FT5.05 (Hurricanes)- Hurricane Katrina and other major water related disaster: lessons learned for managing risk

Organised by

US Army Corps of Engineers-IWR

LA-33 – Tsunami & Water Related Disasters-ISDR’s International Initiative

Presented by:

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ISDR, India
South Asian Tsunami – 26 Dec 2004
1. Tsunami from Vivekanand Memorial, Kanyakumari, India.
2-Tsunami from Vivekanand Memorial, Kanyakumari, India
3-Tsunami from Vivekanand Memorial, Kanyakumari, India.
4-Tsunami from Vivekanand Memorial, Kanyakumari, India
Physical observations on 26th Dec 2004

• Chennai -

At 09:00 hrs as the tsunami hit the Chennai coast, water excurred to a maximum of 200 m inside the beach (up to kerb wall of the beach) with a surge height of 2.5 m. Subsequently a series of waves hit the coast at 10:45 hrs, 12:30 hrs, 15:10 hrs and 17:10 hrs and the sea level returned to the original level around 18:30 hrs.
Physical observations on 26th Dec 2004

- Nagapattinam -

Nagapattinam, a coastal town, located about 400 km south of Chennai is the worst affected place in India due to tsunami claiming more than 6000 death toll and extensive damage to the public and private property.
Physical observations on 26th Dec 2004

•Andaman Nicobar -

Tsunami waves hit the Nicobar group of islands within few minutes and reached Port Blair in South Andaman at 07:15 hrs, immediately after its generation at 06:45 hrs at Sumatra, indicating the traveling speed of about 700 km/hr.
ISDR’s Initiatives on Tsunami disaster mitigation.....

Training, Research & Workshops on Tsunami rehabilitation

- Objective of the workshop
  - To discuss technical issues, problems and damages arising from Tsunami in agriculture, aquaculture, irrigation, drinking water, coastal infrastructure, costal ecosystem and costal economic system.
  - Formation of NGO’s Task Force for preparation of report on capacity building for Tsunami rehabilitation
  - Proposing comprehensive assessments and evaluate exact needs based on the problems identified in consultation with Local organizations, working groups and other agencies.
National Workshop on Tsunami Rehabilitation
- At A.V. C. College of Engineering, Mannampandal, Mayiladuthurai, Tamil Nadu, India.
**Opening Session:** (l. to r.): Dr. Radhakrishnan, District Collector, Nagapattinam; Mr. Karthikeyan, Chairman – AVCCE, Dr. A.V. Parvate, Principal AVCCE; Dr. A.G. Bhole, President, ISDR.

**Field trip participants:** A field trip to the affected area was included in the workshop programme.

(l. to r.): Dr. Lalit Chaudhari, Vice President, ISDR; Dr. Bhattacharji, NIT-Kurukshetra; Dr. Surjeet Angra, NIT-Kurukshetra; Dr. M.C. Satyanarayana, AVC.

**Closing Session:** (l. to r.): Dr. A.G. Bhole, Dr. Parwate, Dr. Lalit Chaudhari, Mr. C. Senthilvel, Secretary AVC.
Resource Center on Tsunami

This center is a Joint initiative of

ISDR  A.V.C.C.E

-Supported by IAPSO - CGSI and other institutions which may join latter for providing the various resources & services to this center.
ISDR - Resource Center on Tsunami-
AVCCE, Tamilnadu, India
**ISDR-AVC - CGSI Resource Center on Tsunami**

- The center was inaugurated by the Dr. J. Radhakrishnan, Hon. Collector of the Nagapattinam District, on 8th April 2005 during the National workshop on Tsunami rehabilitation jointly organized by ISDR, AVC and IAPSO-CGSI at A.V.C. College of Engineering Mannampandal, Mayiladuthurai, Tamil Nadu.

- The scientific and technical materials on Tsunami and other Geo-Disasters - books, journals, research papers, audio-visual documentaries, online learning resources on various Tsunami events will be collected for training, research & education on Tsunami. Some of the Institutions have already communicated their support to this center.
ISDR-AVC - CGSI Resource Center on Tsunami

- Computer facility will be available with online facility for Tsunami education in this center. Various research & developmental projects will be undertaken through Tsunami Resource Center on Socio-economic scientific & technical aspects in the affected region and other coastal and other peripheral region.

- The Scientists and Researchers from India and other countries will be able to utilize the resources from the Tsunami center as and when required with the due permission of A.V.C College of Engineering.
The center will impart Tsunami and other geo-disasters education to local population, scientists and researchers, social workers, schools, Colleges etc.

Regular training programme will be organized in association with national and international Institution on Tsunami rehabilitation and capacity building. Tsunami Center will co-ordinate in the National organization, local bodies and State Government authorities for Tsunami and geo-disasters awareness programme.

Co-ordination, Advisory and Management committees will be form for local, National & International participation.

Initially this center is planned for 3 years depending on the utility and necessity. All the participating institutions, depending upon the finance and response, will revise the decision for further continuation of this center.

Coordinator of this center:

Dr. Arun V.Parwate, Principal, A.V.C. College of Engineering, Mayiladuthurai, Tamilnadu, India
Tsunami Rehabilitation

- 3 Workshops are planned for planning the rehabilitation programme.
AVC - CGSI will support and / or co-ordinate the rehabilitation programme through Tsunami Resource Center.
ISDR-AVC-CGSI Resource Center on Tsunami has been established at AVCCE, Mayiladuthurai, Tamilnadu, India.

This center will provide the technical and scientific input on Tsunami rehabilitation and Tsunami education, Tsunami awareness using the services of the experts and subject matter specialists.
Implementation Strategy

For rehabilitation NGO taskforce will be formed in the following areas of work.

1. Agriculture
2. Aquaculture (Marine / freshwater)
3. Coastal zone and /or Groundwater- Seawater Interactions
4. Irrigation / Drinking water
5. Ecosystem and economic development
6. Tsunami education
Implementation Strategy

- The Nodal Agency will identify the local partners and organise the rehabilitation programme and provide the inputs to the task force.
- The project will be submitted to State and Central Government, NGOs, Research institutions for funding.
Constitution of Task Force

- Taskforce will consists of 5-7 members.
- The taskforce will prepare the rehabilitation projects based on assessment and requirement using local resources.
- The task force will meet at convenient place to complete the report.
- One or two local NGO will be identified as Nodal Agency to implement the projects (for 2-3 years) based on the task force reports.
The Rehabilitation Projects

- Agriculture Land Reclamation
- Salt Tolerance Cropping Pattern
- Aquaculture Pond Restoration
- Drinking Well - Water Quality Monitoring
- Irrigation Network Assessments
- Coastal Zone Management &
- Ecological Changes
Selective damage:
These houses were not affected by the tsunami as the compound wall absorbed the tidal force. The wall, as can be seen in the photos, was destroyed.
Tsunami... a natural calamity
ISDR committed to help the society to the best of its abilities......

......in association with National & International partners
Thank you!!