# PROGRAM FOR HYDRO- METEOROLOGICAL DISASTER RISK MANAGEMENT IN SECONDARY CITIES IN ASIA (PROMISE)

# Sri Lanka



# **Final Report**

Submitted by;

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# 1. Introduction

Indian Ocean tsunami of 2004 highlighted glaring deficiencies in Sri Lanka's institutionalized framework of disaster management, which the government had been developing since 1996. Tsunami created an unprecedented disaster in Sri Lanka leaving more than 35,000 people dead and displacing of thousands of thousands from their homes.

Though the government had a plan, this event proved it is unequal to the challenge posed by the tsunami and also emphasized the fact that only the effort of the government can not win the challenges occur caused by disasters. Therefore, disaster management reform has become a high priority in Sri Lanka. Multiplicity of organizations involved in disaster management and the sheer range and number of interventions have posed significant challenges to the effectiveness of reform efforts.

Kalutara is one of the three administrative districts in the Western Province. The total geographical area of the district is 1607.60Sq Km. the Kalutara district consists of 14 divisions. The total population of the district is approximately 1,060,800 out of which 520,726 are males and 540,074 are females.

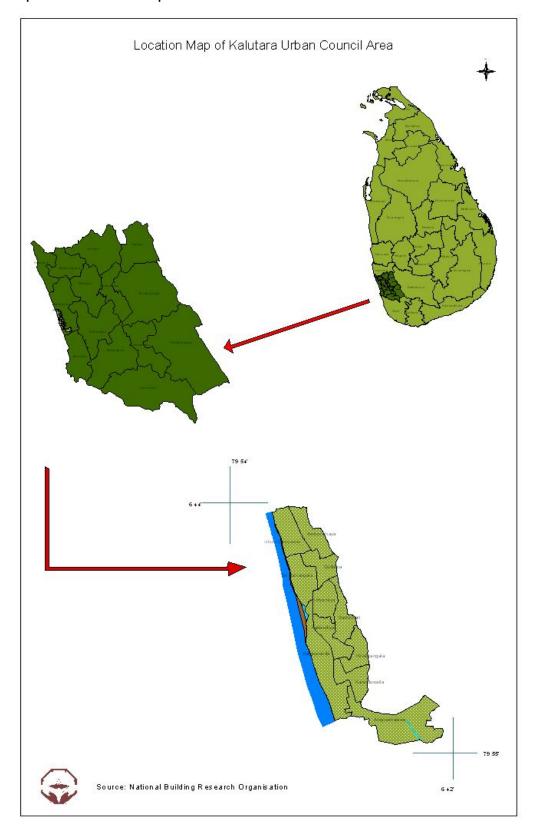


Figure 1: Location of Kalutara (bottom-most) district in the western province of Sri Lanka. The other districts are Colombo and Gampaha

The entire Kaluthara district falls into the wet zone and gets rains throughout the year. South west monsoon is the main source of water and comes generally in the period of May to September. The district is divided in to three zones based on the amount of rainfall it gets. In addition to flood the district is also affected by landslides, cyclones (e.g., Beruwala), sea erosion, etc

On December 26, 2004 Kaluthara district was hit by the tsunami, with affected around 75% of the costal belt of Sri Lanka. This was an extremely destructive tsunami wave, triggered by a powerful earthquake that occurred in the sea about 40km from the Indonesian island of Sumathra, measuring 9.0 on the Richter scale the largest quake worldwide in four decades.

Map No. 1 - Location Map of Kalutara Urban Council Area



Kalutara District is also a flood prone District. Floods are reported once or twice a year due to the over flowing of Kalu Ganga but it varies depending on the rainfall and is not of a major nature. Devastation floods that occurred in May 2003 and June 2008 were the most severe floods experienced after six decades. Floods caused large property loss and losses of human lives.

Floods are reported in Southwest monsoon season activated in May to September and inter monsoon season in September and October. Some areas of the district are subject to water logging condition and it is mainly due to inadequate drainage, construction activities in low lying areas and filling of low lands.

#### **PROMISE** Initiative

Because of this vulnerable situation exist in the district; Kalutara was selected as a secondary city for the PROMISE Project. Very few NGOs were working for DRR then and some of the programs were not well received by the communities as they were failed to serve the correct purpose. Seemingly lack of coordination amongst the agencies providing capacity building programs and obviously programs conducted are unplanned, uncoordinated and duplicated without knowing the effectiveness and sustainability not much attention was paid.

Above condition express the need of having a project where its objectives had been set to make the change in the existed situation.

Program goal was to Reduced Vulnerability of Urban through Enhanced preparedness and Mitigation of Hydro-meteorological disasters in the city of Kalutara, Sri Lanka.

# 2. Project Overview

Founded as a non-governmental, non-sectarian, voluntary service organized by Dr.A T Ariyaratne in 1958, the Lanka Jathika Sarvodaya Shramadana Sangamaya, which has global linkages as the largest people's movement in the Sri Lanka, also accelerate its services towards pre-disaster and post- disaster activities strengthening organizational capacities in a wide spectrum. Sarvodaya's philosophy and its community development model had an effective approach to the communities in grass root level through the several projects commenced under Sarvodaya Community Disaster Management Centre, for disaster risk reduction activities.

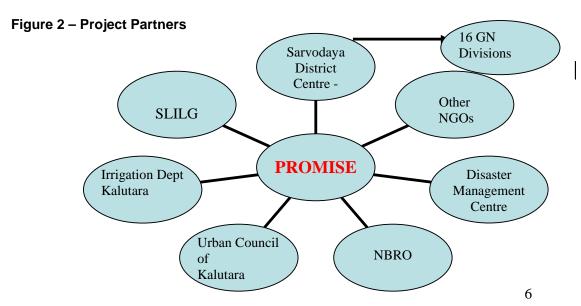
As a step forward to DRR activities Sarvodaya linked with ADPC as a local partner in Sri Lanka to implement the project for preparedness activities for disasters in Kalutara District. PROMISE project which was for reduce hydro-meteorological risk mitigation in secondary cities in Asia was introduced to Kalutara as a two year program.

### **Disaster Preparedness Initiatives**

Although there were incipient efforts at establishing disaster preparedness or management system by the government, there was no effective mechanism either by the GO or NGOs in place. Each disaster was responded to from the point of rescue, relief and rehabilitation and not in the form of integrated disaster management. Urban Council and the other GOs in Kalutara District also responded with relief measures through the existed typical structure with District Secretary and Divisional Secretary in an event of a disaster. Vulnerable communities also were prepared themselves just to receive relief and reduce the economical loss occurred due to the disaster and tend to relax until the next disaster. With the implementation of the PROMISE project, we could change the typical way of conducting disaster related activities with sustainable solutions introduced to the communities as well as to the different stakeholders.

#### **Networking towards Better Achievement**

During the project period, networking had been done with several stakeholders. The project comprised with structural and non structural mitigation activities. Technical inputs were received from several institutions allover the project period.



National Building Research organization (NBRO), Sri Lanka Institute of Local Governance (SLILG), Irrigation Department., joined the project for training and capacity building, module development, and delivering of them. Disaster Management Centre (DMC), played a key role mainly as an information hub for the project team as well as for the beneficiaries apart from the networking with the project in conducting awareness programs for the schools and communities while involve in planning evacuation process.

Urban Council and the Sarvodaya District Centre of Kalutara helped in organizing communities for DRR activities. The participants of the activities included community members and local leaders, as well as government officials, municipality officers and NGO community. The Table below Summarizes the Project Partners, Activities and the Outcomes.

# Partners. Activities and Outcome

Partners, Activities and Outcome				
Organization	Contribution for Activities	Outcome		
NBRO	<ul> <li>As per HVRA it is identified the need to build the capacity of the technical officers and the masons on construction rules in disaster prone areas. NBRO provided technical inputs to get trained the team of TO s and masons with the assistance of the Chamber of Contractors.</li> </ul>	Technical confidence built on TOs and masons on correct construction rules to follow in constructions for sustainable housing /building in disaster prone areas.		
	<ul> <li>Land use plan developed for the UC area of Kalutara and construction guidelines</li> <li>Technical support to develop Community Based Early Warning mechanism with installation of flood gauges along the left</li> </ul>	<ul> <li>A helping tool to use identify flood plains, warning areas and prohibited areas in the project area and make use of them in taking decisions in constructions and settling as households in particular area.</li> <li>Warning mechanism and helping communities in the process of evacuation.</li> </ul>		
	and right banks of the Kalu River.			
SLILG	Training on Good Governance	Relate strategies of good governance in the level of policy making and as well as dealing with several stakeholders in disaster related activities.		
DMC	<ul> <li>Community Awareness</li> <li>School Disaster Management Programs</li> <li>Develop Standard Operational Procedures to use in a disaster for DMC</li> </ul>	<ul> <li>Sensitize community and the youth groups to issues pertaining to natural disasters management.</li> <li>Disaster Management Plan for the Schools.</li> <li>Maintain effectiveness and efficiency in an emergency situation. Help in existing rehabilitation efforts and also disaster preparedness efforts targeted for future. Develop set of rehabilitation guidelines.</li> </ul>		
	<ul> <li>Providing information, guidance and coordination to identify and implement small scale mitigation demonstration projects</li> </ul>	Construction of the drainage system at Kaleel place as a small scale structural mitigation project		
UC, District Secretariat, Other NGOs	<ul> <li>Disaster Risk Reduction Plan Development</li> <li>Networking and partnering DRR activities to avoid replication.</li> <li>Programs on good governance</li> </ul>	<ul> <li>Developed a DRR plan for Kalutara for next two years.</li> <li>Directly feed into the improvement of DRR Policy and practice in the government and the NGO activities.</li> </ul>		
Irrigation Dept. of Kalutara	• Identify the critical locations to set the flood gauges on banks of Kalu River and provide early warning to the communities and to the district administration regarding rising water levels in rivers flood.	EW Mechanism to the community		

# 3. Achievements

### Component 1: Hazard Vulnerability and Risk Assessment

The project was proposed just after the tsunami. It is observed that much Research Studies done with special references to the DM activities conclude that most of the programs had no relevant to preparedness and disaster risk reduction activities, assessments had not done before designing of the programs, duplication of programs, defects in the selection process of the participants, and trimming of programs without community consultation about their availability.

As a solution to all the facts discussed above before design the project activities, Hazard Vulnerability Risk Assessment (HVRA) was conducted in the selected project area. HVRA contains the vulnerable situation of the each community in the area and identified the causes as well the mitigation activities that can be suggested to reduce the risk. In other way it is an analysis of resource availability in the area and the capabilities, social and economic condition of the communities who are vulnerable.

The HVRA was conducted using Participatory Rural Appraisal (PRA) Methods and covered all the 14 GN Divisions. PRA methods included, seasonal calendars, participatory physical assessment of community infrastructure etc. The information collected were supplemented by Secondary Data available from government and nongovernment sources.

Results of the PRA in all GN divisions in Kalutara city indicate great similarities in terms of common hazards and vulnerabilities. The reason being there are no significant differences in geographical, cultural and social profile. Land occupancy was mainly for human settlements and tourism industry establishments such as hotels and Shops.

All the areas we selected for the project were vulnerable to one or more disasters such as riverine floods, flash floods and epidemics like Dengue. According to the perspectives of the villagers, floods is recognized as being the most common and devastating hazard, there are several reasons for floods. Major flood causing river is Kalu River. Two inundations are occurred each year based on two monsoon season. Mainly affected by south western monsoon during May to July. One of the other reasons is narrowing the water channels by building houses and other constructions along the water cannel and used the water cannels as places of waste disposal .Therefore capacity of baring water flow has reduced in that channels, specially Heen Ala,Maha Ala and Waskaduwa Ala.. Other reason is the lack of a proper drainage system or poor standards of the existing systems. Because of the poor drainage of rain water, they are affected by flood even under the effect of a very small rain.

The recommendations people themselves came up with included;

- 1. Further enhancement of awareness in Public, Local Government, Private sector about project activities and goals.
- 2. Municipal Council should enhance actions for land encroachment.

- 3. Increase community involvement in Disaster Risk Mitigation and Preparedness.
- 4. Provide the necessary materials, tools and other inputs for capacity building.
- 5. Establish sign boards and marking the directions in evacuation sites. (Establish solar panels in those locations for keeping 24 hours electricity.
- 6. Widen the water cannels specially Heen Ala, Maha Ala and Waskaduwa water cannel.
- 7. Introduce proper waste management initiative with community and the urban council of Kalutara.
- 8. Construct widened and standard drainage systems based on a proper plan.
- 9. Networking the Government, Local Authorities, NGO's Communities business community for mitigation activities.
- 10. Establishment of community based end to end Early waning mechanism, Emergency Operations Centers.

Based on these findings and recommendation of the HVRA, the project activities were designed and/or further refined. Awareness programs, mitigation and disaster risk reduction activities were planned to bridge the gaps identified. Data and the findings of HVRA will be useful even in the future to assess the existing situations of the vulnerable groups as it serves as a baseline.

# Community based early warning system

Flood forecasting and warning are the current trend of flood mitigation and are categorized as non-structural flood protection measures. It is based on mathematical modeling which allows experts to quantify present rain fall in to the amount of river flow, based on the studies made on past events of floods, and forecast the future floods. It reduces flood damage by permitting public to respond early before the flood reaching up to a critical level.

Sarvodaya engaged the National Building Research Organization (NBRO) to develop the Early Warning System. According to the MOU signed between Sarvodaya Shramadana Sangamaya (Sarvodaya) and NBRO on 11th July 2006, a *Digital Rainfall Runoff Model* which is capable of forecasting the inundated area against time which could be used to issue flood warning for Kaluganga flood plane from Ratnapura to Kalutara, was to be developed and delivered to Sarvodaya.

The NBRO developed the "Dynamic Model" with the use of HEC-RAS (version 3.1.3) flood simulation package. The model required the plain and cross sections of Kalu river (about 100 cross sections) have been taken by NBRO from Rathnapura to Kalutara, upstream and downstream boundary conditions, Hydraulic properties (Past rainfall records, Flood records, Catchment characteristics etc) and river flow levels for past 30 years. This model will be used at the Sarvodaya Community Disaster Management Centre and will also be made available to other project partners.

# Component 2: Mitigation and Preparedness

Sustainable livelihood development and the Disaster Risk Reduction strategies emphasize the need for resilience building amongst vulnerable groups. Under community level projects for preparedness focused on disaster risk reduction. Three construction projects as for structural mitigation projects and two non structural mitigation projects were conducted under the project.

Under PROMISE, a few small scale community level projects were completed to enhance the community preparedness focusing on disaster risk reduction. Three construction projects as for structural mitigation projects and a micro credit scheme as for non structural mitigation project were conducted under the project.

Demo Projects	Location	Community
		involvement
01. Clearing of 'Bindunu Ela' Stream. Wadduwa		96
		families(direct
		beneficiaries)
02.Construction of the draining System   Nagoda South		32 families
at Daham Mawatha – Nagoda South		
03.Construction of the draining System	Akkaragoda- Kaleel	26 families
at Kaleel Place	Place	(direct
		beneficiaries)
04. Micro Credit Scheme	Ten (10) community members in	
	Damniyamgama, Lagoswattta project	
	area were supported in the Micro Credit	
	Scheme for different enterprises and self	
	employment opportunities, in order to	
	reduce their economic vulnerability for	
	varies type of disasters. The Loan	
scheme was carried out through SEEI		hrough SEEDS.

Under the school awareness programme, hundreds of students in three vulnerable schools were benefited. The three schools involved in the program were Mathugama Ananda Shasthralaya , Mathugama C.W.W. Kannangara M.V. & Kalutara balika Vidyalaya.

Student sub committees and some staff members in the three schools were trained on different themes related to disaster management. The training sessions included the basic skills development and practical know how in Early Warning and Dissemination, First-Aid & Emergency Medical Response, Search & Rescue and Camp Management.

Emergency response plans were also developed for each of the above schools.

## Integration of Land Use Planning

Project's primary focus being on mitigation of vulnerable communities in Kalutara area who are susceptible for flood disaster, as described previously, one of the key components of preparedness is a community based early warning system for vulnerable communities in flood prone area of 'Kalu Ganga'. This flood model can predict the flood levels of 'Kalu Ganga' based on historical the data. With the help of this flood model, vulnerable communities have marked their own flood levels in critical locations which allow them to create a kind of early warning system.

With this background, Human Settlements Division (HSD) of NBRO, in March 2008 was engaged to developed a Flood Based Landuse Map for Kalutara UC area. Relevant data was obtained from the current project and other stakeholders. Based on this flood map, project team prepared a Risk Zonation Map for Kalutara UC area. This map identifies the risk zones with high, medium and low levels. Further, by using this map project team prepared a set of landuse (for high, medium and low risk areas) and construction guidelines for each risk zones.

# Public Activities; National Disaster Day & Competitions

Disaster Safety Day was organized on 26th December at Kalutara, to coincide with the National Disaster Safety Day. The event included a morning seminar, a rally, and religious ceremonies at the Buddhist shrine at Kalutara. There was an exhibition organized at the Kalutara city hall in collaboration with the District Secretaries office, Kalutara UC, Red Cross, Disaster Management Center (Kalutara District Coordinating Office), Green movement and other NGOs. The main event for the day organized in Galle district was related to tsunami disaster preparedness, hence the PROMISE-Sri Lanka project highlighted flood preparedness in its programs.

An Art Competition was also organized amongst the school children to raise awareness on disasters which not only brought out the tremendous talent amongst the 2 age categories of children, but also their own life experience with disasters.





## Other planned activities

At the time when the PROMISE project was started (in middle of 2006), the new government structure for disaster management in Sri Lanka was just being put into place with the creation of the National Disaster Management Centre (DMC) and its district level mechanism being created. The PROMISE staff worked in close coordination with the District DMC staff and it was then found that the DMC was already taking steps to produce common Standard Operating Procedures for Disaster Management. Therefore rather than duplicating efforts, the project provided inputs to that process rather than initiating action to produce SOPs with the MC.

# Component 3: Training and Public Awareness

Training and Public Awareness activities under the project delivered the knowledge on disaster management and develop the coping skills of the communities. These trainings were helpful to make the people understand disaster management cycle and select appropriate strategy for them to minimize the affect of the disaster.





Sixty (60) persons were trained for Community Based Emergency Response Committees (CBERC) in three (03) training sessions. The community members were selected voluntary basic under the recommendation of Grama Sewaka Niladari in each of communities. The training sessions were jointly conducted by the 'Medical Teams International' and National Disaster Management Center (DMC).

Training of the government officers on Good Governance was an eye opening of the government officers to adopt transparent policies in disaster risk reduction activities. Still the major part of the post disaster activities are resting with the government authorities and the capacity of the government authorities was build to cope with the emergency situation.

Trainings were conducted to build the capacity of Technical Officers and masons working in the construction field as a transformation of knowledge on construction rules to be applied in the disaster prone areas. Training included practical sessions also. (gabion wall, retention wall etc.) This knowledge and the developed skills they can use in construction works in disaster prone areas. For the purpose of their recognition in the respective communities we issued certificates for all the participants.

# Handbook on Community Based Disaster Risk Reduction(CBDRM)

It has been observed that there is a dearth of material in local languages on community based disaster risk reduction. Most of the available material focus on post-disaster event management and less on preparedness and mitigation.

To address this need and as part of the long term efforts to integrate PROMISE project learnings into day to day lives of the people and the organizations involved in disaster risk reduction work, a Manual in Sinhala has been prepared and has been released as a project publication. This Manual is based on the ADPC Guidelines. the **PROMISE** project learnings as well as on the Sarvodaya experience on disaster risk reduction at Community Level. 500 copies of the Manual has been printed and it is being distributed to the village societies, community leaders, local government officers and the other NGOs involved in the field of disaster risk reduction.

Sarvodaya also intends to translate this Manual in to Tamil in due course.



# Component 4: Advocacy for Mainstreaming Risk Management in Urban Governance

Under this component, the main achievement was the Plan Development for Disaster Risk Reduction of the City. Outcomes were division of labour and better coordination amongst community capacity building amongst agencies involved implementing DRR programs, took DRR issues to the national level discussions to solve problematic areas in mitigation activities in Kalutara, identified and listed individual resource persons and institutions well qualified to carry out programs, developed strategies to motivate community participation , documentation of suggestions made both by NGOs and GOs and made use of them with better coordination.



This was useful to strengthen the networking and partnering between Sarvodaya and other institutions to work in join hands even after the project.



#### These institutions included;

- Urban Council Kalutara
- NBRO
- NIHS (National Institute of Health Studies)
- SLILG (Sri Lanka Institute of Local Governance)
- Police
- DMC
- Irrigation department
- St. john ambulance brigade
- Red cross Societies
- UNDP
- IOM
- W.D.C. (women Development Center)
- Arthacharya
- Sewa Lanka
- SAHANA
- WCDF
- Water Supply & sanitation decade services
- Asia ONLUS
- Habitat for Humanity Sri Lanka
- BRAC Sri Lanka
- Ameri cares
- MOH offices

- University of Peradeniya
- FINCO Engineering agency

Disaster Risk Reduction plan reflecting the resource availability was a useful tool parallel to the Kalutara District Disaster Preparedness and Response Plan, for organizing post disaster activities for both UC and the DMC during the flood in 2008. (Anenxure – Disaster Risk Reduction Plan for Kalutara)

Development of the case study on PROMISE Sri Lanka "Urban Flood Risk Mitigation in Kalutara City, Sri Lanka":

The PROMISE Sri Lanka team extended assistance to Ms. Manel Jayamanne, the consultant who documented the project and developed the case study "Urban Flood Risk Mitigation in Kalutara City, Sri Lanka" with the theme of community-based disaster risk management. The case study describes the significance of actions of the different stakeholders, and presents different types of flood preparedness interventions.

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# 4. Opportunities, Strengths, Obstacles and Constraints

# **Opportunities**

- The need to have an effective project for addressing hydro-meteorological risks in the vulnerable communities was well recognized by the communities themselves as well as the GOs including DMC> The created a favorable environment to initiate the PROMISE project even with some obstacles. There were a large number of NGOs in the district working on tsunami related issues, however, more common hazards such as floods were automatically neglected by those who worked for the disaster related issues. It was an opportunity to place the project in the vulnerable areas to floods.
- Networking and partnering with external organizations led to share the resources in structural and non-structural mitigation activities in the project. Also it was useful to work in a wide spectrum for DRR and make a value addition to the project.
- Trust build with the Ministry of Disaster Management and the Government Disaster Management Centre was useful to organize events and also to have a better approach to the communities with a good image and a well recognition.

# Strengths

- People had a good impression and faith on Sarvodaya village development model and the underlying philosophy.
- Long term goal of Sarvodaya to make all Sarvodaya villages disaster-resilient and responsive was shared in many ways to the communities in Kalutara and GOs from the events of tsunami recovery activities have assess the internal capacity of Sarvodaya.
- Supportive project staff with capabilities in Sarvodaya and ADPC.

### **Obstacles and Constraints**

- Numbers of awareness programmes were to be carried out even before doing HVRA as the project objectives were not very much clear to them since their requests for getting relief was not responded through the project goals. Community participation for the programs was in a questionable situation at the beginning of the project.
- More time was spent on completion of HVRA in the first phase and when it was to be revised, another period of time as to be spent on the same activity. Trust on the project of the communities and the GO s also were at a low level and during the second phase of the project it was a really big challenge to overcome that situation to ask for support from them for the project activities.

- Due to initial staff changes at a management level, project comprised several
  intervals during its life time and also affected the continuity of activities. Same
  problem affected negatively to reduce trust in making relationships with the
  several stakeholders in DRR Activities.
- Strength of the PROMISE working group (number of persons worked for the project) in the country was not sufficient to meet the challenges during the project cycle.
- Due to slow progress initially, there was more pressure to complete the remaining activities towards the latter part of the project.
- Unnecessary delays occurred in completing some activities in situations support asked for from external institutions and from the partners who were in PROMISE network.
- In certain instances, party politics influenced the project activities. Some
  politicians
  visited the sites informally, where the constructions commenced under mitigation
  activities and have told the communities that this project was brought to this area

by them. In this situation persons of that community who had personal/political conflicts with that politician were hesitated to contribute to the community work.

# 5. Lessons Learnt

- Changing attitudes of the communities to make aware them on the DM cycle and think out of the typical frame was not an easy task but the appropriate approaches in social mobilization and the dedication of the immobilizers towards the task will make the change gradually.
- Although there were incipient efforts at establishing disaster preparedness or management system by the government, there was no effective mechanism either by the government or the NGOs in place. Some NGOs hesitate to accept their responsibility and the role in Master Plan of Disaster Risk Reduction and try out competitive approaches for the same vulnerable groups with other NGOs to win the funds.
- Hidden conflicts between the GOs and NGOs generate misunderstandings between two parties and not willing to share resources for a better achievement when there are no strategies for a win win situation.
- The main challenge is to rectify sewage and drainage system of entire city especially low lying areas of the city. People have big economic loss on their hygienic issues irrespective to the seasonal changes of the whether. These problems have not considered as disasters in DRR action plans.
- Thought the communities have trained to get evacuated in a warning and when the
  evacuation places also identified, most of the persons still remain in their
  residences and around even the need for evacuation is clear due to fear of theft of
  household items. This was experienced even in the flood of June 2008 and some
  of this type of incidents caused deaths.
- Property loss during the 2008 flood was low compared to the flood in 2003 due to rebuilding of houses after 2003 have done using construction rules appropriate for flood prone areas.

# 6. Exit Strategy and he Sustainability of the Project

PROMISE Project was a technical and financial supporter for the considerable number of DRR activities in the UC area of Kalutara. Upon reaching the completion of the project highlighted the need for introducing exit strategies to the communities and the local authorities for good practices.

#### Role of Sarvodaya

Sarvodaya has incorporated disaster management activities in to ongoing programs and Sarvodaya is able to work jointly with other local and international groups on projects that reduce risk for disasters in the vulnerable communities of the project area with the intervention of District Disaster Management Centre of Sarvodaya on long term basis. Sarvodaya Community Disaster Management Centre and the Field Operation Division have the responsibility towards commencing programs and providing guidance. They will continue the training and other awareness activities in the target area through the Sarvodaya District Centre located in Kalutara.

#### Community Intervention in the Future

Local communities are normally first responders and have coping strategies to mitigate and respond to disasters, such as by moving to safer locations and issuing warnings. Their input into disaster planning is critical at the beginning of the project and subsequent to empowering people building capacities and making those aware on DRR, process of evacuation, strategies to be used in evacuation people will automatically use their knowledge in practicing the same in a disaster. The way they act in the ever biggest flood in Kalutara in June 2008 reflected that strongly.

#### Intervention of UC and DMC

Volunteer base of the PROMISE project who have received CBDRM trainings and the First Aid trainings have linked with the UC and the DMC. In an emergency case they will make use of that data base for field operations and it was practiced for the first time during the flood in June 2008.

Schools that completed Disaster Management Trainings with PROMISE project intervention have also linked with other NGOs such as Sri Lanka Red Cross Society, Arthecharya Foundation etc. for further capacity building. Also the students who are in the rescue committee will be given a chance to work as a volunteer for the DMC in their school vacations and even after schooling to get experience. In the recent future UC will act as an information hub for the people to gain knowledge on DM and DRR.

## Role of Other NGOs

Non structural mitigation projects such as "Bindunu Ela Flood Mitigation Project" was linked with an NGO call Asia Onlus to continue with future activities and to provide the further guidance.

## Annexure -

# Disaster Risk Reduction Plan for Kalutara UC Area

# Introduction

Disaster management meant different for different players. Both GOs and NGOs have different initiatives for disaster risk reduction. However most of these initiatives are being implemented in isolation and as a project with limited life cycle, instead of integrating disaster risk reduction is in ongoing development programs. Very few have understanding that the disaster risk reduction is a development need.

In any disaster what matters most is the time gap between the disaster event and the response that follows. Most of the damages to lives and properties occur during the period of this gap. There fore it is not the right idea to leave the responsibility only with the government or only with the NGOs. It should be responsibility of organized local groups in disaster prone areas, responsibility of the local government authorities, and of the NGOs who are working for the disaster risk reduction activities.

This document reflects the effort of the PROMISE Sri Lanka to make an Integrated Plan for Disaster Risk Reduction in UC area of Kalutara.

# **Process**

Output of the this document is based on the details, past experiences in disasters, several discussions with responsible parties, participatory decisions came out as a result of group work during workshops which GOs and NGOs involved. Also it is followed by the community coming together to articulate its own strengths and weaknesses with respect to a disaster situation.

# Objectives of the Plan

- Reduce the losses of lives and means of livelihoods
- Integrate work of GOs ,NGOs and CBOs to a master plan develop for the UC area.

- Match the structural and non structural mitigation activities with the prioritized needs.
- Keep replication at a minimum level.
- Strengthen the capacity building of vulnerable communities and the institutionalization building to cope with disasters.
- Networking knowledge on effective approaches, methods and tools for DRM developing.
- Empowerment of communities and local self-government through education public awareness campaigns.

# Disaster Risk Reduction Plan Development

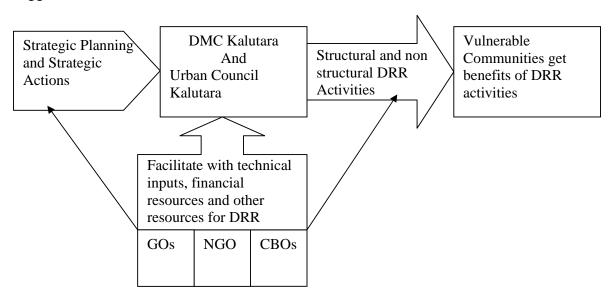
Disaster Management Center of Kalutara act as the focal point in a disaster situation in the district and the guide lines have been provided through the "Disaster Preparedness and Response Plan " developed for the district by the National Disaster Management Centre. However the effort of the PROMISE Project is to support Kalutara UC area with an elaborated Disaster Risk Reduction Plan using the network of GOs , NGOs, other stake holders and CBOs.

# **Key Issues**

- GO s believe that they are technically competent enough to handle disaster risk reduction activities but they are lack of financial and other physical resources to cope with situation.
- NGOs say that they are getting lack of assistance in working with GOs.
- CBOs say several parties time to time involve in doing several programs with them but still the root causes of the majority of the problems have not still addressed in a proper way.
- Still the communities are not fully aware on the situation of Disaster Risk Reduction and most of them are tended to relax till the next disaster comes and non affected people distribute relief.

- One common factor was so far most of them are projects initiated by some agency with a stipulated time period to achieve certain targets and exit from the scene without an exist strategy.
- Disaster Risk Reduction is not included in School syllabuses as well not given the priority at least as an external program.

# Suggested Model for Disaster Risk Reduction in Kalutara UC Area



# Main Considerations in Development of the Plan

# **Capacity Building of Communities**

- Awareness generation and education programs in disaster reduction and recovery.
- Empower the communities for community –based disaster management initiatives.

- Scaling up the best practices in disaster management for enhancing the resilience of the communities to disasters is beginning to create a revolution and favorable impact.
- Introduce sustainable livelihood options for the persons in disaster prone areas.

# DRR activities integrating in to Government Systems and Processes

- Form a steering committee to maintain quality of the programs and to avoid mismatching in distribution of recourses. This committee should consist with officer representatives from DMC, UC and other government officers as well as selected participation should be allow for the officers of NGOs
- Assess the capacities that can be use in DRR, of GOs, NGOs and other stakeholders.
- Disaster management plans have to be shared with the steering committee and after to the stake holders in the target area.
- When designing plans priority should be given to the need of the area
  while developing the development plans. In utilization of funds for
  mitigation activities and capacity building of disaster management
  teams is encouraged. Special provision for disaster mitigation activities
  is being made in fund allocation by the government and other
  interested groups at various levels.
- All the organizations who will take part of the disaster risk reduction activities should present and discuss their plans with the DMC and the steering committee to set them some where in the master plan for the area for disaster risk reduction.

- Land use plans for the area were lastly updated in 1998 and resource allocation should be provided to update the land use plans and share them among UC, DMC and other stake holders.
- NBRO, District Planning Division, should have a proper schedule for skill development of Technical Officers and the masons who involve in construction activities in disaster prone areas. Land use plan should be shared with them also to use it as a base plan to identify the disaster prone areas.
- As a strategy to bridge the gap and misunderstandings among GOs and NGO s once a month their will be a meeting to meet and present the progress of the on going projects.
- All the NGOs should support to the existing structure of the local authorities to disaster risk reduction.
- DMC should perform as the focal point in organizing DRR activities and UC should be strengthen as a information dissemination centre for the general public on DRR activities.
- Following areas were suggested as areas to be strengthened through the on going DRR programs.

# Community Organization and Social Capital

- DRR activities should decentralize to several types of social organizations, women organizations, youth organizations, particularly local mitigation committees.
- Make all social organizations discuss disaster risk reduction issues apart from their development issues.
- Early warning and communication, community risk mapping, local simulation exercises and mock drills ect.

# Family Level Preparedness

- Learning about public shelter
- Familiarity with evacuation roots
- Keep a check list of fire, police, ambulance ect.,
- Awareness among all responsible members of the household how and when to turn off water, gas, and electricity at the main switches or values.
- Adequate insurance coverage
- Complete inventory of home, garage, and surrounding property
- Keeping the originals of important documents in a safe deposit box

Disaster Risk Reduction can't be achieved in isolation either by the government NGOs or by the communities. DRR calls for collaborative action and the commitment by all stake holders and we have to make disaster prevention as inevitable, integral practice and approach to our development planning.