





PROGRAM FOR HYDRO-METEOROLOGICAL DISASTER MITIGATION IN SECONDARY CITIES IN ASIA(PROMISE)

Kalutara City Demonstration Project Sri Lanka







Lead partner - Lanka Jathika Sarvodaya Sangamaya

- Voluntary service organization founded by Dr.A.T.Ariyaratne in 1958 and was incorporated by a Parliamentary Act No. 16 of 1972
- Sarvodaya has today evolved in to a single largest people's movement in the country with linkage at global level.
- Sarvodaya has 34 District Centers, 325 Divisional Centers and 4607 registered village organizations known as Sarvodaya Shramadana Societies, serving around 15,000 village communities across the country.
- The scope and breadth of Sarvodaya's outreach cannot be measured only in terms of numbers but they can help to visualize its sheer size and complexity





<u>City Demonstration project- Kalutara Urban Council</u> Kalutara is a medium size urban coastal city in Sri Lanka with a population of over 100,000 with annual growth rate of 1.2%.

Kalutara has a prominent administrative role as the district capital and has shown a tremendous growth and development potential as a rapidly developing satellite town due to its proximity to the capital city, tourism and fisheries industry as well as being the site for many export oriented industries and related investment.

The city is prone to frequent events of reverine floods, (most recent was in May 2003), health hazards, rain-induced landslides etc. The coastline of Kalutara city was heavily impacted by the recent tsunami of December 2004.









FLOOD RISK IN KALUTARA UC AREA



2003







Hazard mapping, vulnerability and capacity assessment

- Will be carried out in two levels
- Local government level hazard mapping and vulnerability and capacity assessment will be carried out by Sarvodaya
- Kalu river basin wide study will be carried out by NBRO in collaboration with University of Peradeniya







- The assessment will be carried out by Sarvodaya
- ADPC has conducted a 05 day CBDRM course for capacity enhancement of Sarvodaya staff.
- Sarvodaya has translated the training material into Singhalese language for easy reference
- Conducted two introductory work shops for Sarvodaya staff to explain the methodology and strategy under PROMISE-Sri Lanka for Sarvodaya District leaders from Kalutara and Rathnapura districts
- One workshop for Sarvodaya staff(Divisional coordinators and field coordinators) within Kalutara District





- Three separate workshops (one day duration was ulletheld for
 - Urban council elected representatives and officials
 - Divisional secretary, Grama Niladaris and other government officials, NGOs, Civil societies, CBOs
 - District secretary and officials of all government departments within the district capital of Kalutara





Sensitization workshop for elected representatives and government officials.



Mr.Saidur Rahman from BDPC and Dr.Iftekhar from ADPC were also attended the meetings









- Kalutara UC has 12 electoral wards and 16 Grama Niladari divisions(GNDs).Assessments will be completed through 03 phases
 - 1st phase 06 most vulnerable
 GNDs
 - 2nd phase-06 GNDs with medium vulnerability
 - 3rd phase- 04 other GNDs

Methodology adapted for baseline data collection on Community preparedness (PRA)

- Individual meeting (Village leaders, Social Mobilizes and)
- Family meeting (Men ,women and children's)
- Custer meeting (Homogenous group)
- Village community meeting (Heterogynous)























- The community level hazard mapping will be conducted by Sarvodaya community leaders(SCLs) attached to Sarvodaya community centers.
- Data will be made available in the same location for reference by community.
- Sarvodaya community leaders have been trained from all 16 GNDs

- Training modules taken up by SCLs
 - On Sarvoraya principals
 - Hazard events
 - Disaster cycle
 - Preparedness(pre,during and post
 - PRA tools
 - Community mobilization for risk management







- PRA tools used during assessment
 - Social mapping
 - Transact walk
 - Resource map
 - Wealth ranking
 - Seasonal calendar
 - Hazard

mapping(historical data)

- Outputs
 - Social status of communities
 - Cross sections and observation on vulnerabilities
 - Resources and capacities
 - Seasonal impact
 - Hazard map of the community





Vulnerabilities observed during the assessment

- During non-flood period
 - Use of drugs and illicit liquor
 - Family disputes(among alcohol addicts and family members
 - Urban fire
 - Accumulation of garbage
 - Health problems
 - Un-employment among educated youth
 - Poverty

- During flood season
 - Destructions of houses, toilets, kitchen,temporary buildings
 - Un-employment and loss of livelihoods
 - Sanitary problems due to contamination
 - Difficulties to use toilets
 - Dengue fever, malaria etc transmitted through mosquitoes







Local government level hazard mapping and vulnerability and capacity assessment Future activities planed during 2006

- After mapping all data will be presented to community members and displayed in sarvodaya community center for verification of data.
- Data will be used to identify vulnerabilities and actions for vulnerability reduction
- Action plan for emergency preparedness and mitigation will be carried out after validation of assessment data







Local government level hazard mapping and vulnerability and capacity assessment Future activities planed during 2006

- Community based projects will be developed and undertaken under the project Phase II on selected actions prioritized by community members.
- Sarvodaya will facilitate implementation of action plans through mobilization of resources.
- The action plans will be presented at city level workshop to develop a city level Action plan with the city authorities.







Kalu River basing wide study

- will be carried out by NBRO in collaboration with University of Peradeniya
- Activities under the Kalu River Basin study from Ratnapura to Kalutara commenced on July 11, 2006 with the signing of a MOU between the Lanka Jathika Sarvodaya Shramadana Sangamaya (Sarvodaya) and the National Building Research Organization (NBRO).
- NBRO is a Semi-government organization and has experience in conducting similar studies
- Peradeniya university will provide software and technical assistance to the project
- Objective of the study is to establish a end-to-end early warning mechanism involving all Sarvodaya village centers within the Kalu River basin located in two districts:Kalutara and Rathnapura
- Other partners are Municipal Council Kalutara, Sir Lanka Institute of Local Governance, Meteorology Department



Kalu River basin wide study

- Kalu River has 06 major tributaries and all inputs will be considered under simulation study.
- Rathnapura city is located around 93 KM upstream of Kalu river and often get flooded due to torrential rains in upper catchments.
- The flood water comes to Kalutara within around 24-36 hours and discharged to Indian Ocean .In many cases at Kalutara gets flooded when sand dunes formed in the mouth of the river or during high tides.
- During high tides usually flood situation aggravates and the duration of inundation gets prolonged.







Kalu River basin wide study

- The study will help to identify villages which will be inundated when Rathnapura and upstream area get flooded.
- Plan is to get Meteorology department to provide rainfall data from Rathnapura and Irrigation department to provide river data in several locations and feed them in to the simulation model and identify areas which will be inundated.
- In the lower basin Sarvodaya community centers will be provided with Flood level gauges with color coded flood levels so that they can activate village level evacuations and emergency plans.
- Annual Flood level records will be maintained by Sarvodaya community centers.

