expertise in Mangroves

Learnings from Post-Tsunami Projects

- Building the livelihood asset base in itself will not assure the sustainability of livelihoods; unless there is supportive governance mechanisms/structures
- Community alone cannot take the leadership in DRR as the space for input to development decisions is minimal
- Sensitivity to gender roles and improved gender relations are vital for effective livelihood development and DRR
- Disasters should be considered as a development issue and the capacity of local governance institutions should be built to assess, plan and implement risk sensitive development
- Ecosystem based holistic approach should be adopted to address and enhance resilience

Community First Responder Training

Community infrastructure improvement

Gaminipura

Simple low cost interventions - landslides risk - evacuation routes.

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Kumbalgamuwa

In the Kumbalgamuwa there is a bridge in the main road damaged by the landslides.

Temporary bridge has been constructed by the community but which is not safer to use although more than 150 people including school children are using this temporary bridge daily.

Since which is the only road direct to the main road which is an important point in the evacuation path. Because when there is a disaster community have no other option to go to the evacuation centre or to the hospital. Since the permanent bridge has constructed to make it more safer as evacuation route.

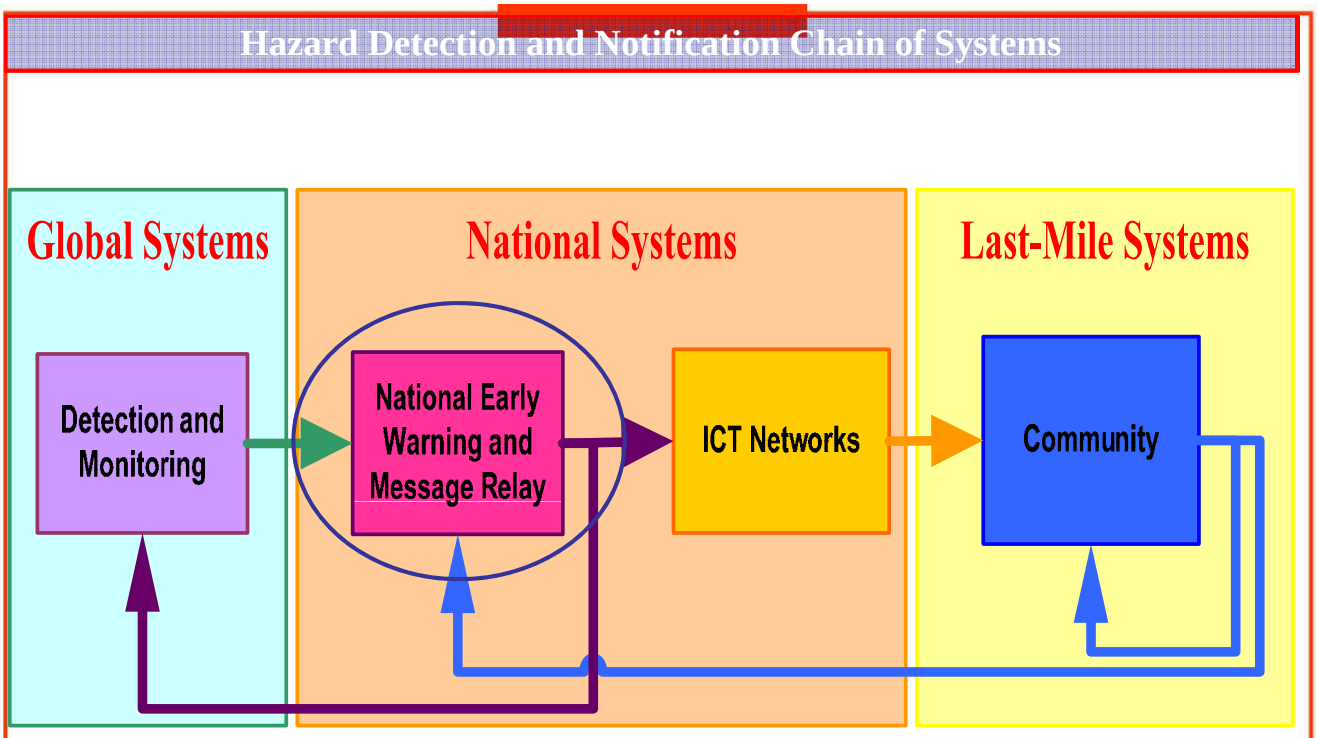
Community Early Warning Systems

- Establishment of sirens in Medaketiya and Kahadamodara villages in Hambantota
- Mock drills
- June 12th 2010 Tsunami

'Evaluating Last Mile Hazard Information Dissemination Project' (HazInfo project)
Rationale (supported by IDRC/LIRNEasia)

To warn communities about rapid onset disasters, improvements are required on at least three parallel fronts:

- the science of rapid detection and analysis needs to be fine-tuned;
- proper institutional arrangements have to be in place to decide on and issue credible, swift warnings; and
- there should be effective ways of communicating these warnings to everyone at risk.



Lessons Learned

- The people/community has to be at the centre of the entire recovery process.
- “People-to-people” approach can mobilize local resources and expertise effectively.
- The approach to disaster mitigation has to be an integrated one – from the classical approach to a new paradigm.
- Adoption of a “multi-hazard” approach to risk reduction with community resilience building being given greater importance.
- Institutional arrangements for mitigation, response and warning systems should be revisited, re-evaluated and clarified.

Thank You!