

# **Final Report**

**On**

## **Outcome Evaluation of Disaster Risk Management Programme of UNDP, Sri Lanka**

**June 2011**

## Abbreviations

ADPC	Asian Disaster Preparedness Centre, Thailand
AG	Auditor General
CBDPP	Community Based Disaster Preparedness Plans
CBDRM	Capacity Building in Disaster Risk Management
DDMC	District Disaster Management Centre
DM	Disaster Management
DMC	Disaster Management Centre
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRMP	Disaster Risk Management through partnerships (DRM-P) in Sri Lanka
EWSS	Strengthening Early warning system in Sri Lanka
IDNDR	International Decade for Natural Disaster Reduction
LAs	Local Authorities
MODM	Ministry of Disaster Management.
NCDM	National Council For Disaster Management
NDMCC	National Disaster Management Coordinating Committee.
NDRSC	National Disaster Relief Services Centre
PAEDF	Preparatory assistance for Establishing Disaster Management Framework and Disaster Management Centre in Sri Lanka
SLDMA	Sri Lanka disaster management act No. 13 of 2005.
SRNRTA	Sustainable Recovery of Natural Resources of Tsunami Affected Coastal Areas of Sri Lanka with People's Participation
SSORM	Strategic Support to "Operationalize the Road Map towards Safer Sri Lanka"
TRSFDF	Transitional Recovery Support to Flood Disaster in Southwest Sri Lanka
UNDP	United Nations Development programme

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## **Executive Summary**

UNDP has extended its fullest cooperation to the Government of Sri Lanka in the area of Disaster Risk Management (DRM) since 1997. UNDP – DRM programmes are aimed at assisting countries to enable communities to become resilient to natural hazards and related technological and environmental disasters so that economic, environmental, human and social losses can be reduced. The United Nations Development Programme (UNDP) has implemented several Disaster Risk Reduction projects through the Disaster Management Centre (DMC) in Sri Lanka from 2005 onwards. A Project Evaluation Team was entrusted to evaluate the efficiency, effectiveness, relevance, degree of change and sustainability of these projects and make recommendations for future programming.

### **The structure of outcome evaluation report**

The report consists of five main chapters: Introduction, Methodology, Programme output analysis, Findings, Lessons learned, Conclusion and Recommendations. It deals primarily with the seven projects implemented with the assistance of UNDP. The evaluation report has two main aims: feed back of the support provided to Sri Lanka and realign the focus to suit current needs.

### **Assessment methodology**

To collect the primary data the evaluation team interviewed key officials of the MODM, DMC and relevant agencies. During field visits, District Administrators, DDMCs, community leaders and relevant officials were interviewed.

### **UNDP assistance**

The Consultants noted that there was a large amount of assistance from INGOs/ governments /local NGOs for rehabilitation and reconstruction of infrastructure facilities in the post tsunami activities; but there was not a single agency that came forward to undertake the strengthening of the DMC. UNDP was able to respond quickly and appropriately to challenges and opportunities under UNDP - DRM policy. UNDP assistance has been extended to good governance, capacity building, disaster management early warning system, environment, and mainstreaming DM in Sri Lanka.

The interviews revealed that outcome of projects implemented in the last five years by the DMC was “very good”. Despite the confusing bureaucratic policies and procedures, politicized and centralized decision making and lack of willingness to engage in coordination, the projects have achieved commendable results. It was noted that while some projects were consistent with the road map – towards a safer Sri Lanka, others were not.

### **Relevance**

The relevance of projects was evaluated on the basis of how the project components fit into the UNDP’s priorities in Sri Lanka and how consistent they were to the project components with the Hyogo framework for action and Road map documents and how they reflect the national priorities and needs. Generally all seven projects were carefully designed to meet the immediate and urgent requirements of the DMC and other related DRR activities. Therefore relevance of all projects could be graded as “very good.” However some activities implemented by the DMC/UNDP may not have produced the best results immediately and some activities cannot be precisely measured or assessed. For instance training and awareness. Combined effort of UNDP/DMC/stakeholders and the government, produced good results on achieving overall project objectives. A key issue raised by the District Administrators was that they were not consulted prior to formulation of the projects and people’s immediate needs were not addressed adequately; Consultants observed that the interviews were not sufficiently independent to provide balance overviews. UNDP extended their support through capacity building of the vulnerable groups. The absence of disaster preparedness at community level was identified as a major obstacle. UNDP assistance was provided to draw up preparedness plans in five districts under the TRSFD project. Unfortunately these valuable documents have been discarded and new plans have been prepared.

### **Effectiveness**

UNDP/DMC has implemented a series of measures over a period of time leading towards disaster risk reduction. However this must follow a certain path as it were so that it reinforces and complemented the measures to follow later. Number of activities have been designed and implemented, eg. early warning systems, development of capacity of DMC, preparedness plans, training etc. However our observations and results of interviews reveal that little attempt has been made to maintain those activities.

The persons interviewed are satisfied with the programs implemented through the District Disaster Management Centers (DDMC) especially the awareness programs for identifications of early warning messages, evacuation routes and centres, existence of the danger and what can be done to prevent avoid or minimize the dangers. They are aware of the hazards, elements of risk in moving people from an area of risk to a safer location. As a matter of priority, DMC/UNDP has developed an information base (desinventar) and this could be used to design and implement counter disaster initiatives.

DMC must make a strategic choice as to where and to what extent it wishes to engage in disaster management because there are other government departments and technical agencies mandated on DM activities. Therefore, prioritization of initiatives is essential to their eventual success.

### **Efficiency**

The outcome of the project was carefully examined to find the efficiency of the project with the available data. Both positive and negative extremes of human behavior occur when implementing too many projects (nearly four projects have been implemented) within a very short duration. This important point had been taken into account on efficiency assessment. Officers were well aware that UNDP funds are channelled through DMC, but they were confused from which project funds were released. One key district officer said he was under the impression that entire funds were provided by UNDP to DMC for all operations including salaries. From top to bottom, DMC staff's knowledge on the different project activities was limited. Lack of knowledge of project objectives may lead to reduce efficiency

TRISFD project implemented from 2003 to 2008 was scheduled to complete in December 2005. The feedback report of the project does not show impressive results utilizing resources solely entrusted to the district administrators and executed by National Disaster Management Centre (NDMC).

### **Degree of Change**

Six months before the 2004 tsunami, the UN Intergovernmental Oceanographic Commission warned that the "Indian Ocean has a significant threat from both local and distant tsunamis" (Revkin, 2004) Yet little or no attention was paid to this tsunami risk as they were not considered to be a major hazard. These facts are highlighted to understand the situation prior to tsunami and how the UNDP intervened to change the prevailing situation. With the funds specified in the agreement, a work plan was carried out under the EWSS project in order to reduce the vulnerability to tsunamis and related hazards. EWSS project could be rated as excellent with regard to degree of change. However there was a clear need to further enhance ongoing disaster risk management capacity building initiatives. The community interviewed said they were trained for disaster response and local early warning systems are in place. Mock drills were also carried out by DDMC randomly.

CBDRM and PAEDF – Both projects were aimed at the development and implementation of Road Map for Disaster Risk Reduction. In terms of degree of change these two projects produced excellent results. Under these two projects Road Map - a ten year plan was formulated and implemented.

### **Sustainability**

Generally all the seven projects could be classified as "very good" with regard to sustainability; projects were designed to meet the immediate requirement where government funds were not enough or not available. It is necessary to continue these activities by DMC without interruption, with or without external funding, since project activities link with the main functions of the DMC. At present sustainability remain in the hands of the UNDP. All interviewees were of the opinion that continuation of this work needs external funding.

The infrastructure repaired and rebuilt under TRSFD project continue to be used by the communities as planned. The support and timely technical inputs provided by the CBDRM project to develop risk reduction culture in the country would be a long- term investment towards promoting disaster risk reduction. Climate change adaptation work initiated through the project is recognized at the national level. This project has served as one of the most successful and timely interventions of the UNDP. EOC established and strengthened through the project is functioning well at the national and district levels. Development of disaster risk profiles will be used to develop building guidelines.

## **Findings**

### **Key achievements.**

- UNDP provided the initial support towards the establishment of the Disaster Management Centre and related institutional arrangements. There was no institutional framework within the DMC to integrate risk reduction components in to the agenda.
- There was no coherent and comprehensive guiding document for disaster management in the county prior to 2005. Formulation and implementation of Road Map for disaster risk management was a remarkable achievement of the UNDP project. Further strategic support extended to operationalize the Road Map Towards Safer Sri Lanka
- Support to institutionalize Multi-hazard Early Warning system and strengthen the capacity for observation, detection, and prediction.
- DMC is now recognized as leader in responding to natural disasters and in adopting a more holistic approach to disaster risk reduction.
- Desinventar data base which includes the past records of disasters in Sri Lanka for the last 30 years was established and is being maintained.
- Disaster Risk faced by the community before the implementation of the project has been reduced to a certain degree as a result of the projects.

### **Missed Opportunities**

The best opportunities to strengthen the Research and Development were missed. Since most of the natural disasters are localized and occur due to human interference at local level, empowering Local Authorities for undertaking activities related to disaster risk reduction should have been considered. There are a large number of experts on DM available in Sri Lanka and their involvement would have upgraded the efficiency of DMC and DRR as well. It is not too late to appoint Technical Advisory Committees.

### **Allocation verses project outcomes**

A large sum of money had been allocated for the above seven projects by Foreign Governments and agencies through the UNDP to the DMC. In addition, funds were available through the national budget annually. Consultants observed the pressure to spend this money within a short period and visibly worked against making best use of the local capacities and not even the least possible amount of assistance trickled down to the deserving population. However it is not possible to conclude the observation on this matter due to lack of information.

### **Partnership strategy**

A number of public-private partnerships were also promoted through the project. In November 2007 The National Disaster Management Coordination Committee (NDMCC) a forum for government, civil society, UN agencies, academia, media and private sector institutions working on disaster management related issues was established.

## **Summary of Recommendations**

### **Programme management**

- The HFA-based Roadmap has been a strong contribution to DM in Sri Lanka. Implementing simple tracking tools that connect projects to the Roadmap and to the HFA indicators would help strengthen this support.
- Revisit the Roadmap in the light of Climate Change Adaptation interest and resources. Link the Roadmap to the country's development plan and develop an appropriate action plan with provision for monitoring and evaluation in line with HFA reporting;
- Immediate action should be taken to recruit the staff on a permanent basis. Constant transfer of staff would turn out to be a wasteful exercise in training.
- A thorough analysis of capacity development issues is required, especially in regard to sustaining national capacity for DRM as "staff turnover" is repeatedly seen as a problem. Sustaining the HR capacity of government institutions is a difficult issue that must be explored with a broad "systems-look" (not just training) at the development of government capacity.
- Ensure transparency in all actions – transparency should always be encouraged as a means of achieving successful outcomes.
- UNDP programme management staff may not be there for long; therefore, action to be initiated to transfer the activities handled by UNDP programme office to DMC gradually.
- Eradicate shortcomings with regard to Management of projects. (coordination, monitoring, time management etc.)
- Appointment of Technical Advisory Committees for each major disaster. (in terms of SLDMA)
- Build up a strategy (mechanism) to continue the project activities; well contributed for DRR, before closing of the projects.
- UNDP interventions are crucial because state funds are not available for some priority areas of DRR. Therefore Consultants recommend continuous support of UNDP for future programmes for DRR

### **Mainstreaming Disaster Management**

- The Strategic Environment Assessment for the Northern Province can be the basis for such assessments across the country, as a first-step towards integrating (mainstreaming) disaster risk reduction into environmental management and development;
- Integration of DRR into national development planning process by promoting and assisting the involvement of DMC in the national process and in the process working in close collaboration with the relevant ministries for mainstreaming of DM.
- Government funded disaster preparedness and mitigation measures are heavily tilted towards structural aspects, and undermine non structural elements such as the knowledge and capacities of local people, and the related livelihood production issues. Therefore future programmes of the UNDP has to be focused on non structural measures as well.

### **Involvement of local Authorities**

- Empowering Local Authorities for undertaking activities related to disaster risk reduction would have to be considered as the centre piece of the DRR strategy. Strengthening Local Authorities on DRR activities should be included in future projects.
- It is at LAs level that rescue, evacuation, and relief operations are launched and carried out. This local responsibility to be reinforced with Regulations under the Local Government Ordinance (Act), for devolution of basic services and functions to Local Government units and allocate funds for emergency operations.

### **Community based local level action**

- Interventions supported at community-level should combine eco-system conservation, livelihood enhancement and disaster risk reduction to maximize both benefits and sustainability of initiatives, giving concrete benefits even in the absence of hazard-event occurrence.
- While a thorough analysis could help guide the overall capacity development approach, there is an opportunity to pursue capacity development activities around Disaster Needs Assessments, including development of tailored assessment tools and Disaster Recovery



frameworks in anticipation of frequent small-scale disasters. This effort could help avoid wasting time and mistaken recovery priorities in the immediate aftermath of a disaster.

- Expanding the small-grant approach for community level DRR projects would further encourage community-level partnership activities, and could improve CBDRM delivery.
- Existing good practices and some lessons learned in various areas on community based efforts towards disaster preparedness should be documented and dispatched to wider audiences.
- DMC has to identify livelihood options that could enhance disaster risk management capabilities.

### **Special Areas in DRR**

- Natural disasters in Sri Lanka are mainly hydro meteorological and mostly on small and medium in scale. There has been a clear spatial distribution pattern of natural disasters, hence spatial planning should be recognized as the most effective tool in DRR efforts.
- Psychological trauma due to disasters is linked with the feeling of grief and loss. Identify ways and means of helping victims of disasters who require psychological support to overcome traumatic conditions.
- Community planning activity can often act as a catalyst for more fundamental change. Consultants urge involvement of community for project planning at initial stage.

### **Early warning System**

- Warnings need to be transmitted from a **national technical agency** through multiple receivers before they reach the vulnerable people. Any message that passes through many hands before reaching the ultimate target runs the risk of delay or distortion and requires a combination of technological and non technological solutions.
- Use of modern technology with trained and responsible manpower is essential for the operation of the warning system. Establishment of EOC in a permanent building with equipment and training human resources is recommended.

### **Partnership strategy**

- Strengthening the academic institutionalization for DRR through continued partnership with academia can be helpful and should have some lasting benefits.
- Given anticipated decline in resources, continue to focus on partnerships via small grants and other modalities to take advantage of the capacity of local partners including universities and community organizations to carry-out CBDRM activities.

### **Gender perspective**

- UNDP handbook on planning monitoring and evaluating for development results (page 171) states that: “Consistent with UNDP development efforts, UNDP evaluations are guided by the principles of gender equality, the rights-based approach and human development.....”These guidelines to be strictly followed in future programming.
- Disaster risk reduction has long remained a largely male- dominated affair, yet it is clear that the full and balanced participation of women and men make disaster risk reduction more effective. Gender balance should be recognized in future project planning, because the UN/ISRD secretariat is facilitating to build a global partnership for mainstreaming gender issues into the disaster risk reduction process.

### **Micro Financing**

- Reviewers recommend introduction of micro-finance system in disaster prone areas through state banks or any private banks willing to support. This has to be initiated by DMC with possible assistance of UNDP.

### **Awareness and Education**

- The community leaders interviewed were of the opinion that implementing this type of projects helps capacity building and keeping village level committees alive.
- More attention needs to raise awareness among school community. As schools are the best venue for sowing collective values, school teachers and students can serve as vehicles for building a culture of prevention.

### **Language barriers**

- As far as possible use local languages, use plain language. Jargon prevents people from engaging and is usually a smokescreen to hide incompetence, ignorance and arrogance. At least project document should be translated to local languages so that majority of officers responsible for implementing understand easily.

## **Significant Outcome of UNDP – DM programmes**

- On 12 Sept. 2007 a possible tsunami alert was issued internationally and in this instance Sri Lanka was able to evacuate the vulnerable coastal communities within 45 minutes. This was a significant improvement in national early warning dissemination and evacuation capacities.
- The effectiveness and efficiency of DMC was proved again in managing floods of 2007 and 2008 and preparing for possible cyclonic situation in 2009. In a very short period of time the DMC transformed into an organization that was able to independently manage emergency situations without international support.
- Installation of the first automated rain gauge system in landslide prone areas of the country demonstrated the possibilities of generating and disseminating early warning message in time
- The “Road Map towards Safer Sri Lanka” which was produced with the support of the UNDP constitutes the guiding framework document for overall disaster management programme of the country. Its holistic nature has been acclaimed even internationally.
- EWSS project has proved to be a successful project with a number of models and lessons learnt emerging. The project resulted in the development of a multi-hazard National Early Warning strategy, and has significantly strengthened capacity for early warning forecasting and dissemination in Sri Lanka. The results are tangible and will have a lasting impact
- UNDP worked with the government partners to catalogue all known disasters that had taken place in Sri Lanka over the past 30 years. UNDP provided technical support for developing and popularizing the inventory of past disasters – Desinventar.
- Significant level of capacity development of disaster management sector was achieved through projects and was able to assess the future needs of the country to develop a culture of safety.
- Partnership established with the Education Ministry to integrate disaster management in school curriculum, which ensure DRR in the education system.
- DMC efforts ensured that those affected by the disaster had basic minimum to protect their life, property, health and dignity and this would not have been possible without the generous support of the UNDP.
- EOC at national and district levels were established and strengthened and now DMC can reach the vulnerable communities of the country immediately and effectively to save the lives and property.
- Key partnership between the DMC and other stake holders were established or strengthened during project period.
- Prior to the project the DMC considered climate change adaptation as a subject with no direct relevance to disaster management and no resource allocations were made through the DMC and currently the climate change adaptation has been considered as a key priority area of the DMC.
- Landslide hazard profiles for 10 districts, National drought hazard profile, coastal hazard profile for 6 districts and flood hazard profile for 4 districts are available.

## **Conclusions in brief**

The lesson learned from the tsunami experience in 2004 December, prompted government to introduce a legal framework that would provide for initiating action to be prepared for any type of disastrous event. Much of the technology and expertise required to combat the threat of natural disaster is available. Given the will and the resources, the technology and the expertise can be used now to minimize the loss of life and reduce the destruction caused by such events. UNDP has a major role to play in this vital work and has formulated seven projects with different themes to achieve these objectives. There is no doubt about the complexity of the task of implementing seven projects within a short period of time.

Local-level activities are seen as the most effective for directly reducing risk for populations, and UNDP must encourage government and partners to increase support for these activities. Activities which combine risk reduction and environmental management with increases in livelihood opportunities and resilience are likely to be the most popular and sustainable, although care must be taken to ensure that this type of “mainstreaming” does not lose the risk reduction message, completely.

UNDP has provided a large amount of support for basic capacity-building and planning, as well as awareness-raising, which have served to strengthen DM in the country. At the same time, staff-turnover has undermined these efforts.

Natural disasters in Sri Lanka are mainly hydro meteorological and mostly on small and medium in scale. There has been a very clear spatial distribution pattern of natural disasters, hence spatial planning should be recognized as the most effective tool in DRR efforts.

Floods and droughts have been the most common disasters having a very clear spatial distribution pattern. Thus comprehensive spatial planning at all three levels (national, provincial and local) could provide sustainable and long lasting DRR solutions.

The work done by the women has dispelled the myth that grassroots women’s efforts benefit women only. In fact the women’s efforts clearly have helped respond to family and community needs. At the project formulation stage, all the seven projects had forgotten the role of women.

Recognize the Local Authorities as the key institution in disaster risk reduction at the local level. At present local government is totally neglected in the disaster management process. Since most of the disasters are rooted at local level and the wrong relationship of the human activities with the natural processes are the primary causes of such disasters it is essential to empower the local authority to handle the DRR at local level.

Formulation of corporate plan is not consistent with either Road map or the HYOGO framework for action. Any activities that deviate from Road Map or the HOYGO frame work will not serve the purpose and it will reduce the degree of relevance too.

The Integrated Strategic Environmental Assessments of the Northern Province would serve as the first-step towards an integrated approach.

# Chapter 1

## 1.1 Introduction

The United Nations Development Programme (UNDP) has implemented several Disaster Risk Reduction projects through Disaster management Centre (DMC) in Sri Lanka from 2007 onwards. Supporting national capacity development for poverty reduction and the attainment of the Millennium Development Goals lie at the very heart of the UNDP's mandate. A team of Consultants were entrusted to evaluate the efficiency, effectiveness, relevance, degree of change and sustainability of the projects and make recommendations for future programming.

Every possible attempt has been made to present an accurate outcome evaluation report by the consultants, but still one cannot rule out some shortcomings in attempting such a complex and difficult task spread over the period of five years and some assumptions are based on the perceptions expressed by the community and stakeholders on the project results.

In pursuance of the mandate given by the UNDP, the Project Evaluation Team (Consultants) defined the methodology to conduct the evaluation and presented to UNDP for their concurrence. It is our sincere hope that this evaluation will serve as a timely and important source on the outcome of the projects, observations and recommendations.

## 1.2 Background

Disasters undermine the development by contributing to persistence of poverty, Didler Cheripital, Secretary General of the international Federation of RC and RCS says, "Disasters are first and foremost a major threat to development, and especially to development of the poorest and most marginalized people in the world. *Disasters seek out the poor and ensure they stay poor*" – (source-World Disaster Report -2002)

However, vulnerability to disaster is determined not simply by lack of wealth, but by a complex range of physical, economic, political and social factors. Flawed development is exacerbating these factors and exposing more and more people to disaster. While population growth and rapid unplanned urbanization force poorer groups to live in more hazardous areas, even the better off are at risk.

Economic growth does not necessarily imply a reduction in risk, particularly in the lower income groups. Economic pressure can bring environmental degradation; deforestation in particular it has disrupted watershed, leading to more severe droughts as well as floods. Social and economic changes can undermine traditional extended family structures, once an important form of support during crises.

The effectiveness of community and government arrangements for disaster preparedness and mitigation are also critically important. Such arrangements include the extent of early warning systems against flood, drought, cyclone, tsunami and flood protection structures, evacuation routes and shelters, stockpiles of relief materials, well-trained and coordination of disaster response teams, and disaster aware population.

Clearly disasters are a major threat to the economy and to the society. The old view of disasters as temporary interruption of the path of social and economic progress, to be dealt with through humanitarian relief, is no longer credible. Nor can a simple line be drawn between reducing poverty and reducing disasters. The problem is much deeper; it stems from fundamental flaws in the development process itself. Sustainable development is society's investment for the future. That investment will be squandered if it is not protected adequately against the risk of disasters.

Since 1970's, the relationship between human actions and disasters has been increasingly well documented and argued. By the mid 1990's the significance of social, political and economic vulnerability to disasters was widely accepted within academic circles. But this new thinking has so far proved ineffective in breaking down barriers between disasters and development at operational level. Most mitigation efforts still address the visible signs of vulnerability, such as poor housing and

unsafe locations: because these are seen as physical or hazard related problems, they are addressed mainly through technical solutions, such as embankments against flood or improved construction against landslides. Meanwhile, the underlying factors that compel people to live in insecure conditions remain unaddressed.

### **1.3 UN intervention**

There is an inherent problem in trying to prove that mitigation and preparedness pay. Former United Nations (UN) Secretary General, Kofi Annan puts succinctly *“while the costs of prevention have to be paid in the present, its benefits lie in a distant future. Moreover the benefits are not tangible; they are the disasters that did not happen”*.

During the 1980's this message seemed to be getting through and with the establishment of the international Decade for natural Disaster Reduction (IDNDR) in 1990, the member states of the UN committed themselves to reducing impact of natural disasters through “concerted international action”. Disaster mitigation and preparedness appeared to be firmly on the aid agenda and IDNDR-international Strategy for Disasters Reduction was established based on more realistic expectation.

There were signs of interest elsewhere as well. Programmes relating to poverty alleviation were beginning to address vulnerability to natural hazards. The World Bank and UN Development Programme (UNDP) were actively addressing hazard and risk.

They have (UNDP, WB) created special units to promote greater awareness among their own technical and geographical department and are supporting research, discussion and piloting of new approaches to vulnerability reduction. The World Bank supported by IFRC and UNDP has established the prevention consortium, global coalition of governments, international organizations, academic institutions, the private sector and civil society organizations aimed at reducing disasters impacts in developing countries.

### **1.4 Introduction of Disaster Management in Sri Lanka**

A committee of officials appointed by the cabinet sub-committee on natural disasters in 1991 identified the following forms of disasters as significant to Sri Lanka.

- a. Floods and Cyclones
- b. Landslides
- c. Epidemics and Industrial accidents

The Technical Advisory Groups (TAGS) appointed for the four forms of disasters were suggested to develop sub plans with the cost estimates for the institutional frame work for national disaster preparedness and mitigation.(annex VI)

However the proposals of the cabinet subcommittee on natural Disasters did not materialize. Meanwhile governments around the world have committed to take action to reduce the disaster risk because risk reduction needs to go to the heart of the development process. The challenges are well beyond the capacity of conventional disaster managers alone. It requires the cooperation between the national and local government as well as the nongovernmental organizations.

The past heritage and history of the country reflect the harmony with which the ancient civilization flourished with nature and led to a peaceful life. However this harmony was disturbed with the clearance of vast areas of virgin forest especially in the hill slopes to be replaced with plantation crops such as tea, coffee and rubber in the first half of the 19<sup>th</sup> century. The land degradation resulting from this large scale land clearance and the accompanied disrupted socio economic structure coupled with the increasing population, exposed the country to adverse effects of natural disasters such as landslides, floods and droughts. The increasing environmental degradation has continued to have severe impacts on human life and economic infrastructure.

Asia is the continent most frequently affected by disasters. In 2009 total number of people reported affected in the world was 142 M of which 111 M. was in Asia which was nearly 79%. Apart from the

occurrence of most forms of natural disasters, current trends in industrialization, level of economic development rapid population growth pattern of human settlement and environmental degradation increase the vulnerability to disasters and economic developments can be wiped out or set back by disasters.

Government of Sri Lanka laid the foundation for disaster management in June 1996 by establishing the National Disaster Management Centre (NDMC) under the Ministry of Health Highways and Social Services. Subsequently a separate Ministry was established for social services and NDMC came under the purview of the Ministry of Social Services.

### **1.5 UNDP Support for Disaster Management in Sri Lanka**

In 1988 the UNDP provided technical assistance to execute an Emergency Reconstruction and Rehabilitation Project (ERRP) to promote national reconciliation and development through rehabilitation of displaced persons, the reconstruction and rehabilitation of damaged infrastructure and restoration of normalcy in areas affected by ethnic violence with a total budgetary provision of US \$ 3.2 Million. The launching of a Landslide Hazard Mapping Project in 1990 with the assistance executed by UNCHS was a major initiative. The project already enhanced the institutional capacity in the area of landslide studies by the establishment and strengthening the capacity of Landslide Services and Studies Division of National Building Research Organization (NBRO)

Subsequently in 1997 UNDP came forward to support the Government of Sri Lanka providing technical assistance worth of US\$ 250,000/- to manage disasters in their totality, under the direction of a centralized agency (NDMC)

The underlying strategy of this UNDP project was to support the establishment and strengthening of a coordination mechanism at the national level which integrates the different stakeholders responsible for disaster related matters at national, provincial district and the lowest level of the administrative structure. International experts were hired to advise and assist in the formulation of an operational strategy of NDMC, including defining the role and function of DMC and its operational relationship with other agencies.

Contribution of the UNDP was utilized to recruit international and national personnel and to issue subcontracts, to procure necessary system support, and to organize training programmes, study tours and workshops.

### **1.6 Turning Point**

The devastation caused by the Indian Ocean tsunami made the Sri Lanka government to introduce the necessary legal framework. In May 2005 the Sri Lanka Disaster Management Act was passed in Parliament. A board called “National Council for the Disaster Management” was set up under Section 2 (1) of the said Act. That national council was comprised of The President (Chairman), Prime Minister, Leader of the Opposition, 20 Ministers, Chief Ministers of Provincial Councils and 05 nominated members of Parliament.

### **Establishment of a Separate Ministry for Disaster Management**

Disaster Management is a devolved subject under the provisions of the 13<sup>th</sup> amendment of the Constitution. However, DM has now been vested with the Central Government under the provisions of the Sri Lanka Disaster Management Act no. 13 of 2005 (SLDMA). The apex body for disaster management is the National Council for Disaster Management (NCDM). Disaster Management Centre established under the aforesaid act functions under the NCDM. For administrative purposes DMC comes under the Ministry of Disaster Management. Disaster Management Centre is considered as the main coordination arm of the government for disaster management in Sri Lanka.

### **Responsibility of project implementation**

DMC is governed by the following Laws and guidelines.

- a) Sri Lanka Disaster Management Act No. 13 of 2005.
- b) Corporate Plan of DMC.
- c) Road Map for Disaster Risk Management.

- d) Hyogo framework for action.
- e) Sri Lanka National Disaster Management Plan'
- f) National Disaster Management Policy.

### **1.3 Overall Objectives of the UNDP – Disaster Management Programmes.**

- a. To enhance disaster risk management capacities at the local , sub national and national level
- b. To mainstream disaster risk reduction into national development process.
- c. To ensure sustainability of the disaster management centre (DMC) and to improve the outreach of the programs designed and implemented by the DMC
- d. To implement the vision of a safer Sri Lanka as envisioned in the Road Map
- e. Providing facilities to strengthen the DMC
- f. Institutionalize an early warning system and strengthen capacities for observation, detection and prediction
- g. General public education and awareness
- h. Build and sustain community based volunteers groups for providing early warning messages
- i. Capacity and systems for effective preparedness mitigation and response to natural and manmade disaster development at national and sub national level
- j. Building community level programmes and plans for preparedness and mitigation with the participation of the community
- k. Establishment of national emergency operation centre
- l. Development of risk profiles for drought flood, landslides and coastal hazards
- m. Strengthen partnerships with government and nongovernmental organization and stakeholders
- n. National Disaster preparedness and response plan for national, district, divisional and village level
- o. Support for development of database (Desinventar)
- p. Development of website for disaster management

Project implementing role is played by the DMC as the primarily responsible party for project management, administration and delivery. A UNDP Project Management Unit is established at the DMC which is supported by the UNDP.

As the head of the executing agency, Secretary to the Ministry of Disaster Management (MODM) is responsible for providing overall guidance, and the evaluation of the progress of the project. Secretary MODM chairs the National Project Board of the UNDP projects. The project board consists of secretary MODM (chairman) UNDP officials DG/DMC representatives from relevant agencies. The project director is Director General of DMC. The steering committee monitors and evaluates the progress of the project.

## Chapter 2

### 2.1 Evaluation Methodology

Structured questionnaire data collection techniques were adopted to collect the primary data. One questionnaire had been developed to collect data from implementing agencies and stake holders of the projects and the second questionnaire was developed to collect the data from direct beneficiaries. These questionnaire surveys produce quantitative data to evaluate the outcome of projects. Apart From questionnaire survey, direct observation was carried out to ascertain the degree of attainment of expected objectives.

In order to evaluate project in terms of efficiency, effectiveness, relevance, degree of change, and sustainability a survey was conducted with the following personnel.

- Project implementing partners –  
The project team members (Reviewers) interviewed includes the Secretary to the MODM, Project Director DG/DMC, Director of DMC, DMC, District Coordinators Kalutara, Galle, Matara, Hambantota, Ampara, Batticaloa, and Trincomalee. Head LSSD/NBRO, Acting Director NDRSC, Ex Director NDRSC, Kalutara NBRO site Office. UNDP Project Coordinator.
- Stakeholders –  
Secretary, Ministry of Social Welfare, DG, Meteorological Dept., Ex Director – NCDM, District Administrators – Additional GA, Kalutara, Galle, Matara, Hambantota. Officers from – District Secretariat, Ampara, Batticaloa, Urban Development Authority, Central Environment Authority Agriculture Dept, Coast Conservation Dept. Sri Lanka Red Cross.
- The community –  
VDMC members in Kalutara, Galle, Matara, Hambantota, Ampara, Batticaloa, Trincomalee. (Direct beneficiaries)

Data was gathered regarding the following major components.

- General information (project locations, type and size etc...)
- Technology (level of technical innovation)
- Project management (contracting strategy learn integration)
- Cost (estimated and actual costs, contingency)
- Scheduled (planned and actual by phase, changes)
- Operational performance (planned and actual)
- Project definition (field specific factors, project execution planning)
- Value improving practices

The project evaluation system provides project –specific measures of cost, impact and operational performance outcomes. The project specific comparison is important for understanding and quantifying the cost implementation and operational performance.

### 2.2 Criteria of the final evaluation

- a. Impact assessment of the programmes. (degree of achieving the goals)
- b. Assess the degree of **efficiency** of the project
- c. **Effectiveness** of the project. actual; existing in fact rather than officially or theoretically.
- d. Assess the **relevance** of the project.
- e. **Sustainability** of the project. Plans and provision to continue/sustain activities.
- f. **Degree of change** – positive changes brought by programmes



- g. Identify the strengths & weaknesses in the context of project –intervention strategies/methodologies
- h. Lessons learnt through the project
- i. Study and recommend the balance programmes at National and sub national levels
- j. Recommendations for future programming areas and how to improve/ reorient the UNDP programme to meet the national needs and priorities.

## 2. 2.3 Degree of achievements

Grade	Level of achievements
1	more than 75%
2	between 60%-74%
3	between 45%-59%
4	Between 35%-44%
5	Less than 34%

## Grading criteria

1	Strongly agreed/excellent /well aware
2	agreed /very good/aware
3	moderately agreed /Good/little knowledge
4	Average/awareness very low /not agreed
5	Poor /strongly disagree/ know nothing

## 2.4 Impact assessment assumptions

Relevance	<ul style="list-style-type: none"> <li>- Entire project components relevant to national needs of priorities.</li> <li>- The programme components fit in UNDP's programmatic priorities in Sri Lanka</li> <li>- Community involvement in CBDRM is good.</li> <li>- Project activities are appreciated by the community and stakeholders</li> <li>- UNDP stimulate the government efforts to streamline the DM activities</li> </ul>
Effectiveness	<ul style="list-style-type: none"> <li>- Vulnerable communities are reached quickly and efficiently when disaster strikes.</li> <li>- Project objects were completed effectively</li> <li>- Project activities have strengthened the DRM practices.</li> </ul>
Efficiency	<ul style="list-style-type: none"> <li>- The target groups are selected affectively</li> <li>- Resources have been utilized efficiently</li> <li>- Quality of technical assistance up to the expected level.</li> <li>- all the projects well contributed to mainstreaming the DM in SL</li> <li>- UNDP assistance have been utilized for recovery activities efficiently</li> </ul>
Degree of change	<ul style="list-style-type: none"> <li>- Ability to respond to disasters successfully</li> <li>- Paradigm shift (change of perception)</li> <li>- Response to early warning</li> <li>- Data collected and disseminated.</li> <li>- Training on DM</li> <li>- Individual development in intellectual, moral, and social terms</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>- Community based DM volunteers groups formed</li> </ul>

- and trained
- Local level capacities are upgraded and resources available to cope with disasters
- The road map identified the national priorities and implemented without interruption.
- Early Warning System/ necessary instruments and equipments are in place.
- Budgetary allocation from National Budget for DRR

## **2.5 Collection of data through Questionnaires.**

To identify the strength and weakness of project interventions using above criteria two types of questionnaires were developed one for officials /stakeholders and another for community. (Questionnaire appear in annex ii) The draft questionnaire submitted to UNDP for their information and observation. The Questionnaires consists of both close ended and open ended questions. Questionnaires survey produced quantitative data for the assessment.

The credibility of answers of the interviewee was assessed and ranked. The ranking has been used to assess the impact of project and to rating the findings.

## **2.6 The evaluation process.**

- a. Submission of inception report
- b. Detail study of project proposals, existing records, progress reports monitoring reports, other relevant reports and publications
- c. Collection of secondary data from UNDP DMC. MODM, relevant district/divisional secretaries and other relevant institutions.
- d. Study of Ten year plan – towards safe Sri Lanka (Road Map) and other relevant documents.
- e. HYOGO Frameworks ( who is responsible)
- f. A evaluation criteria developed for evaluations.
- g. Based on this primary/secondary data samples size and sample method will be decided
- h. Questionnaires will be developed with the intention to understand the opinion of stake holders and community (beneficiaries)
- I Field survey and collection of primary data.
- i. Data analysis
- j. Report writing
- k. Presentation of draft report
- l. Consensus and inputs on the draft report.
- m. Power point presentation on the salient features of the evaluation.
- n. Submission of Final report

## Chapter 3

### Programme output Analysis

#### 3.1 What existed prior to UNDP – DRM Programmes

Our country has been the cradle of one of the most ancient civilizations of the world. Much before the advent of the present industrial civilization a vibrant community lived in perfect harmony with nature, practiced and developed agriculture and had planned urban settlements with flourishing centers of trade and commerce. The people of the country had to cope with disasters caused by vagaries of nature. The challenges faced by local communities led them to develop their own mechanisms to reduce impact of such events within limitations of their capabilities and human resources. This is how the country has survived the crippling, droughts, devastating floods, cyclones and landslides. The rich storehouse of knowledge and skills available with the local communities is our proud inheritance of the common intellectual property resource. Sadly this resource and value system built around it has gone into disuse and the traditional technology is getting obliterated under the impact of modern science and education. Availability of such time tested knowledge and skills with local communities are our best assets against the onslaught of natural disasters.

However, there has not been very much reduction in what might be called the traditional disasters threat. Most of the old problems remain as they were. Natural phenomena such as floods, cyclones, coastal erosion, landslides, droughts till persist.

New disaster threats have developed particularly since World War II. New threats have come from hazardous materials, atomic and nuclear sources, garbage wastes, and change of weather pattern due to climatic changes, industrial accidents. It can be said that the new disaster threats contain some unwelcome characteristics, in that they may have extremely far reaching effects and at the same time are difficult to counter.

It has been pointed out that most of the world's worst natural disasters tend to occur between the tropic of Cancer and the tropic of Capricorn and that coincidentally, this is the area which contains the poorer countries (including Sri Lanka) – Source – Disasters and Development – by Frederick. C. Cuny. The major significance of this is, of course that such countries find themselves facing repeated setbacks to progress. Some countries seem destined to remain within the developing category primarily because of the severity and magnitude of their disasters. Therefore disaster can be a strong aggravating factor in the differences between wealthy nations and poor nations.

#### 3.2 The approach.

The evaluation report represents the culmination of over five years of work by UNDP. It examines the success and failures as well as constraints of work carried out by DMC with the UNDP assistance. Sources of this report are listed in bibliography in annex ii.

This evaluation report presents work by UNDP/DMC. It examines the successes and failures as well as constraints of the work carried out by DMC with the UNDP assistance. The Consultants have adopted the following approach.

- Analysis of primary data, this includes baseline data that incorporates the perspectives of the various personnel and the evaluation team.
- Primary data sources; meeting with stakeholders, interview with officials and Community especially direct observations.
- Review and triangulation (process of comparing information across a variety of sources in order to validate that information between documents or data) of secondary data, project proposals, terminal report, progress reports, progress review minutes of the meetings of project board and NDMCC.

Special attention was given on consistency of the projects and Road Map / HYOGO frame work for action.

### **Seven thematic areas of the Road Map**

- a) Policy, institutional mandates and institutional development.
- b) Hazard, vulnerability and risk assessment.
- c) Multi-hazard early warning systems
- d) Preparedness and response plans
- e) Mitigation and integration of disaster risk reduction in to development planning.
- f) Community based disaster risk management.
- g) Public awareness, education and training.

The Volume II of Road Map contains 107 detailed proposals that aim to provide development partners with more information on each activity listed under the seven thematic areas in vol. I.

Hyogo framework for action - 2005 – 2015.

Priorities for action.

- a) Make Disaster Risk Reduction a priority
- b) Know the Risks and Take Action
- c) Build Understanding and Awareness
- d) Reduce Risk
- e) Be Prepared and Ready to Act.

### **3.3 Limitations and constraints**

- Selection of interviewees depended on the officers present at the time of interview.
- Findings are indicative rather than conclusive. Because assessment of project requires longitudinal data (primary and secondary) and this is not available.
- District officials were not aware of from which project funds were released for district level activities.
- Not only district level but also officers attached to the DMC were not aware of the details of projects.
- Time allocation for outcome evaluation was short and New Year and Wesak holidays impeded the progress of the evaluation.
- Objectives of some projects mainly focused on capacity building, therefore outcomes are invisible.
- Field survey was limited to selected areas due to time constraints.
- Some projects were implemented in districts far away from Colombo. Therefore practical difficulties encountered ascertaining actual ground reality of project results.
- Most of the officers who were responsible for implementation of project activities had either retired/transferred or resigned from the organization. This severely affected the ascertaining of outcomes and collecting information.
- The armed conflict prior to 2009 restricted the benefits of the projects to the North and East.

### **3.4 Concise description of each Project (Seven) and Activities of the programme**

UNDP Sri Lanka has implemented several projects related to strengthen DRM in Sri Lanka. The brief details and objectives of key DRM Projects implemented by UNDP since 2003 are as follows:

#### **Project 01 -**

***2003-2008: Transitional Recovery Support to Flood Disaster in Southwest Sri Lanka (TRSFD)***

Budget = US\$ 1,850,962

funded by BCPR and SIDA.

Main partners: National Disaster Management Centre & National Disaster Relief Services Centre

#### **Main Objectives:**

- Reduce vulnerability of communities living in flood and landslide prone areas of Kalutara, Galle, Matara and Hambantota districts.
- Build the capacity of government officials to deal with these hazards in a comprehensive way.

#### **Project Activities**

- To provide assistance to reconstruct the damaged infrastructure facilities in affected areas.
- To develop the capacity of National Disaster Management Centre (NDMC)

- To provide opportunities for establishing and strengthening DM coordination mechanisms at national and district level to respond to emergencies.
- To provide the assistance to rebuild life lines of the social fabric on priority basis who are worst affected due to flood.

### **Project 02 -**

#### **2006-2008 Capacity Building in Disaster Risk Management (CBDRM)**

Budget=\$ 1,176,470

Funded by government of France.

Main partner: Disaster Management Centre

#### **Main Objectives**

- To enhance disaster risk management capacities at local, intermediate and national levels
- To mainstream disaster risk reduction in the development processes.
- **Key Activities**
- Institutional strengthening - To implement DRM Framework/Roadmap developed by DMC for “safer Sri Lanka”.
- Provisions of Physical (Hardware and software) and human resource to establish National Emergency Operation Room at DMC and provincial EOC.
- Build capacity of Disaster Reduction Unit at UNDP Sri Lanka Office.
- To develop disaster preparedness and response plans for National Ministries, Departments and authorities.
- To develop Multi Hazards Community contingency Plans at Villages/GN levels
- To Carryout and develop Capacity Building of DM teams at various levels.
- To integrate hazard mapping into development process at the local levels.
- Training and awareness creations – To promote partnership with academic and Research institutions and private sector for engaging in DRM. (R & D)
- To carryout awareness campaign on Disaster Mitigation and preparedness for all stakeholders, professional institutions, school and community.

### **Project no. 03**

#### **2005-2008: Preparatory assistance for Establishing Disaster Management Framework and Disaster Management Centre in Sri Lanka ( PAEDF)**

Budget=\$ 847210

funded by SIDA

Partner : Disaster Management Centre.

#### **Main objectives**

- To support the DMC in the development of a Road Map for risk reduction in Sri Lanka
- Provide initial capacity development support to the DMC to assist in establishing and institutionalizing the centre, implemented through:
  - o Sector –specific, national and /or regional expertise developed covering disaster preparedness planning and /or mitigation of risks and vulnerabilities
  - o Establishing disaster management framework at intermediate provincial, district and local levels.
- Support implementation of Disaster Management Framework at intermediate and local levels. (Provincial, districts and local levels)

#### **Key Activities**

- Technical support (Consultancy) for the establishment and functioning of the DMC.
- Support to DMC to develop a DRM Road Map.
- Training and Capacity building for staff of the Disaster management Centre
- Support for development of ‘initial’ communication material for DMC.
- Assistance with initial stake holder’s workshops, consultation meetings and coordination of donor and international agencies.
- Training/capacity building of intermediate level staff and volunteers.
- Provide technical assistance in the preparation of Disaster preparedness and response plan at intermediate and GN levels

- Provide physical and technical assistance in establishing operation centers and websites at intermediate level.
- Technical assistance on appropriate disaster resistant construction technologies from mason and engineers.

#### **Project 04**

***Jan 2009 – April 2009 Disaster Risk Management through partnerships (DRM-P) in Sri Lanka(DRMP)***

Budget =US\$ 699035

Funded by ISDR & IOC

Partner: Minister of Disaster management and human rights

#### **Main Objectives**

- Ensure equitable access to improved quality services and economic infrastructure to vulnerable populations in disadvantaged areas
- **Key Activities**
- Key stake holders to participate at national and provincial risk reduction forums
- Support most vulnerable community centres, Health centres and Schools in Uva and eastern provinces to draft infrastructure development plans with disaster risk reduction mainstreamed.
- Provide materials to DMC for community level training and advocacy activities.

#### **Project No.05**

***2005-2007 Strengthening Early warning system in Sri Lanka (EWSS)***

Budget US\$ 125,000

Funded by ISDR.

main partner Disaster Management Centre, implemented primarily in the landslide prone areas of Ratnapura district

#### **Objectives**

- Establish a pilot level landslide early warning system in most vulnerable areas of Sri Lanka.
- Institutionalize EWS (national, Intermediate and local) and strengthen capacities for observation and prediction
- Utilizing existing IG command emergency communication systems for warning and dissemination.
- General public awareness.
- Build and sustain community-based volunteer groups for providing early warning messages
- **Key activities.**
- Establishment of community based flood level monitoring network along vulnerable river basins
- Establishment of a pilot, integrated model for real-time land slide monitoring based on real-time precipitation measurements.
- Strengthening of capacity of institutions involved in early warning systems to improve amongst others forecast for multi hazards and ensure appropriate actions to avoid their adverse impact.
- Strengthening dissemination mechanism of early warning to communities.
- Development guideline s for evacuation.
- Establishment of local warning systems such as sirens and loudspeakers.
- Mock drills.

#### **Project 06 –**

***2006-2008: Sustainable Recovery of Natural Resources of Tsunami Affected Coastal Areas of Sri Lanka with People's Participation (SRNRTA)***

- Budget US \$190,476
- Funded by Government of Korea
- Partner: DMC and implemented in Hambantota, Matara, Ampara, Baticaloa, Trincomalee districts
- **Main Objectives :**

- Enhance the productivity and long-term protection of ecosystems while improving the quality of life of the communities through community participation in environmental management

**Key activities**

- Development of environment plans and implemented with the participation of the community
- Ecosystems are managed by people affected by the tsunami whose livelihoods depend on the sustainability of ecosystem.
- Raised awareness amongst selected communities and the district committee on the linkages between environment and disaster risk reduction

**Project 07 (an ongoing project)**

**2008-2012 Strategic Support to “Operationalize the Road Map Towards Safer Sri Lanka” (SSORM)**

Budget \$ 2,100,000

Funded by BCPR – UNDP

Partner: Ministry of Disaster Management and Human Rights /Disaster Management Centre

**Main Objective.**

- Support the DMC and other relevant stakeholder to implement the Road Map proposals through building their capacities and creating an enabling environment.
- **Key activities.**
- Development of Hazard, Vulnerability and Risk Report for Sri Lanka.
- Establishment of tsunami and multi-hazard warning systems at district level.
- Sustainable Disaster Risk reduction approaches mainstreamed into Development Planning.
- Promotion of climate risk management at the community level.
- Promotion of DRR as a subject of study in research institutions and schools.
- Support Ministry of Disaster Management in project implementation and management

**3.5 Analysis of Each project**

Survey shows that the growing expectations of the people are speedy action on capacity building not only of the officials but also of the community as well. Survey indicates that district level officers felt that all the disaster management activities including DMC operational expenditure are met by UNDP. The interviewees revealed that outcome of projects implemented in the last five years by DMC was “very Good”. One of the most frequently raised questions by the respondents had to do with the “promises” of the district officers on capacity building, procurement of essential equipments for disaster response, training on community based disaster management. First aid tool kits, sirens, sign boards for evacuation routes, storage facilities to keep the equipment for village committees and conducting programmes to sustain their knowledge on DRR.

It was emphasized by the stakeholders that before a project is designed and finalized, consultation of targeted population would be extremely helpful.

The consultants noted the unprecedented assistance from INGOs/governments /local NGOs for rehabilitation and reconstruction of infrastructure facilities in post tsunami activities. To our knowledge there was not a single agency that came forward to undertake strengthening the DMC and mainstreaming of disaster management in the country. UNDP has focused their attention carefully and assistance has been extended to governance, capacity building disaster management early warning, environment, and mainstreaming DM in Sri Lanka

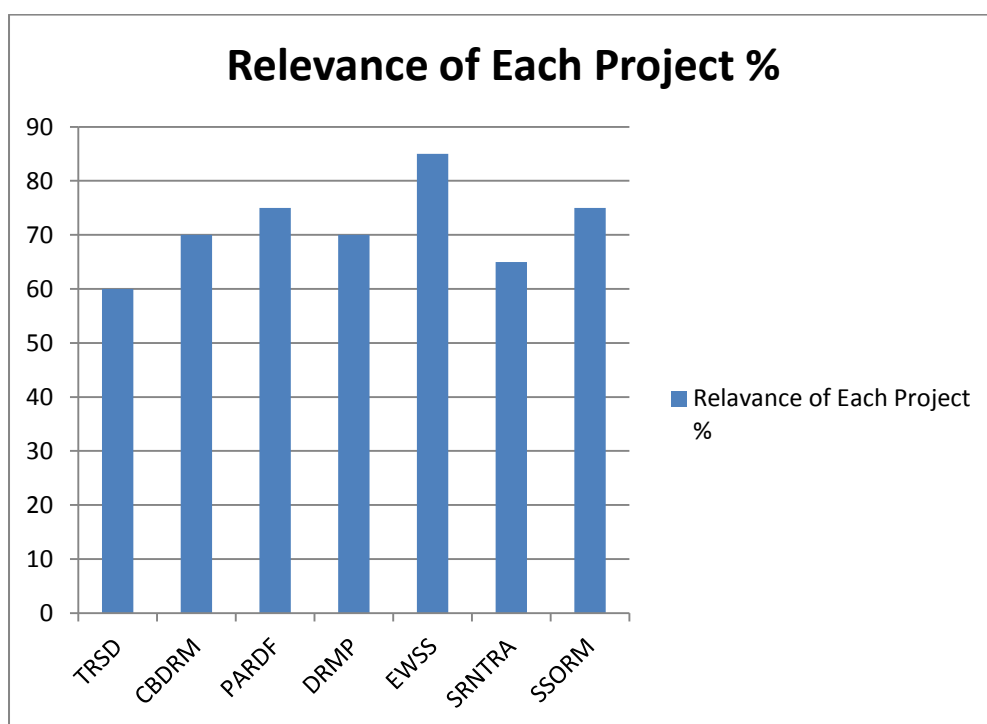
Despite the confusion in official policies and procedures, politicized and centralized decision making and lack of willingness to engage in coordination, the projects have achieved commendable progress.

The Consultants unanimously agreed that all seven projects are consistent with the road map – towards a safer Sri Lanka. Therefore, the degree of achievement of all projects is “very good”.

### 3.6 Relevance.

Relevance of projects was evaluated on the basis of how the programme components fit into UNDP's priorities in Sri Lanka and how consistent the programme components were with the framework documents (CCA/UNDAF national strategic document) and how they reflect the national priorities and needs.

Generally all seven projects have been carefully designed to meet the immediate requirements of the DMC and other related DRR activities. Therefore relevance of all projects could be graded as "very good." However some activities implemented by DMC/UNDP may not produce best results immediately and some activities cannot be precisely measured or assessed, for example, training and awareness. Combined effort of UNDP/DMC/stakeholders and the government, produced best results on achieving overall project objectives. Available information suggests that relevance level of objectives is very good. A key issue raised by the District Administrators was that they were not consulted prior to formation of the projects and people's immediate needs were not included adequately in the projects with regard to disaster preparedness. Consultants observed that interviewees were not sufficiently independent to provide balance overviews.



**Figure - 2.**

#### **TRSD project – Transitional recovery support of Sri Lanka, flood in 2003.**

In the year 2003, certain areas in the South and South Western sector of Sri Lanka were severely affected by the floods in the river basins of Nilawala, Gin ganga and Kalu ganga causing heavy damage to minor irrigation works and other infrastructure facilities in the transport and health sectors. Government of Sri Lanka called for assistance from the UNDP and other development agencies for rehabilitation. The UNDP extended their support to implement this project through National Disaster Management Centre (NDMC) which was under the Ministry of Social Services. NDMC was renamed subsequently due to change of ministries as National Disaster Relief Services Centre (NDRSC). The records maintained at the NDRSC are not providing adequate information for evaluation. We observed that the change of ministries and higher officials frequently was the cause for the lapses. With the available documents and information provided by former Director of the NDRSC we were able to evaluate the outcome of the project.

We are conscious of the fact that one organization or community alone cannot bear the burden of disaster preparedness and that support of other agencies for these activities is important. UNDP



extended their support through building capacity of the targeted community. Absence of disaster preparedness at community level was identified as a major obstacle. UNDP assistance was provided to draw up preparedness plans in five districts. Apart from these activities on the request of the government UNDP provided assistance for rehabilitation of damaged infrastructure. These were some of the prioritized programmes of the government in 2003; Government was compelled to call for assistance due to unavailability of government funds. These facts may have lead to call for UNDP assistance. Considering available records, level of relevance is determined as “very good”.

### **CBDRM project**

CBDRM project mainly focus on capacity building of Disaster management centre and UNDP country team on Disaster Risk management. Establishment of provincial EOC, vulnerability mapping, mainstreaming disasters risk management into development process were the other areas. Provision for hardware, software support to establish provincial emergency operation centres had been utilized in the best possible manner.

The UN Volunteers programme supported project implementation by providing UN volunteers for district and national level programs. Most of the district officials interviewed for the evaluation were of the view that most project activities undertaken by DMC did not provide expected level of achievement because benefits of UNDP funds do not trickle down to the direct beneficiaries. However, project objectives are fitted well to national requirements. Prior to 2005, sufficient funds were not available from the national budget. Without the above UNDP support, DMC would not have been able to handle DRR activities. So the relevance level is determined as “very good” and this conclusion was arrived with the available documents and primary data.

### **PAEDF Project**

The terminal report of the project reveals that the project provided the critical initial support towards the establishment of the disaster management centre. Under the provisions of the Sri Lanka Disaster Management Act No 13 of 2005; DMC has been identified as apex institution to coordinate all the disaster management related activities in the country. Basically DMC is the operational arm of the national council for disaster management. The project provided technical and administrative assistance to training, education, preparedness planning emergency operation management and risk mitigation and technology development. DG-DMC was able to extract the maximum benefits out of the project. According to the views expressed by DG and directors of DMC activities of the project relevance to DMC mandate.

Considering the available data, and the observation made by the consultant, relevance of the project can be graded as “very good”. Most of the officers interviewed were of the view that this project delivered good results. Establishment of Disaster Management Centre with knowhow and equipment itself is a great achievement

### **DRMP project**

Disaster Risk management through partnerships – development DMC corporate plan, national emergency operational plan, publication of newsletters, redesigning of the DMC website , flood management study, development of cascade based drought risk reduction module support researchers to undertake research relates to DRR, DRR through best land use practices, building guidelines, develop information, education and communication materials for awareness creation etc have been completed according to the progress reports. Consultants studied the project proposal and progress reports and verified through interviews and found most of project activities have been completed. DMC officials confirm those activities implemented through DMC are completed to the maximum possible.

Project activities have been designed to trickle down the benefits of the UNDP assistance to the vulnerable groups. This is one of the priority areas of the national government in order to reduce the vulnerability and strengthen the capacity of the community. A community so equipped and empowered would cope with disasters more confidently and enhance the quality and effectiveness of outside assistance and efficient use of scarce resources. However, the formulation of corporate plan is not consistent with either the Road map or the HYOGO framework for action. Any activities that

deviate from the Road Map or the HOYGO frame work will not serve the purpose and it reduces the degree of relevance too.

Considering the facts available and answers received from interviewees the consultant decided the degree of relevance of the project is “very good” and percentage indicates as 70%. This is an ongoing project of which some activities are to be completed in the near future. Therefore consultants could not come to a consensus giving higher degree of relevance.

### **EWSS Project**

Early warning systems in Sri Lanka- The project focused on a very important area of disaster risk reduction, namely strengthening the capacity of the institutions involved in early warning systems and to understand and effectively act on tsunami early warnings, mapping out the selected vulnerable locations along the coast and establish signboards and evacuation paths, community based flood and landslide monitoring system and early warning dissemination mechanism, establishment of local early warning systems, awareness programmes and educate police personnel on dissemination of early warning messages to vulnerable community. Local level action and overall coordination and post disaster support.

NBRO was selected as the main recipient of capacity building initiatives implemented under this project. Mapping out selected vulnerable locations along the coast, erecting sign boards and establishing evaluation paths are some important activities implemented.

Towards a safer Sri Lanka- A road map for disaster risk management published by the DMC and supported by the UNDP in April 2006 (volume 2: project proposals) is a ten year programme of work to be addressed in a systematic and prioritized manner with the involvement of all relevant stakeholders. These priorities for action are consistent with the Sri Lanka disaster management act no 13 of 2005 and also in line with the Hyogo framework for action 2005-2015, which this road map will work towards implementing in the next decade(2005-2015)

The EWSS project is consistent with the thematic area of the road map. All the activities are designed to meet the requirements of the road map. The stakeholders interviewed have confirmed the importance of the project. The document available with us also gives enough evidence to reach the same conclusion.

### **SRNRTA Project**

The main expected outcome of the programme was to enhance the productivity and long term protection of ecosystem while improving the quality of life of the communities through community participation in environment management. Under the project, priority activities like identification of potential communities, raise awareness, formulate management plans, had been undertaken. Monitoring, evaluation, documentation, promotion of best practices for replication are also included. The project activities have been implemented through civil societies. UNDP/DMC jointly worked to ensure long term preservation of the three green belts establishment through the project in tsunami affected districts, namely Ampara, Batticaloa and Trincomalee districts. The communities living in project areas have agreed to maintain the green belt if they are benefitted through the project. UNDP has made arrangements to supply food rations for two seasons.

When evaluating the project outcome the consultants had to rely on the project terminal report. From the available document it was difficult to identify good practices easily. The DMC official's description on the project activities helped consultants to conclude relevance of the project as 65%. However, consultants discussed the matter with District Administrators and found that there are examples of good practices by community on environmental conservation and they confirm that the project activities were implemented smoothly. When evaluating project outcome, due consideration was given for the prevailing situation (civil conflict) in those districts at the given time.

### **SSORM Project**

This is an ongoing project and the project period is 2008-2012. The vision document for the Sri Lanka disaster management sector is the Road Map for Disaster Risk Management- Towards Safer

Sri Lanka “. The project activities have been designed to meet the thematic areas Identified in the Road Map. The DMC is entrusted with the responsibility of operationalizing the road map.

The key deliverables of the project include the development of partnerships among key stake holders, the identification of opportunities for mainstreaming risk reduction approaches in to socio-economic development process in the country, development of hazard vulnerability and risk reports. Mainstreaming of sustainable disaster risk reduction approaches in to development promotion of DRR as a subject of study in research institutions and schools are important activities implemented.

There are some activities to be implemented before 2012. The consultants consider this project as the most relevant project out of the seven projects implemented by the DMC/UNDP. Therefore a complete evaluation is not possible. However, judging by the activities it may be prudent to decide the level of relevance as “very good”. Further, a complete evaluation could be conducted only at the end of the project.

### **3.6 Effectiveness**

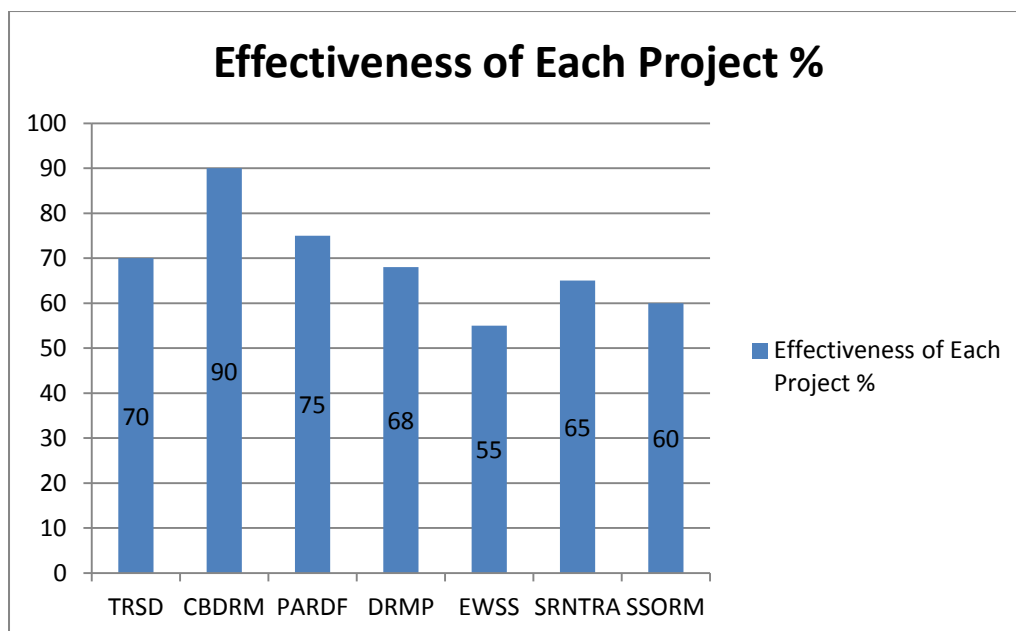
**Measures:** Interventions, solutions, strategies, activities to reduce peoples vulnerability and strengthen capacities are risk reduction measures. It can be categorized as measures to limit the impact of hazards, to reduce vulnerability and to build capacity, including reinforcing peoples existing coping strategies and to undertake appropriate and doable disaster management activities before, during and after the disaster. The aforesaid description is a disaster risk reduction measures in a nutshell.

The consultants carefully examined the entire seven projects to ascertain whether projects are designed and implemented to achieve these objectives.. DMC must make a strategic choice as to where and to what extent it wishes to engage in disaster management. Therefore prioritization of required initiatives is critical to their eventual success.

UNDP/DMC has implanted a series of incremental measures over a period of time leading towards full scale disaster preparedness. However this must follow a certain path as it were so that it reinforces proceeding measures and complement the measure to follow later. Out of the seven projects some were focused on preparedness. However our observation and results of interviews reveal that no attempt had been taken to keep the sequence of those activities. One of the most remarkable achievements of this project is risk reduction of the community.

The community interviewed is satisfied with the programs implemented through District Disaster Management Centers (DDMC) especially, awareness programs for identifications of early warning messages, evacuation routes and centres, existence of the danger and what can be done to prevent, avoid or minimize the dangers; these are disaster preparedness activities. They are aware of the hazards, elements at risk and moving people from an area of risk to a safe location. At the interviews few community leaders (office bearers of Village DM committees) said they know what disaster management is. There is enough evidence to prove that UNDP programs contributed towards disaster preparedness

As a matter of priority DMC/UNDP has developed information base (desinventar) and this could be used to design and implement counter disaster initiatives. Almost all officers were aware that a data base is available but there was no evidence how efficiently utilizes the data base for day to day programming/planning activities. Effectiveness of the data base (Desinventar) depends on the users of the database which could contribute immensely for DRR.



**Figure 3**

#### **TRSED Project**

The documents available for the evaluation indicate that, to develop Desinventor (the historical disaster information system) UNDP support was extended beyond the completion of the project till end of 2009, and as a result an internationally acclaimed disaster inventory was developed. The experience gained through the project implementation has been used by the NDMC and subsequently NDRCS to manage early recovery activities in a better way considering the other activities implemented. As mentioned earlier with little relevant supporting documents evaluation had been done. The former Director of NDMC/NDRSC said there was little delay in implementing project activities but implementation of project activities went well. His explanation could be accepted. Therefore the effectiveness of all the projects had achieved a comparatively high degree. Effectiveness of the project ranked as “very good”. Rehabilitation of infrastructure was also taken into consideration when rating the effectiveness.

#### **CBDRM Project**

Strengthening of the apex institution (DMC) through technical inputs, provisions for physical and human resources hardware and software to establish a national emergency operation room, boosted the risk reduction activities in Sri Lanka.

Degree of effectiveness was increased due to vibrant partnership with private sector for educational tools and early warning dissemination. As a result of this partnership a number of initiatives on risk reduction of vulnerable communities had been developed and implemented by DMC. The programs implemented with the assistance of UNDP achieved the intended objectives to the maximum and project activities had strengthened the DRM practices. Therefore effectiveness of the project objectives estimated as “excellent.”

#### **PAEDF Project**

The district officers and the community brought to the notice of the Consultants that they have very little knowledge with regard to Road Map. Each and every staff member of the DMC should read and understand the contents of the Road Map, because, all key decisions on the disaster management sector in Sri Lanka are being made based on the Road Map since its introduction. Preparation of GN level plans is in progress according to documents available. District disaster management and response plans were finalized in 14 districts. District divisional and GN level training classes were conducted to raise awareness of government and civil society representatives as well as the general public. However, provincial and local government level training has been given less attention. Consultants observed that local government has been neglected in the process of disaster risk

reduction. All these facts were considered when rating the effectiveness of PAEDF project which can be ranked as “very good”.

### **DRMP Project**

This project primarily aims to develop partnership and collaborative programmes with other agencies engaged in socio economic development activities. There was a need for institutional systems and administrative arrangements that link public, private and civil society sectors and build vertical ties between local, district and national level sectors. These objectives cannot be achieved by enforcing the law. To provide legal status to DMC, legislation is necessary, but on its own is not a sufficient tool for increasing equity and participation in DRR activities. Fortunately the principles of equity and participation in disaster risk management are not solely depending on legislation. DRMP projects have been designed to engage key stakeholders on disaster risk reduction actively. The most vulnerable community centres, Health centres and schools in Uva and Eastern provinces were given support to draft infrastructure development plans. Relevance of the project is very good. But it was limited to preparation of plans. According to the available information effectiveness of DRMP project rated as very good and it indicates the percentage as 68%. Some project activities are less relevant to Road Map; however, we are compelled to give a lower rating.

### **EWSS Project**

In the DMC annual report for 2007 (the project period 2005 to 2007) early warning activities are described as follows:

#### **“Early Warning Dissemination & Emergency Operations Centre (EOC)**

- Erecting Multi Hazard Early Warning Towers: UNESCAP allocated USD 280,000 to establish three multi hazard warning towers at Hikkaduwa, Kalmunai and Jaffna. Towers at Hikkaduwa and Kalmunai were erected and connected to EOC in DMC. Construction work commenced in Jaffna tower.
- Distributed 12 Megaphones to selected coastal police stations to use for dissemination of early warning messages to the vulnerable community when they receive a message from DMC or Police Communication Centre at Mirihana.
- Conducted a pilot project for testing the Disaster Early Warning Network (DEWN) System developed in collaboration with Dialog and University of Moratuwa. The equipment was tested at DDMCUs in Ampara, Galle, Hambantota and Puttalam Districts.”

In the annual report there is no indication as to how successfully project activities have been performed. Implementation and outcome of the UNDP project activities have not been mentioned. However in the progress reports of the projects under the activities and results it is indicated that all project activities have been implemented successfully. The other partners are NBRO and Meteorological Department, Irrigation Department and ICT Netherlands. Considering these facts consultants concluded that this project had been able to meet its objectives and there is no doubt it had contributed to strengthen Disaster risk reduction to some extent with regard to effectiveness. Strengthening technical organization relevant to Sri Lanka Disaster Management Act therefore can be rated as “Good”.

### **SRNRTA Project**

Development of green belts in tsunami affected area was implemented in Ampara trincomalee and Batticaloa districts under the project. According to terminal report of the project higher percentage of plants exist but effectiveness of the plants as a green belt is questionable. Apart from this activity other major activities are capacity building of Disaster management in Sri Lanka and providing resources through UNV. The annual report – 2008 of the DMC states:

#### **“Establishing Green Belts to Reduce Impacts of Coastal Hazards**

Coastal Green Belts were established on the eastern coastal belt in Ampara, Batticaloa, and Trincomalee Districts. Total length of the green belt is 16 kilo metres and is expected to mitigate the impact of tsunami sea surge. Under the UNDP funded programme, 30 Community Based Organizations in five tsunami affected districts (Ampara, Batticaloa, Hambantota, Matara, and

Trincomalee) were provided with small grants to implement environmentally friendly, disaster risk reduction activities related to livelihoods.”

These are some important points to decide the level of effectiveness of the project. Specially this project had produced tangible results. It could be graded as lower level of “very good”.

### SSORM project

This is an ongoing project and suppose to wind-up in 2012. It is premature to evaluate entire project on effectiveness because end results will be available only at the end of 2012.

Disaster management is a discipline which deals with and avoiding risks. Disaster management includes the process of preparing, supporting, and rebuilding society when natural or man - made disasters occur. It is a continuous process in which all individuals, groups, and communities manage hazards in an effort to avoid or mitigate the impact of disasters resulting from the hazards. Decision makers try to implement their blueprint without considering the community’s needs and aspirations. Due to this reason most of the disaster management mechanisms implemented have failed. Therefore disaster risk reduction managers have thought it fit to incorporate community in the planning process which is named initially as ‘Community Based Disaster Management’ (CBDM) and later as ‘Community Based Disaster Risk Management’ (CBDRM). Well prepared protected communities are the first line of defense against disasters and a key to reducing vulnerability and increasing disaster resilience. To be effective, local communities must be encouraged to analyze their hazardous conditions, their vulnerabilities and capacities as they see themselves. Most of project activities are indirectly relevant to CBDRM. Development of web page is relevant to polices of DMC. The relevance of the project can be rated as “good”

### 3.8 The Efficiency

The practical details of project evaluation are much more difficult to overcome, particularly with the design and timing issues linked so closely to the data-collection process and scientific questions being pursued. Because five projects have already been wound-up some important baseline data could not be obtained. Therefore consultants had to rely on appropriate methodologies and statistical analysis defining the efficiency. Outcome of the project were carefully examined to define the efficiency of the project with the available data. Both the positive and negative extremes of human behavior that occur when implementing projects had to be considered and nearly six projects have been implemented within a very short duration. This important point had been taken into account on efficiency assessment. Officers are well aware that UNDP funds are channelled through the DMC, but they were confused from which project funds were released. One key district officer said he was under the impression that entire funds were provided by the UNDP to the DMC for all operations including salaries.

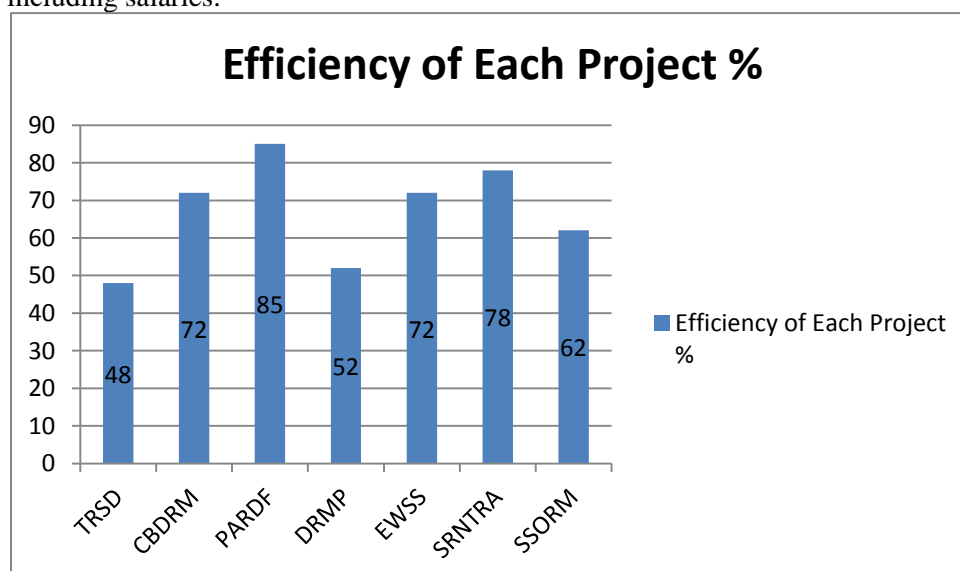


Figure 4

**TRSFDF project** implemented from 2003 to 2008 was scheduled to complete in December 2005. The project progress report indicates that due to reasons beyond their control, it was not possible to complete the project activities till December 2008. The feedback of the project does not show impressive results. Utilizing resources solely entrusted with the district administrators it was executed by the National Disaster Management Centre (NDMC). There are a number of Audit Quarries raised by the Auditor General (AG) on discrepancies of payment to contractors. Accountability and transparency had been challenged by the AG. Delay of implementation and change of ministries impeded the efficiency of the project. Funds for recovery activities have been utilized efficiently. Considering these facts, consultants are of the view that efficiency is “Good”.

**CBDRM project** was implemented from 21.07.2006 to 31.12.2008 by Disaster Management Centre. The Main objective was capacity building. Resources available for development and disaster risk management were very limited. Decision makers will always measure the impact on project against the funding, staff time and technology utilized in the project. Therefore state fund allocation for capacity development in the field of disaster risk management is either very limited or nothing. UNDP has formulated the project objectives to fill these gaps. Capacity building at Provincial, District, divisional and GN levels could be rated as excellent. The resources allocated for the purpose had been utilized efficiently. The officials interviewed confirmed that the resources had been used efficiently.

**PAEDF project** – Implemented in 01.10.2005 to 31.03.2008. This project was a need of the hour. Supporting to establish the Disaster Management Centre is a remarkable contribution of the UNDP, because DMC is the apex institution on disaster management in the country and the project had formulated the National Disaster Management Plan and Disaster Management Policy. Further the project provided technical and administrative assistance to training, education, preparedness planning, emergency operations, management and risk mitigation and technology development too. The project was implemented very successfully, and the tangible results were DMC, DM plan and DM policy. The resources had been utilized effectively and efficiently. The technical assistance provided for the formulation of plans was excellent. The efficiency therefore could be graded as excellent and percentage determined as 85%.

**DRMP project** – Project period 2008 to 2012. This is an ongoing project. The management of the project was reviewed up to 15 April 2009 and this report was available to the consultants for perusal. The nature of the project is capacity development through strengthening the National Disaster Management Coordinating committee (NDMCC). Development of web pages, providing financial assistance for three CBDRR initiatives, research assistance, infrastructure development plans in Uva Province, News letter, development of DMC corporate plan and National Emergency Operational Plan etc. have been implemented. The development of Corporate Plan was not included in the project. Consultants observed that corporate objectives are not on par with the Road Map. Allocating funds for this particular activity was a deviation from UNDP principles. Therefore Consultants could not agree with the decision made by DMC/UNDP to utilize funds for formulating a Corporate Plan. The available evidence does not depict that a high level of efficiency has been reached. Consultants graded the efficiency as “good”.

**EWSS project** –Institutionalization of Early Warning System, Community based flood and landslide monitoring system and early warning dissemination mechanism is essential for disaster risk reduction in the country. It is a timely intervention of UNDP because it provides the vital link between preparedness measures and response action. The warning system, and its associated procedures, must be clearly defined and written down and the standard operating procedures should be in place. The project was formulated in such a way to accomplish the above requirements. All the resources had been directed to achieve this objective. Efficiency of the EWSS project can be graded as “very good”.

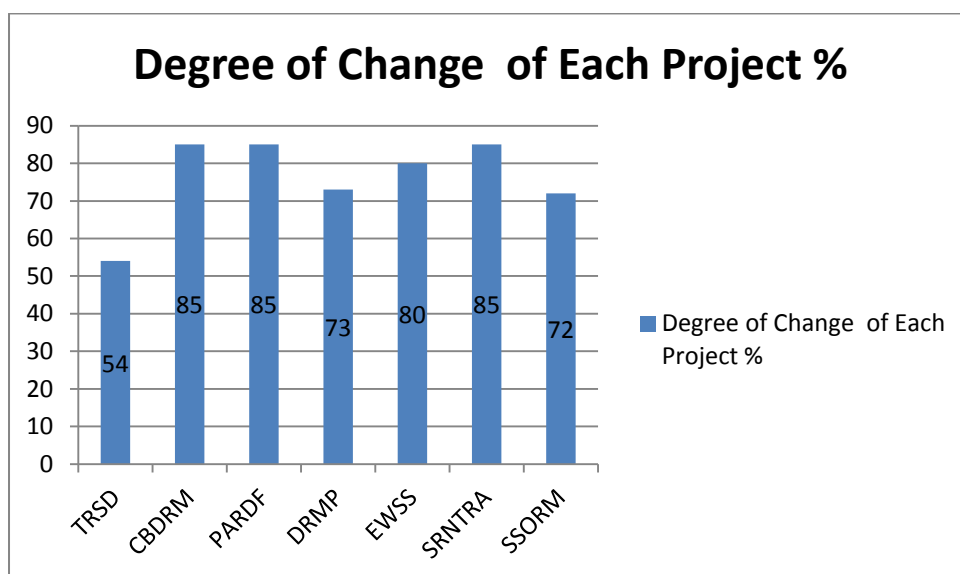
**SRNRTA project** implemented in the period 2006 to 2008. Extraction of coral, sand mining, extensive cleaning of mangroves continued despite stern regulatory measures implemented by the government. This situation worsened in the aftermath of the tsunami. UNDP intervention was to address the aforesaid environment issue. In this project responsibility to develop and implement environment management and management of ecosystem lies with the community. Involving

community for project activities was an excellent approach. Resources had been utilized efficiently. The technical assistance and resource persons were provided to the community. Implementation of these activities produced excellent results.

**SSORM project** started in 2008 and expected to windup in 2012. This is an ongoing project. The responsible party for the entire project is the UNDP with DMC. Most of the activities of the project are entrusted to local consultants. At the interview, a key stake holder raised a query on hiring of consultants. His argument was: if the capacity of DMC had strengthened through a number of projects implemented by the UNDP, why DMC's in-house capacity is not used to implement these activities instead of paying consultants. The argument is acceptable but due to shortage of staff, DMC is unable to undertake such responsibility. So the hiring of consultants is inevitable. But in principle the argument cannot be ignored. However technical assistance provided for project activities is impressive. Therefore, Consultants have no option but to grade the efficiency as "good".

### 3.9 Degree of Change

Six months prior to the 2004 tsunami, the UN Intergovernmental Oceanographic Commission warned that the "Indian Ocean has a significant threat from both local and distant tsunamis" (Revkin, 2004) Risk reduction preparedness prior to a disaster event can reduce fatalities. Our country is at risk from natural hazards, including tsunamis, floods, landslides, droughts and cyclones. Yet little or no attention was paid to this tsunami risk as it was not considered to be a major hazard. There were reports that a warning to mainland from the Indian military in the Nicobar and Andaman islands went unheeded. Apparently the Indian Meteorological Service sent a warning fax to a former minister of science rather than the incumbent. (singh 2004). In Thailand, the head of Meteorological Services was sacked because he had decided not to issue a warning (Associated Press 2005, Watts, 2005) A simple system for communicating warnings could have saved many a life in Sri Lanka. No one knows who took the message and why he did not take serious note of it when he received the message. Disaster risk reduction (DRR) and preparedness receive relatively a small portion of international aid. Developing the community's capacity to deal with disaster is generally a cost effective approach.



**Figure 5**

In 2007 UNESCAP allocated USD 280,000 to establish three multi hazard warning towers at Hikkaduwa, Kalmunai and Jaffna. Towers at Hikkaduwa and Kalmunai were erected and connected to EOC in DMC. Construction work commenced in Jaffna tower. Again DMC had planned to establish Early Warning Towers under the 'Disaster Management Communication and Response Capacity Development Project' in 2008. A total of 25 towers around the coastal line were erected in ten districts.



However there was a clear need to further enhance ongoing disaster risk management capacity building initiatives. With the funds specified in the agreement, a work plan was carried out under the EWSS project in order to reduce vulnerability to tsunamis and related hazards. EWSS project could be rated as excellent. The community interviewed said they are provided with training and local early warning systems are in place. Mock drills have also been carried out by the DDMC.

**TRSFDP project** also contributed towards building an effective Disaster Risk Management Mechanism. As an immediate measure to support the capacity needs of the government authorities at the District and Divisional Secretariats it had provided additional disaster risk management specialists and District and Divisional Support Officers. Our effort to collect disaggregated data of TRSFDP project failed and the project outcome was evaluated with the available secondary data. Although District Disaster Preparedness Plans had been prepared for the districts affected by 2003 floods there is no evidence to prove that these plans were implemented by the relevant district authorities. If these plans were implemented, a remarkable change would have been recorded. Even after the establishment of DMC in 2005 these plans were ignored. If the District plans were implemented at the inception of DMC, it would have contributed to change the response approach of responsible officers for disaster response. In this context consultants rated the degree of change as good.

**CBDRM and PAEDF** – Both projects were aimed at the development and implementation of Road Map for Disaster Risk Reduction. In terms of degree of change these two projects produced excellent results. Under these two projects, Road Map - a ten year plan was formulated and implemented. The Road map Volume II contain 109 detailed proposals that aim to provide development partners with more information, and each activity listed under seven thematic areas in volume I. It will contribute significantly towards achieving sustainable development in the country. Disaster Management Centre as the main coordinating body for disaster management in the country liaises with other agencies to implement the projects. Most of the agencies refer to the Road Map and agree that it provided the visionary beginning to systematic disaster management in Sri Lanka. Despite few minor shortcomings these two projects enabled the change of attitudes of the officials and stakeholders excellently.

**DRMP:** Large number of activities found in the project document mainly focus on capacity building, other than one item to purchase a caravan to be modified as a mobile training unit. It could be used in remote areas to create awareness among communities and school children. It is intended to get active participation of key stakeholders in national provincial disaster risk reduction forum and to draft infrastructure development plans for Uva and Western provinces. This is an ongoing project. DMC officials are confident that they can implement the project successfully. Consultants are satisfied with the programmes implemented to date and the degree of change is rated as very good.

**SRNRTA project** initiated action to mobilize the communities living in the coastal belt in the island to develop Community Based Disaster preparedness plans (CBDPP) and train them to implement the CBDP when disasters occur. The CBO's trained undertake small scale DRR interventions and environment activities while enhancing their livelihood opportunities thereby helping recovery process. The activities to protect and conserve environment based on local situation had been designed to bring added benefits to their respective community. Small grant mechanism had been used for the implementation of project activities. There is no doubt that the project will bring the changes to the targeted community in respect of lifestyle and perception. Therefore the degree of change is excellent.

**SSORM project** – The Disaster Management Centre is entrusted with the responsibility to operationalize the Road Map. One of the expected outcomes of this project indicate as “service providers ensure equitable access to improved quality services and economic infrastructure to vulnerable populations in disadvantage areas.” Who are the people living in disadvantage areas? Where are they located? What do they need? Are we reaching them? The problems are complex and people living in disadvantage areas are in large numbers. Majority of the people are poor. They may not be vociferous enough to attract attention at the national level or to extract benefits or to influence policy makers in favour of lessening their problems. Are we keeping them in mind while designing programmes? Funding agencies have to consider whether our schemes are really benefiting these

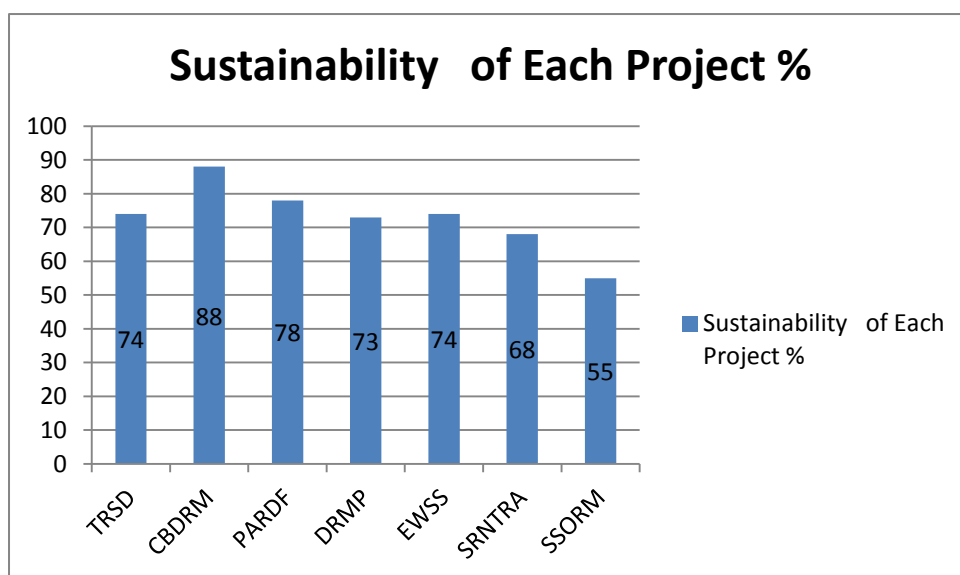
people especially in the area of natural disasters, as most vulnerable people are the poor and economically under-privileged. Consultants were impressed with the project activities proposed to improve the quality of life through operationalizing the Road Map. Expected degree of change (on going project) could be ranked as “very good”.

### 3.10 Sustainability.

The sustainability of the seven projects was evaluated with the available progress and terminal reports and primary data collected through interviews. Generally all the seven projects could be classified as “very good”, because projects are designed to meet the immediate requirement where government funds are not available. It is necessary to continue these activities by the DMC without interruption, because project activities link with the main functions of the DMC. At present sustainability remain in the hands of the UNDP. Continuation of this work needs external funding.

However, it is the primary responsibility of the government to strive to reduce disaster risk and increase disaster response capacities at community, Divisional, District and National levels, within the frame work of the development process.

All UNDP projects are under evolution consistent with disaster management policy of Sri Lanka. For instance: formulating and implementing the Road Map for disaster risk management “Towards a safer Sri Lanka” is a remarkable effort of the UNDP and its outcome will sustain for a long period, because one of the main responsibilities of the DMC is the implementation of the Road Map. Government is committed to continue these activities without further external support.



**Figure 6**

The infrastructure repaired and rebuilt under TRSFD project continue to be used by the communities as planned. The minor irrigation systems repaired and rebuilt provide irrigation water to paddy fields continuously and it contributes to national economy in a significant manner. Community and school based water supply schemes have been maintained and provide drinking water. The institutional arrangement for managing disasters in a comprehensive manner, established and strengthen by the project continues to function. The sustainability of the project can be classified as very good. The District Disaster Preparedness Plans are not implemented and plans are not traceable with stakeholders.

The support and timely technical inputs provided by the CBDRM project to develop risk reduction culture in the country would be a long term investment towards promoting disaster risk reduction. Climate change adaptation work initiated through the project is recognized at the national level. It was pointed out by one very senior officer that Climate Change was not included in the Road Map. Not

only the climate change but also some disasters are not addressed by the Road Map. This project has served as one of the most successful and timely interventions of the UNDP. The project had undertaken to develop a culture of safety in the island. EOC established and strengthened through the project is functioning well at the national and district levels. Development of disaster risk profiles will be used to develop building guidelines. These are necessary activities to be continued and government has to take over to sustain the activities if external funds are not available. . Therefore sustainability of the project is graded as excellent and the percentage is 80%.

A comprehensive human resource review commissioned by the UNDP through the **PAEDF** project, helped DMC in identifying and meeting its present and future needs. Emergency Operation Centres have been established at national and district levels. The role played by EOC at the recent flood and landslides were highly commended by stake holders. At times, inaccuracy of early warning predictions poses a major threat to the credibility of the DMC. The different disasters in Sri Lanka, and their geographical dispersion and frequencies of their occurrence are based on data gathered through Desinventar a historic disaster information system in Sri Lanka supported by the project. The partnership also develops through the project with government, semi-government and private organization. These project activities will last long for years. Therefore sustainability of the project can be rated as excellent.

**DRMP project** has extended its support to strengthen partnership and active participation of the private sector, media and research institutions in MDMCC activities. Further the project has supported the development of the existing website of the DMC to improve new features and user friendliness. Equipment and grants to the research institutes to conduct research were also provided through the project. Assistance was extended to develop knowledge products for land use planning best practices and building guidelines for tsunami affected areas and public awareness raising campaign. SOP for areas not currently covered by existing DRR SOPs. All of these activities under the DRMP project will continue without interruption. Considering aforesaid facts DRMP project can be graded as very good.

Institutionalization of early warning system, Community based flood and landslide monitoring system and early warning dissemination mechanism, strengthening dissemination of early warning mechanism to communities, local level action and overall coordination, post disaster support are the outcome of the **EWSS** project. Rapid onset of disasters like the tsunami need a very high quality early warning system and sophisticated modern technology for speedy action. Training on receiving and disseminating of warning signals are also equally important. DMC has also been provided with equipment and training on the subject. Therefore the sustainability of EWSS project can be graded as very good.

The terminal report of **project SRNRTA** provides some challenges faced by the project at the implementation stage. All project activities were carried out with community participation and therefore beneficiaries were well conversant with the project concept and approaches. Project initiatives are centred on livelihood improvement and skills development. Most beneficiaries directly applied the skills gained through training and technical assistance in areas such as salinity reduction in paddy fields, production of vegetable seeds, small scale cottage industries, home gardening and compost production and development of green belt. The strong sense of ownership of the project sustain for long providing better living conditions for the beneficiaries. However sustainability depends on the community and the stakeholders where project activities are implemented. Considering these facts sustainability is graded as very good.

Physical progress as at 31.12.2010 of **SSORM project** indicates that budget for 2010 was Rs. 125.5 million and expenditure was Rs. 73.9 million. The physical progress of the project is not impressive. Project activities have been formulated to achieve the very specific objective spelt out in the Road Map. Project intended to develop hazard, vulnerability and risk support and multi hazard early warning systems at district level and sustainable disaster risk reduction approaches mainstreamed in to development planning. Slow progress of the project reduces the efficiency and further sustainability is also affected. It very clearly indicates the level of capacity of the Disaster Management Centre in respect of implementation of projects. The rationale is, if implementation of project activities could

not keep to schedule, funds may not be available for rest of the activities, unless otherwise project period is extended. If entire proposed project activities are implemented, it will be internalized with budgetary allocation and sustainability is assured by the state. Considering these facts sustainability is graded as good.

### **3.11 An analysis of UNDP DRM Projects in terms of DRM Roadmap Components**

The Roadmap for Disaster Risk Management in Sri Lanka was actually developed through one of the UNDP projects under review, and was thus not a guiding document for most of the projects. Still, the Roadmap provides a well-accepted framework for disaster risk reduction which can serve as a lens in which to view all DRM programming in the country. A rough analysis of the projects and their foci (from project document budgets) is presented in Table 1, below. This table shows the various proposed project activities in relation to the Roadmap Components.

The Roadmap Short-term (1-2 year) budget is not necessarily a reflection of the highest priorities for overall risk reduction in Sri Lanka. Still, they do reflect a time-based prioritization, presumably targeting the most important areas for immediate DRM efforts. It is interesting to note that 47% of the short-term budget in the Roadmap was designated for Community-Based Disaster Risk Management (CBDRM). UNDP's contribution to CBDRM is estimated to be 17%, but perhaps more emphasis could be placed on CBDRM-related support in future programming. UNDP's support for Policy and Institutional Development has been understandably high (30% of budget), given UNDP's established role and comparative advantage in this area. Over time, it can be expected that this type of institutional support should increase, yet the high turnover of staff and resulting challenge to sustaining institutional capacity, will require careful consideration as how best to support a sustainable DRM capacity in the future. Eighteen percent of UNDP's projects have supported response planning and preparedness, which allocate 9% of the Roadmap Budget.

UNDP's support for awareness raising and training constitute about 8% of its spending (as opposed to 4% of the roadmap short-term budget). This is not surprising given the essential role of awareness-raising as a step towards DRM efforts. UNDP's support for integration of DRM into development and for Early Warning systems has been comparable (in percentage terms) to the short-term Roadmap budget, and more support for these areas could be considered in the future. Risk assessment and mapping is an area in which the UNDP is currently placing more emphasis. This may be a good area for more UNDP emphasis in the future, as past spending has amounted to approximately 6% of the budget and UNDP's approach to hazard mapping in Sri Lanka also strongly supports further integration into the development process. (please refer to annexure IX for detailed schedule)

## Chapter 04 - Findings

### 4.1 Key achievements.

- DMC was established in 2005 under the provisions of the Sri Lanka Disaster Management Act No. 13 of 2005. However there was no institutional capacity within the DMC to integrate risk reduction components into its agenda. PAEDF project provided technical and administrative assistance for very important areas of training, education, preparedness planning, emergency operations management, risk mitigation and technology development and the support complemented with human resources and financial assistance. DMC was able to train its staff and develop necessary skills to conduct such programmes after completion of the project. This is a major achievement. (HFA priorities for action 2005 – 2015: ensure that disaster risk reduction is a national and local priority with strong institutional basis for implementation)
- There was no coherent and comprehensive guiding document for disaster management in the country prior to the establishment of the Disaster Management Centre. A comprehensive Disaster Risk Management framework for the country will unify the effort of agencies working in various sectors across all regions and level of development activity. Formulation of Road Map for disaster risk Management – Towards a safer Sri Lanka was a remarkable achievement of PAEDF project. Road Map focuses on seven thematic components which are consistent with Hyogo Framework for action 2005-2015. Key decisions on the disaster management sector will be taken with the help of the guiding principles of the Road Map.
- Further assistance was extended by the UNDP to operationalize the Road Map – Towards Safer Sri Lanka. Large number of activities had been formulated and implemented to operationalize the Road Map under the SSORM project. In fact it is a strategic support of the UNDP, otherwise implementing Road Map would not have been a reality, an excellent and timely support by the UNDP.
- While we cannot prevent weather-related hazards, the loss of life and damage caused can be minimized by using adequate forecasts and warnings to take appropriate actions. Support to institutionalize Multi-hazard Early Warning system and strengthen capacities for observation, detection, and prediction through EWSS project has made excellent contribution to DRR.
- As a result of continuous progressive and demonstrative achievement over the last five years with the assistance of UNDP, DMC is now recognized as leader in responding to natural disasters and in adopting a more holistic approach to disaster risk reduction.
- Desinventar data base which includes the historical data records of disasters in Sri Lanka for the past 30 years was established and maintained. This information could play a vital role in planning, research, and forecasting.
- Most vulnerable people, have a good understanding of their surroundings and are capable of analyzing and assessing their situation specially in tsunami and flood prone areas of the country. Community awareness programmes and establishment of village level DM committees made the change or the “paradigm shift”
- A certain community maybe highly at risk but if the number of beneficiaries is low and impact of disaster risk in macroeconomic terms is low, decision makers may not decide to implement a disaster risk management project in those communities. SRNRTA project provided 15 small grants to develop environmental management plans and implemented ecosystems managed by people whose livelihoods depend on sustainability of the ecosystem in Hambantota, Trincomalee, Batticaloa, Ampara and Mullativu. This project is a good example for community empowerment and resilience.
- Sri Lanka can now boast of some best practices in disaster risk reduction and ultimately influencing decision making in DRR programmes and practices, with the support extended by UNDP for last few years.
- The biggest challenge that Sri Lanka has faced is changing the way disaster management as understood and practiced at all levels of the community. The UNDP has demonstrated both commitment and effort to evolve and establish the necessary infrastructure facilities to DMC to bring about the changes (i.e. relief and rehabilitation) to disaster risk reduction.
- Disaster Risk faced by the community before the implementation of the project has been reduced to a considerable extent as a result of the projects.

- To reduce the impact of disasters and the vulnerability of communities in an effective and sustainable manner, DMC implements community-based disaster management programmes through training and provisions of response equipments.

#### 4.2 Missed Opportunities.

- There was no indication in all seven projects that due consideration was given to local wisdom on disaster risk management. As mentioned in chapter 3.1 of this report” The rich storehouse of knowledge and skills available with the local communities is our proud inheritance. Sadly this resource and value system built around it has gone into disuse and the traditional technology is getting obliterated under the impact on modern science and education. Availability of such time tested knowledge and skills with local communities are our best asset against the onslaught of natural disasters. No attempt has been initiated either by the DMC or the UNDP in this regard.
- Making best use of local and national capacities was neglected. It was brought to the notice of the consultants that highly paid UN Volunteers were engaged in project activities and the in-house staff was neglected, and they were not given the opportunity to enhance their knowledge through working in project activities.
- Involvement of Local Authorities is crucial because they have a clear mandate to engage communities and ensure community participation in planning and monitoring of projects.
- Since most of the natural disasters are localized and occur due to human interference at local level, empowering Local Authorities for undertaking activities related to disaster risk reduction need to be considered.
- Provincial Councils have to get involved in disaster management activities to ensure that goals are met to the satisfaction of the target community.
- The consultants examined the possible intervention of beneficiaries at the project formulation stage. However there was no evidence to show that any attempt has been made in this regard. It is presumed that when formulating project objectives, top down approach had been adopted. Valuable ideas of the beneficiaries would have produced better results.
- The section 9 (1) of the SL Disaster Management Act very clearly state that, “ In the discharge of their functions under the Act, The Council and the Disaster Management Centre shall be assisted by such number of Technical Advisory Committees as shall be deemed necessary by the Council, consisting of professionals and experts having expertise in relation to the respective functions and responsibilities, as the case may be the Council” This important provision was not implemented to date by the Council or the DMC. NDMCC do not come under this section. There are a large number of experts on DM available in Sri Lanka. Their inputs would have upgraded the efficiency of DMC and DRR as well. It is not too late to appoint Technical Advisory Committees than never.

#### 4.3 Allocation verses project outcomes.

##### Fund allocation

• Transitional Recovery Support to Flood Disaster in Southwest Sri Lanka (TRSFD)	US \$	1,850,962
• Capacity Building in Disaster Risk Management (CBDRM)		1,176,470
• Preparatory assistance for Establishing Disaster Management and Disaster Management Centre in Sri Lanka ( PAEDF)	Framework	847,210
• April 2009 Disaster Risk Management through partnerships (DRM-P) in Sri Lanka(DRMP)		699,035
• Strengthening Early warning system in Sri Lanka (EWSS)		125,000
• Sustainable Recovery of Natural Resources of Tsunami Affected Coastal Areas of Sri Lanka with People’s Participation (SRNRTA)		196,476
• Strategic Support to “Operationalize the Road Map Towards Safer Sri Lanka” (SSORM)		2,100,000
Total allocation	US\$	6,983,153
Total allocation (US\$1 – Rs 110/-)	SL Rs.	786,806,830

Apart from the money allocated for the seven projects by Foreign Governments and agencies through the UNDP, funds were also been made available through the national budget annually. Consultants observed that the pressure to spend this money within a short period has not made the best use of local capacities and even the least possible amount of assistance has not trickled down to the deserving population. However it is impossible to conclude the observation on this matter due to lack of information. Investment in capacity building (officers of DMC and stake holders) planning, administration, logistic were important components of DRR projects. It is nonetheless important to look at cost-efficiency. Consultant's evaluation reveals that considerable funds were allocated on capacity building. However, tangible results could not be found. There was an allegation by an interviewee that too much has been spent to obtain services of experts. But international missions and service of experts are unavoidable for this type of project and it is too early to rely on internal staff.

#### **4.4 Partnership strategy.**

The partnership strategy was well planned and implemented to extract valuable ideas and support of government ministries, departments, institutions, universities, UN agencies, private sector organizations including NGOs.

Key strategic partnerships developed through the CBDRM project included partnerships with Ministry of Environment on reducing Human – Elephant conflict; Rice Research and Development institute (RRDI) for conservation of traditional seeds and agri resources on identification and promotion of saline resistant paddy varieties.

Disaster Management includes a wide range of subjects and multiple stakeholders. The partnership plays an important role for the sustainability and the resource optimization for mainstreaming DRR into development planning, better preparedness and disaster response. This will help to build a well prepared and resilient community. Number of public-private partnerships was also promoted through the project. For instance: Vibrant partnership developed with the private sector was with the Wijaya Newspapers for developing 'Snake and ladder' game boards outlining response strategies to various disaster scenarios. A strategic partnership was developed with Sri Lanka Association for Advancement of Science (SLAAS) which has a membership of more than 40000 scientists to involve the academic community in DRR.

In November 2007 The National Disaster Management Coordination Committee (NDMCC) was established. (The constitution of NDMCC annex III) The NDMCC is recognized by the UNISDR as the Sri Lankan "National Platform" and is being considered one of the most vibrant and successful National Platforms.

In order to address the felt needs of the vulnerable communities, all NDMCC stakeholders work on different aspects of disaster risk reduction and at different stages of disaster management cycle. However gaps exist that are yet to address as per the Road Map needs. Therefore an approach was developed for an effective reviewing of the work programmes/plans of NDMCC stakeholders aiming at,

- Better understanding the type of work and geographical distribution
- To match the ongoing work with the road map needs
- To identify the gaps in technical areas as well as geographical coverage.
- Develop an agreeable work programme for NDMCC membership to implement the Road Map.

Analysis of NDMCC stakeholder presentations, studying the Road Map and the corporate plan were the steps followed to identify the outcomes, expected results, activities, indicators and partners of the NDMCC work programme that could supplement the government efforts to reduce the disaster vulnerability while increasing the disaster resilience. So the partnership strategy has been included in the project adequately.

## 4.5 Technical Assistance

Due to dearth of disaster management experts in the Disaster Management Centre, services of Technical Specialists who have a specialized knowledge and expertise in disaster management are required. Disaster management specialist's inputs are vital to strengthen the DRR activities implemented by the DMC. For instance Capacity Building for Disaster Risk Management project has extensively used the services of DM specialists, to establish the DMC, National Emergency Operation Centre and to strengthen the UNDP disaster management unit.

Under the UNDP projects during the last five years a large number of areas that needed technical assistance have been provided. Assistance provided to DMC contributed towards the formulation of the National Disaster Management Policy, in addition to strengthening communication coordination and outreach capacities of the DMC, and national and local level government institutions and the communities. Establishment of the first automated rain gauge system in the county in landslide prone areas demonstrated the possibilities to generate and disseminate early warning messages at times of need in Sri Lanka.

## 4.6 Critical issues and challenges.

The challenges and issues in implementing DRR programmes as described in the corporate plan of the DMC are applicable to UNDP projects as well.

- Ambiguity of legal status of DMC and human resource issues such as the absence of a HRD plan.
- Job insecurity feelings of the staff - almost all staff recruited on contract basis
- High staff turnover
- Inadequate skilled staff at district level and lack of multilingual skills, particularly Tamil, language has been identified as a challenge.
- Underutilization of some vital physical resources and non availability of a permanent office premises to operate from and to house equipment.
- Operational deficiencies such as poor coordination mechanism, non availability of 24/7 emergency operations in all districts, non coverage of last mile Early Warning.
- Lack of a comprehensive set of SOPs,
- Insufficient efforts to integrate programmes with regular development activities at district level.
- Lack of understanding of mandates and strengths of other key technical partners and low priority for research have also been identified.
- Biggest threat faced by the DMC is the possibility for policy changes with Cabinet changes.
- Even at present, operation of DMC is severely affected by the difficulty in convening regular meetings of NCDM as stipulated in the Act. While more and more organizations are entering and competing for DRR, institutional hostilities do exist among key stakeholder agencies and some are reluctant for collaborative work.
- At times, inaccuracy of early warning predictions poses a major threat for the credibility of DMC.
- DMC should also be well prepared for the possibility of withdrawing UNDP staff now deployed to DMC almost on full time basis to perform vital functions.

High staff turnover of DMC - this issue create enormous challenges to DMC as well as implementing of UNDP project activities. When a well trained officer who has undergone foreign training with project funds leaves, difficulties are created to the DMC. At the evaluation consultants had to rely on terminal reports, steering committee meeting minutes and other relevant documents because there were very few executive and staff grade officers who have served more than three years in the DMC were available to comment on project activities and even at the district level the position was the same. Job insecurity may have contributed to worsen the issue.

Another important issue pointed out is the lack of understanding of mandates and strengths of other key technical partners and low priority for research. In terms of the Sri Lanka Disaster Management act No. 13 of 2005, section 4 (k) provisions have been made "to facilitate liaison with organizations and persons pursuing hazard, vulnerability and risk reduction studies and implementing actions programmes and commissioning such studies and action programmes" But this issue was not



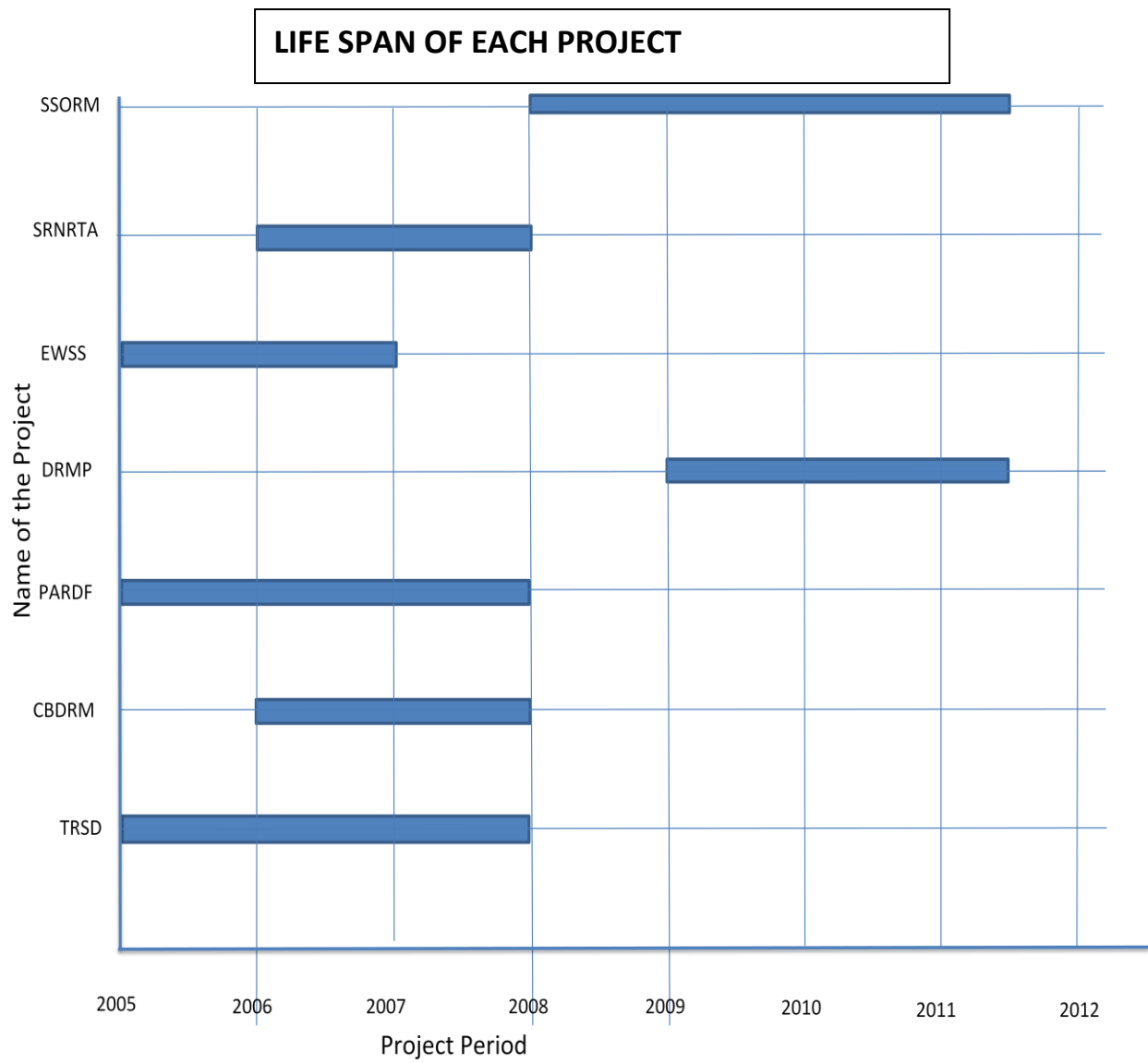
adequately addressed by the projects. Officers interviewed in the research organization stated, that their request on research assistance was turned down on the basis of non availability of funds. Without changing objectives of the project, activities could be rescheduled to meet the requests of research institutions.

Although the SL Disaster Management Act section 8(f) states “ Promoting research and development programmes in relation to disaster management and setting up and maintain a database on disaster management”, except the database, research and development draw less attention in these projects.

Unexpected delays occur in transferring cash advances from the Treasury to the Ministry of Disaster Management which is the national implementing agency under the project, thus affecting project implementation and continuity of some programmes.

All the district response plans developed for eighteen prioritized districts were not completed within the project life span due to unavailability of essential information on district disaster management situations. However with financial contribution of the government, they were completed and disseminated. Inability to complete the project according to the time schedule caused unforeseen expenditure to the government.

The seven projects were implemented within a short period (five years) of time. Ministry of Disaster management served as the main implementing partner of the project. On behalf of the Ministry, Disaster Management Centre served as the primary executing agency responsible for project delivery. UNDP supported the project implementation through establishing a Project Management Unit at the DMC. However a reasonable question raised by some officials was whether DMC was strong enough to implement seven projects within five years. The United Nations Volunteers Programme supported the project implementation by providing ten volunteers for district level implementation and for national level project management. Irrespective of support extended by the UNDP as implementing agency it was the responsibility of the DMC to implement the project activities successfully. Consultants observed that some project activities did not produce the best results.



**Figure 7**

## **Chapter – 5 Conclusions, Recommendations and Lessons learnt and Significant outcome**

### **5.1 Conclusions.**

#### **DRR activities in Sri Lanka**

While disaster risk management was slowly gaining recognition in Sri Lanka in the late 90's and early 2000's, the tsunami of December 2004 prompted a considerable increase in attention to the subject. The government and the international community provided considerable resources for tsunami recovery efforts, which included substantial resources focused on improving disaster risk management in the country. Since Sri Lanka is generally free from such large-scale disasters, it is not surprising that the flow of resources for disaster management has drastically been reduced. This reduction in resources calls for a more measured approach to DM that integrates disaster risk reduction into environment and poverty reduction programming and that engages a wide range of development partners. The Integrated Strategic Environmental Assessments of the Northern Province could serve as a model first-step towards this type of integrated approach.

#### **UNDP intervention.**

UNDP has provided a large amount of support for basic capacity-building and planning, as well as awareness-raising, which have served to strengthen DM in the country. At the same time, staff-turnover has undermined these efforts.

UNDP will need to focus efforts in the future on support for broader partnerships for roadmap completion and there is a need to strengthen the M&E component of DRM programs with tighter links to the Roadmap and HFA. Tools for monitoring roadmap completion could also serve to engage a wide range of partners as it would serve to highlight their contributions as well as gaps that need further support.

While it may be difficult to assess the efficiency and effectiveness of past UNDP interventions, the partnership approach appears to be both effective and efficient as it exploits considerable capacities in Civil Society Organizations, Universities and the Private Sector in Sri Lanka which could be exploited further.

Information resources abound regionally and globally and the programme appears to be well equipped with these resources. Financial resources are declining globally, and Sri Lanka may not be in a favourable position, as it is not a high priority for global natural disaster risk reduction efforts. Local-level activities are seen as the most effective for directly reducing risks, and the UNDP must encourage government and partners to increase support for these activities. Activities which combine risk reduction and environmental management with increases in livelihood opportunities and resilience are likely to be the most popular and sustainable, although care must be given to ensure that this type of “mainstreaming” does not lose the risk reduction message, completely.

#### **Cost Vs results**

We live in a dynamic world that has many challenges. Global shifts such as population growth, climate change and energy shortages are driving our search for sustainable solution. Climate change is a good example. Governments in Europe are well intentioned in tackling the efforts of climate change. But what they have done so far generally defies logic when it comes to cost efficiency. In Germany in 2009, for example, government spent Euro 5.8 bn on a project to avoid carbon dioxide emissions by about one million tones. This means that for every ton of reduction, the emission cost was about Euro 12,000 – 13,000.

This is a lesson to keep in mind when formulating a project for disaster risk reduction; the cost verses result to be considered thoroughly. Reviewers found that when projects are completed and handed over to the organizations responsible for maintenance they are either neglected or abandoned due to lack of resources or some other reasons not known to us. One good example is preparation of District Disaster Preparedness and response plans for Hambantota, Matara Galle, Kalutara and Ratnapura districts under the UNDP funded project; “Transitional Recovery Support to flood Disaster in South

and South West Sri Lanka. These District Disaster Preparedness and Response Plans are the ultimate output of the efforts of numerous individuals from government and non-government agencies and communities. These valuable plans are not implemented and now plans are not traceable in district offices. Most notable point is that new plans for these districts have been developed by the DMC.

There is another project implemented by the DMC which has to be given serious consideration; erecting tsunami (or multi-hazard) early warning towers in tsunami affected areas. Money received from a European country as a loan has been invested on this project and action has been already initiated to increase the number of towers. Sri Lanka has a coast line of 1585 km. Two third (2/3) of coastline is vulnerable to disasters. Maintenance of these towers will be the responsibility of the DMC. Since sophisticated instruments have been fixed to maintain these towers, technical officers have to be recruited. These towers serve people living around one or 2 km. from the tower. Cost of towers, maintenance cost, beneficiaries of this system would not have been considered during the feasibility study. Reviewers observed that some towers are in the initial stage of corrosion.

2011 work programme of the UNDP indicates that again funds are allocated for capacity building of DMC staff. Funds are available to follow Disaster Management Certificate/ diploma courses and refresher training programmes etc. including Project staff and other management and operations. To implement these activities the allocated expenditure for 2011 is USD 315,222. Reviewers are of the view that until such time as DMC recruited employees on a permanent basis, expenses be suspended.

### **Spatial planning**

Natural disasters in Sri Lanka are mainly hydro meteorological and mostly on small and medium in scale. There has been a very clear spatial distribution pattern of natural disasters, hence spatial planning should be recognized as the most effective tool in DRR efforts.

DRR is a national priority and needs to be integrated in to the national spatial planning system. However DRR strategies need to be implemented at local level as most of the disasters are localized. At present the Government has approved the national physical plan prepared by the National Physical Planning Department (NPPD). DRR strategies have been adequately mainstreamed into this plan based on spatial planning aspects. Hence the directions of National Physical Plan should be reflected in the local level spatial plans / land use plans. Floods and droughts have been the most common disasters having a very clear spatial distribution pattern. Thus comprehensive spatial planning at all three levels (national, provincial and local) could provide sustainable and long lasting DRR solutions.

At present, there is no machinery in the Planning Department to take care of perspective planning and formulation of initiative for long-term disaster reduction due to pre-occupation of the planning bodies with other pressing issues of economy and development. The subject of the disaster management does not get the priority it deserves under pressure of other competing demands. It needs to be emphasized that any delay in resolving these issues will escalate the costs of disaster reduction which developing economies could ill-afford.

### **Women's participation**

In a society with severe constraints on women's participation in public decision making the post disaster relief and recovery processes have provided a rare opportunity for women to step into new public roles and get involved in community decision making. The work done by the women has dispelled the myth that grassroots women's efforts benefit women only. In fact the women's efforts clearly have helped respond to family and community needs. At the project formulating stage, all the seven projects had overlooked the role of women.

### **Involvement of Local Authorities**

At the local authority level, disasters are mostly "invited" or "created" due to wrong interference of the human activities with the environment, caused by absence of comprehensive development plans and poor law enforcement.

One has to recognize the Local Authorities as the key institution in disaster risk reduction at the local authority level. At present local government is totally neglected in the disaster management process.

Since most of the disasters are rooted at local level and as the wrong relationship of the human activities with the natural processes are the primary causes of such disasters, it is essential to empower the local authority to handle the DRR at local level.

### **Public corporation**

Under the provisions of SLDMA the NCDM/DMC is considered as a Public Corporation. The intention of the establishment of public corporations being to liberalize from government procedures for speedy decision making and speedy action, corporations have their own financial and administrative procedures. To date DMC has not initiated action to have its own financial and administrative procedures; further delay will cause hardship to decision makers of DMC.

Formulation of corporate plan is not consistent with either Road map or the HYOGO framework for action. Activities that deviate from Road Map or the HYOGO frame work will not serve the purpose and will reduce the degree of relevance too.

### **International Cooperation**

The responsibility for disaster risk reduction and management essentially lies with the national government. International cooperation therefore is vital for building up national capabilities, particularly in respect of low income economies with high exposure to natural hazards. International cooperation is crucial for transfer of technology and promoting multilateral projects and research efforts in disaster risk reduction. The UN system, SAARC Disaster Management Centre, Asian Disaster Reduction Centre, Japan and Asian Disaster Preparedness Centre could play a vital role in this effort.

### **National Disaster Management Plan and National Policy**

SLDMA section 4 (b) – “ to prepare and formulate the National Disaster Management Plan and National Emergency Operation plan based on national policy and programme formulated under paragraph (a) in order to ensure –

- i) Preparedness for disaster and any other emergencies;
- ii) Risk prevention and
- iii) The prevention and mitigation of disaster.”

National Disaster Management Plan (NDMP) and National Policy are in draft form for the last five years. It is a legal requirement to prepare these plans and submit to Cabinet of ministers for its approval. NDMP and National Policy have to be finalized without further delay.

### **5.2 Lessons learned**

- Very high staff turn-over, human resources limitation of DMC, undue delays of implementing projects etc. would have been avoided if the DMC tried to obtain the services of the government officers who had undergone training on disaster management (NDMC trained government officers on DM with UNDP assistance). It would have eased many constraints encountered by DMC due to dearth of experienced staff. Under the provisions of SLDMA, getting services of government officers on secondment basis is permitted.
- Communities are the lowest and the most basic and effective unit for disaster management in any society and particularly in developing countries. There are inherent strengths in communities. They have local knowledge on DM and are aware of the locally available resources. Communities are the first real time responder to every disaster and they have the most authentic knowledge of local risk and vulnerabilities. They are a reservoir of time-tested knowledge of coping mechanism; which could be effectively used for DRR.
- Prior to implementation of a project, officers who are responsible for implementation should be made aware of the activities and objectives of the project; it will help to understand the roles and responsibilities of each actor. The best time to start involving officers are at the beginning of any programme. It was revealed at the interview that some stakeholders were not aware of the name of the project and its objectives.
- Local Authorities were not consulted or involved in this effort. They have to get involved in DRR activities to ensure community representation.
- Need to convert the present top-down approach to development into an integrated and holistic approach that treats risk reduction as a development priority must be recognised.

- Tailor made programmes do not fit everywhere.
- Communities are very supportive of the programmes of disaster preparedness, especially if they are involved in events that showcase their experience to other organizations.
- Once convinced communities are well prepared to commit their own resources to take preventive actions to reduce risk of loss or damage.
- A strong and knowledgeable political leadership committed to Disaster Risk reduction is a must.

#### **Future programmes**

- Community participation has been recognized as the additional element in disaster management necessary to reverse the trend of increasing frequency and loss from disasters, build a culture of safety and disaster resilient communities, and ensure sustainable development for all. Therefore future assistance should be focused on Community Based Risk Reduction programmes.

#### **5.3 What went well?**

- Without UNDP support DMC would not have been able to handle DRR activities. Projects designed to strengthen the DMC went well
- Establishment of Disaster Management Centre with new technology and equipment.
- Integrated Strategic Environmental Assessment (ISEA) for the Northern Province of Sri Lanka.
- Government commitment for DRR is visible through the significant increases in the national budget allocation.
- Support and timely technical inputs provided by CBDRM project to develop a risk reduction culture in the country is a long term investment towards promoting disaster risk reduction.
- The Emergency Operation centres established and strengthened through the CBDRM project is functioning well at national and district level.
- The foundation laid by the CBDRM project helped DMC to attract funding from many bilateral agencies and successfully implement disaster management programmes.
- Development of Hazard, Vulnerability and Risk Report for Sri Lanka.
- Establishment of Tsunami and Multi-Hazard Early Warning Systems at the District Level.
- Sustainable Disaster Risk Reduction approaches mainstreamed into Development Planning
- DRR promoted as a subject of study in research institutions and schools
- Ministry of Disaster Management extended their fullest support in project implementation & management
- Development of the Coastal Hazard Profile, Landslide Hazard Profile, Cyclone Hazard Profile, Drought Hazard Profile, Flood Hazard Profile and Vulnerability Profile
- Strengthening of Disaster Information System – Desinventar
- DMC web site.

#### **5.4 What need to be improved?**

- Further strengthening of DMC, with permanent staff, this is very urgent.
- Establishment of VDMC; there are six committees established at village level on different subjects. Each committee comprises of ten members. Community leaders are doubtful about the sustainability of these committees as they have no activities to perform on a regular basis.. Current practice village-centric DM committees may need to be reviewed to establish more sustainable committees; formulating VDMC on real need of the community. People of different ages, gender and background invariably have different perspectives it is therefore necessary to ensure that a full spectrum of the community is involved. This is usually far more important than involving large numbers.
- Implementation of structural disaster risk reduction activities.
- Improve livelihood activities. Poverty, vulnerability and disasters tied in a reciprocal and reinforcing relationship. Any effort to reduce vulnerability to disasters requires interventions to reduce poverty more generally. Disaster Management should be linked to development and promote livelihood
- A well prepared Community.
- Close supervision on project activities.

- Assistance and commitment of all the stake holders
- Training of the staff concerned before implementation of the project.
- Communities should be given awareness by technically qualified persons.
- Poverty alleviation should be considered as a priority.
- Develop and nurture linkage with Local Authorities from the very beginning.
- The collection and dissemination of best practices in development planning and policy that reduce disaster risk.
- The galvanizing of political will to reorient both the development and disaster management sectors.

## **5.5 Recommendations for Future Programming:**

### **a) Programme management**

- The HFA-based Roadmap has been a strong contribution to DM in Sri Lanka. Implementing simple tracking tools that connect projects to the Roadmap and to the HFA indicators could help strengthen this support. Simple tracking tools for Roadmap progress that also recognize partner support, together with broad steering committee membership, should further contribute to partnership development.
- Revisit the Roadmap in the light of Climate Change Adaptation interest and resources, link the Roadmap to the country's development plan and develop an appropriate action plan with real provision for monitoring and evaluation in line with HFA reporting;
- Immediate action should be taken to recruit the staff on a permanent basis, if not all the good work done may fade away with staff turnover. Reviewers noticed a large number of paper advertisements published in news papers incurring a heavy burden to DMC calling applications for vacancies on contract basis. Selection procedures consume lot of time and effort.
- A thorough analysis of capacity development issues is required, especially in regards to sustaining national capacity for DRM as "staff turnover" is repeatedly seen as a problem. Sustaining the HR capacity of government institutions is a difficult issue that must be explored with a broad "systems-look" (not just training) at the development of government capacity.
- DMC must make a strategic choice as to where and to what extent it mandated to engage in disaster management. Because there are other government departments and technical agencies that are mandated on DM activities. This a thought for future programming.
- Ensure transparency in all actions – transparency should always be promoted as means of achieving successful outcomes.
- UNDP programme management staff may not be there for long; therefore, action to be initiated to transfer the activities handled by UNDP programme office to DMC gradually.
- Eradicate the short coming with regard to Management of the projects. (coordination, monitoring, time management etc.)
- Appointment of Technical Advisory Committees for each major disaster. (in terms of SLDMA)
- Build up a strategy (mechanism) to continue the project activities; well contributed for DRR, before closing of the projects.
- UNDP interventions are crucial because state funds are not available for some priority areas of DRR. Therefore Reviewers recommend continuous support of UNDP for future programmes for DRR

### **b) Mainstreaming Disaster Management.**

- The Strategic Environment Assessment for the Northern Province can be the basis for such assessments across the country, as a first-step towards integrating (mainstreaming) disaster risk reduction into environmental management and development;
- Integration of DRR into national development planning process by promoting and assisting the involvement of DMC in the national process and working in close collaboration with the ministries of Finance, Planning, and Disaster Management and other relevant agencies.
- Government funded disaster preparedness and mitigation measures are heavily tilted towards structural aspects, (because project proposals to the treasury usually based on structural

measures.) and undermine non structural elements such as the knowledge and capacities of local people, and the related livelihood production issues. Therefore future programming of UNDP to be focused on non structural measures.

**c) Involvement of local Authorities**

- Since most of the natural disasters are localized and most disasters occur due to human interference at local level, empowering Local Authorities for undertaking activities related to disaster risk reduction should be considered the centre piece of the strategy. Reviewers strongly recommend; future assistance for DRR should focus on strengthening Local Authorities on DRR activities.
- It was surprising to note that an important element of DRR has been neglected or forgotten when deciding priority areas in the UNDP funded project as well as in Road Map. However fortunately in Road map Vol. II (P-2-2) it is stated that “There is a need for the DMC to strengthen the mandate of these PCs and LAs and bring them together to work in a coordinated manner” (budget requirement is limited to US\$ .10 ml.). Local Authorities are the lowest political Institutions directly linked with people, member of LAs are in the front line when disasters strike. Therefore involvement of Local Authorities in DRR is mandatory for mainstreaming DM in Sri Lanka.
- The Local Authorities are the closest to the people. It is at this level that emergencies are felt most. It is at this level that rescue, evacuation, and relief operations are launched and carried out. This responsibility to be reinforced with Regulations under the Local Government Act and funds for emergency operations must be allocated.

**d) Community based local level action**

- Interventions supported at community-level should combine eco-system conservation, livelihood enhancement and disaster risk reduction (including climate resilience) to maximize both benefits and sustainability of initiatives, giving concrete benefits even in the absence of hazard-event occurrence.
- While a thorough analysis could help guide the overall capacity development approach, there is an opportunity to pursue capacity development activities around Disaster Needs Assessments, including development of tailored assessment tools and Disaster Recovery Frameworks in anticipation of frequent, smaller-scale disasters. This effort could help avoid wasted time and mistaken recovery priorities in the immediate aftermath of a disaster.
- Expanding the small-grant approach for community level DRR projects would further encourage community-level partnership activities, and could improve CBDRM delivery.
- Existing good practices and some lessons learned in various areas on community based efforts towards disaster preparedness should be documented and dispatched to wider audiences.
- Disaster management should be linked to the development and promote livelihood patterns, structures and opportunities that could empower disaster-prone communities to cope with hazard shocks and livelihood systems help poor people to survive disaster events. This basic principle in disaster management was not considered adequately in the UNDP projects implemented. DMC has to identify livelihood options that could enhance disaster risk management capabilities.
- No community planning activity can solve all the issues. But that is not a reason for holding back. Limited practical improvement will almost always result, and community planning activity can often act as a catalyst for more fundamental change. Reviewers urge involvement of community for project planning at initial stages.

**e) Early warning System**

- Reviewers learned that the present mechanism of dissemination viz. early warning signals has been impaired due to a number of reasons. Why do early warning messages fail to reach their intended recipient? Warnings need to be transmitted from a **national technical agency** through multiple receivers before they reach the vulnerable people. Any message that passes through many hands before reaching the ultimate target runs the risks of delay or distortion. Even well-coordinated structures, dissemination to remote areas is still difficult in many



places and requires a combination of technological and non technological solutions there is no “one size fits all” solution.

- Use of modern technology with trained and responsible manpower is essential for the operation of the warning system. Timely warning to the potential victims of disasters such as flood and tsunami can reduce damages to a great extent. The warning should contain full information so that no panic is created.
- The Emergency Operations Centre (EOC) was established in 2006 and located in a temporary building for the last five years. Sophisticated equipment moved from one place to another and new building for DMC is under construction. Early warning is the most crucial part of DM in saving life and property. Therefore EOC has to be established in a permanent building with all equipment, facilities and trained human resources. The Ministry and DMC to find ways and means to overcome this problem immediately; if not all the resources and effort may fade away quickly.

**f) Partnership strategy**

- Strengthening the academic institutionalization for DRR through continued partnership with academia can be helpful and should have some lasting benefits.
- Given anticipated decline in resources, continue to focus on partnerships via small grants and other modalities to take advantage of the capacity of local partners including universities and CSOs to carry-out CBDRM activities;
- National-level support has been necessarily large at the start, but further national support should be directed to delivering DRR at the local level.

**g) Special areas in DRR.**

- Natural disasters in Sri Lanka are mainly hydro meteorological and mostly on small and medium in scale. There has been a very clear spatial distribution pattern of natural disasters, hence spatial planning should be recognized as the most effective tool in DRR efforts.
- Disasters are not only physical events that take lives and damage property. When disaster strikes a community, people experience powerful emotions. Psychological trauma due to disasters is linked with the feeling of grief and loss. The death of relative or friends as well as material losses will affect the sustainability of people’s lives. But not everyone is suffered in the same way or as deeply, and given all the types of disasters – rapid or slow onset. This important area has not been covered. Reviewers recommend designing a project to identify ways and means of helping victims of disasters who require psychological support to overcome traumatic conditions.

**h) Gender perspective.**

- UNDP handbook on planning monitoring and evaluating for development results (page 171) states that: “Consistent with UNDP development efforts, UNDP evaluations are guided by the principles of gender equality, the rights-based approach and human development. Thus, as appropriate, UNDP evaluations assess the extent to which UNDP initiatives have addressed the issues of social and gender inclusion, equality and empowerment; contributed to strengthening the application of these principles to various development efforts in a given country; and incorporated the UNDP commitment to rights based approaches and gender mainstreaming in the initiative design”. These guidelines should be strictly followed in future programmes.
- Disaster risk reduction has long remained a largely male- dominated affair, yet it is clear that the full and balanced participation of women and men make disaster risk reduction more effective. Gender balance should be recognized in future project planning, because the UN/ISRD secretariat is facilitating to build a global partnership for mainstreaming gender issues into the disaster risk reduction process.

**i) Corporate Plan of DMC**

- The Corporate Plan serves as the key management tool to guide and prioritize government’s action on disaster management. Corporate Plan should be a clear, coherent and action oriented policy framework for disaster risk reduction. Reviewers recommend revisiting the corporate

plan and consider revising in consistence with the Road Map and Hyogo framework for action.

**j) Micro Financing**

- In India both micro-finance and disaster risk reduction have during the past few decades experienced rapid growth and acceptance as important for sustainable development. While those active in micro-finance have long faced the challenges of socio-economic shocks due to various hazards, the disaster management community has only recently began to recognize micro-finance's potential use and benefits for disaster risk reduction. Reviewers recommend introduction of micro-finance system in disaster prone areas through state banks or any private banks willing to support. This has to be initiated by DMC with possible assistance of UNDP.

**k) Awareness and Education**

- Projects to strengthen the capacity of disaster preparedness measures at local level are significant, because Vulnerable community are the direct beneficiaries of such projects. The community leaders interviewed are eager implementing such projects for capacity building and to keep village level committees alive.
- More attention needs to raise awareness among the school community. As schools are the best places for sowing collective values, school teachers and students can serve as vehicles for building a culture of prevention. These include training of teachers, bringing disaster risk reduction into the classroom, campaigning for disaster safety and turning school student into catalysts and initiators.

**l) Language barriers**

- As far as possible use local languages, use plain language. Jargon prevents people from engaging and is usually a smokescreen to hide incompetence, ignorance and arrogance. At least project implementing instructions should be translated in to local languages so that majority of officers responsible for implementing process will understand easily and comprehensively.

**5.6 Significant Outcome of UNDP – DM programmes.**

- When international agencies alerted Sri Lanka on 26th December 2004 of a tsunami threat, country did not have a responsible institution to receive and effectively disseminate the message. Again in 12 Sept. 2007 a possible tsunami alert was issued internationally and in this instance Sri Lanka was able to evacuate the vulnerable coastal communities within 45 minutes. These signaled significant improvements in national early warning dissemination and evacuation capacities within three years and authorities well recognized the project to strengthen the Emergency Operation Centre by UNDP.
- The effectiveness and efficiency of DMC was proved again in managing flood of 2007 and 2008 and preparing for possible cyclonic situation in 2009. In very short period of time DMC transitioned into an organization that was able to independently manage emergency situations without international support.
- Installation of the first automated rain gauged system in landslide prone areas of the country demonstrated the possibilities of generating and disseminating early warning messages in time. The models developed to predict landslide vulnerabilities were proven accurate thirteen times during the first 12 months of operation. Private partnership developed through the project with Dialog Telecom PLC ensure the sustainability of the system as data transfer will be free of charge from the rain gauges to data processor.
- The “Road Map towards Safer Sri Lanka” which was produced with the support of UNDP and constitutes the guiding framework document for overall disaster management programme of the country. Its holistic nature has been acclaimed even internationally. A significant portion of the proposals prepared in seven thematic areas of the Road Map have been completed during the last five years with the generous

support of UNDP. It provided a clear guidance to all the stake holders on disaster risk management targets of the country.

- EWSS project has proved to be successful project with a number of models and lessons learnt emerging. It helped to strengthen the partnership between UNDP, DMC, NBRO, Department of Meteorology and Dialog GSM. It is the first partnership programme drawing together UN organizations, public sector and private sector in a long term risk reduction programme in Sri Lanka. The project resulted in the development of a multi-hazard National Early Warning strategy, and has significantly strengthened capacity for early warning forecasting and dissemination in Sri Lanka. The results are tangible and will have a lasting impact
- Education, awareness and training for DMC, other government and civil society officials and general public helped to improve understanding on disaster management principles and approaches.
- UNDP worked with the government partners to catalogue all known disasters that had taken place in Sri Lanka over the past 30 years. UNDP provided technical support for developing and popularizing the inventory of past disasters – Desinventar. Mainly the newspaper reports of different disasters were used as an information source. This exercise provided an opportunity to understand the complexities of disaster reporting. It was realized that there were many small scale disasters occurring in the country over a long period of time without getting much attention from the public and authorities.
- Significant level of capacity development of disaster management sector was achieved through the projects and was able to assess the future needs of the country to develop a culture of safety.
- Partnership established with the Education Ministry to integrate disaster management in school curriculum, which ensure DRR mainstreaming in to school infrastructure.
- DMC efforts ensure those affected by the disaster had basic minimum to protect their life, property, health and dignity and this would not have been possible without the generous support of the UNDP.
- EOC at national and district levels were established and strengthened and now DMC can reach the vulnerable communities of the country immediately and effectively to save the lives and property.
- Key partnership between the DMC and other stake holders were established or strengthened during project period.
- The initiative taken forward by the project such as saline resistant paddy cultivation is still being maintained by respective communities and technical agencies.
- Prior to the project DMC considered climate change adaptation as a subject with no direct relevance to disaster management and no resource allocations were made through DMC and currently climate change adaptation has been considered as a key priority area of DMC.
- Landslide hazard profiles for 10 districts, National drought hazard profile, coastal hazard profile for 6 districts and flood hazard profile for 4 districts are available.

## **5.7 Views of experts in disaster management sector in Sri Lanka.**

As a part of the Evaluation process, the evaluators conducted a few focus group discussions to get the views of experts in disaster management sector in Sri Lanka.

Vide Annexure X

Focus groups discussions were conducted under the following five main themes:

01. Policy, Institutional Mandates and Institutional Development.
02. Hazard, Vulnerability and Risk Assessment, and Multi Hazard Early warning System.
03. Planning for Disaster Preparedness and Response, and Disaster Mitigation and integration to Development Planning.
04. CBDRM, and Public Awareness, Education and Training.
05. Partnership.

### **Annexure – 1**

Members of the committee of officials, appointed by the Cabinet subcommittee on Natural Disasters.

1. Dr.V.Ambala Vanar  
Additional Secretary , to the President (Chairman)
2. Dr. Reggie Perera  
Deputy Director General , Ministry of Health & Women's Affairs,  
Chairman TAG
3. Dr.P.Ramanujam  
Director, Ministry of Policy Planning & implementation  
Joint – Convener
4. Dr.A.W.Mohotr\tala Director, Department of Mehtodology
5. Dr.R.K.Bandari, Chief technical advisor, National Building Research Organization
6. Mr.J.Charitha Ratwatte, Managing Director, Janasaviya Trust Fund
7. Mr.E.A.Nanayakkara  
Director General , Central Environment , Authority (chairman TAG-  
industrial Accidents)
8. Mr.G.Lankanesan  
Director, Ministry of Reconstruction Rehabilitation and Social Welfare
9. Mr.Christie Silva,  
Secretary , Ministry of Reconstruction Rehabilitation and Social Welfare
10. Mr.K.A.H.Ranaweera, Vice Chairman  
National Water Supply and Drainage Board
11. Mr.K.Yoganathan, Director, Irrigation Department  
Chairman TAG-Flood and Cyclone
12. Mr.P.Illangaovan – National Programe Coordinator – MEIP Colombo (Joint Convener)

**Annexure II - Questionnaire**  
**Outcome Evaluation - DRM Projects of UNDP**  
**Questionnaire for community**

1. Have you participated in any DRM Training programmes conducted by DMC funded by UNDP?
 

Yes	No
Not aware	
  
2. Are there any DRM Programmes implemented in your village by DMC/UNDP?
 

Yes	No
Not aware	
  
3. Did you get an opportunity to upgrade your knowledge in DRR through these projects?
 

Yes	No
Not aware	
  
4. Do you need further assistance for capacity building of community (to cope with Disasters)?  
 .....  
 .....
  
5. Are you aware that village disaster management communities have been established in your village?
 

Yes	No
Not aware	
  
6. Have you participated in the preparation of village DRR plans?
 

Yes	No
Not aware	
  
7. What can you contribute to the success of DRR?.....  
 .....  
 .....
  
8. The aim of the UNDP projects is to reduce vulnerability and increase capacity to better prepare and cope with disasters  
 How far have you achieved these objectives through these projects?
 

1	2	3	4	5
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9. Have voluntary teams been formed in your village?
 

1	2	3	4	5
---	---	---	---	---
  
10. What are the areas to be improved for better relationship with community and DMC?  
 .....  
 .....  
 .....
  - a. Are you satisfied with the present relationship between community and DMC?  
 Yes/No
  
11. CBDRM is an excellent tool for poverty alleviation
 

1	2	3	4	5
---	---	---	---	---
  
12. Do communities actively participate in the DM activities
 

1	2	3	4	5
---	---	---	---	---
  
13. Your knowledge in DM.
 

1	2	3	4	5
---	---	---	---	---
  
14. Have you observed any changes after implementation of DRR projects in your village?
 

1	2	3	4	5
---	---	---	---	---

## Outcome Evaluation - DRM projects of UNDP.

### Part I – Guidelines for interviewer

#### 1. Degree of achievements

Grade	Level of achievements
1	more than 75%
2	between 60% -74%
3	between 45% -59%
4	Between 35% -44%
5	Less than 34%

#### 2. Grading criteria

1	Strongly agreed/excellent /well aware
2	agreed /very good/aware
3	moderately agreed /Good/little knowledge
4	Average/awareness very low /not agreed
5	Poor /strongly disagree/ know nothing

#### 3. Impact assessment assumptions

Relevance	<ul style="list-style-type: none"><li>- Entire project components relevant to national needs of priorities.</li><li>- The programme components fit in UNDP's programmatic priorities in Sri Lanka</li><li>- Community involvement in CBDRM is good.</li><li>- Project activities are appreciated by the community and stakeholders</li><li>- UNDP stimulate the government efforts to streamline the DM activities</li></ul>
Effectiveness	<ul style="list-style-type: none"><li>- Vulnerable communities are reached quickly and efficiently when disaster strikes.</li><li>- Project objects were completed effectively</li><li>- Project activities have strengthened the DRM practices.</li><li>- The target groups are selected affectively</li></ul>
Efficiency	<ul style="list-style-type: none"><li>- Resources have been utilized efficiently</li><li>- Quality of technical assistance up to the expected level.</li><li>- all the projects well contributed to mainstreaming the DM in SL</li><li>- UNDP assistance have been utilized for recovery activities efficiently</li></ul>
Degree of change	<ul style="list-style-type: none"><li>- Ability to respond to disasters successfully</li><li>- Paradigm shift (change in perception)</li><li>- Response to early warning</li><li>- Data collected and disseminated.</li><li>- Training on DM</li></ul>
sustainability	<ul style="list-style-type: none"><li>- Community based DM volunteers groups formed and trained</li><li>- Local level capacities are upgraded to cope with disasters</li><li>- The road map identified the national priorities and implemented steadily.</li><li>- EW System/ instruments/ equipments</li></ul>

### Part II

Interviewee will be questioned only on his involvement / knowledge of the relevant projects

1. Name of the interviewee:.....
2. Organization:.....
3. Position:.....
4. Date and time of interview:.....

### Part III - Questionnaire

1. Your involvement in following UNDP projects
 

1	2	3	4	5
---	---	---	---	---

  1. Project 01 (TRSFD)
 

1	2	3	4	5
---	---	---	---	---
  2. Project 02 (CBDRM)
 

1	2	3	4	5
---	---	---	---	---
  3. Project 03 (PADEF)
 

1	2	3	4	5
---	---	---	---	---
  4. Project 04 DRMP
 

1	2	3	4	5
---	---	---	---	---
  - Project 05 EWSS
 

1	2	3	4	5
---	---	---	---	---
  5. Project 06 SRNRTA
 

1	2	3	4	5
---	---	---	---	---
  6. Project 07 SSORM
 

1	2	3	4	5
---	---	---	---	---
2. Has UNDP contributed to improve and enhance the quality of human life through these projects?
 

1	2	3	4	5
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3. Its influences in heightening DRM in Sri Lanka
  - a. Have we extracted the maximum benefits of UNDP assistance? Yes/No
  - b. If not, why
 

.....

.....
4. Your knowledge in DRM
 

1	2	3	4	5
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5. Do you think that entire UNDP Projects relevance and appropriate in the area of DRM
 

1	2	3	4	5
---	---	---	---	---
6. DMC/relevant authorities have plans to continue the project activities without interruption
 

1	2	3	4	5
---	---	---	---	---
7. What are the specific contribution of these programmes to streamline DRM systems and practices in Sri Lanka
 

.....

.....
8. National and local level partnership for implementation of the programme
 

1	2	3	4	5
---	---	---	---	---
9. Do we need further support of UNDP for DRR? – Yes /No  
If yes, what are the areas?
 

.....
10. Has UNDP supported for HRD adequately for DRR?

### Part IV - Impact assessment of each project

1. Project 01 TRSFD
  - 1.1. Are you aware that TRSFD project was implemented in 2003 by NDMC?
 

1	2	3	4	5
---	---	---	---	---

1.2. Is this project relevant to flood disaster mitigation?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
1.3. Has this project supported to rebuild the damaged houses due to Disaster in project areas successfully?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
1.4. Are the preparedness plans used by the relevant agencies? (Prepared under the project)	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
1.5. Was there a monitoring mechanism in place to monitor the activities?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
1.6. Do the desinventar used by policy makers	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
1.7. Have community aware response operation procedures of DMC	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
1.8. Has UNDP funds been utilized effectively and efficiently?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
1.9. Was the training given to government officer's boost their efficiency	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
2. Project 2 CBDRM						
2.1. Are you aware that the CBDRM project was implemented by DMC?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
2.2. Has it provided opportunities to enhance DRM capacities at local, Intermediate and national levels?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
2.3. Are you aware of the thematic areas of road map?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
2.4. Are all the technical units of DMC in operation?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
2.5. Have the preparedness and response plans for pradeshiya Sabas been prepared?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
2.6. Has DMC activities focus for mainstreaming DRM in to development process	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
2.7. Has the DMC carried out awareness campaign on disaster mitigation and preparedness for stake holders and community?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
2.8. Have the UNDP funds been utilized to achieve its objectives effectively and efficiently?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
2.9. Is this project relevant to Govt. D.M. programmes?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
3. Project 3 PAEDF						
3.1. Are you aware that PAEDC project is implemented by DMC/UNDP?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
3.2. Do you think that road map is a comprehensive document for DRM?	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		
	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5
1	2	3	4	5		



- 3.3. Could the road map be implemented as a tool to reduce human suffering?
- 3.4. How efficiently and effectively is the road map implemented? 

1	2	3	4	5
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- 3.5. Has preparedness and response plans for DS/Divisional secretariat/ GN level is in place 

1	2	3	4	5
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- 3.6. Was this project implemented effectively and efficiently? 

1	2	3	4	5
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- 3.7. Is stakeholder involvement sufficient for the success of the project? 

1	2	3	4	5
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- 3.8. Is the DMC established and function efficiently? 

1	2	3	4	5
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- 3.9. Is the training provided to DMC staff sufficient? 

1	2	3	4	5
---	---	---	---	---
- 3.10. Does Turnover of trained staff affect the efficiency of DMC? Yes / No 

1	2	3	4	5
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4. Project 4 DRMP
- 4.1. Are you aware that DRMP is implemented by DMC? 

1	2	3	4	5
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- 4.2. Your knowledge in HFA framework 

1	2	3	4	5
---	---	---	---	---
- 4.3. DMC website is developed in such a way to provide information to general public 

1	2	3	4	5
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- 4.4. Has best practices on land use planning and construction shared with LA? 

1	2	3	4	5
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- 4.5. Are rehearsals on tsunami warning conducted effectively? 

1	2	3	4	5
---	---	---	---	---
- 4.6. Are NDMCC advices / proposals implemented by relevant authorities? 

1	2	3	4	5
---	---	---	---	---
- 4.7. Do undergraduates research projects on DRR financially supported by this project? 

1	2	3	4	5
---	---	---	---	---
- 4.8. Have best practices of building guidelines available in Sinhala and Tamil? 

1	2	3	4	5
---	---	---	---	---
5. Project 5 EWSS
- 5.1. Are you aware that a project on EWSS implemented by DMC / UNDP? 

1	2	3	4	5
---	---	---	---	---
- 5.2. Are you satisfied with the present flood level monitoring network under the project? 

1	2	3	4	5
---	---	---	---	---
- 5.3. Are pilot integrated models in operation for collection of real time rainfall data collected through automatic rain gauges? 

1	2	3	4	5
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- 5.4. Are early warning messages disseminated using (5.3) 

1	2	3	4	5
---	---	---	---	---

5.5. Are local warning systems in place?

1	2	3	4	5
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5.6. Community awareness on EW Systems established by DMC and other agencies

1	2	3	4	5
---	---	---	---	---

5.7. What action is been taken for sustain  
EWS?.....

1	2	3	4	5
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6. Project 6 SRNRTA

6.1. What caused to implement SRNRTA project in tsunami affected areas?

.....

1	2	3	4	5
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6.2. Were CBOs and NGOs provided knowledge on link between environments  
management and DRR?

1	2	3	4	5
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6.3. Are you satisfied with the activities implemented to achieve the project objectives?

1	2	3	4	5
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6.4. Are management plans formulated with the participation of the community to  
prioritize activities of the project?

1	2	3	4	5
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6.5. Are there plans in place to continue these activities?

1	2	3	4	5
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6.6. Is there a mechanism in place to monitor the implementation of plans?

1	2	3	4	5
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6.7. Was community participation in the project to the expected level?

1	2	3	4	5
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7. Project 07 SSORM

7.1. Has this project adequately addressed implementing of the Road Map?

7.2. Has national land use and physical planning models developed at divisional  
Secretary level? (yes/no/in progress)

7.3. Are tsunami and early warning systems established at District levels? (yes/no /  
in progress)

7.4. Are risk profiles developed for drought? (yes/no/ in progress)

7.5. Do district level EW Systems function effectively? (yes/no/in progress)

7.6. Do the building bylaws and building codes revised and developed?

1	2	3	4	5
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7.7. How far has DMC achieved the main objective of the project?

1	2	3	4	5
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7.8. Is HFA framework addressed by this project?

1	2	3	4	5
---	---	---	---	---

## Outcome Evaluation - DRM Projects of UNDP

### Questionnaire for community

1. Have you participated in any DRM Training programmes conducted by DMC funded by UNDP?

Yes	No
Not aware	

2. Are there any DRM Programmes implemented in your village by DMC/UNDP?

Yes	No
Not aware	

3. Did you get an opportunity to upgrade your knowledge in DRR through these projects?

Yes	No
Not aware	

4. Do you need further assistance for capacity building of community (to cope with Disasters)?

.....  
.....

5. Are you aware that village disaster management communities have been established in your village?

Yes	No
Not aware	

6. Have you participated in the preparation of village DRR plans?

Yes	No
Not aware	

7. What can you contribute to the success of DRR?.....

.....  
.....

8. The aim of the UNDP projects is to reduce vulnerability and increase capacity to better prepare and cope with disasters

How far have you achieved these objectives through these projects?

1	2	3	4	5
---	---	---	---	---

1	2	3	4	5
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### **Annex III**

#### **Member of the National Disaster Management Coordination Committee**

Ministry of Disaster Management(MODM), Disaster Management Centre(DMC), Dept. of National Planning(NP), Road Development Authority (RDA), Dept. of Agrarian Development (DOA), United Nations Development Programme(UNDP), Sri Lanka Land Reclamation and Development Corporation (SLRDCC), National Building Research Organization(NBRO) , Irrigation Department (ID) , Dept.of Meteorology (DOM), Consortium of Humanitarian Agencies (CHA) , Practical Action (PA), Sri Lanka Red Cross Societies (SLRCS) , Asia Foundation (AF), Ministry of Health(Min.of Health), German International Cooperation(GIC), World Vision Lanka(WV), , International Union for Conservation of Nature(IUCN) , Office for the Coordination of Humanitarian Assistance(OCHA), University of Sri Jayewardenepura(Uni.Jayawardanepura), University of Colombo(Uni.Colombo), Save the Children(SC), Sarvodaya, Sewalanka Foundation(SLF), National Water Supply & Drainage Board ( NWS&DB), Coast Conservation Department(CCD), Food & Agriculture Organization(FAO), Geological Survey & Mines Bureau(GSMB), United Nations Children's Fund(UNICEF), Marine Environment Protection Authority(MEPA), World Health Organization(WHO), Japan International Corporation Agency (JICA), Urban Development Authority(UDA)



## United Nations Development Programme

Since 1989, the Disaster Risk Management Programme of UNDP-Sri Lanka has been providing technical and financial support to strengthen the capacities of Sri Lankan Disaster Management Sector. After a number of years of programme implementation, UNDP wishes to conduct an outcome evaluation of the Disaster Management programme. Findings of the outcome evaluation will be used to design the approach of UNDP in the next programming cycle that starts in 2013. In this context UNDP-DRM programme wishes to hire a Consultant (an individual or an organization) to carry out the proposed outcome evaluation. The expected duration of the consultancy is two months.

### UNITED NATIONS DEVELOPMENT PROGRAMME National Consultant- Programme Outcome Evaluation

#### Duties and Responsibilities:

- Review the approaches taken, results and outcomes of the projects implemented by the UNDP-DRM programme during 2008-2011
- Review opportunities and challenges faced by the UNDP-DRM programme during the above programming period
- Consult key stakeholders (Government, non-government, university, research institutions and private sectors) on the contribution of the UNDP-DRM programme in disaster management of Sri Lanka
- Recommend how UNDP-DRM programme should position in the next four years

#### Functions / Key Results Expected

- Evaluation Report containing the findings and recommendations

#### Educational Background and experience

An advanced University degree in Science, Disaster Management, Agriculture, Arts or any other relevant subject area with at least twenty (20) years of work experience including national level programme management.

#### Competencies

- Demonstrated ability to grasp and synthesize inputs from a range of disciplines and stakeholders related to disaster management;
- Excellent knowledge of the disaster management, policy and institutional framework
- and initiatives of Sri Lanka and the region.
- Proven management and leadership qualities
- Demonstrated skills in evaluation of programmes and projects

Qualified candidates/organizations are invited to submit an updated CV/ organization profile with qualifications and experiences with names of two, non-related referees, contact details and price schedule. Organisations applying are required to submit CVs of proposed consultants. The price schedule should include consultancy fee, cost of transportation, subsistence, cost of report preparation etc. Submissions should be sent under registered cover to reach the address below on or before 21<sup>st</sup> February 2011. Please visit <http://www.undp.lk> for additional details including the Terms of Reference for the task.

Procurement Unit-UNDP  
202-204, Bauddhaloka Mawatha, Colombo 7, Sri Lanka

Email: [procurement@undp.org](mailto:procurement@undp.org)

<http://www.undp.lk>

## **Annexure V: Terms of Reference for the Programme Outcome evaluation**

### **Background and Context**

UNDP has been working with the Government of Sri Lanka (GoSL) in the area of disaster risk management (DRM) since 1998. Over a period of time, UNDP has emerged as a trusted partner of the GoSL in respect to DRM. UNDP has provided consistent support to the GoSL in developing its institutional and legal system and making substantive progress towards achieving the objectives of the Hyogo Framework of Action (HFA). In order to get a feed back of the support provided to Sri Lanka and to realign the focus to suit current needs UNDP proposes to conduct a Programme Outcome Evaluation of the Disaster Risk Management (DRM) portfolio of projects implemented since 2007 with UNDP assistance.

### **Objectives**

The overarching objective of the proposed outcome evaluation of DRM is to summarize the extent of contribution by the UNDP supported DRM programmes to the national level changes/improvements in policies, practices and institutional frameworks.

In that context the evaluation will:

- Highlight the specific contributions of these programmes to strengthening DRM systems and practices in Sri Lanka;
- Assess how efficiently and effectively have these programmes been implemented by UNDP and its partners;
- Ascertain the relevance and appropriateness of interventions in the area of DRM;
- Analyze national and local partnerships for implementation of programmes, and how the partnership strategy could be improved further;
- Value addition of the UNDP support to HFA framework and National Disaster Management Coordination Committee (NDMCC) approach;
- Review the process or steps taken by the DRM programme to disseminate the information on project outputs and success stories and make recommendations to improve the communication;
- Review the balance of products between the three languages, namely, Sinhala, Tamil and English;
- Study and recommend the balance of programmes at national and sub national levels;
- Evaluate the ability of the DRM programme to access regional and global resources;
- Analyze development of human resources and knowledge base through UNDP's programmes and suggest how it could be improved further; and
- Present key recommendations regarding the strategic direction and future programming areas and suggest how UNDP's programmes could be improved / reoriented to respond to national needs and priorities

The outcome evaluation will cover all the DRM programmes falling within the UNDP Country Programme Action Plan Period of 2008-12. DRM projects that started after tsunami of 2004 will be included as they continued in the above period. Geographic coverage will include all the regions of Sri Lanka but the programmes in the Northern and Eastern regions have started at different time frames due to the conflict.

### **Institutional and Legislative Developments in relation to DRM in Sri Lanka**

Although the Government's initiative to strengthen institutional and legislative system related to DRM commenced in early 1990s, it was the December 26, 2004 Indian Ocean Tsunami which provided a strong momentum to accelerate the DRM efforts. A number of institutional changes took place related to Disaster Management in the recent past. For example, in 1996, National Disaster Management Centre (NDMC) was established under the Ministry of Social Welfare which was renamed as the National Disaster Relief Services Centre (NDRSC) under the purview of the Ministry of Disaster Relief Services. The NDRSC implements relief, rehabilitation and reconstruction activities related to disaster response and recovery.

In the aftermath of the tsunami the Disaster Management Act (2005) was passed and the National Council for Disaster Management (NCDM), chaired by the H.E. the President was established. The same year the Disaster Management Centre (DMC) to coordinate disaster management activities and the Ministry of Disaster Management and Human Rights (MDMHR) was established. MDMHR

coordinated consultations in 2005/2006 to formulate the ‘Road Map towards a Safer Sri Lanka 2005-15’ to serve as the basis for planning, resource mobilisation and the phased implementation of disaster risk reduction activities in Sri Lanka. Development of a number of Disaster Management Policy and Standard Operating Procedures have been undertaken with the coordination of DMC that include; a) Disaster Management Policy of Sri Lanka; b) National Disaster Management Plan; c) Institutional and Legal Framework of Sri Lanka; d) National Emergency Operating Procedures (NEOP) etc. The Ministry was re named in 2010 as the Ministry of Disaster Management and it presently hosts the DMC and NDRSC along with Metrological Dept. of Sri Lanka and National Building Research Organization (NBRO).

### **UNDP’s Support for DRM Programmes**

UNDP Sri Lanka has implemented several projects related to strengthen DRM in Sri Lanka. The brief details of key DRM projects implemented by UNDP since 2003 are as follows:

***2003 – 2008: Transitional Recovery Support to Flood Disaster in South and Southwest Sri Lanka***  
Budget = US\$1,850,962 funded by BCPR and SIDA.

Main partners: National Disaster Management Centre & National Disaster Relief Services Centre

Objectives:

- Reduce vulnerability of communities living in flood and landslide prone areas of Kalutara, Galle, Matara and Hamabntota districts.
- Build the capacity of government officials to deal with these hazards in the future.

***2006 – 2008: Capacity building in disaster risk management***

Budget = \$ 1,176,470 funded by Government of France, main partner: Disaster Management Centre

Objectives:

- To enhance disaster risk management capacities at local, intermediate and national levels.
- To mainstream disaster risk reduction in the development processes.

***2005 – 2008: Preparatory Assistance for Establishing Disaster Management Framework and Disaster Management Centre in Sri Lanka.***

Budget = \$ 847,210 funded by SIDA

Partner: Disaster Management Centre

Objectives:

- To support the DMC in the development of a Road Map for risk reduction in Sri Lanka
- Provide initial capacity development support to the DMC to assist in establishing and institutionalizing the Centre, implemented through:
  - Sector-specific, national and/or regional expertise developed covering disaster preparedness planning and/or mitigation of risks and vulnerabilities.
  - Establishing Disaster Management Framework at Intermediate provincial, district and local levels.

***Jan 2009 – Apr 2009: Disaster Risk Management through Partnerships (DRM-P) in Sri Lanka***

Budget = \$ 699,035 funded by ISDR & IOC

Partner: Ministry of Disaster Management and Human Rights

Objective:

- Ensure equitable access to improved quality services and economic infrastructure to vulnerable populations in disadvantaged areas.

***2005 – 2007: Early Warning System in Sri Lanka***

Budget \$125,000 funded by ISDR, main partner: Disaster Management Centre, implemented primarily in the landslide prone areas of Ratnapura district).

Objectives:

- Establish a pilot level landslide early warning system in most vulnerable areas of Sri Lanka .

***2006 – 2008: Sustainable Recovery of Natural Resources of Tsunami Affected Coastal Areas of Sri Lanka with Peoples’ Participation.***

Budget \$190,476 funded by Government of Korea

Partner: DMC and implemented in Hambantota, Matara, Ampara, Batticaloa, Trincomalee districts

Objectives:

- Enhance the productivity and long-term protection of ecosystems while improving the quality of life of the communities through community participation in environmental management.

***2008-2012: Strategic Support to “Operationalize the Road Map Towards Safer Sri Lanka”***

Budget \$2,100,000 funded by BCPR-UNDP

Partner: Ministry of Disaster Management and Human Rights

Objectives:

- Support the DMC and other relevant stakeholders to implement the Road Map proposals through building their capacities and creating an enabling environment.

Using the resources from above projects UNDP continued to provide human and financial resources to address capacity gaps in the institutional system. In addition to the capacity-building support provided at the national and district levels UNDP also implemented DRM programmes at the community level.

### **Evaluation Methodology**

The Evaluation process will commence with a review of individual project documents, key publications, products, policy documents and other material provided by the DRM programme and stakeholders. Evaluator/s will review progress and terminal reports for each of the projects; refer to previous evaluation reports available on these projects including the evaluation conducted by BCPR. Consultant/s will also review the minutes of the national steering committee for DRM and minutes of the National Disaster Management Coordinating Committee.

The evaluators would hold discussions with key stakeholders, which include senior government officials within the Ministry of Disaster Management, Disaster Management Center, UNDP senior management, donor community, and field-level implementation partners. The evaluators will use interviews to analyze programme outputs and overall outcome and analyze the context in which these programmes have been implemented.

The evaluation team should conduct field visits to selected sites. The field visits should include important regions of programme implementation. In the field, the team should meet with the government officials, NGOs, and communities which have participated in the programme.

The evaluation team should hold regular consultations with evaluation focal points in the Ministry of Disaster Management and UNDP, Sri Lanka. The evaluation team will present the key findings before UNDP, Sri Lanka and seek its formal comments on its findings and recommendations. An overall guidance on Programme evaluation methodology can be found in the “*UNDP Handbook on Monitoring and Evaluating for Results* .”

The evaluation team will apply the following criteria for presenting its findings:

- a. **Relevance:** How do the programme components fit in UNDP’s programmatic priorities in Sri Lanka? How consistent are these programme components with the framework documents (CCA/ UNDAF, national strategic documents), and how do they reflect the national priorities and needs?
- b. **Effectiveness:** Have these programmes been able to meet their intended objectives? Have these programmes strengthened the DRM institutions and practices? Have these programmes contributed to disaster risk reduction in a visible and tangible way?
- c. **Efficiency:** Have these programmes utilized their resources efficiently for implementing programme activities? Have these programmes received feedback on their impact, and introduced mid-course corrections? How have these programmes accessed technical assistance for their implementation? How good has been the quality of technical assistance?
- d. **Degree of Change:** What are the positive or intended changes brought about by these programmes? Have they created a policy climate in which similar programmes would have greater receptivity?
- e. **Sustainability:** How have these programmes been internalized by the government at different levels? Has the government created institutional mechanisms and budgetary provision through which the programme results could be sustained?

### **Deliverables**

The evaluation team will deliver the following outputs:



- Inception report: It will outline the preliminary approach to the study, the sources of data, a list of key informants, a schedule of activities, and the structure of the final report.
- Draft final report: it will include all of the major findings and recommendation of the study. It should include an executive summary of the major findings and recommendations.
- Final report: It will include comments on the draft final report received from UNDP, Sri Lanka and other sources
- A PowerPoint presentation on the salient features of the evaluation to be presented before the key stakeholders

UNDP, Sri Lanka should consider preparing a publication on the basis of evaluation. It should include information on key achievements, best practices, and future recommendations.

The Evaluation Report will follow the format as suggested below, though it could be modified later:

- Executive Summary (Findings and Recommendations)
- Introduction
  - The evaluation context
  - What are the key issues addressed by the evaluation?
  - What is the methodology used for the evaluation?
  - What is the structure of the evaluation report?
- Programme Context:
  - Programme Outputs Analysis (each project to be discussed separately)
- Findings and Conclusions:
  - Key Achievements
  - Partnership Strategy
  - Technical Assistance
  - Critical Issues and Challenges
- Lessons Learned and Recommendations
- Annexes

### **Evaluation Team**

Evaluation is proposed to be conducted by a single consultant, a group of consultants or by an institution. The lead expert identified for the evaluation should have at least 20 years of work experience in disaster risk management with demonstrated monitoring and evaluation skills. The experts should particularly be familiar with development of institutional and legal systems for DRM, various components of DRM such as risk assessment, disaster management planning, and community-based disaster risk management.

### **Supervision**

The evaluation will be supervised by the Team Leader for Disaster Management Programmes of UNDP Sri Lanka and the day to day support will be provided by the UNDP Programme Officer for Disaster Management. During the evaluation periodic briefs to UNDP DRM team is expected. The process will include approval of the inception report and the first draft evaluation report by DRM team. The final draft of the evaluation report will be approved by the senior management of UNDP, Sri Lanka. Periodic guidance will be provided by the UNDP Regional Advisor on Disaster Risk Management.

### **Time-frame**

February 2011: Hiring of Consultants / Experts and commissioning of the consultancy

March 2011: Literature review, Field Sites, Key Interviews and Inception Report

April 2011: Draft Evaluation Report and stakeholder consultations

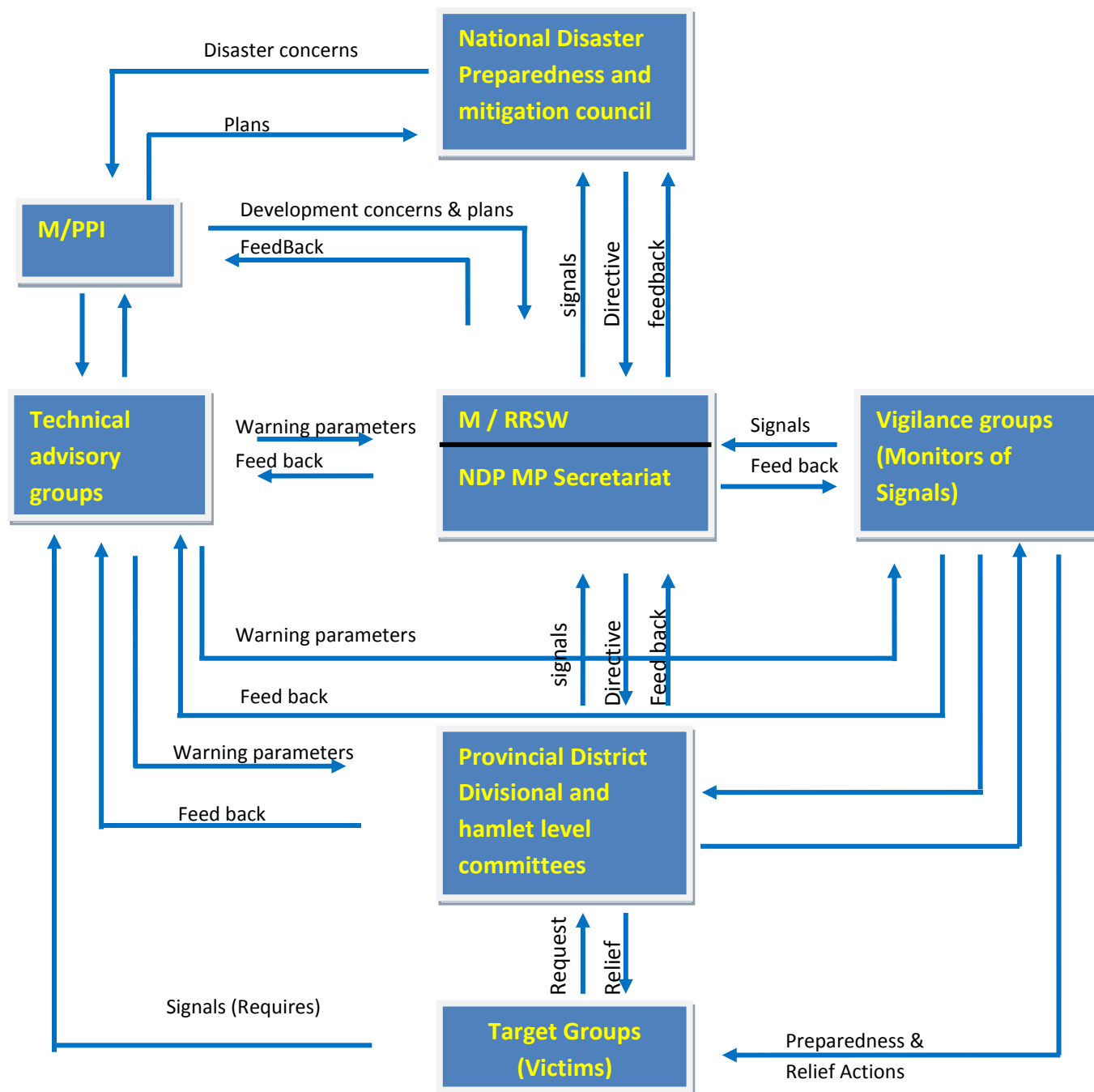
May 2011: Publication of the report

### **Payment schedule**

1. 20% of the total payment upon the submission of Inception Report
2. 30% of the total payment upon the submission of the draft Outcome Evaluation Report
3. Remaining 50% of the total payment upon the submission of the final Outcome Evaluation Report

## Annexure VI

### Institutional Frame work for National Disaster Preparedness and Mitigation



## **Annex VII**

### **Bibliography**

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4. Disaster Management – A Disaster Manager’s Hand Book – W. Nick Carter
5. Building Disaster Resilient Communities – 2007 A publication of the “global Network of NGOs” for disaster Risk Reduction– ISDR.
6. Micro- finance and disaster risk reduction – edited by P.G.Dhar Chakrabarti, Mihir R, Bhat.
7. A global report - Reducing Disaster Risk, Challenge for development – UNDP
8. Community Based Disaster Risk Management – field practitioners’ hand book – Imelda Abarquez and Zubair Murshed
9. An integrated approach to disaster recovery – A toolkit on cross cutting issues.- Lessons from the tsunami recovery unit – UNDP Sri Lanka.
10. Meeting the challenge of disasters – Collection of best practices and field experience on community centered disaster management. ITDG South Asia publication. A contribution to the world conference on disaster reduction in Kobe, Japan
11. Disaster Management in India – A status report, Government of India, Ministry of Home Affairs, National Disaster Management Division.
12. Lessons from Natural Disasters Policy issues and Mitigation Strategies, VIT University, India (Vellore Resolution 2007)
13. Livelihood Centred Approach to Disaster Management, A policy Framework for South Asia – ITDG South Asia, Rural Development Policy Institute.
14. Introduction to Incident Command System – Centre for Disaster Management – Lal Bhadur Shastri National Academy of Administration.
15. Building Sri Lanka, Assessment of Tsunami, Recovery Implementation, Under the Direction of Donor / Civil Society Post-Tsunami Steering Committee.
16. Towards a Culture of Prevention: Disaster Risk reduction Begins at school, Good practices and lessons learned – United Nations

#### **Annexure VIII – Lists of Documents. (Secondary data)**

1. Project documents – (Seven projects.)
2. The terminal projects reports.
3. NDMCC meeting minutes.
4. Steering committee Meeting minutes.
5. Corporate plan of DMC
6. Annual reports of DMC from 2006 to 2009 ( 2010 not available)
7. Road Map for disaster risk management Vol. 01 and 02.
8. Disaster preparedness plans for Kalutara, Galle and Matara.
9. NCDM minutes (one meeting)
10. Sri Lanka Disaster Management Act No. 13 of 2005.
11. Projects progress reports.
12. An audit quarry on TRSFD project
13. National Plan for Disaster Management (Draft)
14. National Policy for Disaster Management (Draft)
15. Annual Budgetary allocation for DMC
16. National Plan for Disaster Management – National Disaster Management Centre,  
Ministry of Social Services, Sethsiripaya, Battaramulla. November 2000.



## Annexure IX

Table 1. Analysis of UNDP DRM Project foci versus Roadmap Components

UNDP DRM Projects:		Strategic Assistance to Road Map 2008-12 (BCPR)	Sustainable Recovery of NR Tsunami 2006-08 (Korea)	Early Warning Systems 2005-07 (ISDR)	DRM- partnerships Jan-Apr 2009 (ISDR, IOC)	Prep Assist DM Frame and DMC 2005-08 (SIDA)	Cap Bldg DRM 2006-08 (France)	Recovery to Flood in S- SW 2003-08 (BCPR-SIDA)	Total:	% of UNDP Total	Short-term Road map %
General Comments:		Assistance activities not x- refed to roadmap, CBDRM activities mostly CRM related, which seems good, but a missing focus in the Roadmap	Focus on recovery with minor connection to DRR, only rain- water harvesting and some flood sensitive Ag. Livelihood support made DRR popular.	Part of Prep Assistance prodoc, viewed as success, spread of pilot uncertain	Focus on strengthening partnerships to support Roadmap. Activities not x- ref'd to Roadmap. 34k\$ to ID gaps in Roadmap.	Development of National to Local Gov. level capacities and plans. Development of the Roadmap highly praised and seen as useful.		Pro-docs not available (.450 Mill USD from BCPR in 2004 prog report, remaining amount not disaggregat ed)			
Budget (million USD):		2.100	0.190	0.125	0.699	0.847	1.176	1.851	6.988		
Roadmap Component and Short-term Budget (1-2yrs) USD (million) Total											
1.Policy, Institutional Mandates and Institutional Development		0.285			0.234	0.628	0.503		1.650	30%	8%
1.1 Implementation of Sri Lanka Disaster Management Act	2.24	Mostly support for a PMU and UNVs			Mostly project management support	Institutional Frameworks at all levels and capacity building			-		
1.2 Review of Institutional Mandates								-			
1.3 Developing Institutional Mandates and Capacities								-			
1.4 Formulation of CBDRM Policy								-			
1.5 Enforcement of Policies								-			
2.Hazard, Vulnerability and Risk Assessment		0.300					0.043		0.343	6%	15%
2.1 Landslide Hazard Zonation Mapping	4.17	Work on hazard and vulnerability profiles							-		
2.2 Establishment of Disaster Risk Management Information Systems at DMC								-			
2.3 Flood Risk Assessment								-			

UNDP DRM Projects:		Strategic Assistance to Road Map 2008-12 (BCPR)	Sustainable Recovery of NR Tsunami 2006-08 (Korea)	Early Warning Systems 2005-07 (ISDR)	DRM-partnerships Jan-Apr 2009 (ISDR, IOC)	Prep Assist DM Frame and DMC 2005-08 (SIDA)	Cap Bldg DRM 2006-08 (France)	Recovery to Flood in S-SW 2003-08 (BCPR-SIDA)	Total:	% of UNDP Total	Short-term Road
2.4 Coastal Vulnerability Assessment & Risk Analysis											
2.5 Development of Drought-prone Area Maps									-		
2.6 Dam Safety and Risk Assessment									-		
2.7 Vulnerability and Risk Assessment for Local Government Areas									-		
2.8 Vulnerability Atlas									-		
2.9 Development of Wind Zoning and Storm Surge Maps									-		
2.10 Seismic Zonation Maps									-		
2.11 Integrated Epidemic Risk Assessment									-		
2.12 Major Transportation/Industrial Accidents									-		
3.Multi-hazard Early Warning System		0.230		0.125					0.355	6%	7%
3.1 Early Warning Centre	1.94	Support to elements of multi-hazard EWS		Landslide EWS focus					-		
3.2 Meteorological Observation and Forecasting									-		
3.3 Flood Monitoring and Forecasting									-		
3.4 Landslide Prediction and Early Warning									-		
3.5 Drought Monitoring and Forecasting									-		
3.6 Cyclone and Storm Surge Tracking									-		
3.7 Seismic Monitoring									-		
3.8 Early Warning Systems for Major Dams									-		
3.9 Oceanographic Monitoring Systems									-		
3.10 Nuclear/ Radiological Monitoring									-		
4.Preparedness and Response Plans					0.037	0.219	0.487	0.250	0.993	18%	9%

UNDP DRM Projects:		Strategic Assistance to Road Map 2008-12 (BCPR)	Sustainable Recovery of NR Tsunami 2006-08 (Korea)	Early Warning Systems 2005-07 (ISDR)	DRM-partnerships Jan-Apr 2009 (ISDR, IOC)	Prep Assist DM Frame and DMC 2005-08 (SIDA)	Cap Bldg DRM 2006-08 (France)	Recovery to Flood in S-SW 2003-08 (BCPR-SIDA)	Total:	% of UNDP Total	Short-term Road
4.1 Hazard Specific Response Plans	2.7				SOP development and rehearsals	Disaster Preparedness and Response Plans	EOCs National and Provincial, local level Dis Prep Systems		-		
4.2 National Rapid Response Team									-		
4.3 Emergency Operation Centre									-		
4.4 Hazard Specific Contingency Plans									-		
4.5 Emergency Service Networks									-		
4.6 Knowledge Management Systems									-		
5.Mitigation and Integration of Disaster Risk Reduction into Development		0.370			0.169		0.029	0.200	0.768	14%	10%
5.1 Landslide Mitigation in High Risk Prone Areas	2.87	Disasters integrated into EIA, land-use planning, risk transfer mechanisms, some research			Research Grants + critical infrastructure planning		Landslides and Ag sector forecasts	Irrigation system recovery and drought support	-		
5.2 Flood Protection for Major Cities									-		
5.3 Disaster Mitigation Action Plans									-		
5.4 Integrating Disaster Impact Assessment into Development Projects									-		
5.5 National Land Use and Physical Planning Policy									-		
5.6 Coastal Zone Management									-		
5.7 Development Controls, Building Bye-laws									-		
5.8 Housing, Education, Tourist and Infrastructure Facilities									-		
5.9 Drought Mitigation in Select Districts									-		
5.10 Dam Safety Enhanced in Major Dams									-		
5.11 Risk Transfer mechanisms									-		
5.12 Research and Development in DRR									-		
5.13 Health risk due to Polluted Ground Water									-		
6.Community Based Disaster Risk Management		0.645	0.190		0.029		0.065		0.929	17%	47%



UNDP DRM Projects:		Strategic Assistance to Road Map 2008-12 (BCPR)	Sustainable Recovery of NR Tsunami 2006-08 (Korea)	Early Warning Systems 2005-07 (ISDR)	DRM-partnerships Jan-Apr 2009 (ISDR, IOC)	Prep Assist DM Frame and DMC 2005-08 (SIDA)	Cap Bldg DRM 2006-08 (France)	Recovery to Flood in S-SW 2003-08 (BCPR-SIDA)	Total:	% of UNDP Total	Short-term Road
6.1 Promoting CBDRM Volunteerism	13.30	Focus on CBNRM related Climate Risk Management	Focus on CBNRM as a part of Livelihoods recovery		Small Grants		Establishing CBDM teams				
6.2 Establishing CBDRM Resource Centres									-		
6.3 Preparedness and Mitigation through Small Grants Programmes									-		
6.4 Micro-finance Schemes									-		
6.5 Applied Research Grant Scheme for CBDRM									-		
7.Public Awareness, Education and Training		0.190			0.229		0.050		0.469	8%	4%
7.1 Awareness through Disaster Safety Day	1.25	DRR as field of study and targeted training/awareness projects			Training materials development		Partnership with academia and awareness raising		-		
7.2 National Public Awareness Programme									-		
7.3 Training for Emergency Responders and Enhancing Training Capacities									-		
7.4 Awareness through Schools and School Curriculum									-		
7.5 Awareness through Continuing Education/ University Education									-		
7.6 Training for Government Employees									-		
7.7 Special Awareness Programmes									-		
S-Short term (1-2 years) Budget Total	28.47								-		100%
Other:									-		
Surface Water Quality Survey (2.3)		0.080							0.080	1%	0%
	Totals:	2.100	0.190	0.125	0.699	0.847	1.177	0.450	5.588	100%	

## **Annex X**

**Following were the views of the focus groups.**

### **5.7.1. Policy, Institutional Mandates and Institutional Development**

- The Sri Lanka National Disaster management Act is enacted in 2005, and with the UNDP support Disaster Management Center was able to strengthen to meet the challenge faced by the DM sector and Disaster management Plan has been prepared and submitted to the council for approval. The National Disaster Management Policy is under preparation. UNDP support extended to develop the DMC to sustain its efforts to establish and strengthen an effective mechanism to manage disasters island wide.
- The key results achieved through the projects had significant impact on emergency operations including early warning dissemination, disaster risk reduction activities, preparedness planning and developing partnership among key agencies involved in DM sector.
- The act however, needs amendment with respect to management of urban floods, droughts, slow onset & rapid onset environmental hazards and climate change etc. The DM plans and Policy should focus very much on building trust among stakeholders and community groups.

Certain lacking areas and positive impacts in the DM regulation has been highlighted at the discussion.

- Like EIA, Disaster Impact Assessment is not mandatory in the development process. Nevertheless, National physical plan and UDA have considered the disaster prone areas in the preparation of the plan. Emerging wonder of Asia (Mahinda Chinthana policy document) has addressed DM under the section on environment. This is a positive commitment of the government or the political will towards disaster risk reduction

- SEA and certain development sectors such as Hotel Industry and hazardous industries etc demand DIA under EIA processes.

E.g.: DIA considered in SEA for Northern Development.

Uva and Central province, and Gampaha district development.

- Under the DM Act, the National Building Research Organization is now involved in issuing landslide clearance certificates for development in landslide prone districts
- Building guidelines have been prepared for construction practices in disaster prone areas.
- Recently the Ministry of Finance Planning has issued a Circular, No. 152 of Dept. of National Budget, indicating the procedures in order to provide immediate relief, short term rehabilitation and construction of infrastructure damaged due to the disasters. In this context, the involvement of Ministry of Disaster Management at the initial stage and Ministry of Economic development and other line Ministries are highlighted.

### **Capacity building and Disaster Management Center**

- It is reasonable to say that with the establishment of the Disaster Management Center mainstreaming of Disaster Management functions are much effective. However improvements are needed in coordination and dissemination.

With the UNDP assistance following areas have achieved significant improvement.

- Emergency operation system has been established
- Response capacity for disasters has been improved
- Early warning system has improved a lot
- Hazard maps for Cyclones, Landslides, Coastal Hazards and drought have been developed and risk maps should be prepared based on this.
- National level awareness has been created regarding availability of central body, DMC, to deal with all disasters. Today many people are well aware of the availability of disaster management center, Disaster and government concern about the DRR.

### **Following issues are highlighted**

- Massive staff turnover due to contract appointment and job insecurity has resulted in institutional instability and as a result expected level of capacity development has not reached. This instability of the institution will result in a serious deterioration of the quality of the institution.

- There are many resource persons who deal with disaster management and with very good exposure and capacity have not been utilized in the mainstreaming process. However, it was highlighted that officers trained in DM tend to serve for short period and work at other institutions due to transfers, and this knowledge gained through the training could also be utilized at the current institution.
- With regard to the involvement of political authority as policy makers, it is observed that there is an unsatisfactory situation. In order to overcome this situation the UNDP has to initiate an advocacy mechanism.
- Sector specific expertise should be developed at different levels such as regional, national, district/divisional and GND levels. For example, creating a DM pool at the SAARC region enables quick deploying of response teams which could cater any emergency situation within the region. Appropriate recognition of such teams facilitates quick issuance of VISA and immigration clearance.
- DM act has not designated the authorized institutions for various functions e.g.: for floods to department of Irrigation, droughts, cyclones to Dept of Meteorology etc.
- At emergency situations it is very important that a system is established with immigration and customs to reduced Visa and clearance constraints with foreign expertise and aids.
- DRM needs to be integrated in the local governance Act also. Awareness creation and DRR enforcements have not reached the local governance.
- DRM framework at provincial level is not functioning well. No DRM related proposals are coming from provincial level but from the divisional level. Integration between the dual systems has not been achieved.
- Sector specific expertise should be developed at different levels such as regional, national, district/divisional and GND levels. For example, creating a DM pool at the SAARC region enables quick deploying of response teams which could cater any emergency situation within the region. Appropriate recognition of such teams facilitates quick issuance of VISA and immigration clearance.
- A mechanism is needed for DMC for effective knowledge management with guidelines and procedure manuals. This would also be a solution to brain drain experienced by the DMC.

#### **5.7.2. Hazard, vulnerability and risk assessment and Multi Hazard Early Warning System**

A multi hazard early warning system has been established by DMC. This is tested twice a year for performance. Through Mock drills effectiveness is tested and about 60% effectiveness has been reached. People are aware of the early warning system and are responsive also. However, there are situations of issuing erroneous warnings and people responding to them. As such situations may seriously degrade the effectiveness of the warning system and possible errors should be set at virtual zero. For e.g. relating to the early warning signals, in the recent past in

Galle, there was a signal indicating a Tsunami, mistakenly by the authority. In view of the early warning signals 03 steps have to be followed; alert, warning and evacuation. But in case of Galle the latter two signals were not experienced. At the same time, in the evaluation of the effectiveness of this system, people should vacate their homes within 25 minutes of the 3<sup>rd</sup> signal, but in case of this incident they took 45 minutes.

And even though this warning system is called Multi-hazard it is limited only to TSUNAMI and floods. It is important that the warning system is extended to other hazards such as cyclones, landslides etc.

**Lack of integration of DRR at local planning level** - Community hazard maps are prepared for certain emergencies and people are well aware how to use them. However, regular updating of maps is not done. Also, integration of hazard risks in local authority level planning is not effective and needs strong improvement.

Inter agency disaster response plan should be developed at national level. Overall disaster response, but not the area specific disaster response, should be practiced nationwide, as Sri Lanka is a small country and people are used to travel often from region to region which are subjected to different types of disasters.

### **5.7.3. Planning for disaster preparedness and response and disaster mitigation and integration to development planning**

- UNDP's involvement in disaster risk reduction is broad, and in general, the outcome is very good, even though there are areas that need improvements relevant to individual projects. For example, UNDP's project with NBRO on Landslide Hazard Zonation Mapping is a success story. Such projects should be identified and the institutions should be strengthened to move forward.
- Having observed the 07 projects funded by the UNDP on disaster management it was suggested that there should be one mega project incorporating key components of all 07 projects. Further, instead of an annual plan of action, there could be a strategically designed medium term plan of action for implementation covering a period of 3-5 years in collaboration with all stakeholders.
- There are overlapping areas in the roadmap. A checklist of already implemented projects should be prepared so that project implementing agencies and donor agencies can focus/invest on the lacking areas. The progress of the already implemented projects should be reviewed and the achievements of the roadmap objectives should be analyzed.
- Lack of integration of DRR at local planning level: Community hazard maps are prepared for certain emergencies and people are well aware how to use them. However, regular updating of maps is not done. Also, integration of hazard risks in local level planning is not effective and needs strong improvement.

- DMC and Disaster Management Ministry integration with other stakeholder is very poor. This has made unnecessary obstacles in getting projects off the ground.
- Availability of data is not known as technical agencies do not make their data freely available. There should be a common repository of information on who has what to avoid duplications in data collection and repetition of work.
- Lack of contact details of the stakeholders in taking the DRR to the last mile is an issue which needs to be urgently addressed.
- Communication charges of data transfer are high. Hazard and disaster related information communication needs to be funded and strengthened.
- Overlapping of two projects funded by UNDP was expressed. UNDP need to collaborate with technical agencies and should play the role of national level project facilitator but not the project implementer. Having situations such as agencies competing with each other is a waste of money and time.
- Certain plans prepared spending a lot of investment have been very ineffective in its implementation (practical action) and as a result expected outcomes have not been produced.
- Also, certain plans and programs appear dragging too long a time without clear reasons and may affect performance of the project. Hence streamlining and scheduling of functions need improvement.
- A stock taking should be done on what are the villages covered in CBDRM, what have been achieved, what are the gaps and who are in action teams. Available information needs to be frequently updated.
- There has been a very comprehensive plan developed called National Disaster management plan, 2000. Such plans have not been considered in new DMRR planning.
- Development of DM plan is at a standstill at the 5<sup>th</sup> draft and should be pushed forward. Inter agency disaster response plan should be practiced at national level.
- A mechanism should be established to integrate community mapping and mapping carried out by technical agencies. Maps prepared by technical agencies should be fine tuned at the village level and NGOO can work as an interface between technical agencies and the community in this regard.

**Financial allocations for DRR programs** -The financial allocation for implementation of DRR programs at grass root level (local planning implementation) is very much insufficient and as a result expected outcomes have not been produced.

At the district level, District Secretaries have mandatory functions to implement projects under the decentralized budget. When compared to the earlier situation where the NDMC had been located at the Ministry of Social Welfare, proper guidelines were issued in order to utilize DCB and other funds for disaster risk reduction and mitigation. But currently there is no indication of the use of any guidelines. For e.g. Construction of agro-wells under the NDMC.

#### **5.7.4. CBDRM, and Public Awareness, Education and Training**

**There are many success stories especially with regard to DRR through community awareness.**

**Story 1** The people living in upstream of Kalu river sends warning to downstream people when flood level rises in the upstream allowing downstream people to evacuate with adequate time. This early warning system is coordinated via ‘Gami Diriya’

**Story 2** DRR is now a part of school curricular, grade 5-11 and with further advance courses in special subject areas. DRR is in the University curricular and there are post graduate courses in the University of Peradeniya and Kelaniya.

**Story 3** Early warning systems operated by NBRO with community involvement are very effectively in operation in landslide prone areas.

**Story 4.** Tsunami (or multi hazard) early warning towers demonstrated impressive impact on early warning. Vulnerable people are educated to understand the signals. Well trained community-based volunteer groups for providing early warning messages are operating satisfactorily.

**Story 5.** Dissemination of knowledge is another success story. People even at rural level are knowledgeable on DRR and show an increased vigilance on anticipated disasters.

- Capacity building at national level has been achieved to an acceptable level. Even though the priority should be given to district and divisional level, there are gaps, especially in the North and the East.
- **Poverty alleviation as an indicator of effectiveness of DM-**Through the DRR programs people’s resilience to disaster has been increased and also damage to the life and property is significantly reduced. This can be highlighted from the past annual records of flood damage and damage due to landslides (life and property). But relating to the Plan of Action of DMC, supported activities for livelihood of people are not included. Therefore, a goal achieving poverty reduction of poor people is not up to the expected level.
- National level awareness has been created regarding availability of central body, DMC, to deal with all disasters. Today many people are well aware with the availability of disaster management center, Disaster and government concern about the DRR.
- **Lacked integration of DRR at local planning level-** Community hazard maps is prepared for certain emergencies and people are well aware how to use them. However, regular updating of maps is not done. Also, integration of hazard risks in local authority level planning is not effective and needs strong improvement.

- A stock taking should be done on what are the villages covered in CBDRM, what have been achieved, what are the gaps and who are in action teams. Available information needs to be frequently updated.

#### **5.7.5. Partnership Development**

The UNDP has been working with Govt. with regard to disaster risk management since 1996 and has implemented several projects relating to strengthening DRR in Sri Lanka with support from the partner organizations. In the evaluation of disaster risk management through partnership, one of the key results has been the equitable access to improved quality services to vulnerable population in Sri Lanka. At the National Level, it has been noted that nearly 125 officials representing large number of organizations from both the Govt. and private sector are involved as members of National Disaster Management Coordinating Committee. However, it was revealed that the subject area of DRM has not been decentralized under the 13<sup>th</sup> Amendment to the Constitution. Therefore, coordination from national level to DS Division level is done through the District Secretariats. At district level coordination of DRM, it has been noted that nearly 70 Govt., NGO and private sector organizations are actively involved in the delivery of services to the community at each district level, according to the UN OCHA Geographical Map updated in August 2009. Further, they have developed another map indicating institutions involved at district level with details of major service areas updated in 2009.

It was reported that the following notable activities have been implemented successfully.

- Published booklets on best practices of land use planning and building guidelines in local languages and shared with minimum of 50 Local Government Authorities (LGAs).
- Minimum of 50 officials from LGAs trained in good practices of land use planning and building guidelines.
- Minimum of two rehearsals on tsunami early warning message generation and dissemination involving key stakeholders.
- NDMCC membership increased by 20%.
- CBDRR initiatives identified for providing financial assistance.
- Minimum of 15 under graduate research projects on DRR financially supported

#### **Suggestions made by participants of the working groups**

UNDP should request stakeholders to refine and redefine their requirements in the context of need assessment based on projects funded by UNDP and other agencies.

The said need assessment submitted by the stakeholders must be discussed at a forum to identify the mechanism of implementation (and include collaboration when necessary). This approach enables the establishment of a common platform for knowledge on project.



In view of the high staff turnover of trained officers on DM, it was suggested that mid management has to be trained by trained staff during their contractual period.

### **General Comments made by Focus Groups**

- UNDP should request stakeholders to refine and redefine their requirements in the context of need assessment based on projects funded by UNDP and other agencies.
- It was revealed at the Focus Group Meeting that two projects funded by UNDP are overlapping and the UNDP has to collaborate with technical agencies at national level as the project facilitator.

The progress of the already implemented projects should be reviewed and the achievements of the roadmap objectives should be analyzed