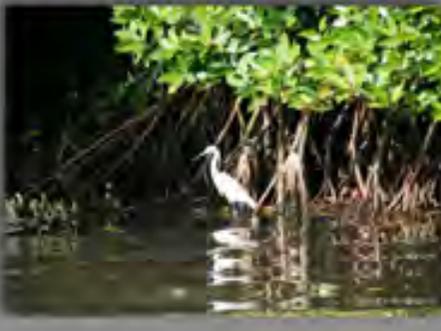


EASTERN DEVELOPMENT PLAN 2012 - 2016

Volume III ; Sector Analysis



f) Environment and Disaster Management



Eastern Provincial Council
Trincomalee



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List of Abbreviations

ADPC	Asian Disaster Preparedness Centre
BESP	Basic Education Sector Programme
BECAre	Basic Education for Children in Disadvantaged areas
BIQ	Basic Information Questionnaire
CAARP	Conflict Affected Area Rehabilitation Project
CBDRM	Community Based Disaster Risk Management
CBO	Community Based Organization
CEA	Central Environmental Authority
CKD	Chronic Kidney Disease
COC	Certificate of Conformity
DDMC	District Disaster Management Committee
DDMU	District Disaster Management Unit
DELEC	District Environment Law Enforcement Committee
DEO	Divisional Environment Officers
DM	Disaster Management
DMC	Disaster Management Centre
DRR	Disaster risk reduction
DRM	Disaster Risk Management
EIA	Environmental Impact Assessment
EOC	Emergency Operations Centre
EPC	Eastern Provincial Council
EPL	Environmental Protection License
EPP	Environment Pioneer Program
FRC	Family Rehabilitation Centre
GN	GramaNildhari
GO	Government Organization
GTZ	German Technical Corporation
IDP	Internally Displaced Person

ILD	Integrated Local Development Planning
I/NGO	International NGO
LA	Local Authority
LTTE	Liberation Tigers of Tamil Ealam
MC	Municipal Council
MOE	Ministry of Education
MOU	Memorandum of Understanding
MPPA	Marine Pollution Prevention Act
NARA	National Aquatic Resources Research and Development Agency
NCDM	National Council for Disaster Management
NEA	National Environmental Act
NEAP	National Environmental Action Plan
NECCDEP	North East Coastal Community Development Project
NECORD	North East Community Restoration and Development
NEHRP	North East Housing reconstruction Project
NELSIP	North East Local Services Improvement Project
NGO	Non-Governmental Organization
NHDA	National Housing Development Authority
NISD	National Institute of Social Development
NWPC	North Western Provincial Council
PA	Protected Area
PCLG	Provincial Commissioner of Local Government
PEACE	Pro-poor Economic Advancement and Community Empowerment Project
PDE	Provincial Department of Education
PRMP	Provincial Resource Management Plan
PROP	Pro-poor Rural Development Project
PS	Pradeshiya Sabha
PTWC	Pacific Tsunami Warning Centre
RESIST	Reducing the Effects & Incidents of Trauma

SEO	Senior Environmental Officers
SWM	Solid Waste Management
TF	Task force
UC	Urban Council
UNOPS	United Nations Office for Operational Services
WMO	World Meteorological Organization

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ENVIRONMENT

1. Sectoral Background

1.1 Introduction

The three subjects viz: Environment Management, Disaster Management and Post Conflict Recovery, Rehabilitation and Reconstruction, dealt in this paper are not subjects devolved to Provincial Councils (PC). Protection of Environment is a subject listed in the list of concurrent subjects. The Concurrent List of the Ninth Schedule to the Constitution, although the term Disaster Management is not mentioned anywhere in the Constitution, stipulates that the provincial councils can undertake the following functions with the concurrence of the government.

- Relief, rehabilitation and resettlement of displaced persons ;
- Relief of distress due to floods, droughts, epidemics or other exceptional causes and rehabilitation and resettlement of those affected ;
- Restoration, reconstruction and rehabilitation of towns, villages, public institutions and properties, industries, business places, places of worship and other properties destroyed or damaged, grant of compensation or relief to persons of institutions who have sustained loss or damage and the reorganization of civil life.

However, this provision lacks risk management aspects of disaster management such as prevention, mitigation and preparedness. Therefore, risk management becomes entirely a responsibility of the Government.

Therefore, it is the responsibility of the Centre to define the role of PCs in regard to subjects which are not devolved. It is in this backdrop the three subjects are discussed in this paper.

The increasing population and consequent increasing needs of the society, compels the country to pursue a rapid development process in order to raise the living standards of the people. This will result in inevitable increase in the use of natural resources and generation of waste. However, the level of resources use and the levels of waste generation should remain within their carrying capacities. Therefore, there is a need to exercise better environment management practices.

The following policies have been formulated by the Ministry of Environment from time to time setting a course of action that would steer the country between the needs of development and the necessity to protect the environment.

- National Environment Policy – 2003
- National Forestry Policy – 1995
- The National Policy on Wild Life Conservation – 2000
- National Air Quality Management Policy – 2000
- Cleaner Production Policy – 2004
- National Bio-safety Policy – 2005
- National Air Quality Management Policy – 2000
- National Policy on Wetlands – 2005

- National Policy on Sand as a Resource for the Construction Industry – 2006
- National Policy on Elephant Conservation – 2006
- National Policy on Solid Waste Management.

Inappropriate management of natural environment will result in depletion of natural resources and it may result in frequent natural disasters such as floods and droughts. Although there is doubt as to whether environmental management may be counted among effective risk reduction measures, environmental management which encompasses a broad range of activities, is poised to make significant contributions to disaster risk reduction efforts as well. Advances in both socio-economic and technical approaches to conservation and development have brought some measurable successes in managing forests, wetlands and agricultural lands, water resources and air quality.¹

There is convincing evidence that the number and seriousness of disasters is on the increase and that poor countries, poor regions and poor communities are disproportionately affected. Historical evidence shows that the eastern province has also been prone to number of disasters such as floods, droughts, cyclones, tsunamis, sea surges, etc. In years to come, adverse impacts of climate change would also increase the frequency of occurrences and seriousness of disasters, especially floods, sea surges and drought that would occur in the province.

Disaster risk reduction (DRR) is a cross-cutting and complex issue. It, therefore, requires political and legal commitment, public understanding, scientific knowledge, careful development planning, responsible enforcement of policies and legislation, people centered early warning systems, and effective disaster preparedness and response mechanisms. It, therefore, involves several government agencies such as the Department of Irrigation, Geological Survey and Mines Bureau, National Aquatic Resources and Research Agency, Coast Conservation Department, Central Environment Authority, etc. However, the work in regard to the development of the five year plan is confined to the actions of and activities performed by the Ministry of Disaster Management and the Disaster Management Centre.

The eastern province is abundant in natural resources and beauty which needs to be managed in a sustainable manner. Eastern Province is a coastal province with all three districts being in the coast. It has a coastal belt which stretches from Kokkilai in the north to Kumbukkanoya in the south. It holds about 28 % of the coast-line with 420 km of coast of the total 1530 km. and shares a significant variety of coastal habitats of the country.

1.2 Historical Brief.

The Central Environmental Authority (CEA) was established in August 1981 under the provision of the National Environmental Act No: 47 of 1980. The CEA was given wider regulatory powers under the National Environment (Amendment) Acts No:56 of 1988 and No:53 of 2000. Prior to the establishment of CEA, Local Authorities were engaged in environment management within the framework provided by the respective laws.

¹Environmental Degradation and Disaster Risk, Asian Disaster Preparedness Centre, 2004

It is believed that the current legislations related to the environment protection are just adequate to ensure that, provided the laws can be enforced effectively. Article 27(14) of the constitution (1978) states that it is the duty of the state “to protect, preserve and improve the environment for the benefit of the community”. Article 28 (f) makes it a fundamental duty of every person “to protect nature and conserve its riches”

There are several other laws and ordinances which are very much important in respect of natural resource management in the country and enforced by government agencies established specifically for the purpose. The Coast Conservation Act No 57 of 1981 as amended by act no 4 of 1996 is enforced by the Department of Coast Conservation.

The aquatic resources are managed by the National Aquatic Resources Research and Development Agency (NARA) which is a statutory body duly established by NARA Act of No. 54 of 1981.

As there was a need to coordinate the law enforcement activities at sub-national level, the Ministry of Environment issued a Circular in January 1995 requesting the Government Agents/District Secretaries to set up District Environment Law Enforcement Committee (DELEC) under the Chairmanship of the District Secretary with the following as the members.

- Provincial/District Director of Health Services
- Head of the Police for the District
- Provincial Commissioner of Local Government
- District Forest Officer
- Heads of Local Authorities in the District
- A Representative of the Central Environment Authority
- A Representative of local NGOs.

The Committee was charged with the responsibility of ensuring that the environmental law, viz., National Environmental Act and Public Nuisance Law, is enforced by the relevant police stations and local authorities. A similar arrangement was made at the Divisional Level too.

The government led Disaster Management dates back to 1996 as the Ministry of Social Services established the National Disaster Management Centre with the approval of the Cabinet of Ministers. However, 2003 floods and 2004 Tsunami were the eye openers for most policy makers and resulted in the establishment of a Parliament Select Committee in 2005 to suggest ways and means of curbing disasters that occur in the country. The Disaster Management Act was enacted in 2005 and this was followed with the establishment of the Disaster Management Centre (by ignoring the then existing National Disaster Management Centre), National Council of Disaster Management, and a separate national Ministry for Disaster Management.

1.3 Importance of the Sector

The long coast line with its famous sandy beaches, large number of inland waters, mix of forest and agricultural lands and the magnificent natural harbour in Trincomalee make the Eastern Province one of the most beautiful sought after Provinces in Sri Lanka. The Trincomalee district is famous for its hot springs and places like the Pigeon Island, Nilaveli beach, etc which attract both local and foreign tourists. The Trincomalee port has the potential of becoming a major commercial and industrial centre in the South Asian Region

Every district in the Province has its own historical and religious significance. All the three districts are noted for large scale agriculture and coastal fishing. Arugam- Bay in Ampara district is noted for sea surfacing. The district of Batticaloa is famous for singing fish in the Batticalao Lagoon. It is the longest lagoon in the country and is suitable for development of eco-tourism.

The coast and coastal ecosystem resources predominate in the province. Pigeon Island near Trincomalee has already been declared as a Marine National Park. The entire Eastern Coast has to be protected (managed to avoid degeneration of value). Most of the cities too are in the coast. Although it is believed that the conflict, which lasted for the last 25-30 years, may have had an adverse impact on the entire eastern coast recent studies show that the impact is insignificant. A recent NARA study had shown that the corals of Pigeon Island had not bleached like the others in the country (e.g. Hikkaduwa). A similar study done in respect of whole shore line of the province states: "It appears that there are no significant changes on the coastline of Eastern Province other than where human interventions of construction have occurred particularly in Trincomalee district".²

Special eco systems like the AraluBuluNelliKele of the Ampara district, Villus of the Mahaweli flood plains, and the Lakes and wetlands (Sathurukondan, Thandiyadi, Ullekelle), which are important for bird life, are important eco-systems which need to be preserved. Ampara district is the only one in the North East, which has high elevation rocky out crops and vegetation and ecosystems in such areas should be given special consideration. For example, the 'Gal Siyambala' is chopped for the collection of fruit, and is becoming rare in these regions.

1.4 Environment Management Framework for the Eastern Province³

The prime tasks to be undertaken or addressed in the formulation of an environmental framework for the region are the preservation of the pristine environment, including forest cover, wetlands, coast with the exception of minerals and dunes. In the case where the environment has already deteriorated, the prevention of the further deterioration of the natural environment and the rehabilitation of degraded environment are the two tasks to be undertaken by the environmental management.

² NECCDEP, Study No 10: An Assessment of the Changes in Shoreline Location Along the Coast of the Eastern Province of Sri Lanka Using Remote Sensing Technology, 2010, p.40

³ An extract From the Physical Plan Developed for the Province in 2002-2004 Period

In the Eastern Province, about 40% of the land is under natural vegetation cover, ranging from good tropical mixed evergreen forest to thorn scrublands. The country's natural forest cover has reduced to 24% and almost the entirety of the forest cover is declared as protected areas. The largest extent of non-protected natural forest is found in the North East. Therefore it is important that the resource is managed properly, for the prosperity of the region and for the country as a whole. Good management is essential, if the needs of the population in terms of products of natural resources (e.g. timber, sand, clay etc) are to be met without compromising the sustainability of the environment.

In the absence of a mechanism established by the Provincial Council for management of environment within the Province, central agencies like the Central Environment Authority, the Department of Wildlife Conservation, the Department of Forests manages the natural resources within the province without much coordination at the Provincial Level.

2. Sector performances

2.1 Contribution to quality of life.

Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This requires the reconciliation of environmental, social and economic demands which are known as the three pillars of sustainability. Sustainability is improving the quality of human life while living within the carrying capacity of supporting eco-systems.

Disasters cause loss of life, property and infrastructure, and damage to and loss of livelihoods. In the eastern province, majority of people live on agriculture and fishing. Frequently occurring disasters like floods and droughts affect the lives of the people whose livelihoods are based on agriculture and fishing which aggravate their poverty and the fragile eco-system. Disasters also tend to erode gains of development and siphons scarce resources to relief and rehabilitation.

The manmade disaster which the Province experienced for about three decades prior to 2006 has disturbed the social fabric and caused psycho-social distress, which is not easily quantifiable, and aggravated the problem of poverty within the province. Therefore, prevention and mitigation of both natural and manmade disasters and better management of the environment would tend to enhance the quality of life of the people.

Disasters undermine the achievement of Millennium Development Goals which aim at Human Development throughout the world. The impacts are felt directly as well as indirectly. Indirect impacts are through the diversion of funds from development to emergency relief and reconstruction or wider effects on economy and society.

Table 1 show the number of deaths occurred in the country caused by disasters during the period 1974-2007

Table 1: Impact of Incidents on Human Life in Sri Lanka (1974-2007)

Event	Deaths
Tsunami	39,331
Cyclone	2,344
Epidemic	1,384
Animal attack	1,055
Landslide	870
Flood	498
Lightning	437
Storm	60
Gale	41
Snake bite	32
Tornado	28

(Source: www.disinventar.lk)

The table above depicts the total number of deaths that have resulted from the occurrence of the 12 most frequently occurring hazards from 1974-2007. The two disasters viz: tsunami and cyclone which have caused the most number of deaths affected the eastern province as well.

Table 2 shows the number of houses damaged and destroyed due to disasters during the period 174-2007. The table also shows that the three disasters, viz: Flood, Cyclone and Tsunami, which have caused much damage to the houses, have impacted the eastern province also severely.

Majority of people living in the province depend on agriculture for their livelihoods. The crop agriculture sector plays a prominent role in the economy of the province. Therefore, a damage done to the crops affects livelihoods of majority of people and their quality of life. Table 3 below depicts the damage/destruction caused to crops in general and paddy in particular from the occurrence of the 12 most frequently occurring hazards from 1974-2007. Of the 12 disasters, droughts account for the largest proportion of crop losses amounting to 530,685 hectares followed by floods amounting to 170,159 hectares, animal attacks amounting to 24,590 hectares, cyclones amounting to 4,409. Most these disasters impact the province severely.

It is widely known that only relief centric approaches were prevalent in the country before Tsunami 2004 in handling disaster related activities. As such successive governments have paid colossal sums to the affected people as relief. Table 4 shows the distribution of relief during the period 1974-2007. Proper DRR practices would help reduce payment of such relief considerably if not fully prevented. Savings through DRR measures can be utilized to improve quality of life of the people at risk.

Table 2: Impact on Housing: Damaged and Destroyed Housing (1974-2007)

Event	Houses Destroyed	Houses Damaged	No. of Damaged and Destroyed Housing Units
Flood	49,891	144,916	194,807
Cyclone	65,756	101,816	167,572
Tsunami	44,250	49,914	94,164
Gale	58,210	9,611	67,821
Landslide	2,029	6,899	8,928
Animal attack	1,283	2,734	4,017
Storm	332	2,967	3,299
Coastline	1,301	998	2,299
Tornado	47	1,240	1,287
Fire	336	146	482
Tidal wave	NA	350	350
Urban Flood	4	75	79
Total	223,439	321,666	545,105

(Source: www.disinventar.lk)

Table 4 shows that for the period 1974-2007, the largest proportion of emergency assistance has been spent on droughts, followed by floods, cyclones, the tsunami, which impacts the Province most. Emergency supplies worth Rs. 1,110,434,179 have been spent on droughts, Rs. 636,614,913 on floods, Rs. 223,520,392 on cyclones, Rs. 31,180,200 on the tsunami, Rs. 24,647,000 on epidemics, Rs. 18,620,429 on coastal erosion and finally Rs. 15,350,969 on landslides.

2.2. Performance Trends

2.2.1 Environment Management

The planned effort towards environment management in the country was commenced in 1988 with the formulation of the National Conservation Strategy. The first National Environmental Action Plan (NEAP) was prepared in 1991 coinciding with the famous 'Earth Summit' and it was implemented during the period 1992- 1996. After that second NEAP was implemented during the period 1998-2001.

Table 3 : Impact on Crops and Paddy (1974-2007)

Event	Damage to Crops (Ha)	Damage to Paddy (Ha)	Damage to Paddy and Crop (Ha)
Drought	530,685	303,957	834,642
Flood	170,159	274,057	444,216
Animal attack	24,590	15,335	39,925
Cyclone	4,409	1,747	6,156
Forest fire	1,128	NA	1,128
Storm	1,000	NA	1,000
Gale	440	103	544
Landslide	115	480	594
Plague	NA	1,935	1,935
Frost	NA	202	202
Tsunami	NA	91	91
Total	732,526	597,907	1,330,433

(Source: www.disinventar.lk)

It is in this backdrop, the first strategic plan for the sector titled Caring for the Environment 2003-2007 was developed and implemented by the then Ministry of Environment and Natural Resources. During this process, a National Environmental Policy has also been formulated setting a course of action that would steer the country between the needs of development and the necessity to protect the environment.

The second document on Caring for the Environment (2008-2012) itself reviews the performance of the work done during the period 2003-2007. Of the 217 programmes identified for the period 2003-2007, 65% have been classified as immediate priority. However, only 27% of them have been implemented satisfactorily. The reasons for shortfalls as per the document are:

- Delays in effective implementation of acts and policies as a result of non-availability of regulations and timely and appropriate amendments,
- Lack of coordination among large number of institutions involved,
- Devastation caused by Tsunami in 2004 resulting in significant deviations of focus of many government agencies,
- Conflicting political pressures and lack of investment and,
- Lack of monitoring.

Table 4 : Relief Distribution (1974-2007)

Event	Emergency Supplies	Fully Damaged Houses	Partially Damaged Houses	Loss of life	Injuries	Livelihood Options
Drought	1,110,434,179	NA	NA	NA	NA	NA
Flood	636,614,913	74,510,000	2,636,187	30,000	NA	5,661
Cyclone	223,520,392	446,750	303,330	NA	NA	753,850
Tsunami	31,180,200	1,250,000	7,200,000	110,500,000	NA	3,330,000
Epidemic	24,647,000	NA	NA	NA	NA	NA
Coastal Erosion	18,620,429	NA	NA	NA	NA	NA
Landslide	15,350,969	NA	NA	10,000	NA	NA
Animal attack	2,000	41,000	83,030	200,000	4,650	NA
Total	2,060,370,082	76,247,750	10,222,547	110,740,000	4,650	4,089,511

(Source: www.disinventar.lk)

In the sectoral analysis, Forestry and Wildlife, Industry and Tourism, and Health, Sanitation and Urban Development sectors have achieved more than 30% progress, while more than 30% of the activities have not been implemented satisfactorily in the Agriculture, Plantation, Land Development and Mining, and the Energy and Transport sectors.

The review of performance under Caring for the Environment 2003-2007, highlights that the Forest Department and the Department of Wild Life Conservation, being the lead agencies have made considerable efforts in managing and conserving the country's natural resources, as given below.

- Equipping the institutions with required protection-based logistical equipments together with required capacity building.
- Decentralization of departmental functions along with the establishments of regional offices
- Survey and demarcation of Protected Areas (PAs) and Forest Reserves.

- Preparation of Management and Operational Plans for the (PAs)
- Incorporation of traditional knowledge for the conservation of bio-diversity.
- Establishment of Protected Area Conservation Trust and initiation of community-based outreach programmes to reduce the conflict between the wildlife and the community.
- Recent initiatives on “*HelaThuruUyana*”, “*WanaPiyasa*”, “*WanaSenasana*” etc., to conserve and increase forest cover with the participation of community and the school children.

At the same time, the review highlights the reasons for setback as well. The main issues identified in the Forest and Wild Life sector were;

- Undue delay in obtaining required amendments to the Flora & Fauna Protection Ordinance and Forest Ordinance thus delaying most of the conservation activities
- Deviation of proposed programmes as a result of Tsunami rehabilitation activities since December, 2004
- Lack of promotion of forestry research, focusing on areas such as valuing the environmental benefits, sustainable use of natural resources, etc.
- Political interventions/pressures that threatened officers, limiting implementation of conservation programmes.

Commenting on the Agriculture and Land Development and Mining Sector, the review says that whatever achievements the sector have made are mainly due to preparation of a Land Use Policy with the involvement of many line Ministries and agencies under their purview and Facilitation of agriculture research by all agencies concerned as a measure to solve burning issues in the sector. The reasons given for the shortfalls in the achievements of the sector are:

- Inadequate or ineffective coordination mechanism among the institutions, leading to substantial overlaps and duplication of responsibilities.
- Identification of too many organizations as responsible agencies often leading to non-implementation of programmes
- Serious drawbacks in policy decisions due to *ad hoc* decisions often made on trade-related matters in order to maintain a balance between low consumer price and high producer price.

In respect of achievements in the Fisheries, and Coastal and Marine Area Management, the review says that following can be attributed to the achievements.

- Incorporation of fisheries and aquatic resources management into educational curricula especially at secondary education level
- Creation of awareness on the importance of fisheries and coastal resources management at all levels of the society

- Promotion of the implementation of Integrated Coastal Zone Management Plans.
- Amendment to Marine Pollution Prevention Act (MPPA) No 59 of 1981, which provides strong institutional and legal mechanism to deal with oil spills.
- Promotion of sharing of regional information on coastal resources management

As there had been shortfalls also in regard to the targets to be achieved during the period 2003-2007, the review says that in addition to the impacts of 2004 Tsunami, the presence of donor-driven investments and absence of a financing mechanism for sustainability of the initiatives and operation & maintenance thereafter, inadequate law enforcement measures on un-controlled sand mining and delays in implementation of the National Policy on Sand, resulting in serious coastal erosion have also contributed negatively.

2.2.2 Disaster Management

In the aftermath of tsunami 2004 which caused severe damage to the people and property in the coastal belt, several steps have been taken by the government towards effective disaster management. In May 2005, the Disaster Management Act was enacted. This provided the legal basis needed for Disaster Risk Management in the country. The National Council for Disaster Management (NCDM) under the chairmanship of HE the President with Prime Minister as the Vice Chairman has now been established under the act. The Chief Ministers of Provincial Councils are also members of NCDM. The Ministry of Disaster Management (then the Ministry of Disaster Management and Human Rights in 2006 and again the Ministry of Disaster Management in 2010)) and the Disaster Management Centre (DMC) were created in 2005. The Ministry and DMC developed a Road Map detailing the DRM activities to be undertaken during the period 2005-2015. The Ministry and DMC have also taken steps to establish Disaster Management Units, and District Disaster Management Steering Committees in all districts including the three districts in the province under the supervision of respective District Secretaries.

The Road Map developed has more than 100 projects to be implemented under the following thematic areas.

- Policy, Institutional Mandates, and Institutional Development
- Hazard, Vulnerability and Risk Assessment
- Multi-hazard Early Warning Systems
- Preparedness and response plans
- Mitigation and Integration of Disaster Risk Reduction (DRR) into Development Planning
- Community-based Disaster Risk Management
- Public Awareness, Education and Training

Since DRM is cross cutting, a National Disaster Management Coordinating Committee has been established under the Chairmanship of the Secretary of the Ministry in charge of the subject of Disaster Management. The Ministry and DMC in consultation with relevant agencies have decided that the following agencies are responsible for issue of early warning to communities at risk in the event of a disaster.

- Floods- Department of Irrigation
- Tsunami- Department of Meteorology
- Cyclones- Department of Meteorology
- Storm Surges- National Aquatic Research and Development Agency (NARA)

However, the related laws need to be amended in order to make it mandatory for the agencies to carry out such risk communication functions. The Disaster Management Centre is responsible for early warning dissemination. The systems required for issue and dissemination of early warning are now in place. The DMC has its own 24x7 early warning centre and emergency operation centre established in Colombo. Similarly the other agencies mentioned above have developed their own early warning systems.

The technology required for receiving early warning messages from the international warning centres such as Pacific Tsunami Warning Centre (PTWC), Asian Disaster Preparedness Centre (ADPC), and World Meteorological Organization (WMO) is also in place. The Department of Meteorology is now in a position to issue warning to the public three days ahead in the case of a cyclone and it has the technology to track the path of a cyclone so that advance warning can be issued to the people living in the possible areas of a cyclone attack.

DMC has established links with telecom providers like Dialog which has enabled the people using mobile phones to know about the disaster warnings through cell broad casts. The effectiveness of such systems was tested on the 12th September 2007 when it was threatened that a Tsunami generated in the sea close to Sumatra would attack the country. The Ministry of Disaster Management and the DMC could evacuate people in areas in the coastal belt of the country within a very short time except the North and the East.

3. Current Services

3.1 Environment Management

In the absence of a Provincial Environment Authority like the Authority established by the North Western Provincial Council or any other mechanism established by the EPC, both CEA Head Office and its Provincial Office located at Kantale (with the assistance of the two district offices located in Ampara and Batticaloa) and also the Local Authorities currently provide the following services to the people and industrialists who require services.

The Provincial Office is headed by a Regional Director and is serviced by an Assistant Director, 3 Senior Environmental Officers (SEO) and 10 Divisional Environmental Officers (DEO). The Batticaloa District Office is serviced by a SEO and 8 DEOs whereas Amapara District Office is serviced by two Deputy Directors, 2 SEOs and 16 DEOs. The DEOs are assigned with divisions but they attend to their work in the divisions from Provincial/District Offices they are attached to.

3.1.1 Environment Pollution Control

The Provincial Office of the Central Environmental Authority located at Kantale issues Environmental Protection Licenses for industries listed in the category "B" in the gazette notification no 1533/16 dated 25.01.2008 in order to prevent and control pollution issues. In the case of industries falling into the category "A", the Provincial Office processes the applications and forwards the files to CEA Head Office for issue of license. The Environmental Protection License (EPL) is a regulatory/legal tool under the provisions of the National Environmental Act issued with a view to achieving the following objectives.

- To prevent or minimize the release of discharges and emissions into the environment from prescribed (industrial) activities in compliance with national discharge and emission standards.
- To develop an approach to pollution control that considers discharges from prescribed (industrial) processes to all media (air, water, land) in the context of the effect on the environment.
- To contain the burden on industry, in particular by providing guidance on pollution control for polluting processes.
- To ensure that the system responds flexibly both to changing pollution abatement technology and to new knowledge such as cleaner production, waste minimization etc.

The industries listed in the category "A" comprises of 80 significantly high polluting industrial activities such as discharge of effluents/emissions and solid waste and the industries in the category "B" comprises of 33 numbers of medium level polluting activities.

The LAs issue EPLs for industries categorized under "C" which comprises of 25 low polluting industrial activities. The Environment Officers attached to Divisional Secretariats assist LAs in conducting necessary investigations and other matters related to the issue of licenses. The Local Authorities also carry out related functions such as follow up, monitoring and enforcement. The Provincial Office has conducted training programmes to enhance capacities of LA officials involved in the issue of EPLs.

In respect of all three categories of EPLs, follow up monitoring activities are carried out by the staff attached to the Provincial Office to

- Check the performance of pollution control systems established in the industry,
- Check whether the industry complies with conditions stipulated in the EPL, and
- Check whether there is any change, expansion or alteration to the industrial process.

The validity period of an EPL depends on the category which the industry belongs to. The EPLs issued for category "A" are valid for one year from the date of the license. However, the licenses issued for categories "B" and "C" are valid for three years from the date of license. The section 23 A of the National Environmental Act (NEA) explicitly states that no person shall carry out any prescribed activity except under the authority of an EPL and in accordance with such standards and other criteria as may be prescribed under the Act. In such situations, Provincial Office initiates legal action against the industrialists concerned.

The Provincial Office issues about 150 EPLs annually for industries under category "A". Similarly, about 300 EPLs are issued annually for industries under the category of "B". However, the EPLs issued by LAs appear to be fairly low due to shortage of staff at LAs. In most other provinces, PCs too have provided Environmental Officers to LAs in addition to the Environmental Officers attached to divisional secretariats.

3.1.2 Environmental Management and Assessment

A major regulatory and planning tool utilized by the CEA for management and sustainable utilization of natural resource base of Sri Lanka is the Environmental Impact Assessment (EIA) procedure for projects. EIA has become a mandatory requirement for establishment of development projects in Sri Lanka under the National Environmental Act as well as under a few other legislations.

A project proponent is required to provide the CEA with preliminary information on the proposed project, in order for the EIA process to be initiated. The Basic Information Questionnaire (BIQ) form prepared by the CEA can be used for this purpose. Authority of the Initial Environmental Examination procedure is delegated to the provincial office and the Provincial Office is expected to process Environmental Impact Assessment files and forwarded to CEA head office for further actions.

3.1.3 Natural Resource Management

CEA holds the responsibility for management of country's natural resources. However, it is done through assisting other relevant agencies involved in the management of natural resources such as the Department of Conservation of Forests, Department of Wildlife Conservation, Department of Coast Conservation, and guiding and coordination with the Provincial and District offices of the Authority.

However, CEA reserves the right to declare suitable areas as Environmental Protected Areas, to issue Environmental Recommendations for non-prescribed projects, to formulate regulations under the provisions of the National Environmental Act, prepare, develop and publish Environmental Guidelines pertaining to management of natural resources, and implement National Wetland Action Plan.

The Provincial Office issues Environmental Recommendations for activities which are not prescribed under the provisions of Part IV C of the NEA, such as erection of telecommunication towers, hotels having less than 99 rooms, blocking out of land for Real Estate Development, felling of trees, river bed mining, extraction of mineral resources, land fillings etc: In order to locate the prescribed and other industries in a suitable location, the industrialist should obtain environmental recommendation from the Provincial Office and based on the recommendation the building approval will be given by local authority concerned and COC will be issued on satisfaction.

CEA conducts the Environment Pioneer Program (EPP) under the guidance provided by the Ministry of Environment, in collaboration of the Ministry of Education in the school education system in Sri Lanka. This program is being implemented in about 40% of the schools in the province. The Environment in which we live is degrading day by day. Those who should contribute to the process of preventing this should emerge from the society itself. Therefore, the main objective of the school programme is to produce group of people who can lead the society towards the protecting and conservation of the environment by providing guidance and leadership.

The Provincial Office is carrying out Environmental Education and Awareness programmes among school children through the Environmental Pioneer Brigades and Eco-clubs established in schools with the assistance of provincial Ministry of Education, Provincial/Zonal Education Directors, District and Zonal Environment Pioneer Commissioners and Pioneer Teachers. Eco-clubs are established for primary graders while the Pioneer Brigades are for children in Grade 6 and above. Youth Environment Clubs are established for school leavers.

The Teachers who have been nominated by the Principle of the school as the Officer in Charge of the Pioneer Groups leads the groups at school level. The schools at which such brigades exist are required to nominate two teachers for a pioneer group and one teacher should be a female teacher if female students are included.

The Officer in Charge of the group is responsible for the management of the group as given in the Teachers Guide. They are responsible for conducting programmes and activities, encouraging and

directing students, coordinating with CEA and District and Zonal Environment Pioneer Commissioners. There are benefits that will accrue to the students participating in Pioneer Brigades like the benefits accrue to the Boy Scouts and Girl Guides.

Environment education has been introduced in schools for quite some time for both primary and secondary levels. But it is questionable, how much of this knowledge has been effectively integrated into practical curriculum. Despite the general awareness of the present environmental issues such as, water scarcity, deforestation, pollution, global warming, etc., the educational institutions across the country have not reached out for contributing towards better management of our environment. There is a need to raise participation from schools to set a distinctive example to the rest of the society. Working towards achieving this task requires awareness and skills that need to be developed in young children to bring about a change in the existing state of environment. It is through applications that children can get an insight into the problems and solutions of environmental issues. The Environment pioneer programme may help to address this issue to a certain extent.

3.1.4 Solid Waste Management

The full responsibility for managing solid wastes rests with the Local Authorities (LA) under the respective local authority acts. However, the interest shown by most LAs towards Solid Waste Management appears to be low. The amount of resources utilized by LAs for SWM is relatively low.

The average collection of solid waste by LAs in Trincomalee district is given in Table 5.

Table 5: Average Daily Collection of Solid Waste by Local Authorities in Trincomalee District

Name of the Local Authority	Collection of Solid Waste per day (Kg)
Urban Council, Trincomalee	32000-36000
Urban Council, Kinniya	2500-3000
Town and Gravets PS	4000-4500
Kuchchaveli PS	1500-2000
Muthur PS	5000-6000
Thambalagamuwa PS	1500-1800
Kinniya PS	2000-2500
Kantale PS	3000-3500
Seruwila PS	3000-3500
Morawewa PS	500-700
Gomarankadawala PS	1500-2000
PadaviSiripura PS	1500- 2000
Verugal PS	1000-1200

Source: PIP-2010

The Local Authorities create awareness among the people, on how LAs can assist people in collecting solid waste, through notices and announcements. In addition, Bins have been provided and people have been instructed to separate paper, plastics and glass from other waste and put the waste in appropriate bins. However, people do not follow the instructions.

The Local Authorities also carry out solid waste collection through their supervisors and labourers. Handcarts, tractors and compactors are used to collect and transport waste to dump sites. Recycling and re-use and manufacture of compost fertilizer have not been introduced yet, according Local Government Authorities.

A recent study conducted on the potential pollution impact of current land use practices, on Batticaloa lagoon highlights that despite efforts of LA to manage solid waste, there are occasions where unsystematic dumping is prevalent. Furthermore, at present waste disposal is mainly in open dumps which are unsanitary, the study says.⁴

Although the responsibility of finding a solution to the problem of SWM is not with the Ministry of Environment, given the magnitude of the problem, the Ministry has launched a national level programme called 'Pilisaru' with the participation of other government organizations, private institutions, NGOs & various technological specialists.

According to the Ministry sources, the main aim of the Pilisaru Project is to solve solid waste problem within the next 5 years. Under this Project, waste management will be managed by adhering to reduction of waste generation by reuse, recycling and resource recovery to the maximum extent possible followed by appropriate treatment and finally the disposal of residual waste in an environmentally sound manner.

It is expected to implement the above program for a period of 3 years commencing from 2008 in the form of a project titled 'Pilisaru Project' and implemented by the Central Environmental Authority.

The Ministry has recently initiated action to commence a Pilisaru project on behalf of UC, Trincomalee and PS, Trincomalee. Action will be taken to improve the dump site at Kanniya, Trincomalee. The development project would include composting, recycling, reusing, reducing waste. What is being done at present is just to dump the garbage but does not do any solid waste management activities. The daily collection of garbage is around 31 tons from the UC area and 6 tons from Pradeshiya Sabah area.

The two local authorities, UC Trincomalee and the PS Trincomalee, will jointly implement the project and the dumpsite would be shared by them. It is necessary to protect the forest area around the dumpsite, wild animals such as elephants and to preserve the environment as there is a sizeable population living in the surrounding area.

⁴ NECCDEP, An Assessment and Critical Evaluation of the Potential Pollution Impact of Current Land Use Practices, on Batticaloa Lagoon, 2010, p.18

The Ministry would provide the following:

- a) Full financial support.
- b) Technical support.
- c) Support to develop skill & training to employees.
- d) Planning & designing of the dump site & other infrastructure.
- e) Follow the tender procedures for purchasing, constructions, & etc.
- f) Implementing the project includes construction & etc until the project is handed over to the local authorities.
- g) Provision of vehicles and machineries if necessary to implement the proper solid waste management activities.

In Kantale, PS will implement the SWM project with assistance of CEA. But the site selected attracts wild elephants. Although a project proposal has been submitted to the PILISARU Project authorities asking for money to erect an electric fence. This request has been turned down by the Ministry of Environment as the cost to be incurred (Rs. 1.5 Mn) is high. Therefore, the project is at a standstill as the PS has not been able to find an alternative site for garbage dumping.

In Batticaloa District, MC, Batticaloa is being supported by NECCDEP for SWM which includes the construction of dumpsite, compost plant, and equipment and machinery required for recycling, etc. However, composting has not been started yet. The following six LAs are being assisted by World Vision, in implementing SWM projects in their areas of operation.

- KoralePattu PS
- EravurPattu PS
- Eravur town PS
- Manmunai West PS
- Manmunai South West PS
- PorathivuPattu PS

All these PSs have been provided with machineries and equipment required for composting but only the Eravur Town PS has started producing compost. In the case of PorathivuPattu, as the compost plant has been located 1 Km away from existing three phase electricity supply points, the PS have not been able to utilize the plant. Manmunai South West PS is taking action to start a model farm in order to utilize the compost fertilizer they will be producing in the process. However, the following PSs have not been assisted by any donor in implementing SWM practices.

- KoralePattu West PS
- ManmunaiPattu PS
- Kathankudy UC, and
- ManmunaiPattu South EluvilPattu PS

The two LAs, Kathankudy UC and ManmunaiPattu PS face a different problem which goes beyond SWM. Kathankudy is a densely populated area and as such the UC is unable to find a suitable land within the UC area for dumping garbage. The efforts made by Kattankudy UC to obtain a land from Manmunai Pattu PS area failed due to protests of the people in the PS area. The UC is now taking action to create a dumpsite in a 110 perch land in the UC area. As the land is hardly adequate for

SWM, special efforts from PC authorities would be required to solve the issues faced by the UC. KoralePattu West PS is dumping waste into the Ottamavadi lagoon.

In Ampara district, the United Nations Office for Operational Services (UNOPS) has commenced a project on Integrated Solid Waste Management in the Kalmunai MC area, Ampara UC area and in twelve (12) PS areas with the participation of elected representatives and staff of those LAs since January 2010. The project has been able to complete the following activities so far. The LAs are operating in two clusters as well as independently. Kalmunai MC, Ninthavur PS, Karathivu PS, Sammanthurai PS and Addalachchanai PS form one cluster and they share one landfill located in Addalachchainai PS area. The PSs which send their garbage to the common landfill have to pay Rs.600.00 per every ton of garbage transported to the PS which undertakes to transport. Ampara UC and Uhana PS form the other cluster and they also share the same landfill and other SWM facilities. All other LAs in the district carry out their SWM work independently.

The construction of engineered landfills is a specialist's job and UNOPS has obtained services of a private firm and the cost is borne by UNOPS. Even the recurrent costs incurred by LAs in respect of SWM activities in the first year of implementation are borne by UNOPS.

Some PSs have already imposed a service charge on the people to cover the cost of collection of garbage from households. The service charge in respect of a Samurdhi family is Rs. 20 for a month. It is Rs. 50.00 per month for a non-Samurdhi Family. If paid upfront for one year both Samurdhi as well as non-Samurdhi families are given a discount of 10%. Some other PSs have not imposed such a service charge as the people have not expressed their consent and also that LA elections are round the corner politicians are reluctant to displease their voters.

The progress of providing facilities under the project is as follows.

- Construction of 07 Engineered Landfills is completed
- 04 Composting Facilities established - Kamunai, Ampara, Thirikkovil&Akaraipattu
- 04 Recycling Collection centres - Samanthurai, Karativu, Dehiattakandiya and Akaraipattu
- 01 Waste Transfer Station constructed
- 01 Plastic Recycling Center in Ampara, with baler for completion by August, 2010
- Communal bins completed in all LAs
- Profiling of Health Care Waste Completed
- Pilot hospitals for health care waste management identified

The Provincial Office of CEA has already initiated action to commence a solid waste management project with Urban Council, Trincomalee and the Pradeshiya Sabha of Town and Gravets, Trincomalee.

3.1.5 Local Government and Environment

LAs have a special role in protecting environment. In fact, overall objective of all activities and functions performed by LAs are to protect environment. The CEA is empowered to give directions in writing to any local authority which are deemed necessary for safeguarding and protecting the environment and every local authority is required to comply with such direction. Accordingly, CEA has entrusted several responsibilities to LAs realizing that it is not practical to implement environmental activities without involvement of LAs.

Most environmental problems are manmade. Therefore, participation of people is essential in carrying out environmental activities. It is believed that since LAs are managed by a group of elected representatives whose social and physical distances from the people compared to that between the elected representatives of Provincial Councils and Parliament and the people are relatively less, it is easy to elicit people's participation. Studies conducted and the number of donor funded projects implemented to enhance the capacities of LAs in the province show that external intervention is necessary for encouraging people to participate in LA affairs.

There are several roles LAs are expected to play in Environmental Activities

- **Coordinating Role:** Coordination has two aspects:

Internal Coordination: There are several functions implemented by LAs related to environment such as public health, physical planning, engineering services, sewage disposal, and community development. These functions need to be coordinated effectively.

External Coordination: Coordination with other organizations (GO, NGO and Private Sector) which are involved in environment and development activities within LA area.

- **Environmental Improvement Role**

Improvement of the environment through improvement of infrastructure such as roads (Pavements, Vehicle parks, Sports grounds, public markets, drains) and improvement of public utility services such as waste management (Waste disposal, Water Supply, Drainage, Environmental health, Public health) will help prevent lot of environmental problems. LAs are empowered to undertake physical planning and zoning by which LAs can suitably locate industries and streamline construction activities and building construction. City beautification through establishment of parks, children parks, tree planting, landscaping and roundabouts,

- **Regulatory and Control role**

1. It is the responsibility of LAs to regulate and control activities which are detrimental to the environment and public health in accordance with powers and authority vested in LAs under Local Government Laws and by-laws,

2. It is also the responsibility of LAs not only to regulate and control activities that have been entrusted to LAs by the CEA under the national environment law but to monitor and take legal action as and when necessary

- **Educational and Participatory role**

1. It is believed that LAs can enlist participation as it is an institution with elected representatives and that participation is essential for protection of environment

2. It is the responsibility of LAs to implement strategies/programmes to educate the people on the need to participate in environment protection/conservation/management.

- **Environmental problems that need to be addressed by the LAs**

Based on the experience of LAs in carrying out the environmental functions assigned to them the following can be listed as problems encountered by the LAs despite the existence of laws under which they can take action.

- Inadequacy of infrastructure in LA areas
- Inefficiency shown in providing public utility services and public facilities/services
- Lack of management for waste disposal, litter and drainage
- Inappropriate land use practices e.g: blocking out land, reclamation of wetlands, sand mining, clay mining, felling of trees
- Irregular and unauthorized constructions and
- Irregular and unauthorized marketing/trading
- Dangerous and unpleasant businesses
- Display of unauthorized irregular banners, posters, cutouts, decorations, billboards
- Use of polythene and plastic in unacceptable manner
- Stray dogs and cattle
- Small scale industries which tend to pollute the environment (eg. rice mills, timber mills, coir mills, metal quarries, grinding mills, lathe workshops, garages)

As was mentioned earlier, since the mid-90s, coordination of environment protection and law enforcement activities had been entrusted to Government Agents/District Secretaries at the District Level and Divisional Secretaries at Divisional Level through establishment of District and Divisional Environment Committees. In addition, issues related to environment are discussed at District and Divisional Coordinating Committees, District and Divisional Agriculture Committees and District Fisheries Committees depending on the nature of the issues. These Environment Committees are still functioning but with less importance attached.

The DEOs who were earlier attached to the Divisions have now been attached to the regional offices of CEA. Further, the limitations imposed upon the fuel allocations of government agencies and individual officers have made the District and Divisional Level Authorities to cut down the number of meetings they attend. This explains the less importance attached to the Committees.

In the early 90s, CEA prepared Environment Profiles for each district which served as a district level database on environment. Some district profiles carried short action programmes indicating implementation priorities. This provided the District and Divisional Committees an action plan to monitor. However, the profiles have neither been updated during the last 15-20 year period nor a fresh attempt has been made in that regard.

The Eastern Revival Programme (2008-2010) implemented in the Province is expected to address the following environmental issues.

- **Deforestation and depletion of forest cover and land degradation**

Practice of shifting cultivation and clearing lands for roads and buildings are the major reasons for this situation. Loss of biodiversity, natural vegetation, increased soil erosion etc. is the major effects of deforestation.

- **Over extraction of sand, gravel and clay for the construction industry**

At present over extraction of sand, gravel and clay for the construction industry is identified as the major environmental issue in the East, over extraction of sand results in the collapse of riverbanks, salt-water intrusion and deepening of riverbeds.

- **Increased pollution of air, inland water and sanitation**

Airs, water, noise coastal and marine are the major types of environmental pollution and have become prominent with economic development in the East.

- **Improper solid waste disposal**

Improper solid waste disposal has become a serious problem mainly in the urban and town areas in the East.

- **Depletion of coastal resources**

Coastal pollution, coastal erosion, and unplanned development activities within the coastal zone are the major challenges in the coastal zone which result in a depletion of coastal resources. Further, recent Tsunami destruction created coastal zone pollution, and the proper management of the coastal zone with effective monitoring and law enforcement are required for the conservation of coastal resources.

3.2 Disaster Management

The District Disaster Management units in the three districts are formulating District and Divisional Disaster Profiles and District, Divisional and Grama Niladhari Division Level Disaster Preparedness Plans, and village level community based disaster risk reduction activities as per the Road Map (2005-2015) developed for the purpose.

Of the 230 GN divisions in the Trincomalee District, preparedness plans in respect of 65 GN divisions have already been prepared. Similarly in other two districts also GN division plans are also being prepared. Most these plans cover the following aspects.

- Legal Framework for Disaster Management (DM) in Sri Lanka
- The National Disaster Management Policy
- Development of District Disaster Preparedness and Response Plan
- Activities identified for Emergency Response
- District Profile
- Main disasters affecting the District
- Hazards and Vulnerability Assessment
- Tsunami Hazard threat
- Institutional Arrangements like Emergency Operations Centre (EOC),
- District Disaster Management Committee (DDMC),
- Institutional Arrangements for Emergency Operations, Disaster Preparedness/ Emergency Operations Coordination Structure and Flow of Information at different levels,
- Initial Response and Notification, Activation Steps,
- Functions of the Emergency Operations Centre (EOC),
- Sub-committees Responsible for various functions,
- Constitution of sub-committees and Roles and Responsibilities of sub-committees on different tasks
- Multi-hazard Response Plans for Rapid Onset Disasters (Early Warning and Evacuation, Search and Rescue, Relief Supply and Distribution, Water and Sanitation, Health and first Aid and Rehabilitation and Reconstruction)
- Resources and Capacity Analysis (Resources, Locations of Identified Temporary Shelter and Transit Camps, NGOs and Voluntary Agencies, Community Participation in preparedness, NGOs and CBOs identified for Response Activities at Divisional Level and Reporting Procedure at different stages.
- Contingency Plans for Specific Hazards (Contingency Plan for Floods, Agencies Responsible for Early Warning, Evacuation, Search & Rescue, Relief & Food Supply and Recovery, Contingency Plan for High Winds, Tornados and Cyclones, Agencies Responsible for Early Warning Evacuation, Search & Rescue, Relief & Food Supply, Recovery and Rehabilitation, Agencies Responsible for Early Warning and Evacuation, Search & Rescue, Relief, Temporary Shelter, Food Supply and Recovery)
- Contingency Plan for Tsunami, Sea Surge, Sea Storm etc. (Agencies Responsible for Early Warning, Evacuation, Search & Rescue, Relief & Food Supply, Recovery and Rehabilitation)

It should be noted that the plans prepared are only for response activities and do not include mitigation activities. This is mainly due to non-availability of disaster risk profiles. Actions are being taken to prepare risk profiles at national levels and district, divisional and village level profiles will be prepared in the process.

DMC is also in the process of establishing village level committees for

- Early warning to assist the police and other early warning/risk communicators to take early warning messages to the community and thereby to evacuate the people at risk to previously identified evacuation centres through previously identified evacuation routes. Equipment such as megaphones is being provided to such committees.
- Camp Management to assist the service providers like the Divisional Secretaries and NGOs in establishing relief centres at appropriate places and maintaining the centres.
- Search and Rescue to assist the Police and Armed Forces (if deployed) in search and rescue/lifesaving matters in the event of a disaster such as floods and Tsunami.
- Patrolling to assist villagers and communities at risk in the event of a disaster.
- Health and Sanitation mainly to look into the aspects of health and sanitation during and post disaster situations.
- First Aid to provide first aid to victims of a disaster.

DMC is also in the process of training field level officers attached to Divisional Secretariats and Pradeshiya Sabhas in disaster management, especially in Community Based Disaster Management. Most Social Service Officers have now been trained and they function as contact points in the case of a disaster. However, most village level activities are carried out independent of other village level organizations.

The capacities of Local Authorities for emergency response are being enhanced by providing machinery and equipment required on a LA cluster basis. It is planned to provide the following equipment and vehicles for fire station of the Urban Council, Trincomalee in 2011.

Since Tsunami 2004 impacted the people and the properties in the coastal belts of the three districts in the Province severely, DMC is in the process of erecting Early Warning Towers in the coastal areas. Of the planned number of eighteen (18) towers, thirteen (13) have already been erected. When these early warning towers become fully operational, daily weather forecasts will be disseminated for the benefit of fisher folk.

In order to overcome the difficulties in identifying suitable evacuation centres due to lack of high ground in the areas close to the sea beaches, DMC is in the process of identifying high-rise buildings which can be used as evacuation centres. Once the identification of buildings is complete, maps will be produced and published/displayed for the benefit of people at risk indicating the evacuation centres and evacuation routes.

Table 6: Vehicles and equipment for Trincomalee Fire Station

Item	No.
BLS Ambulance	1
Transport, Double cab	1
Fire Engine, Compact	1
Water Tender, Compact	1
Personal Protective Equipment, Fire fighting	15
BA compressor	1
Portable Pump	1
Rope Rescue Equipment	1
Construction of the fire station appropriate for the vehicles	1
Furniture for the fire station	1

Source: Fire and Rescue and Emergency Communication Project, Sri Lanka Phase II Ministry LG

The building codes (building guidelines) required for construction of disaster resistant buildings in disaster prone areas have been developed with assistance of the University of Moratuwa, and the regulations necessary for enforcement of the codes are being formulated.

Chronic Kidney Disease (CKD) is the latest addition to the list of disasters that affect the people in the province. The disease is now found spreading in the Padavi-Siripura Divisional Secretariat Division and DMC is taking action to popularize Rain Water Harvesting as a solution to the problem.

3.3 Post Conflict Recovery, Rehabilitation and Reconstruction

In the Eastern Province a very big number of families were affected as a result of the 25 year old conflict, a manmade disaster and 2004 Tsunami, a natural disaster. Between mid-2006 and mid-2007, the violent eruption of war, due to closure of Mavil Aruanicut, in the Eastern Province displaced about 210,000 people, who had been living in areas controlled by LTTE. In Trincomalee district, the number of displaced were about 70,000 while 130,000 were displaced from Batticaloa District. The number displaced from Ampara district was about 12,000. The Government with assistance from donors supported the IDPs in temporary camps and welfare centres as well as those living with host families. In addition, about 3,500 families also returned to the Province from Vanni IDP camps.

With the bringing of entire province under the control of the Government, an IDP return process was initiated. By end of 2009, almost all those IDPs were resettled except for the people in 3

welfare centres in Mutur who are unable to be resettled in their original places due to creation of the Economic Zone covering about 4 GN divisions in Mutur Div. Sect. Division.

The Government launched two major programmes to accelerate the recovery in the province. The first was a 180 day programme implemented by the Ministry of Public Administration and Home Affairs with the objective of restoring Civil Administration and Service Delivery System within the province. The second programme was also launched in 2007 complementary to the 180 day programme and was known as the Programme for Eastern Revival. The Eastern Revival Programme is a three year (2008-2010) programme and is still being implemented.

The collective efforts of the government and the donor community have led to improvements in the lives and livelihoods of the IDPs who have been resettled. The inter-agency humanitarian assistance (return shelter, basic house repairs, core houses, distribution of household goods, food rations for six months after return, quick impact projects supporting home-gardens, etc.) provided has been able to address most urgent needs of returnees. However, lack of support beyond humanitarian emergency assistance towards sustainable re-integration could de-stabilize resettlement efforts.

According to UNHCR, Bench Marks to end Returnee Monitoring in the East have been set out in line with international standards and good practices. The indicators developed provide measurable standards and according to UNHCR, the indicators will provide an indication as to when it is appropriate to start phasing down its protection monitoring activities.

UNHCR has taken action to strengthen the core office of Human Rights Commission to fulfill its protection mandate in the three districts including taking over of full responsibility for HR monitoring of the resettled areas and assisted HRC in conducting training programmes on issues specific to displacement and resettlement (e.g. compensation, restitution, property issues, resettlement standards, civil documentation, etc.)

The Government has been able to restore infrastructure destroyed during the war, by tsunami and the areas which were left neglected to a great extent by utilizing foreign loans and grants under the following projects.

- North East Community Restoration and Development Project (NECORD)
- Conflict Affected Area Rehabilitation Project (CAARP)
- North East Coastal Community Development Project (NECCDEP)
- Pro-poor Eastern Infrastructure Project
- Pro-poor Rural Development Project (PROP)
- Pro-poor Economic Advancement and Community Empowerment Project (PEACE)
- Re-awakening Project
- North East Housing Reconstruction Programme (NEHRP)

NECORD has implemented a range of complementary activities in the province to ensure that the people living there, whether original occupants or resettled or relocated, experience a broad improvement in their livelihoods and in their access to services, utilities and income-generation

opportunities. The programme has implemented projects in the sectors of Agriculture, Education, fisheries, Health, Income Generation, Minor roads, Shelter, Water Supply and Sanitation.

CAARP which was implemented along with NECORD had components like rehabilitation of about 500 kilometers (km) of national roads; and rehabilitation of power transmission, distribution and rural electrification.

It has been estimated that about 120,000 houses were damaged partly or fully in the eastern province. Nearly 65% of houses damaged were totally uninhabitable, and about 95% such houses are in the districts of Batticaloa and Trincomalee. Majority of people who were affected by both disasters lost their shelters.

The World Bank provided funds for meeting the housing needs of the poorest conflict affected families in both North and East provinces that meet the accepted vulnerability criteria. The funds were provided through NEHRP since 2004. Initially a grant of Rs. 150,000.00 per housing unit was provided to beneficiary families if the house was fully damaged and Rs. 70,000.00 for a partly damaged housing unit. Now the amount paid for permanent housing unit has been increased to Rs.325,000.00. According to NEHRP, the programme supports only the construction of 22,298 houses. Under the additional financial credit agreement signed in May 2008, NEHRP does not consider partly damaged houses for housing grants. According to NEHRP 132,852 conflict affected families in the Eastern Province have forwarded claims for housing assistance which implies that about 110,554 families are awaiting housing assistance. However, it is not clear whether this number includes fully damaged houses too. The National Housing Development Authority (NHDA) also provides housing assistance under its various housing programmes. NHDA has provided permanent houses for 8375 families in resettled areas in Batticaloa district for which NHDA has spent about Rs. 2400.0 Mn.

The resettled families are generally provided with temporary shelter which can generally last for about two (02) years. If their economic conditions are not improved within that 2 year period through revival of livelihood activities, settlers will undergo severe hardships.

The conflict, the people in the province experienced during the 25 year period prior to 2007, is the major cause for the dilapidated condition of the roads in the Province. The Eastern Revival Programme and several other donor funded projects implemented since 2007 have been able to improve almost all A&B class roads in the Province which has resulted in the improvement in the connectivity to a certain extent. However, same degree of attention has not been paid to the link roads in the province.

Several international agencies working in the east have closed their offices in the past year, including the office of International Red Cross (ICRC) which moved out after a government request, and the UN Office for the Coordination of Humanitarian Affairs (OCHA) The UN Refugee Agency (UNHCR) closed its office in the Batticaloa District, where it has been in operation since 2002 as their work in Batticaloa has been shrinking. It will continue its operations from Trincomalee. The government feels that UN agencies, NGOs and INGOs can now concentrate on rehabilitation of North.

Almost all the displaced people in Batticaloa have been resettled, according to UNHCR. However, there are about 90 families (430 persons) in the two Div. Sect Divisions of Kiran and Chenkalady who are still staying with host families. Of this number only 79 families are eligible to receive WFP assistance. These IDPs will also be resettled as soon as the district rehabilitation authorities receive the demining clearance certificate. Of the Vanni IDPs, i.e. 1023 families (2623 persons), only 141 families (231 persons) receive WFP assistance as all others have completed six months of re-settlement. However, WFP has conducted an assessment study in order to ascertain whether the Vanni IDPs who does not receive food assistance at present really faces food insecurity as there has been pressure from those IDPs requesting assistance. WFP Batticaloa office is awaiting the report of the study.

According to the district authorities, there are a few persons who have been displaced as far back as 1987 and living with friends and relatives in other districts like Matara, Hambantota, Colombo, Gampaha, Kalutara, etc. are willing to return to their original places of residence in Batticaloa as the situation is now conducive for such return. But for this to happen they require facilities which other IDPs have been provided with. The rehabilitation of infrastructure is adequately dealt with in the sector paper on Housing and Infrastructure Development.

The government took steps to restore livelihoods of affected people in the province immediately after the ending of the armed conflict. The Consultative Committee on Humanitarian Assistance (CCHA) established in the Ministry of Defence had a subcommittee for restoration of livelihoods with the participation of Ministries of Fisheries and Agriculture and UN agencies like the International Labour Organization (ILO). The government continued to implement support assistance for the immediate restoration of livelihoods under the Unified Assistance Scheme (UAS) as a short term measure. The Eastern Revival Programme (2007-2010) has taken steps to rebuild the productive sectors with a view to restoring livelihoods in the long run. However, majority of livelihood restoration activities have been handled by the NGOs such as ACTED, Save the Children, Christian Children Fund, World Vision, Care International, and ZOA Refugee Care. The sector papers on agriculture, livestock and fisheries have dealt with the restoration of livelihoods in detail.

Immediately after the capture of areas controlled by LTTE, the government launched programmes to rehabilitate ex- combatants including child combatants with the assistance of agencies such as IOM. The children undergoing rehabilitation have appreciated the facilities and knowledge granted to them to develop their skills to face a new life. UN representatives who inquired into the work discharged under the programme have expressed satisfaction. Meanwhile, young ex-LTTE cadres who surrendered themselves to the security forces undergoing rehabilitation are now releasing various products to the market.⁵

USAID funded International Organization for Migration (IOM) pilot project to reintegrate the former rebels into civilian life has handed over equipment to help over 550 ex-LTTE combatants in the Eastern Province to start new civilian jobs. It included canoes, pumps, engines and tool kits

⁵ www.defence.lk

for paddy cultivation and fishing. The Information, Counseling and Referral Services project aims to reintegrate up to 1,000 former LTTE members. However, an issue to be raised is whether such rehabilitation efforts are adequate given the number of combatants to be rehabilitated. It is believed that about 8000 cadres left LTTE along with Karuna when Karuna faction broke away.

As mentioned earlier, the war which was crushed militarily and the 2004 Tsunami left thousands of people displaced. Most of those affected, both Tamil and Sinhalese, come from the ranks of the poor. While large numbers of those displaced are now resettled in their original places and given facilities to start new lives, much work needs to be done to heal the wounds inflicted from the trauma that they have endured. This calls for providing psycho social services to the people affected by the conflict. The needy would include the different categories of affected such as widows, youth, combatants especially child combatants, children, disabled etc.

Psychosocial problems are disabling, costly, and often push families into poverty. There is growing evidence to suggest that populations living in poor socioeconomic circumstances are at increased risk of poor mental and psychosocial health, and the conflict in Sri Lanka aggravated this situation. This implies that the people affected by the conflict are engulfed in a vicious circle. Therefore the livelihood support extended to the affected people needs to be associated with psychosocial support.

It may, therefore, be crucial to establish a comprehensive and community based service that will assure standard psychosocial/mental health services to the community. An accessible and affordable service may promote the mental wellbeing of the community at large, especially, the people affected by the conflict. To bring this to a reality it may be necessary to make the community aware about the mental health and psychosocial approaches especially by counselors, social workers working in different sectors of the province. In this regard, a pool of trained counselors will be very useful.

In the aftermath of Tsunami, the Ministry of Education (MOE) trained the teachers who were functioning as counselors (career guidance) at school level in psycho-social counseling with the assistance of the Ministry of Health and an NGO, and engaged them in psycho-social counseling at tsunami refugee camps. MOE also carried out some work in the field of psycho social counseling in North and East under its project on Basic Education Sector Programme (BESP) which was implemented in 2001-2005 period with the assistance of GTZ. The **“Basic Education for Children in Disadvantaged Areas (BECare)”** project implemented under BESP, paid special attention to building up psycho-social counseling capacities to establish a school psychological service, besides improving basic education of war affected children, drop-out children, over-aged children and out-of-school children.

The Ministry of Health prepared the National Plan of Action for the Management and Delivery of Psychosocial and Mental Health Services for People Affected by the tsunami with the assistance of World Health Organization (WHO). WHO assisted the Ministry of Health in developing guidelines for psychosocial and mental health interventions. WHO has also assisted in training health personnel in the East on psychosocial counseling and related functions.

In order to help communities affected by conflict-related violence, NGOs have conducted psycho social counseling programmes in the North and the East. The Asia Foundation, in particular, has conducted programmes on psycho-social counseling in partnership with two local NGOs on a program called RESIST, or “Reducing the Effects & Incidents of Trauma”. The partners are the Family Rehabilitation Centre (FRC) and Shanthiham (The Association for Health and Counseling). Services have been made available in seven districts in the north and east regions, including the three districts of Trincomalee, Batticaloa, and Ampara. The program has supported Tamil, Sinhala, and Muslim communities, including war widows, bomb blast survivors, trauma survivors (including torture), and internally displaced persons (IDPs).

The program has helped to reduce trauma by providing psychosocial services such as counseling and medical support (including physiotherapy), yoga and relaxation techniques, befriending, raising awareness of the consequences of conflict-related violence, and assistance with referrals to established government and other NGO services.

The Ministry of Social Services and Social Welfare and the National Institute of Social Development (NISD), is conducting Diploma courses in counseling regularly with a view to producing counselors required by provinces. NISD has already trained 50 Tamil speaking persons and two Sinhala speaking persons from the Eastern province in counseling. Such trained persons can be engaged in meeting psychosocial counseling needs of the Province.

3.4. Gaps/deficiencies in present services provided

It appears that most of the policies formulated by the Ministry of Environment are implemented through central agencies of the Government without any involvement of the provincial councils or the provincial/district offices of the Authority. Only exception is the policy on solid waste management as the policy is implemented through the LAs. Only opportunity at which a PC can intervene in the implementation is the District Coordinating Committee meetings held periodically at the District Level as the Chief Ministers are co-chairmen of those committees.

The Provincial Office and district offices are carrying out several routine functions except for the role they play under the Pilisaru Project. Therefore, there is no government agency at provincial level to attend to province specific environmental issues. Nevertheless, the document titled Caring for Environment 2008-2012 says that a process of institutionalizing environmental management planning was initiated in 2001, where capacity building in planning and analytical skills in environmental management was provided to staff of sector-based institutions, provincial and local authority levels. This was aimed at setting a basis for the preparation of Sector-based Environmental Management Action Initiatives and Provincial Environmental Management Action Plans by the sectors and provincial agencies concerned. Through this process it was expected in the long run, that the Provinces would be in a position to prepare Provincial Resource Management Plans. This is an important and vital element in integrating environmental and economic developmental needs in decision-making at the implementation level, the document further added.

However, the absence of a provincial resource management plan has created problems for the provincial planners in formulating a provincial development plan as a development plan should indicate how existing natural resources are to be used for development and also how the natural resource base will be conserved for future use.

In order to ensure this, the North Western Provincial Council (NWPC) established a Provincial Environmental Authority as far back as 1990 with the concurrence of the Government. However, no other Provincial Council has been able to establish such a council although the Provincial Councils now have a history of more than twenty years. The Western Provincial Council has established a Solid Waste Management Authority.

Although there are projects implemented in the province by several organizations in order to address problems associated with solid waste management it is doubtful whether the problems have been addressed adequately. Eastern province produces about 400 metric tons of solid waste per day which is second only to the Western Province. The district of Batticaloa alone produces about 175 metric tons of solid waste per day.

The schools need to be linked to waste management programmes whether the students are involved in the Environment Pioneer Programme or not as they can act as catalysts in raising awareness among the public on the need to manage waste based on what they learn at the schools under the curriculum on environment.

The Local Authorities cannot play the roles expected of them in environment management mainly due to lack of capacity and resources.

Although five years have elapsed since the establishment of a separate Ministry for Disaster Management, the Disaster Management Centre and the National Council for Disaster Management, (NCDM) has met only thrice despite the fact that Disaster Management Act stipulates that the Council should meet once in three months. This has delayed the finalization of both the National Policy on Disaster Management and the National Disaster Management Plan. The drafting of the National Policy was completed in 2007 and the Minister of Disaster Management gave his concurrence for the draft in 2007. The Disaster Management Authorities are, therefore, reluctant to make the policy a public document.

Non-holding of meetings of NCDM on a regular basis has, on the one hand, violated the conditions stipulated in the DM Act and, on the other hand, the Chief Ministers of the Provinces have denied of opportunities of airing their views on disaster management.

Non-availability of a national policy and a national plan for such a long time has hampered the coordination of activities. As mentioned earlier, disaster management is a cross cutting and multi-disciplinary issue and as such coordination, especially coordination with the private and NGO sectors becomes crucially important, not only at the national level, even at provincial, district, divisional and village levels. Further, the Chief Ministers have lost opportunities for them to air their views on disaster management and the need to incorporate provincial level also in disaster management efforts. Any national policy must be placed before the public for the public to

comment on as to how the policy would affect them. The other Ministries also must be given an opportunity to evaluate how this policy would implicate their own policies and vice versa.

At the time of creation of the Ministry of Disaster Management and Human Rights, another Ministry was also created to handle disaster relief, recovery and reconstruction. This action resulted in the divorce of crisis management from risk management and created a lot of problems and rivalry between the two ministries and that affected the coordination. However, this situation is now remedied to a certain extent by bringing the two aspects together under one ministry.

As was mentioned earlier, at the time of creation of DMC, the National Disaster Management Centre (NDMC) which was functioning under the then Ministry of Social Services has been ignored. Most of the staff who was serving at NDMC had been trained abroad in disaster management. As these two agencies were not merged and the NDMC was abolished later the government lost the services of experienced staff of NDMC.

Current planning efforts for disaster management are confined to district, division and village levels. Even the planning activities at various levels are done independently and as such a bottom up planning approach has not emerged.

Community based disaster management activities are done independent of other development oriented CBOs such as Rural Development Societies existing at village level. This may have prevented other CBOs integrating Disaster Management activities into their development programmes.

The community based disaster management as perceived by DM authorities at the centre as well as at district level is confined to the establishment of seven community groups for specific functions such as first aid, search and rescue, etc. despite the preparation of a manual on Community Based Disaster Management (CBDRM) with the assistance of UNDP. What is important is mainstreaming of DRR activities into planning processes at all levels starting from the village level.

Two natural disasters occurring frequently in the province are floods and drought. Therefore there is a need to mitigate floods and disasters. The planning activities done by the disaster management authorities are mainly on preparedness for response and Tsunami related early warning activities.

Although several efforts have been made by NGOs with the support of government agencies to provide psychosocial services to the conflict affected people, such efforts appear to have been made in isolation without linking them to other support services such as livelihood support efforts. Therefore a coordinated intervention is necessary to streamline such efforts.

4. Problems, Issues and Challenges

It is the responsibility of the Centre to define the role of the provinces regarding any subject. Therefore, in respect of disaster management too, the Centre has to incorporate the role a PC is expected to play in Disaster Management in the proposed amendments to the DM act and the Constitution as well. Until such time the amendments are made, the DM authorities can make arrangements administratively to prepare provincial level disaster management plans in collaboration with the Provincial Council.

Action is being taken by the Ministry of Disaster Management to amend the Disaster Management Act. However, the need to amend the act was identified about two years back. Therefore the challenge is to expedite the process which requires extra commitment from the DM authorities.

The gap is the absence of a Provincial Resource Management Plan (PRMP) and some organization to implement it. This can be done in two ways: One, by enhancing capacities of the Provincial Office of the Central Environment Authority and getting them to prepare and implement a PRMP in close collaboration with the PC; two, by establishing an organization in the form of a Statutory Authority or a Department within the Provincial Council and acquiring required resources.

A Provincial Council can establish a mechanism to handle a subject included in the concurrent list of the Ninth Schedule to the Constitution if and only if the Government is willing to concur for such a course of action. Although there is a precedent that one Provincial Council (NWPC) has already established an organization of its own to handle environmental management it should also be noted that six other Provincial Councils have not followed that path.

Establishment of an organization of its own with the concurrence of the Government may be the best option available for the PC as:

- The Government is then bound to provide both human as well as financial resources required for managing the organization;
- The PC can share resources with Local Authorities with a view to enhancing capacities of LAs required for environment management.

Nevertheless, in taking the fact that six PCs have not established their own mechanisms for protection of environment into account, other options available for the EPC are: one, to sign a Memorandum of Understanding (MOU) with the Ministry of Environment with a view to obtaining assistance of Provincial Office of CEA to prepare and implement a provincial Resource Management Plan complementary to the development plans of the Provincial Council; two, to establish a mechanism at the provincial level administratively to enhance capacities of, and promote LAs to carry out environmental activities in a more coherent manner. The two options can be implemented together.

Promotion of Integrated Local Development Planning (ILDP) as indicated in the sector paper on the Provincial Governance and Service Delivery System and also the five year plans to be

produced by LAs under the NELSIP programme will include projects related to environment protection. The Ministry of the Provincial Council in charge of the subject of environment can bring all such environment related activities into a provincial environment plan and oversee the implementation.

There is increased pressure on Local Authorities to implement sound SWM practices exerted by various sources including the general public as accumulating garbage has now become a health hazard. However, there are several problems faced by LAs in carrying out SWM due to shortage of land in densely populated areas like Kathankudy and shortage of finance. UNOPS has taken steps to meet the initial financial needs of LAs in Ampara district and also to address the problem of land shortage by clustering LAs wherever necessary. NECCDEP and World Vision have helped several LAs in the Batticaloa District. Remaining LAs in Batticaloa district and almost all the LAs in Trincomalee district require outside funding for them to initiate sound SWM practices.

A major problem associated with the rehabilitation of affected people such as war widows, bomb blast survivors, trauma survivors (including torture), disabled, etc is their location and identification. Another problem observed at provincial level is that there are several agencies, both provincial and central, involved in rehabilitation and they operate in isolation without much coordination.

It would, therefore, be necessary:

- To establish information system/resource bank to be able to identify different categories of affected people and prepare a data set,
- To identify and fix roles and responsibilities of involved agencies in regard to services, especially the psychosocial services, to be provided to those groups, and also
- To ensure donor/NGO coordination and mainstream rehabilitation as a cross sectoral activity into development projects.

Given the lack of awareness among people on their psychosocial needs it may be appropriate to adopt a public health model in providing psychosocial services, aiming to maximize the number of people reached with the limited resources available. This may require interventions such as (a) community-based interventions to strengthen resilience; (b) group based interventions to reduce moderate level psychosocial distress, and; (c) focused interventions to address severe distress and high-risk populations.

5. Sector Development Goals

5.1 Development Goals

The sector development plan has two goals:

- **Promote economic and social wellbeing of the people in the Province**
- **Promote emotional wellbeing of the people affected by the armed conflict.**

Environmental management is multi-disciplinary and inter-dependent. Though it may not be possible to identify or pin point the impacts or the importance of every event and location, guidelines need to be set out in order to ensure that environmental hazards are avoided/ mitigated/ protected, at every stage. Environmental issues can be handled in many ways, depending on the type, location and the importance of the issues concerned. Protection, prevention, mitigation, development, regulation, information and human resource development are some of the means of managing the environment.

As was mentioned earlier, the province is abundant in natural resources, which need to be harvested in a sustainable manner by reducing threats (mainly of pollution and misuse) and enhancing opportunities (value additions). This highlights the need to **main stream resource management planning into the provincial development planning framework.**

As was mentioned earlier, it is the responsibility of LAs to regulate and control activities which are detrimental to the environment and public health in accordance with powers and authority vested in LAs under Local Government Laws and by-laws. An important area LAs need to focus their attention on is SWM. The Local Authorities carry out solid waste collection through their supervisors and labourers. Unless otherwise assisted by an outside organization, handcarts, tractors and compactors are used to collect and transport waste to dump sites. Recycling and re-use and manufacture of compost fertilizer have not been introduced yet in most LA areas, according Local Government Authorities.

Despite efforts of LAs to manage solid waste, there are occasions where unsystematic dumping is prevalent. Furthermore, at present waste disposal in most LAs is mainly in open dumps which are unsanitary.

Although, the Ministry of Environment, has launched a national level programme called 'Pilisaru' with the participation of other government organizations, private institutions, NGOs & various technological specialists its impact on the Province is minimal. Given this background, it has become necessary to **make the physical environment within the province clean, healthy and safe.**

Major disasters like Tsunami and Cyclones need to be managed and coordinated at the national level. However, disasters such as localized floods and droughts, adverse impacts of which are experienced by the people in the province need to be managed and coordinated at provincial, local and community levels. Therefore, a thrust area that attention should be focused upon is the **reduction of risks associated with localized disasters.**

Almost all displaced people in the Province are now resettled. Yet they lack basic facilities such as permanent shelter, water and sanitation, etc. The government is in the process of fulfilling such requirements. However, there is ample evidence that in many countries that have experienced periods of conflict or war, people are often left with high levels of psychological trauma. At the same time, these people often have few resources to devote to their mental health when their economies and societies have been devastated by war, displacement, violence and destruction. It is precisely at these times that people affected by an armed conflict need psychosocial therapies.

The 25 year old armed conflict in the country has negatively affected the mental health of people, which resulted, for example, in higher suicide rates (Sri Lanka is among the highest in the World) and alcohol abuse. Mental health disorders prevalent among the conflict survivors tend to isolate them from the rest of the society. Therefore, there is a need to take immediate steps to **re-integrate special groups of people affected by the armed conflict with the society**

5.2 Thrust Areas

Thrust Area 1: Mainstream resource management planning into provincial development planning

Output	Contribution to Thrust area	Indicator/s	Timing during plan period (Year)	Implementing Agency/s	Investment Rs. in Mn
Environmentally sound development projects.	Adverse impacts of development reduced	Guidelines on resource management incorporated into Provincial Planning Guidelines.	5	Chief Minister's Secretariat and Provincial Planning Secretariat	125.0

Thrust Area 2: Make the physical environment within the province clean, healthy and safe through waste management

Output	Contribution to Thrust area	Indicator/s	Timing during plan period (Year)	Implementing Agency/s	Investment in Rs. Mn
Enhanced knowledge and understanding of good SWM practices	Visible cleanliness in the areas	Demonstrated good knowledge and practice of proper handling of waste. Expressed understanding of health implications of good and bad SWM practices	5	PCLG/ACLG/PDE/LAs/CBOs	100.00
Enhanced capacities of LAs in Batticaloa and Trincomalee for effective SWM.	Visible cleanliness in the areas	Infrastructure needed for SWM in place. Revenue base of LAs expanded. Equipment and machinery acquired by LAs	5	PCLG/ LAs	800.00

Thrust Area 3: Reduce risks associated with localized disasters

Output	Contribution to Thrust area	Indicator/s	Timing during plan period (Year)	Implementing Agency/s	Investment Rs. in Mn
Community resilience enhanced	Enhanced Capacities of Communities at risk	Preparedness Plans. Mitigation activities planned/implemented. Community level early warning systems.	5	DDMU/CBOs	50.00
Mitigate Floods	Reduce risks associated with floods	Two rivers widened and dredged. A causeway rehabilitated.	2	Ministry of Irrigation (centre) and Provincial D/ Irrigation	113.0

Thrust Area 4 : Reintegrate special groups of people affected by the armed conflict with the society

Output	Contribution to Thrust area	Indicator/s	Timing during plan period (Year)	Implementing Agency/s	Investment in Rs. Mn
Effects of trauma reduced	Counseling helps affected people to reintegrate with the society	Resource banks established. Additional resource requirements identified and acquired. No of psycho social counseling clinics. No. attended the clinics	3	PDHS/PDE and relevant INGOs.	100

IMPLEMENTATION PLAN

Sector/Project	Short Term (1-2 Years)	Medium Term (1-3 Years)	Long Term (1-5 Years)	Remarks
Environment, Disaster Management and Post Conflict Recovery				
En/Env/01 Resource Management Planning			xxx	
En/Env/02 Raise Awareness of Communities on SWM			xxx	
En/Env/03 Enhance capacities of Local Authorities			xxx	
En/Env/04 Formulating Local Level Disaster Management Plans			xxx	
En/Env/05 Flood Mitigation in EravurPattu South Division – Batticaloa	xxx			
En/Env/06 Rehabilitation of Kiran Causeway in KoralePattu South – Batticaloa	xxx			
En/Env/07 Widening and Dredging of Karaveddi Aru and Mahilavedduwan Aru in Manmunai West, Batticaloa	xxx			
En/Env/08 Psychosocial/Trauma Counseling for People Affected by the Conflict		xxx		

FINANCIAL PLAN

Rs. Mn

Sector/Project	Short Term (1-2 years)	Medium Term (1-3 years)	Long Term (1-5 years)	Remarks
Environment, Disaster Management and Post Conflict Recovery				
En/Env/01 Resource Management Planning			125.00	
En/Env/02 Raise Awareness of Communities on SWM			100.00	
En/Env/03 Enhance capacities of Local Authorities			800.00	
En/Env/04 Formulating Local Level Disaster Management Plans			50.00	
En/Env/05 Flood Mitigation in EravurPattu South Division – Batticaloa	38.00			
En/Env/06 Rehabilitation of Kiran Causeway in KoralePattu South – Batticaloa	50.00			
En/Env/07 Widening and Dredging of KaraveddiAru and MahilavedduwanAru in ManmunaiWest, Batticaloa	45.00			
En/Env/08 Psychosocial/Trauma Counseling for People Affected by the Conflict		100.00		

Financial Outlay and Implementation Plan

Rs. Mn

Sector/Project	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks
Environment, Disaster Management and Post Conflict Recovery						
En/Env/01 Resource Management Planning	15.00	25.00	30.00	30.00	25.00	
En/Env/02 Raise Awareness of Communities on Solid Waste Management	15.00	20.00	20.00	20.00	25.00	
En/Env/03 Enhance capacities of Local Authorities	90.00	270.00	270.00	120.00	50.00	
En/Env/04 Formulating Local Level Disaster Management Plans	10.00	10.00	10.00	10.00	10.00	
En/Env/05 Flood Mitigation in EravurPattu South Division – Batticaloa	38.00					
En/Env/06 Rehabilitation of Kiran Causeway in KoralePattu South – Batticaloa	20.00	30.00				
En/Env/07 Widening and Dredging of KaraveddiAru and MahilavedduwanAru in ManmunaiWest, Batticaloa	15.00	30.00				
En/Env/08 Psychosocial/Trauma Counseling for People Affected by the Conflict	30.00	50.00	20.00			

Persons Consulted

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2. Mr. Uthayakumar Provincial Commissioner of Local Government, Trincomalee
3. Mr. K. Gunanathan Assistant Commissioner of Local Government, Trincomalee
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1. Mr. Lal Fernando Director, PILISARU Project, CEA
2. Mr. Sivakumar Director, Regional Office, Trincomalee
3. Mr. Kiriella Director, Regional Office, Kandy
4. Mr. Ariyadasa Senior Environment Officer, Trincomalee
5. Mr. Ekanayake Senior Environment Officer, Trincomalee
6. Mr. Wimalasiri Environment Officer, Trincomalee

District Secretariats

1. Mr. Arumainayagam District Secretary, Batticaloa
2. Mr. Sharif Project Director, Rehabilitation and Reconstruction, Batticaloa
3. Mr. M. Kaseer District Coordinator, Disaster Management, Batticaloa
4. Mr. A. Weeraratna Project Director, Rehabilitation and Reconstruction, Trincomalee
5. Mr. M. Rizwi District Coordinator, Disaster Management, Trincomalee
6. Mr. Ziyath District Coordinator, Disaster Management, Ampara

Divisional Secretariats

1. Mr. Tennakoon Divisional Secretary, Tambalagamuwa
2. Mr. Jayasinghe Divisional Secretary, Kanthale
3. Mr. Dharmakeerthi Divisional Secretary, Kothmale
4. Mrs. Chandra Herath Divisional Secretary, Dambulla
5. Mr. Somathilaka Secretary to the Governor, UVA Province (former Div. Sect, Naula)
6. Mr. Ariyawansa Divisional Secretary, Harispattuwa
7. Mr. Prasanna Assistant Divisional Secretary, Trincomalee

Local Government/Authorities

1. Mr. Alahakoon PCLG, Central Province, Kandy
2. Mr. Dhanapala OIC, LG Training Centre, Katugastota
3. Mr. Fasheer Secretary,UC, Kinniya
4. Mr. Subair Secretary, PS, Kinniya
5. Mr. Marzook Chairman, PS, Kathankudy
6. Mr. Asfer Vice Chairman, PS, Kathankudy
7. Mr. Ashroff Chairman, PS, Ninthavur
8. Mrs. M. Sashidaran Chairperson, PS, Manmunaipattu
9. Mr. Farook Chairman, PS, Kanthale
10. Mr. Premaratna Secretary, PS, Kanthale
11. Mr. Bandara Chief Clerk, PS, Kanthale
12. Mr. Karunapathy Technical Officer, PS, Kanthale and PS, PadaviSiripura
13. Mr. Dissanayake Community Development Officer, PS, Kanthale
14. Mr. Thevendran Secretary, UC, Trincomalee
15. Mr. Mebool Secretary, PS, Akkaraipattu

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1. Mr. Croos Project Director, NEHRP and NECCDEP
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3. Mr. Naushad Consultant, UNOPS, Ampara
4. Mr. G. Subasinghe Consultant, UNOPS, Colombo

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