



**Sharing Knowledge on Disaster Warning:  
Community-based Last-Mile Warning Systems**  
India Habitat Centre, New Delhi - 19 November 2007



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Highlights of Mr. Bill Clinton's speech at the Third International Early Warning Conference in Bonn in his capacity as the U.N. Special Envoy for Tsunami Recovery.

.....did to marry old-fashioned communication with modern technology, the so-called "last mile" of the early warning system. It's something that we dare not forget in our UN work for the tsunami..

All the sophisticated technology won't matter if we don't reach real communities and people. Satellites, buoys, data networks will make us safer, but we must invest in the training, the institution building, the awareness raising on the ground.



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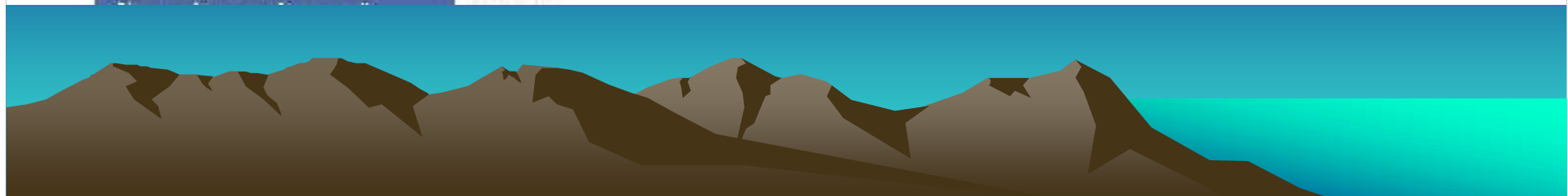
## Better role of information in emergencies

🕒 October 24, 2007 | [events](#), [international](#) and [news](#). |

**New York:** The United Nations kicked off a week-long event on Monday in Geneva which would focus on improving humanitarian responses during emergencies through better information.

The event, Hosted by the UN Office for the Coordination of Humanitarian Affairs (OCHA), aims at bringing together governments, non-governmental organizations (NGOs), scientists, academics, the media and the private sector to improve current humanitarian operations through new technology and improved information practices.

Mentioning that the role of information in humanitarian operations cannot be overstated, the UN Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator John Holmes said, "It is the key element for accurate analysis, which underpins effective coordination, evidence-based advocacy, sound policy and effective action."



# Tamil Nadu Tsunami Resource Centre (TNTRC)

TNTRC is the result of a felt need of UN / INGOs to coordinate efforts among all stakeholders in recovery.

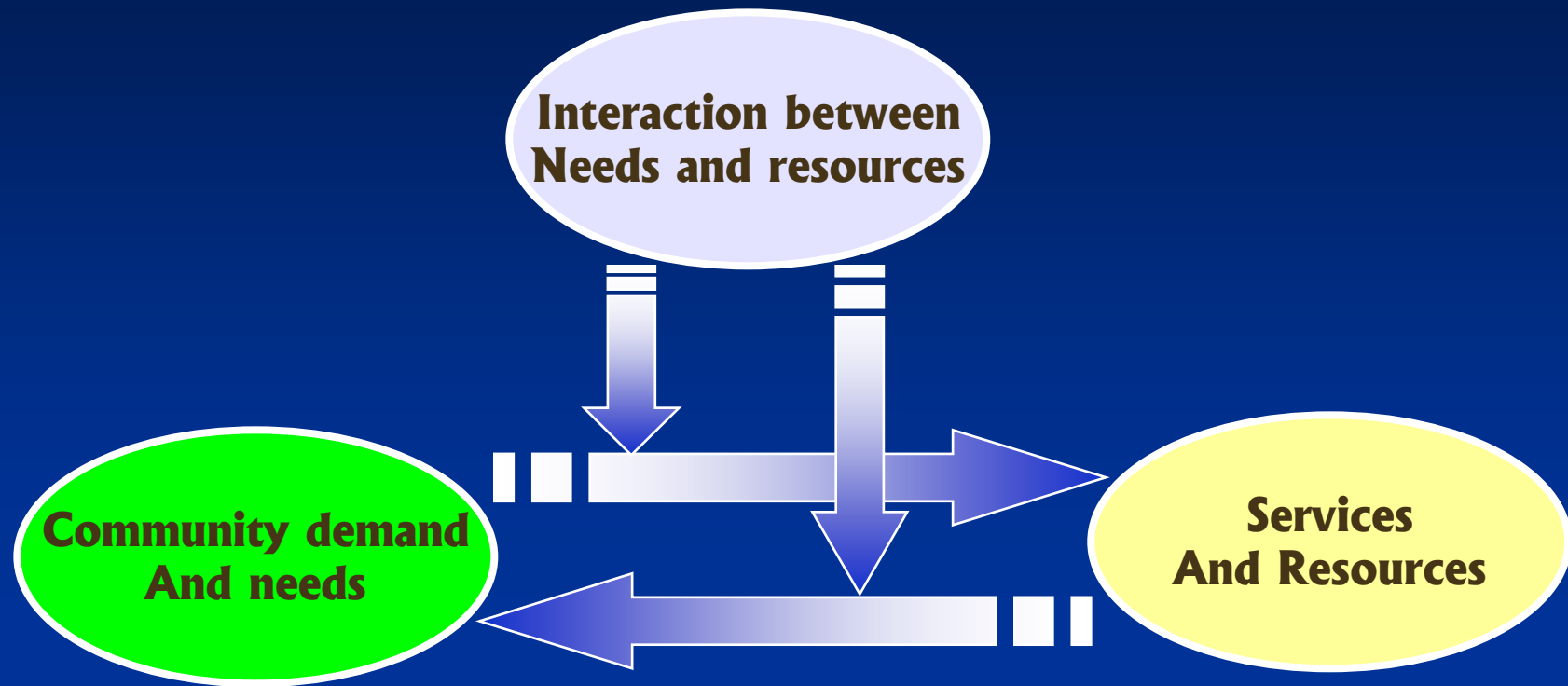


TNTRC facilitates -

- Information sharing
- Knowledge networking
- Coordination among recovery actors in order to contribute to a more coordinated and equitable support to tsunami-affected communities

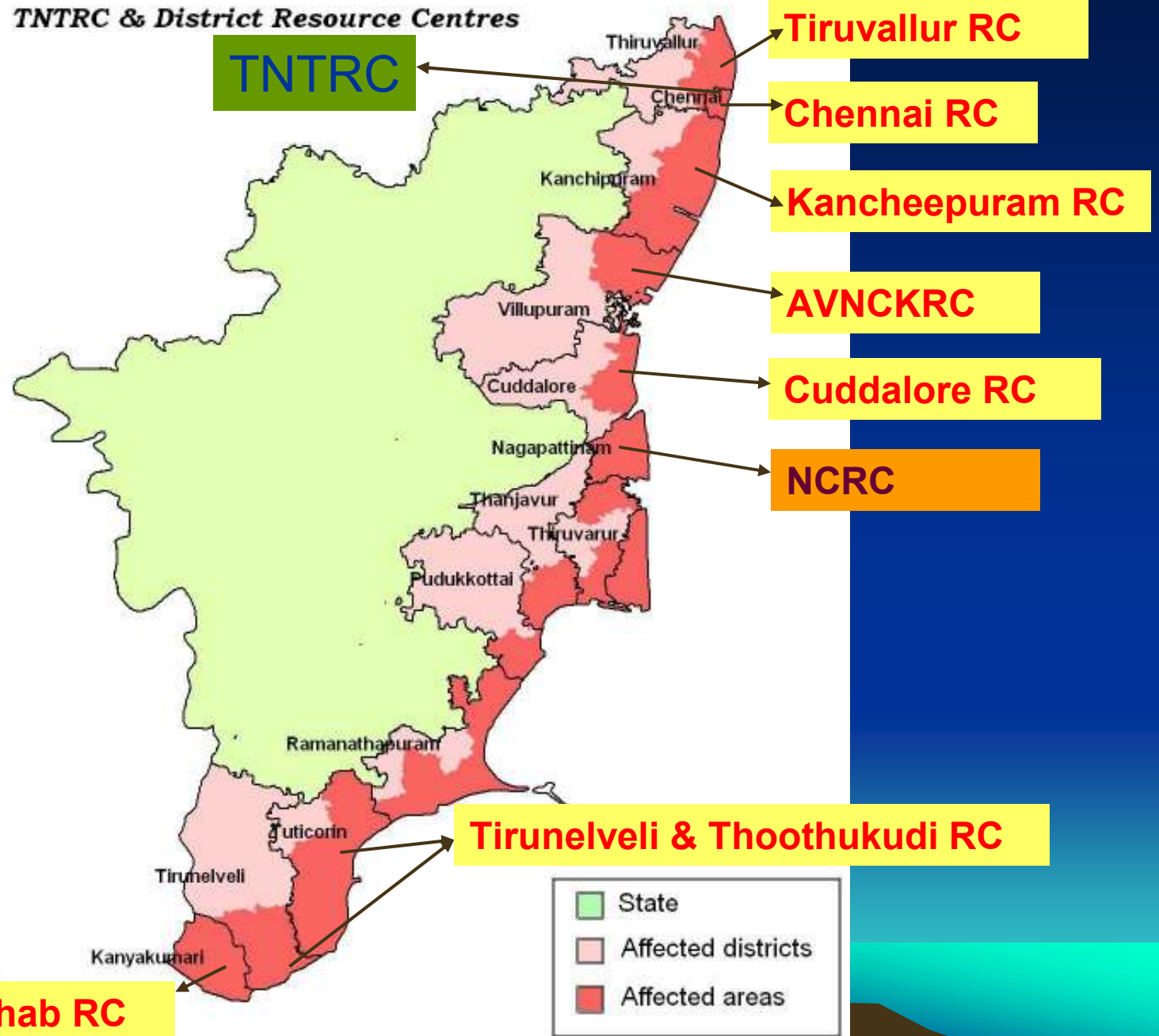
It acts as a bridge between the government system and Civil Society Organizations

# Tamil Nadu Tsunami Resource Centre (TNTRC)



# Tamil Nadu Tsunami Resource Centre

TNTRC & District Resource Centres



# Highlights of TNTRC's activities

Tsunami affected families receiving assistance to effectively rebuild their lives and being more resilient to future disasters

Effective aid coordination in policy development and Tsunami Recovery

Community capacity development in disaster risk management

Monthly Newsletter developed and distributed

TNTRC Website used

TNTRC is trusted forum for dialogue And Knowledge sharing in recovery

Well-coordinated log frame & work plans between system and UN / INGOs / Educ./ RI

Effective coordination in DRM between CSO/NGO and GoTN

Capacity building of NGOs in community based DRM strategies

Lessons learned and good practices documented & shared

Roles and responsibilities between TNTRC and district resource centers on agreed common mandate

Collecting studies, and other relevant information at all levels

# Model of Village Information Centre





# Village Information Centre

## SERVICES AVAILABLE

- ❖ *Computer education*
  - ❖ *Computer aided school education*
  - ❖ *Computer aided Adult Literacy*
  - ❖ *Computer training*
  - ❖ *Offline content & training*
  - ❖ *Job work*
  - ❖ *Meteorological information*
  - ❖ *e-mail & browsing*
  - ❖ *Daily market price*
  - ❖ *Community news*
  - ❖ *GPS*
  - ❖ *Local News paper*
- ❖ *Online Resource Consultations*
    - *Eye care*
    - *Health*
    - *Agriculture*
    - *Legal*
    - *Education*
    - *Animal husbandry*
    - *Fishery sciences*
  - ❖ *Community web portal (new)*
    - *ECKO*
    - *Vyapaar*

# Village Information Centre – Learning

- Assessment of village profile after a disaster situation.
- Learning the culture, problems, issues, local panchayat system and livelihood patterns of community.
- In depth understanding of problems and issues faced by women.
- The policies of Government related to Coastal Regulations Zone.
- Knowledge about minimum standards in the construction of permanent and temporary houses.
- Acquaintance with tools like PRA and PLA for any developmental plan.

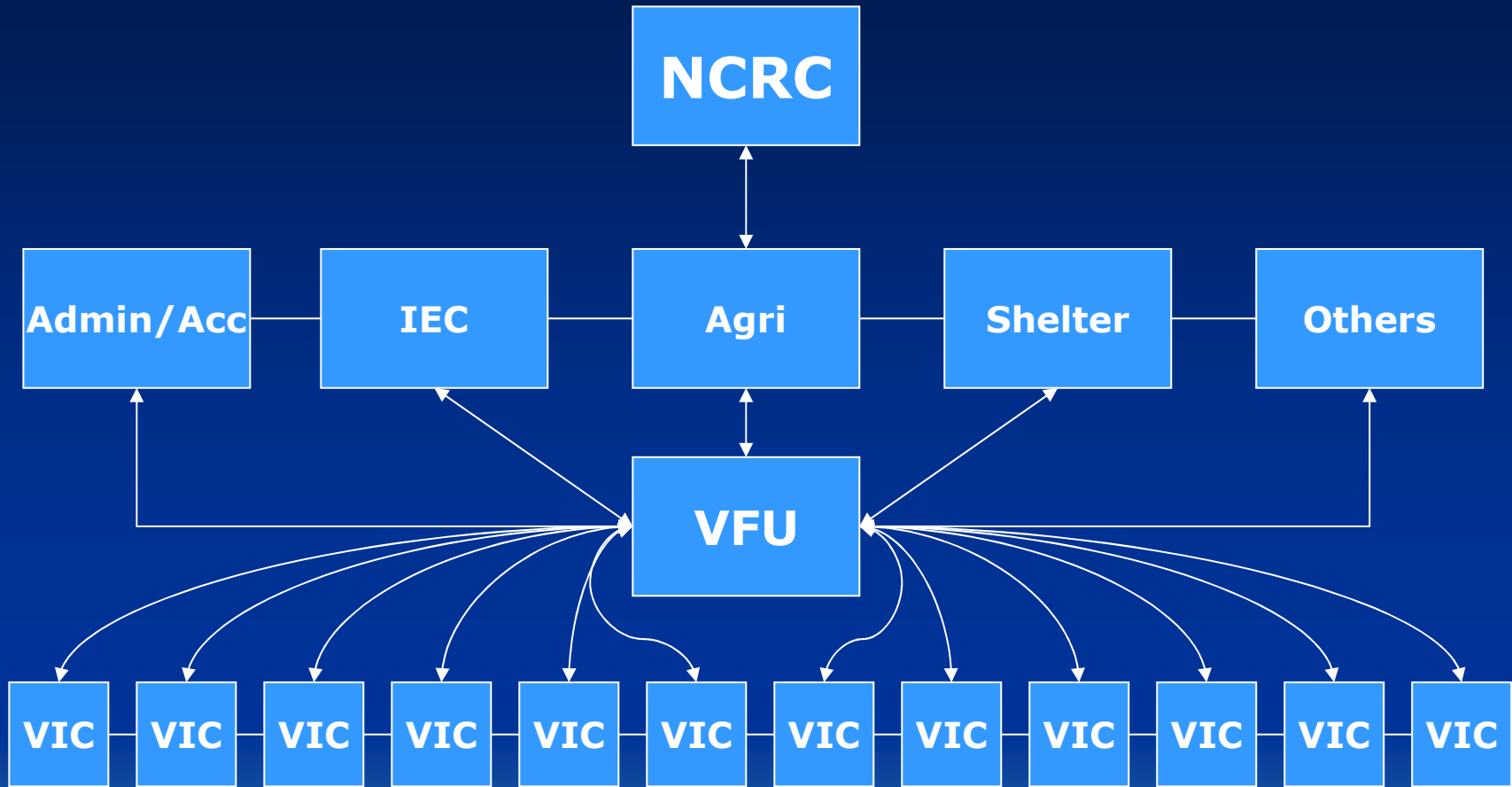


## Players in Village Information Centre

- M.S.Swaminathan Research Foundation
- DHAN Foundation
- Pondicherry Multipurpose Social Service Society
- Dicipleship Centre
- Sathyabama Deemed University
- Nagapattinam Coord. & Resource Centre
- SIFFS
- Kottar Social Service Society



# NCRC VKC/VIC model



# Community Radio



## Key aspects of Community Radio

- Non-profit making
- Community ownership and management
- Community participation

## Concern for Community radio

- Highlighting community issues
- Access to government services
- Civil society information
- Weather forecast as part of DM and LH

# Community Radio - Players

- **ANNA FM** is the first campus based community radio in the country. ANNA FM aired from the smallest, completely digital, tape less, and multi purpose Studio, from the smallest campus of Anna University at 90.4FM to most of Chennai (for 15 kms ). ANNA FM is on 7 days a week between the hours of 5.30PM-9.30PM (live programs) and 6AM-10AM (repeat telecast).
- **Kalanjiam Samuga Vanoli**, a community Radio Station for the communities affected by Tsunami has been set up at Nagapattinam District of Tamil Nadu. The Centre for Development Communication of DHAN Foundation facilitates this process along with the communities of Keelaiyur block, a federation of farmers' groups promoted by it. This initiative is supported by the UNDP and technical support is provided by VOICES, Karnataka



# Community Radio – TNTRC activities

- **Facilitated a state level workshop** and a field visit jointly with Anna University and DHAN foundation in June to encourage the NGOs to start Community Radio service – Experts from DD/AIR and the players in CR field shared their knowledge and experiences
- **Coordinated through AV NCKRC for a Regional Workshop** at Southern level jointly organized by UNDP, DHAN foundation and VOICES, Karnataka in Sept.
- **Released publication for NGOs on CR** covering the licensing modalities, government regulations, establishment costs and content building



## Community Radio – Learnings

- NGOs and communities see the value and show keen interest in promoting this simple media
- Organised social infrastructure lays the foundation for CR especially after Tsunami
- Simplification of licensing modalities - Approval for 5000 licenses by GoI
- Involving local government officials for content and programming is difficult due to lack of clarity.
- Response from children and elders are overwhelming for programming





# Community Radio – Challenges

- **Hurdles in the Policy** – CR license need 3 years experience makes the process delayed
- **Moving from participation & management into ownership and control** – Sensitization of the community is needed
- **Involving women** – among the male domination
- **Sustainability** – Cost coverage by community
- **Integrating with mainstream disaster warning systems** – building location specific warnings



## Experiments with mobile technology

In remote and inaccessible areas for dissemination of various types of info

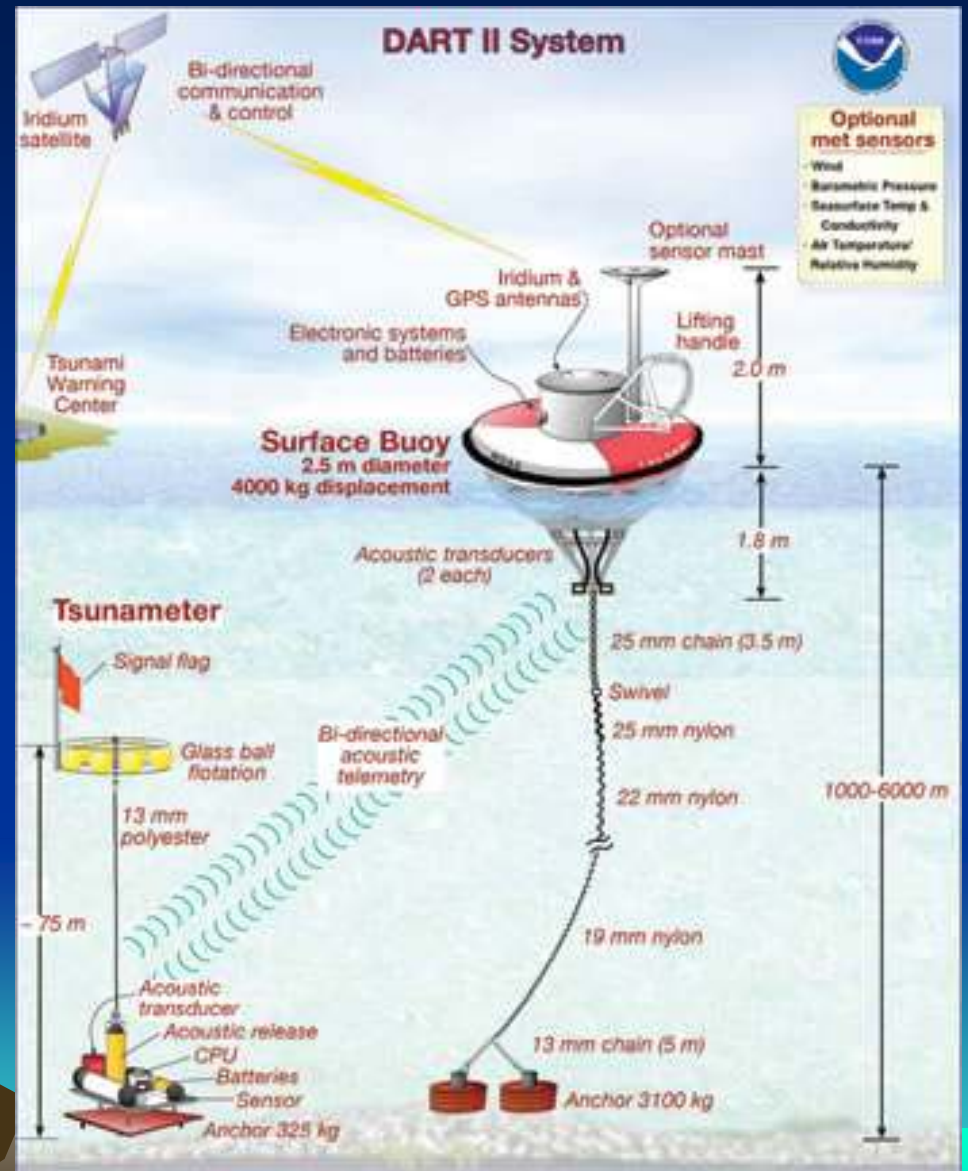
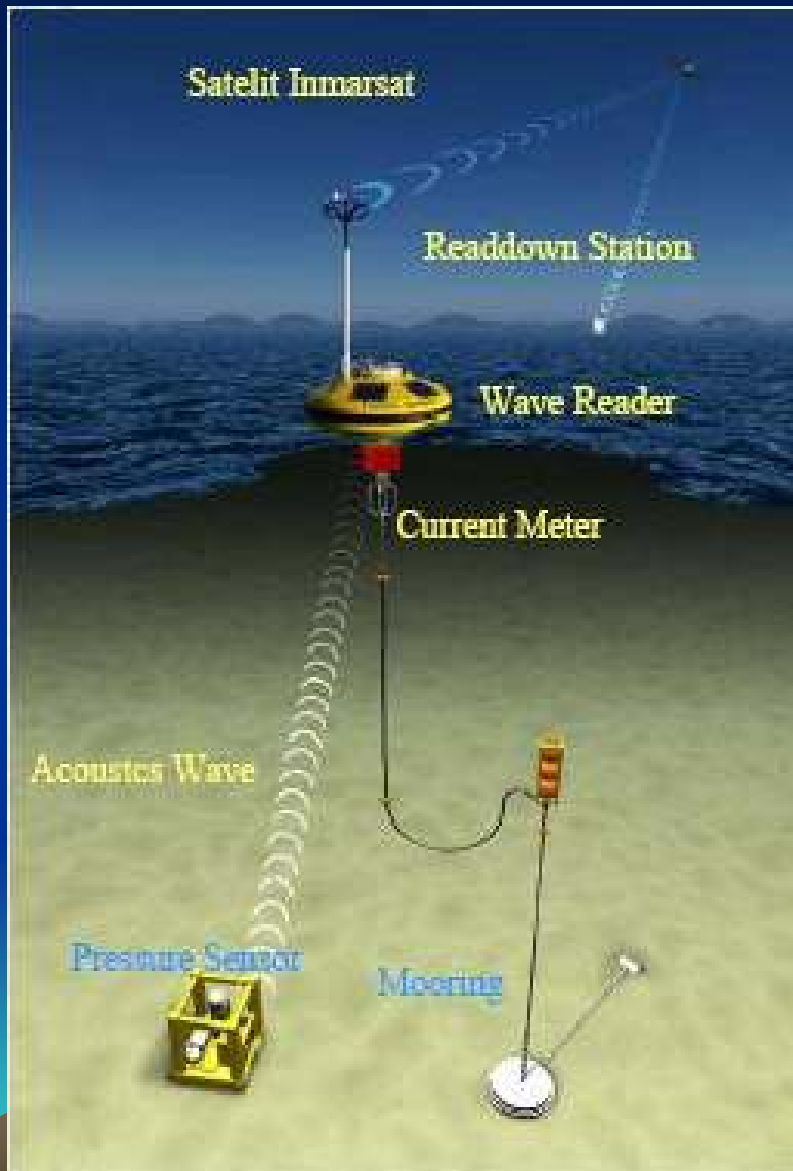
- Alerts for important fund releases;
- organization of health camps and polio vaccination camps;
- Weather and disaster alerts;
- Citizens could inform their problems and issues and could also send requests for information under the RTI Act



# New initiatives- Deployment of Buoy by INCOIS & PMSSS



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## New initiatives- Deployment of Buoy by INCOIS & PMSSS

- Telecast through / DD / AIR / Local Cable TV Networks
  - Weather Forecast
  - Wave Height Information
  - Potential Fish Finding Zones

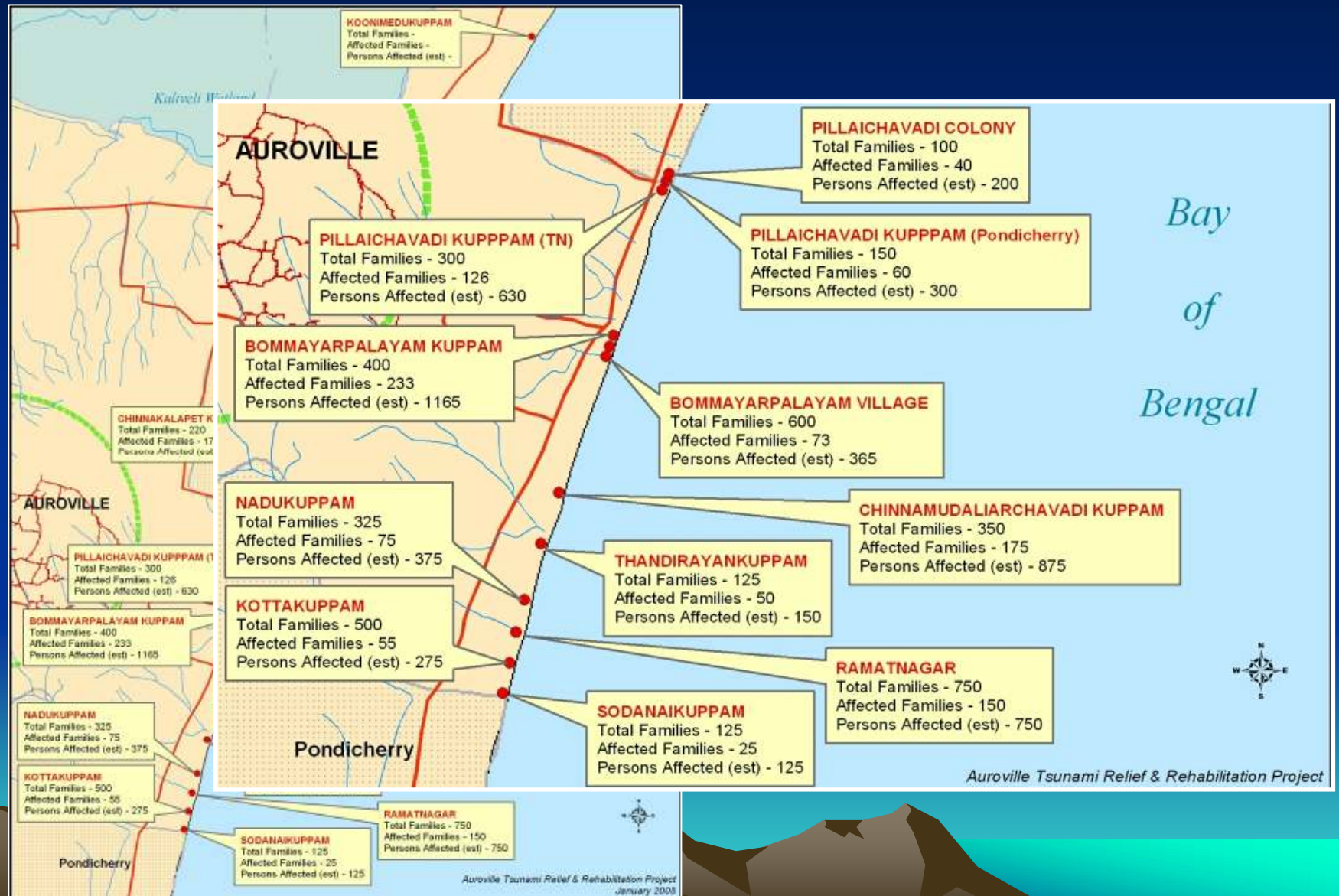


# New initiatives- Digital Board with Siren & Microphone

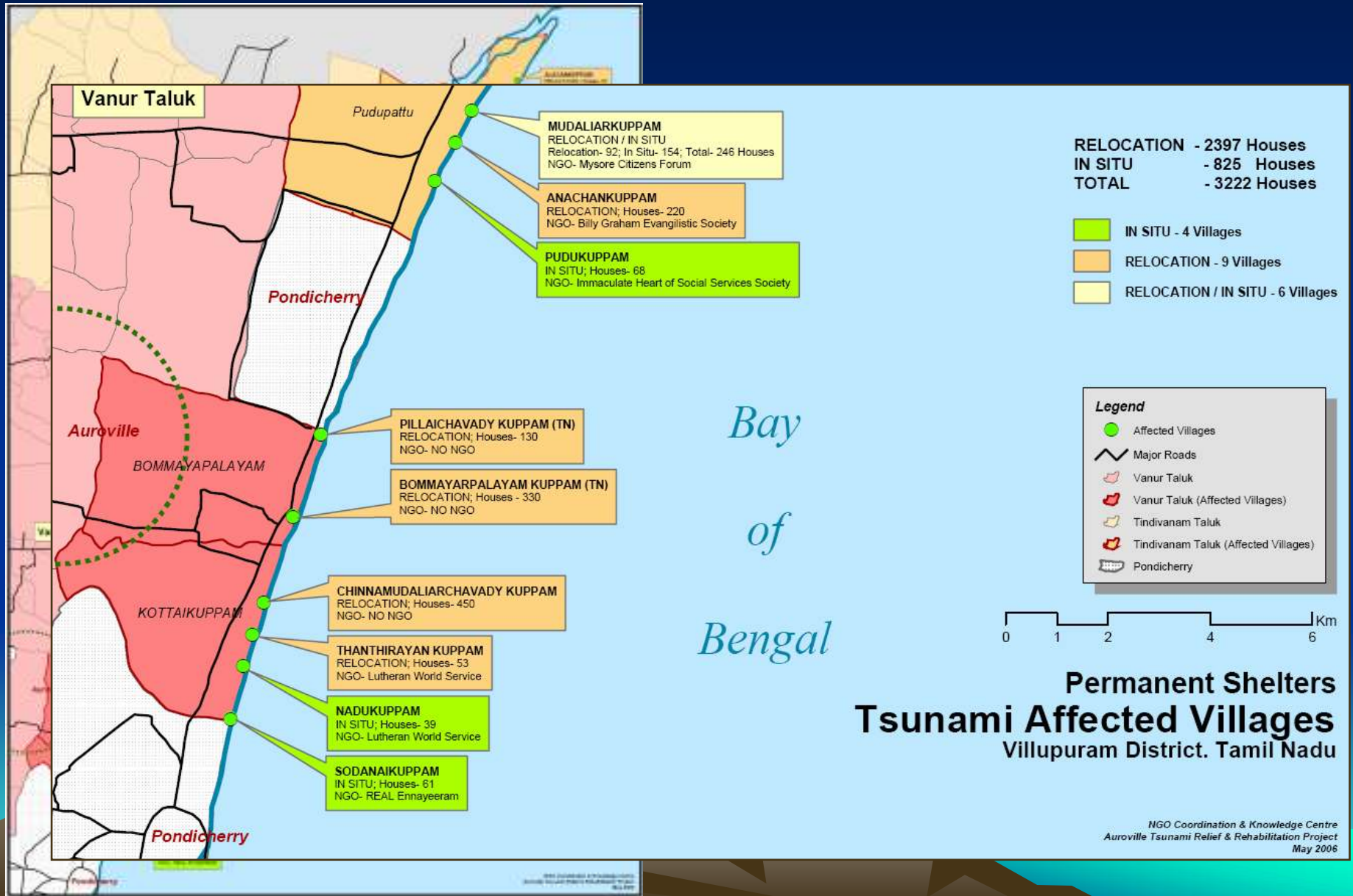


Ocean Information System Sponsored by INCOIS, Hyderabad.

# Other initiatives - GIS by AV NCKRC – Recovery tracking



# Other initiatives - GIS by AV NCKRC – NGO mapping





## Other initiatives – **Telemedicine by ARAVIND EYE HOSPITAL**



With high-speed links to the hospital, three of the clinics, also known as vision centers, screen the patients. Centers are run by a nurse trained in eye care. **Patients first see the nurse, then spend about five minutes on a web camera consulting with an Aravind doctor.** If the doctor determines that a closer examination or an operation is necessary, the patient is given a hospital appointment.

## Other initiatives – **BSNL & Indian Coast Guard, Pondicherry**

- **BSNL**
  - Optic fibre connectivity for connecting networks
  - SMS 'Push Through' technology & MMS for pictures
  - Technical support for sensor technology
  - Support to VIC with high-speed internet facility
- **Indian Coast Guard**
  - Use of satellite communication for assistance in searching the missing boats and fisher folks
  - Equipped with hi-tech facilities to provide EW alerts
  - Capacity building in using GPS panels & instruments



## Other initiatives – UNDP & GoTN at Cuddalore, Tamil Nadu



UNDP has installed a VHF system at Cuddalore Collectorate as part of the EWS project. VHF receivers are setup at 55 villages and connected to PA system at villages and 15 mobile units that enable the Collector to communicate in a short time

## Future ICT initiatives for 'Last mile' connectivity

In the coming years ICT, will potentially redefine the conventional DRM. A concerted effort is needed to develop operational systems integrating recent technology to achieve a effective DM infrastructure.

1. ICT – Government initiatives
  - Disaster Information System
  - Critical Incident Management System
  - Supply Chain Management System
  - Integrated Financial Management System
  - Applicant Assistance Centers
  - Computer Networks
2. NGO initiatives
  - Upgraded VIC/VKC/VRC/VFU/CMC
  - Effective Community radio systems
  - Mobile / SMS service
  - Education / Training / Capacity building
3. Community Initiatives
  - Practicing preparedness
  - Community mapping / updating
  - Responding to EWS

## ACKNOWLEDGEMENTS

Pondicherry Multi-purpose Social Service Society  
DHAN Foundation / Kalanjiam Samuga Vaanoli  
Nagapattinam Coordination and Resourc Centre  
Discipleship Centre  
M S Swaminathan Research Centre  
Auroville Networking & Coord. Knowledge Centre  
Bharat Sanchar Nigam Limited  
Indian Coast Guard  
Aravind Eye Hospital

# Thank You



# Q & A

