



INTEGRATED FINANCING STRATEGY

FOR SUSTAINABLE LAND MANAGEMENT

**Ministry of Environment and Renewable Energy
Sri Lanka**

2014

**Integrated Financing Strategy (IFS) for
Sustainable Land Management (SLM) in Sri Lanka**

**Natural Resources Management Division
Ministry of Environment and Renewable Energy**

Sri Lanka

2014

**Prepared by : Natural Resources Management Division
Ministry of Environment and Renewable Energy**

**Printed by : K.S.U. Graphic (Pvt) Ltd.
No: 510, Rajagiriya Road, Rajagiriya.**

**Available by : Natural Resources Management Division
Ministry of Environment and Renewable Energy
82, "Sampathpaya"
Rajamalwatta Road
Battaramulla.**

Integrated Financing Strategy (IFS) for Sustainable Land Management (SLM) – Sri Lanka

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Abbreviations

ADB	Asian Development Bank
ADF	Asian Development Fund
AG	Attorney General
AUSAID	Australian Aid for International Development
BOC	Bank of Ceylon
CBOs	Community Based Organizations
CEA	Central Environment Authority
CCAS	Climate Change Adaptation Strategy
CCS	Climate Change Secretariat
CDM	Clean Development Mechanism
CEB	Ceylon Electricity Board
CEPOM	Committee on Environment Policy and Management
COP	Conference of Parties
CPS	Country Partnership Strategy
DOA	Department of Agriculture
DLDD	Desertification, Land degradation and Drought
DOER	Department of External Resources
DOF	Department of Forest
DONP	Department of National Planning
DOMA	Department of Management Audit
DOPMM	Department of Project Management and monitoring
DOTO	Department of Treasury Operations
DRC	Disaster Resources Centre
DOWC	Department of Wildlife Conservation
EFL	Environment Foundation Limited
FAO	Food and Agriculture Organization
FR	Financial Regulation
GA	Government Agent

GDP	Gross Domestic Production
GEF	Global Environment Facility
GHG	Green House Gas
GJA	Gem and Jewelry Authority
GLASOD	Global Assessment of Soil Degradation
GM	Global Mechanism
GSMB	Geological Survey and Mining Bureau
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IFC	International Finance Corporation
IFAD	International Fund for Agricultural Development
IFS	Integrated Financing Strategy
IMF	International Monetary Fund
INCD	Intergovernmental Negotiating Committee
IUCN	World Conservation Union
LUPPD	Land Use Policy Planning Division
MC	Municipal Council
MDGs	Millennium Development Goals
MOA	Ministry of Agriculture
MODM	Ministry of Disaster Management
MOED	Ministry of Economic Development
MOE&RE	Ministry of Environment and Renewable Energy
MOF&P	Ministry of Finance and Planning
MOI&WRM	Ministry of Irrigation and Water Resource Management
MOJ	Ministry of Justice
MOL&LD	Ministry of Land and Land Development
MONB&ED	Ministry of Nation Building and Economic Development
MOP&E	Ministry of Power and Energy
MOPI	Ministry of Plantation Industry

MOPIM	Ministry of Planning Implementation
MOWS&D	Ministry of Water Supply and Drainage
NAP	National Action Program
NBRO	National Building Research Organization
NCED	National Council for Economic Development
NCSA	National Capacity Needs Self Assessment
NCSD	National Council for Sustainable Development
NDMC	National Disaster Management Centre
NEAP	National Environment Action Plan
NECLD	National Expert Committee on Land Degradation
NGO	Non Government Organization
NLC	National Land Commission
NLUP	National Land Use Policy
NPPD	National Physical Planning Department
NRM	Natural Resource Management
NRMC	Natural Resources Management Centre
NSB	National Saving Bank
OCR	Ordinary Capital Resource
OFID	Opec Fund for International Development
PAC	Public Accounts committee
PACD	Plan of Action to Combat Desertification
PCs	Provincial Councils
PDOA	Provincial Department of Agriculture
SBA	Standby Agreement
SEAs	Strategic Environmental Assessments
SCR	Social Corporate Responsibility
SGP	Small Grant Program
SLIDA	Sri Lanka Institute for Development Administration
SLM	Sustainable Land Management

SLT	Sri Lanka Telecom
SLTB	Sri Lanka Tea Board
SLR	Sri Lanka Rupee
SNR	Strict Nature Reserve
TCs	Town Councils
UCs	Urban Councils
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNCOD	United Nation Conference on Desertification
UNDAF	United Nation Development Assistance Framework
UNDP	United Nation Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nation Children's Fund
WB	World Bank
WFP	World Food Program

Forward

Sri Lanka signed and ratified the United Nations Convention to Combat Desertification (UNCCD) and became a party to the Convention in 1995. The Ministry of Environment and Renewable Energy (MOE&RE) is the National Focal Point for the UNCCD in Sri Lanka.

In 2002, National action Program (NAP) of the UNCCD was prepared with a clear objective of mainstreaming UNCCD issues in to National Development agenda and integrating programs and projects in to national and regional plans in order to arrest land degradation and thereby to improve the livelihoods of rural communities.

However, mainly financial and some institutional, coordinating and legislative constraints occurring at different levels hindered full implementation of UNCCD and the NAP in Sri Lanka. In this context, in response to that Global Mechanism (GM), a subsidiary body of the UNCCD mandated *inter alia* to increase the effectiveness and efficiency of existing financial mechanisms and to promote activities leading to the mobilization of substantial financial resources to countries affected with desertification and land degradation, has developed the concept of developing “Integrated Financing Strategies (IFS) to design and investment framework for SLM, drawing and internal, external and innovative financing sources, instruments and mechanisms.

GM elaborated the IFS as an instrument to support country to mobilize financial resources effectively and efficiently for the implementation of UNCCD at national level. This new innovative approach therefore, centered on mainstreaming UNCCD issues in to country’s development framework and budgetary process. IFS is a guiding framework for locating and developing a mix of financial resources to fund SLM related programs and projects.

Implementing the IFS, should ultimately lead to an environment which enables and integrated investment framework for SLM as spelt out in the ten year strategy to allocate adequate and predictable financial flows from traditional and emerging sources.

This document is a product of collaborative work, efforts and contribution by officials of numerous Ministries, Government and Corporate Sector Institutions and NGOs. I am thankful to all of them for their valuable inputs. My special appreciation is extended to Global Mechanism (GM), International Fund for Agricultural Development (IFAD), United Nations Development Program (UNDP) country office in Colombo and the Rajarata University of Sri Lanka for providing financial and technical support which made it possible for the Ministry to prepare the Integrated Financing Strategy (IFS).

Secretary
Ministry of Environment and Renewable Energy

Executive Summary

Sri Lanka signed and ratified the United Nations Convention to Combat Desertification (UNCCD) in 1995 and 1998 respectively. In 2002, National Action Program (NAP) of the UNCCD was prepared and approved. The NAP was prepared with a clear objective of mainstreaming UNCCD issues into the national development agenda and integrating programs and projects into national and regional plans in order to arrest land degradation and thereby to improve the livelihoods of rural communities. The Ministry of Environment and Renewable Energy (MOE&RE) is the focal point of the implementation of UNCCD in Sri Lanka.

However, mainly financial and some institutional, coordinating and legislative constraints occurring at different levels hindered full implementation of UNCCD and the NAP in Sri Lanka. The implementation of NAP was almost standstill due to lack of financial resources in particular. In this context, MOE&RE with Global Mechanism (GM) jointly organized a first two days inception workshop on enabling environment in mobilizing resources for Sustainable Land Management (SLM) with relevant stakeholders in 2010 at Colombo. Sri Lanka followed by an another two days workshop which was to finalize work plan and to prepare Term of Reference (TOR) for Consultants in 2011.

Global consensus and changing resource allocation modalities for development and poverty reduction, as expressed for example in the Millennium Development Goals (MDGs) and outlined in the Paris Declaration on Aid Effectiveness, demand new approaches and strategies to support resource mobilization efforts in affected countries. Donor agencies have developed new policies, modalities and instruments for allocating resources to promote national development priorities identified in country development frameworks.

In response to that GM, a subsidiary body of the UNCCD mandated *inter alia* to increase the effectiveness and efficiency of existing financial mechanisms and to promote activities leading to the mobilization of substantial financial resources to countries affected with desertification and land degradation, has developed the concept of developing “Integrated Financing Strategies” (IFS) to design an investment framework for SLM, drawing an internal, external and innovative financing sources, instruments and mechanisms.

GM elaborated the IFS as an instrument to support country to mobilize financial resources effectively and efficiently for the implementation of UNCCD at national level. IFS consists of three key elements; 1).examining the environment for SLM financing, 2). Identifying potential financing sources, instruments and mechanisms, and 3). Designing enabling measures for resource mobilization on which the strategy has been developed.

This new innovative approach therefore, centered on mainstreaming UNCCD issues into country’s development framework and budgetary process.

IFS is a guiding framework for locating and developing a mix of financial resources to fund SLM related programs and projects. To be a meaningful and appropriate guiding framework, IFS should;

- be country led and nationally owned;
- built on existing strategies and processes, particularly NAP; and
- base on comprehensive and reliable analysis.

An IFS is also country-specific, flexible and responsive.

Implementing the IFS, should ultimately lead to an environment which enables an integrated investment framework for SLM as spelt out in the ten year strategy to allocate adequate and predictable financial flows from traditional and emerging sources.

The responsibility of preparing of the IFS was vested with the MOE&RE as the focal point for UNCCD. The donor party, International Funds for Agricultural Development (IFAD) with the concurrence of the MOE&RE Signed and Institutional contract with the *Rajarata* University of Sri Lanka for the preparation of the IFS.

Sri Lanka's IFS was developed in collaboration with relevant stakeholders, i.e. relevant government ministries and departments, donor agencies, farmer communities, non-governmental organizations, academia, Universities and community based organizations through the meetings, workshops, focus group meetings, individual stakeholder consultations and discussions, extensive literature review (reports, research papers, policy documents etc.).

This IFS report has been organized as Executive Summary, Introduction, The analysis of national context, Recommendations as outcomes, and Action Plan. Under the introduction, brief description on UNCCD, NAP and new strategy for resource mobilization for the implementation of UNCCD was given.

The analysis of the national context provides a comprehensive account of the current situation of Sri Lanka as regards SLM. The analysis includes: 1). Environmental outlook of the country, 2). The present status of NAP implementation and the government commitment to UNCCD, 3). The legal framework, 4). The institutional and coordination framework, 5). The national policy/planning process, and 6). The finance mobilization process to arrest land degradation.

Legislative, institutional and coordination frameworks on the resource mobilization in combating land degradation and for SLM activities have been examined. Shortcoming and drawbacks of the existing legal system, institutional and coordination arrangements towards the enhancing enabling environment for SLM were also identified. Decision making, policy and planning processes were reviewed and explored.

Government budgetary process and how the public investments were made from the public budget to environmental sector including land degradation related activities were examined.

Donor policies and modalities of multilateral and bilateral donors for allocating funds SLM activities of a country are very important. As external financing sources, donor's community policies and thematic areas for funding explored. Completed and ongoing foreign funded projects and programs in Sri Lanka were also assessed.

Non-traditional or innovative sources of funding for SLM were explored in this analysis. Taxes and levies, etc. and financial instruments (CDM and Adaptation Fund etc.) exist under the other sister conventions of UNCCD were identified as practically accessible financial sources.

This analysis identifies the shortcomings of the present national context and provides a basis for the recommended actions to be implemented in order to enhance the enabling environment for resource mobilization for SLM activities in the country.

From the analysis of national context, four major outcomes were derived and subsequently several outputs were also identified to achieve these four outcomes.

An action plan was prepared in order to achieve the four outcomes via realizing each and every output identified in this analysis. The outcomes and outputs from the analysis of the national context are listed below;

1. Enhanced enabling environment for resource mobilization in Sri Lanka

The review and analysis of the national context revealed some constraints in the enabling environment that could hinder resource mobilization for SLM in Sri Lanka. This objective may be achieved by resolving following outputs.

1. Enhanced legal framework for effective resource mobilization
2. Enhanced institutional and coordination framework
3. Effective policy formulation and planning process

2. Internal resource mobilization strengthened and rationalized

The major outputs to be achieved are:

1. Awareness creation of the policy makers on SLM
2. Enhanced capacity of officers involved in budget preparation
3. Increased investments by the NGOs and large scale private sector companies.

3. Enhanced mobilization of external resources

External sources of financing play a key role in development arena in Sri Lanka. Funds obtained from donors are either grants, loans, soft loans or other miscellaneous fund arrangements. Through proper coordination with the donors, there is high potential of obtaining funds. The major outputs to be achieved are:

1. Enhanced knowledge on donor funding.
2. Strengthening donor coordination at the MOE&RE

4. Enhanced mobilization of innovative resources

As a result of this assignment for the preparation of IFS, several innovative financing mechanisms were revealed. Some of them to be implemented fully and some of them are already in existence but need strengthening. These include:

1. Environmental taxing including levies, cess etc.
2. Funding solicited through Incentives and market based mechanisms

3. Funds from climate change activities (adaptation fund, funds for CDM activities and mechanisms etc.)

The action plan highlights the actions to be taken, time frame, the responsible agent or institute, priority level and the estimated cost.

1. Introduction

Land is a finite, fragile and non-renewable resource that covers somewhat lesser than one third of the Earth's surface, and is probably the most important resource out of the four major natural resources; air, water, land and living organisms (flora and fauna). Besides forming a natural habitat for life supporting systems for plants and animals and agricultural production land supports preservation of biodiversity, regulation of the hydrological cycle, carbon storage and ecosystem services.

Land degradation is the term used to identify a situation where productive capacity of land is significantly reduced. An area affected due to land degradation is about 40 percent of the earth's surface and more than one billion people got affected¹. Desertification, Land Degradation, and Drought (DLDD) are serious issues which affect the socio-economic development of many countries of the world. It is estimated that 52 percent of land globally used for agriculture, on which 2.6 billion people depend, is moderately or severely affected by soil degradation. Total land degradation affects some 1.9 billion hectares of land worldwide. Due to drought and desertification each year 12 million hectares are lost where 20 million tons of grain could have grown². These statistics clearly show the magnitude and gravity of the effects of land degradation and desertification on the development of a country.

Although Sri Lanka does not experience the effects of desertification, the country experiences severe effects of land degradation due to soil erosion and soil fertility decline. The other important causes have been identified as acidification, crusting and sealing, compaction and pollution.

The country experiences high rainfall regimes especially the western part of the country. The tea cultivations and the erosive agricultural practices used for vegetable cultivations in the hilly areas in the western part of the country have resulted in extensive soil erosion and soil fertility decline. The total land area of Sri Lanka is around 6.5 million hectares and nearly two third (2/3) of the land area falls within the dry zone. The remaining area forms the wet and the intermediate zones. The south central part of the country is mountainous. A relatively flat land surrounds it and lands at elevations above 300 m mean sea level (msl) are categorized as the *Central Highlands*. The total extent of the central highlands is about 92,600 ha or 14 percent of the total land area in the country³. Studies suggest that nearly 50 percent of the agricultural lands in the central highlands have been degraded. Comparative studies of soil erosion by zones have shown that all most all the districts in the country to are prone to some extent of soil erosion.

Under these circumstances, it is required to put collective action in place to arrest all forms of land degradation in the country since its impact on the environment and the national economy is remarkable.

¹Rural poverty portal, 2013

²UNCCD, 2012

³Wijeratne, 2010

Necessity has arisen to explore the environmental, institutional, social and financial constraints that hinder the full implementation of the NAP which had been prepared in order to address the issues pertaining to land degradation in Sri Lanka under the UNCCD.

The investments on SLM need to be ensured to implement NAP. The IFS has thus evolved as an instrument which (a) Creates an enabling environment and (b) Coordinates different financing sources for full implementation of NAP.

1.1 UNCCD and NAP

Recognizing that desertification is a major socio-economic and environmental issue of concern to many countries in all parts of the world, the United Nations Conference on Desertification (UNCOD) in 1977 adopted a Plan of Action to Combat Desertification (PACD). However, despite this and other efforts, the United Nations Environment Program (UNEP) concluded in 1991 that the issue of land degradation in arid, semi-arid and dry sub-humid areas had intensified. The United Nations General Assembly established an Intergovernmental Negotiating Committee (INC) to prepare, by June 1994, the UNCCD, with an overall objective of combating desertification and mitigating the effects of drought in countries experiencing serious drought and/or desertification. This was to be achieved within the framework of an integrated approach consistent with Agenda 21, with a view to contributing to the achievement of sustainable development.

NAP is the main instrument for implementing the UNCCD at country level, developed through a participative approach involving a wide array of local stakeholders. The NAP emerged on the guiding principle of UNCCD that solutions for desertification/land degradation should originate from the people of the country who are affected from the desertification and land degradation, supported by cooperation, collaboration and partnership with national and international stakeholders. These solutions, partnerships and cooperation should be undertaken within the NAP process.

In the UNCCD Ten Year Strategy (2008 – 2018) adopted in 2007, countries signed to the convention further specified their goals *“to forge a global partnership to reverse and prevent desertification/land degradation and to mitigate the effects of droughts in affected areas in order to support poverty reduction and environmental sustainability”*.⁴

Sri Lanka has signed the UNCCD in 1995 and ratified in 1998. The NAP was prepared with a clear objective of mainstreaming DLDD into the national development agenda and integrating programmes and projects into national and regional plans in order to arrest land degradation and thereby to improve the livelihoods of rural communities.

1.2 Resources for the implementation of UNCCD

The Global Mechanism (GM), established by the first Conference of Parties (COP) in 1997, is a subsidiary body of the UNCCD mandated to increase the effectiveness and efficiency of

⁴UNCCD Ten Year Strategy (2008 – 2018)

existing financial mechanisms and to promote activities leading to the mobilization of substantial financial resources to affected developing country parties in dealing with desertification and land degradation. The GM supports the developing countries to position SLM as a development priority through the mobilization of financial resources and increasing investments in SLM. Land as a resource provides basis for livelihood of the poor in many countries. Ensuring investments in SLM able such countries to meet development objectives including food security, economic growth and poverty alleviation.

By its principles of engagement in the Convention, and as a special service provider in financing for UNCCD implementation, GM supports affected country parties in their efforts to combat desertification and control land degradation by:(a) Supporting domestic approaches to SLM financing by mobilizing and strengthening instrumental resources such as strategic framework and policies and plans, (b). Acting as a hub for a dynamic network of strategic and financing partners, facilitating partnership building, committed to focusing their energies, resources and knowledge on the issues pertaining to desertification and land degradation, and (c). Adopting a “mainstreaming approach” as the main instrument for enhancing the integration of UNCCD into development agenda at country level.

Therefore, the GM promotes the mainstreaming of SLM as a key instrument for UNCCD implementation affirming its specific role in this context, convinced that successful mobilization of financial resources involves the mobilization of instrumental resources (strategic framework and policy instruments), human resources (stakeholders, organizations and institutions), and knowledge and information resources (awareness raising and capacity building).IFS has been designed to contribute to broadening of planning processes beyond specific sectors and include comprehensive coordinating arrangements between different financing sources, instruments and mechanisms. While helping to develop appropriate blend of internal, external and innovative funds, the IFS also identifies potential barriers that impede successful implementation of SLM programs.

The UNCCD is the only legally binding agreement linking environment and development in to sustainable land management. The Convention addresses specifically arid, semi-arid and dry sub-humid areas known as dry lands. The Convention through its Secretariat, work towards improving living conditions of the people in dry lands to maintain and store land and soil productivity and to mitigate effects of drought. Established in line with Article 23 of the UNCCD, the Secretariat has the main responsibility of servicing the sessions of COP and its subsidiary bodies and lead role on the operational objective 1 and specific outcomes of operational objectives 2 and 3 and as a support role in other operational objectives of the Ten Year Strategy (2008-2018). These operational objectives include, among others, 'capacity building and financing and technology transfer'. Therefore, the Secretariat has a lead role in facilitating the countries in SLM implementation. The Secretariat continues to build and strengthen partnerships with programs and institutions to foster SLM implementation.

1.3 New strategy for resource mobilization in changing environment

Global consensus and changing resource allocation modalities for development and poverty reduction, as expressed for example in the Millennium Development Goals (MDGs) and outlined in the Paris Declaration on Aid Effectiveness, demand new approaches and strategies to support resource mobilization efforts in affected countries. Donor agencies have developed new policies, modalities and instruments for allocating resources to promote national development priorities identified in country development frameworks.

The GM, adhering to the changing environment of global resource allocation and based on its principles on efficient mobilization of instrumental resources for SLM, has developed the concept of developing “Integrated Financing Strategies” (IFS) to design an investment framework for SLM, drawing an internal, external and innovative financing sources, instruments and mechanisms.

Implementing the IFS, should ultimately lead to an environment which enables an integrated investment framework for SLM as spelt out in the ten year strategy to allocate adequate and predictable financial flows from traditional and emerging sources based on a common understanding of the importance of SLM for development and poverty reduction. The IFS builds on a country’s NAP and other relevant domestic programs which describe the measures to be taken to combat DLDD.

Sri Lanka’s IFS was developed in collaboration with relevant stakeholders, i.e. relevant government ministries and departments, donor agencies, farmer communities, non-governmental organizations, academia, universities and community based organizations through the meetings, workshops, focus group meetings, individual stakeholder consultations and discussions, extensive literature review (reports, research papers, policy documents etc.). This IFS report has been organized as Executive Summary, Introduction, The analysis of national context, Recommendations as outcomes, and Action Plan. The MOE&RE of Sri Lanka functions as the focal point for UNCCD and the responsibility of preparing of the IFS was vested with the Ministry. The Ministry signed an institutional contract with the *Rajarata* University for the preparation of the IFS.

It is worth mentioning a quote by Luc Gnaeadja, Executive Secretary of UNCCD at the Second Scientific Conference on Pricing Land Degradation and Sustainable Land Management- DLDD held on Bonn, Germany, April 2013. He stated “*Land degradation in all regions of the world is very often driven by inappropriate policy and misplaced investment ... Smarter decisions and smarter choices need to be made*” where the actions towards more resilience to DLDD is urgently needed.

2.0 Analysis of the national context

The analysis of the national context provides a comprehensive account of the current situation of Sri Lanka as regards SLM. The analysis includes:

- environmental outlook of the country,
- the present status of NAP implementation and the government commitment to UNCCD,
- the legal framework,
- the institutional and coordination framework,
- the national policy/planning process, and
- the finance mobilization process to arrest land degradation

This analysis identifies the shortcomings of the present national context and provides a basis for the recommended actions to be implemented in order to enhance the enabling environment for resource mobilization for SLM activities in the country.

2.1. Environment outlook of Sri Lanka

2.1.1. Brief country profile

Sri Lanka lies on the Indian tectonic plate and is separated from the Indian sub-continent by the Gulf of *Mannar* and Palk Strait and is a tropical and humid island with an area of about 65,610 km² lying between 6° N and 10° N latitude and between 80° E and 82°E longitude. The island consists mostly of flat to rolling coastal plains, with mountains rising only in the south central part.

The climate is tropical and warm due to moderating effects of ocean winds. Mean temperature ranges from 17°C in the central highlands to a maximum of 33°C in low altitude areas. Day and night temperatures range from 14°C to 18°C. Since Sri Lanka is an island, the annual rainfall and its distribution act as a significant climatic parameter. Rainfall pattern is influenced by monsoon winds from the Indian Ocean and the wet zone and some of the windward slopes of the central highlands receive highest rainfall up to 2500 mm each month. Based on rainfall received and its distribution, the island had been divided into three climatic zones: dry zone (<1750mm/year), wet zone (>2500mm/year) and intermediate zone (1750mm – 2500mm/year)⁵. The island had been further divided into three zones based on elevation from mean sea level. These are low country (elevation <300 meters), mid country (300 – 900 meters) and up country (>900 meters). Furthermore, Sri Lanka is divided into 46 agro ecological regions based on the probability of receiving rainfall, elevation and soil type contributing to rich bio-diversity.

The country receives rainfall mainly from two monsoons. South-West monsoon occurs during the period of May to September while North-East monsoon rains come from

⁵Punyawardena, 2010

December to March. Some rains are experienced in the two inter monsoonal periods. Water received from annual rainfall is about 40 million hectare meters. Almost all the rivers start from the central highland.

Sri Lanka is one of the biodiversity hotspots in the world and records highest biodiversity density in Asia. Among its flora and fauna, 27% of 3210 flowering plants and 22% of the mammals are endemic. The wet zone is a tropical evergreen forest and subtropical evergreen forests are found in higher altitudes. The dry zone is flourished with dry zone forests. The island has declared 24 wildlife reserves, four biosphere reserves and several bird sanctuaries. In the famous tropical evergreen forest, *Sinharaja*, the vegetation density is very high and is estimated at 24,000 individuals per ha including trees, shrubs, seedlings and herbs etc⁶.

Sri Lanka's population is about 21.8 million as per the 2012 census of Department of Census and Statistics (DOC&S) consisting of 73.8 % Sinhalese, 7.2 % of Sri Lanka Moors, 4.6 % Indian Tamils, 3.9 % Sri Lankan Tamils, 0.5 % others and 10% unspecified. The population growth of the country is 1.1 %⁷.

Sri Lanka is the oldest democracy in South Asia. The country is a democratic republic and is governed by a mixture of a presidential system and a parliamentary system. The President elected for a period of six years is the head of state and is responsible to parliament. The President appoints and heads the Cabinet of Ministers selected from the elected members from the parliament. The parliament of Sri Lanka is a unicameral 225 member legislature with 196 members elected in multi seat constituencies and 29 elected by proportional representation. The parliament reserves the power to make all laws.

Sri Lanka's judiciary consists of a Supreme Court, a Court of Appeal, High Courts and a number of subordinate courts. The complexity of the legal system is a blend of Roman Dutch Law and British Law and local laws representing cultural influences.

As of 2012, Sri Lanka recorded Gross Domestic Output of US\$ 64.9 billion and in 1st quarter of 2013, the economy recorded 6% growth. In terms of per capita income, the country is second only to Maldives in the SAARC region, which has exceeded US\$ 2000 and expects to reach US\$ 4000 by 2016. The percentage of poor households based on the official poverty line (2009/2010) is 7.0. The unemployment rate of the country was 4% in 2012⁸.

2.1.2. Overview of land degradation in Sri Lanka

Land degradation is a complex process associated with all natural resources such as lands, soils, water bodies, forests and rangelands, grasslands, living fauna and flora and biodiversity in the ecosystem. Land degradation is the temporary or permanent lowering of the productive capacity of land as a result of human or climate induced activities.

It covers various forms of degradation including soil erosion, fertility decline, nutrient depletion, organic matter reduction, acidification, salinization and alkalization, water logging,

⁶Biodiversity conservation in Sri Lanka – A framework of action, 1999, MOE&RE.

⁷Census by DOC&S, 2012

⁸Central bank report, 2012

soil compaction and crust formation. It also contributes to adverse impacts on water resources, deforestation, degradation of grasslands and rangelands and loss of biodiversity. All these degradation types in various magnitudes adversely affect on overall productive potential of lands⁹.

In Sri Lanka, land degradation has become a serious problem as a result of improper land management especially in the agriculture sector and with the expansion of population. The underlying courses of the land degradation in Sri Lanka are discussed in details in subsequent section. Lands become a scare resource with increases in rural population. This increases poverty among the people due to the continuous exploitation of lands and unsustainable land management practices.

Major impacts of land degradation in Sri Lanka are frequent landslides, reduction in crop yield, high sediment yields resulting in reduction of water retention capacity of the major reservoirs, heavy soil losses, marginalization of agricultural lands etc. Topography, rainfall intensity and soil type combined with inappropriate land use practices and poor management of soil and water, intensify soil erosion. Therefore, severe soil erosion is visible in the up and mid country under poorly managed farming systems. The soil erosion in the low country where most of the areas with the undulating topography, falling under dry and arid zones is relatively low¹⁰.

Based on different estimations, the degraded lands in Sri Lanka due to water erosion are ranged from 33 % to 46 % of total land extent. According to the Global Assessment of Soil Degradation (GLASOD) about 50 % of land is degraded due to water erosion and about 61 % of total agricultural land is degraded as a result of fertility decline of soils¹¹. The figure 50 % of land degraded by water erosion of Sri Lanka is almost double compared to the average value for Asian region which is 25 %. According to an another study, soil erosion in different districts was estimated based on the land use and ranged from 2.4 % to 58 % and the average soil erosion in all districts of Sri Lanka was 33 % of the total land area¹².

Stocking (1986) has assessed the soil erosion hazard under different land uses in Sri Lanka. The soil erosion rate of different land use systems varied widely. Tobacco cultivation on steepy lands without any soil conservation measures showed very high level of erosion which was 200 tons/ha/year. Second highest erosion (100 tons/ha/year) was recorded in cleared lands with 45% slope. Well managed tea and *Kandyan* mix gardens appeared to be much better in controlling soil erosion in mid and up country areas. These land use systems the erosion rate recorded was < 0.5 tons /ha/year¹³. The loss of the productive capacity of lands due to land degradation therefore, a serious problem and should be addressed with great care. Preventive measures for further degradation of lands and the restoration of degraded lands must be implemented through suitable land management practices.

⁹Nandasena, 2002

¹⁰El Swaify et al, 1983

¹¹Oldeman et al, 1992

¹²Nayakakorale, 1988

¹³ Stocking, 1986

Frequent landslides that take place in several districts, especially in the hill country, have become life threatening and lead to degrade land in respective areas. Nearly areas in 10 districts are prone to landslides and the National Building Research Organization of Sri Lanka (NBRO) has commenced landslide zonation mapping of these districts. People deprive of their livelihoods and evacuated from their houses and the areas go out of agricultural production due to degraded lands.

Major off site impact of land degradation through water erosion in Sri Lanka is the siltation or sedimentation of reservoirs and tanks. As a result of this, capacity of reservoirs decreases and hence the reduction of hydropower production and loss of irrigable land area are inevitable. Wallingford (1995) estimated that the *Rantambe* reservoir silted at the rate of 4.3% per year during the period of 1991 and 1992¹⁴. *Victoria* reservoir silted at the rate of 0.08% per year during 1985 to 1993 and *Polgolla* reservoir was at the rate of 2.8% per year during 1976 to 1982. Almost 44% of the capacity of *Polgolla* reservoir was silted by the end of 1988¹⁵. *Rantambe* reservoir was silted up to 48% of its capacity. In the *Mahaweli* catchment the total off site cost was estimated to be Rs. 15.18 million as of 1993 of which 74.2% was contributed by the value of lost hydropower.

2.1.3. Causes of land degradation

Causes of land degradation in Sri Lanka can be identified as direct causes and indirect causes. Important direct causes are outlined below;

- **Loss of forest cover**

Over the last century, the country has lost most of its valuable forest cover. At present the area under forest cover is about 29percentof total land extent¹⁶. Loss of forest cover exposes the soil surface to rain and wind, causing soil erosion. Soils on steep slopes as well as soils with poor soil structure are most vulnerable to erosion due to the removal of forest cover.

- **Chena (slash and burn) cultivation**

Chena or shifting cultivation (also sometimes referred to as slash and burn cultivation) covers nearly 1.2 million ha of land throughout the country. The agricultural lands comprise nearly 41.62% of the total land area and chena cultivation is nearly 3% of the total land area. This was nearly 15% before 1970s because with the commencement of the larger irrigation schemes, people got used to more sedentary farming practices. Chena cultivation is known for its devastating effects on the environment and loss of agricultural productivity, because of the removal of forest cover and cultivation without proper soil conservation methods. This leads to soil erosion and soil fertility decline.

¹⁴Wallingford, 1995

¹⁵Perera, 1989

¹⁶Progress report, MOE&RE, 2011

- **Cultivation of steep slopes without proper soil conservation measures**
Land over 60 percent slope is generally considered unsuitable for agriculture. However, a large extent of land exceeding this limit has been utilized by people for cultivation of crops such as tea, tobacco, vegetables, and potato in the central hill country. South central part of the country is mountainous. A relatively flat land surrounds it and lands at elevations above 300 m mean sea level (msl) are categorized as the *Central Highlands or hill country*. Soil erosion on these steep slopes is very high particularly in areas with fragile soils and high rainfall.
- **Landslides**
According to NBRO about 125,000 ha of land in the hill country is vulnerable to landslides. Although landslides occur due to various reasons, soil erosion is one of the main reasons for the occurrence of landslides in the hill country. Landslides frequently occur during the rainy season in areas with steep slopes and high rainfall. Human activities such as deforestation and poor land uses have contributed to the increased incidence of landslides.
- **Exposure of building sites and road cuttings**
Exposure of soil in construction sites such as roads and buildings has been a major cause for silt transport and sedimentation.
- **Gem , Clay and Sand mining**
Gem mines and burrow pits constructed in the process of brick making have become a serious environment problem. These human induced activities accelerate soil erosion and cause land and environmental degradation in the area.

In addition to direct causes there are underlying causes or indirect causes for land degradation.

- **Lack of awareness on land degradation and SLM activities**
Poverty stricken- resource poor farmers who cultivate on fragile soils on hilly slopes and exploit ground water in the plains do not properly recognize the hazardous effects of land degradation.
- **High demand for agricultural lands**
Due to the lack of alternative income generating opportunities in other sectors in rural areas, people tend to exploit marginal lands for agriculture further aggravating land degradation. These marginal lands are sometimes reserved lands for other purposes and not suitable for cultivation.

- **Insecurity of tenure**

Large numbers of people who use land without proper ownership of land often do not pay interest in protecting the soils due to the uncertainty of ownership. At the same time, many land parcels are too small to make investments on soil conservation. Despite this, land fragmentation is continuing due to increasing populations in rural areas.

- **Drought and uncertainty of rainfall**

Poverty stricken farmers in rain fed areas often do not have sufficient financial or other material resources to face droughts and face uncertainties of rainfall. Trapped in the vicious cycle of poverty, they further continue to exploit the land resource which leads to degradation.

- **Policy failures**

Policy failures relating to land management and SLM have led the land resource to degrade. For example, it is prohibited to cultivate on steep areas where slope is > 60 degrees as per the Soil Conservation Act. The Land Use Policy suggests designated areas for identified specific purposes. Less attention has been paid to both of these legal instruments.

- **Inadequate capacity of government organizations to implement systematic conservation programs**

Due to scarcity of both human and financial capital, the government organizations entrusted with the responsibility of managing land, do not have adequate capacity to implement soil/ land conservation programs.

2.1.4. Cost of land degradation in Sri Lanka

The economic cost of land degradation is a very useful indicator to increase awareness and will of policy makers and other relevant stakeholders involved in environmental conservation activities. The studies revealed that soil erosion cost to the Sri Lankan economy was estimated Rs 4900 million (37 million US\$) during 1998¹⁷. The costing takes into consideration the onsite effects like loss of productivity and offsite impacts like sedimentation of reservoirs and reduced hydroelectric power generation. Another study provides a comprehensive account of cost of soil erosion for Upper *Mahaweli* watershed area of the central highlands. Onsite cost was estimated to be Rs 721.12 million (6 million US\$) of which 69.5 % was contributed by tobacco, shifting cultivation and poorly managed seedling teas. Offsite cost was Rs 22.33 million (0.2 million US\$) as of 1993 which has risen to Rs 134.82 million (1.0 million US\$) in fifty years' time¹⁸.

¹⁷Munasinghe, 1998

¹⁸Gunathilake and Gunawardena, 1999

2.2 NAP implementation in Sri Lanka

2.2.1 NAP preparation

The MOE&RE as the focal point for UNCCD activities initiated the NAP preparation in 2002. The National Experts Committee on Land Degradation and Mitigation of Drought (NECLD) was appointed by the Ministry to obtain advices on matters pertaining to land degradation and implementation of UNCCD in Sri Lanka. The Committee met in several occasions and discussed the NAP formulation process. Ministry invited about fifty position papers on fields related to land degradation and drought from experts in various institutes, including universities. This exercise was done to collate information and to prepare a database. Subsequently, number of national workshops were held in year 2000 with relevant stakeholders to identify the priority issues to be addressed in the NAP. Ministry appointed a team of consultants to formulate the NAP based from the information received from the position papers. After getting the observation and comments from the experts on the draft NAP report at a national validation workshop, the NAP was finalized by incorporating the recommendations given in 2002.

2.2.2 NAP objectives, strategies and programs

The goal of the NAP is to contribute to the sustainable management of land resources for the wellbeing of the people and economy. The NAP was developed mainly to address the issues pertaining to DLDD in Sri Lanka. The NAP identifies and implements programs and activities targeting systemic, institutional and local levels to reduce land degradation and mitigate the effects of drought with the participation of affected communities, including public sector agencies, private sector, CBOs, and NGOs.

The NAP objectives are aligned with the main UNCCD objectives to combating land degradation and mitigating drought in affected countries and consistent with Agenda 21. Therefore, there are more specific objectives have been identified; which are;

1. To address all causes of land degradation and drought and to identify measures to combat land degradation and mitigate the impact of drought.
2. To formulate a program of actions adopting a holistic approach for the implementation of projects and activities to deal with land degradation issues in the country.
3. To make necessary provisions for dealing with land related socio-economic issues and poverty alleviation in the country to uplift the living conditions of the people and to ensure environmental stability.
4. To provide a basis for soliciting necessary funds for addressing land degradation issues in the country.

The NAP outlines programs, strategies, projects and activities that focus on the rehabilitation and conservation of degraded lands and for the sustainable management of land and water resources in affected areas in order to improve the livelihood of rural communities. The proposed programs in the NAP are listed under two main categories as main or supportive programs. Table 1 shows the main and supportive programs and projects of the NAP.

The main programs focus on direct key issues pertaining to the degradation of land, water and forest resources such as soil and water conservation in degraded lands, forest decline and forest degradation, conservation of grasslands, etc. The supportive programs are expected to create an enabling and conducive environment for the effective implementation of the main programs. These supportive programs provide alternate income generating opportunities in rural communities, strengthen the existing legal and policy framework, enhance institutional capacity and promote education and public awareness on land degradation.

Table 1. Main and supportive programs and proposed projects of the NAP

No	Program	Proposed Projects
1	Promote the integrated management of Upper Watershed	<ul style="list-style-type: none"> • Prepare watershed development Master plans for important watersheds. • Identify and test ecologically viable and sound land use systems. • Promote the on farm and off farm soil and water conservation measures in critical watershed areas.
2	Rehabilitate degraded agricultural lands	<ul style="list-style-type: none"> • Undertake soil erosion hazard classification and mapping of degraded land including land suitability maps. • Identify and evaluate various conservation farming systems including livestock, agro forestry and home garden models and demonstrate their values for land rehabilitation. • Promote and implement organic farming and other soil nutrient management programs in the mid country intermediate and in the low country dry zone.
3	Protection of stream and stream banks	<ul style="list-style-type: none"> • Demarcate and conserve stream bank reservations. • A pilot project to demonstrate participatory management approaches of state owned stream banks
4	Protecting springs and water spouts	<ul style="list-style-type: none"> • Map, demarcate and declare major springs and spouts as protected areas. • Implement catchment management through participatory approaches.
5	Conservation of reservoir reservations	<ul style="list-style-type: none"> • Maps reservoir reservations and prepare management plans to restore tank eco systems. • Implement management plans through participatory approaches.
6	Reclaim problems soils	<ul style="list-style-type: none"> • Develop a comprehensive database on problem soils • Conduct farmer participatory programs for land reclamation/ management. • Enforce laws related to land filling.
7	Promote sustainable ground water management	<ul style="list-style-type: none"> • Prepare and inventory of ground water resources with guidelines for safe limits of extraction. • Strengthen research and development capacity of institutions dealing with ground water management.
8	Promote integrated biodiversity conservation	<ul style="list-style-type: none"> • Promote conservation of indigenous agricultural germ plasm in gene banks and botanical gardens. • Identify important components of biodiversity and introduce them in home gardens and tank ecosystems • Study the changes in form and content over time of vegetation in drought prone areas.

No.	Program	Proposed Projects
9	Prevent the decline in the forest cover	<ul style="list-style-type: none"> • Map and classify encroachments in all forested areas since the last cut off date for regularization (15th June 1995) in order to review and prevent encroachments
10	Restore degraded forests	<ul style="list-style-type: none"> • Established agro-forestry systems on degraded forest lands. • Establish S.R.C energy plantation based power generation projects in selected areas. • Develop and implement feature programs on the values of forests through the mass media. i.e. print media, and electronic media
11	Conserve and improve grasslands and Patana lands	<ul style="list-style-type: none"> • Develop an information base on grasslands, information should include the distribution, type and quality, threats and the potential for improvement and grasses. • Prepare a comprehensive management plan for conserving grasslands.
12	Establish a drought early warning system	<ul style="list-style-type: none"> • Enhance the monitoring and weather forecasting capabilities of the development of meteorology. • Conduct a study on the contribution of land use practices to desertification in 3 selected areas. i.e., dry zone, hill country.
13	Strengthen drought relief systems	<ul style="list-style-type: none"> • Establish and manage a drought relief fund or a drought insurance scheme.
14	Strengthen rain water harvesting systems	<ul style="list-style-type: none"> • Develop and disseminate new technologies for rain water harvesting • Train masons and technicians to construct rain water storage tanks in the rural areas of the dry zone.
15	Promote Sustainable Agriculture	<ul style="list-style-type: none"> • Establish location specific and integrated location specific development program. • Develop a climate change and desertification monitoring program to monitor changes in agricultural areas. • Develop a research program and strategies on adaptive and vulnerability of agricultural crops to drought and desertification • Promote district wise land suitability classification and develop appropriate farming models.
16	Provide alternative income generating opportunities	<ul style="list-style-type: none"> • Identify and provide support for setting up suitable agro based industries that will provide off farm employment for farmers operating in environmentally fragile areas. • Develop procedures to ensure that poverty reduction strategies that reduce dependency on land are incorporated in to the sectoral development planning process

No.	Supportive Programs	Proposed projects
1	Strengthen the policy frame work	<ul style="list-style-type: none"> • Develop a pilot project to introduce economic instruments in selected upper watershed areas to arrest soil erosion. • Formulate a land alienation policy.
2	Review land related laws	<ul style="list-style-type: none"> • Review existing laws related to land resources and prepare an “umbrella law” for the purpose of effective land resources management.
3	Enhance institutional capacity	<ul style="list-style-type: none"> • Establish a Secretariat in the Ministry of Lands to coordinate land related matters.
4	Promote capacity building of land users and other stakeholders	<ul style="list-style-type: none"> • Develop pilot projects to train university academics and farmers jointly in order to share knowledge and experience • Provide training and develop guidelines in land management for private land owners. • Carry out special training for provincial and local level officers in planning and implementing natural resources management project and activities.
5	Develop and transfer appropriate technologies	<ul style="list-style-type: none"> • Develop a model technology transfer project involving farmers and experts for facilitating participatory technology development and testing for land management in conservation areas
6	Promote data collection and information sharing	<ul style="list-style-type: none"> • Identify potential desertification areas. • Establish a land information system
7	Promote education and raise/public awareness on environmental issues	<ul style="list-style-type: none"> • Develop a comprehensive awareness and education program to sensitive the general public and target groups in good land management practices. • Develop and implement a feature program via mass media to expose both good and bad land management practices in the country

2.2.3 Present status of NAP implementation

Since its inception in year 2002, NAP has not received high priority due to many reasons including financial constraints. Therefore, stakeholder attention on NAP implementation also has been minimal. However, numerous agencies have been implementing NAP related activities, but not in the name of the NAP. The underlying reasons for not implementing NAP are multi faceted, and include:

- Except for MOE&RE, other ministries are less interested in NAP implementation
- Other agencies are not giving due consideration and recognition in implementing programs identified by the NAP.
- As a result, ministries do not consider or give lesser priority for funding the NAP programs in their budget preparation process
- Impacts of land degradation are not immediately visible and therefore, lack of awareness about the NAP and land degradation issues in general have accorded less priority in their mandates.
- Lack of leadership on mainstreaming the activities of NAP and lack of funding in relevant agencies.

The first proposal to seek Global Environment Facility (GEF) funds for the preparation of the project proposal under GEF focal area of land degradation was initiated in 2012. The project was titled 'Rehabilitation of degraded agricultural lands in *Kandy, Badulla and Nuwara Eliya* districts of the Central Highlands' and was targeted, among other activities, rehabilitating the degraded agricultural lands in three districts which are highly vulnerable to soil erosion in the hill country. A team of consultants worked on the preparation of pre-proposal on land degradation and which is under the consideration for GEF funding. Details of the project are given under the external sources of funding.

Some awareness programs related to land degradation are occasionally conducted by the MOE&RE especially with the participation of school children, rural community, people and farmers. These programs are mandatory and part and parcel of the annual activities of the ministry and not necessarily or specifically stemming from NAP programs. Currently, there are no SLM related major projects implemented by the government. However, as mentioned elsewhere in this document, several ministries conduct programs that have SLM elements which do not necessarily make reference to NAP.

2.2.4 NAP alignment process

The NAP alignment process of Sri Lanka as per the 10 year strategy of UNCCD has commenced in mid-2013 and a Consultant has been appointed. The 10 year strategic plan prepared to enhance the implementation adopted as per decision 3/COP 8, has identified 4 strategic objectives. The convention through the document ICCD/COP(9)/2/Add has issued a set of guidelines to be followed in the process of aligning the NAPs. The strategic objectives are (a) to improve the living conditions of affected populations (b) to improve the condition

of affected ecosystems(c) to generate global benefits and (d) to mobilize resources to support implementation.

In order to achieve these strategic objectives, the country parties are expected to meet the 5 operational objectives and outcomes under each operational objective. The convention through the document ICCD/COP (9)/2/Add has issued a set of guidelines to be followed in the process of aligning the NAPs. A training program had been held in first week of March 2013 in Teheran, Republic of Iran on the NAP alignment process for the country parties.

An awareness raising workshop for the key stake holders had been held in order to have an assessment stock take of the activities implemented by them related to NAP implementation. The government agencies, donors and NGO s have participated at this workshop.

The guidelines for NAP revision and alignment had been presented to the individual agencies. The activities identified as per the guidelines have been compiled in to a work plan and it has been reviewed by all the participants at another workshop. The first draft of the aligned NAP has by now been presented to the MOE&RE.

2.3 Commitment to Rio-Conventions

Three sister Conventions on environment, the UNCCD, United Nations Framework Convention on Climate Change (UNFCCC) and United Nations Convention on Biological Diversity (UNCBD), originated from the United Nations Conference on Environment and Development (UNCED), also known as the "Earth Summit" held in Rio de Janeiro, in 1992.

The UNCCD was adopted in Paris on 17 June 1994 and opened for signature on 14 October 1994. The Convention entered into force on 26 December 1996. Sri Lanka signed and ratified the UNCCD in 1995 and 1998 respectively. The MOE&RE is the focal point for the UNCCD implementation activities in Sri Lanka. Sri Lanka ratified the UNFCCC and UNCBD in 1993 and 1994 respectively. MOE&RE is the focal point for these two Conventions as well.

A National Capacity Needs Self-Assessment (NCSA) for Global Environment Management project was carried out in 2006 to identify the capacity constraints and existing capacity at systemic, institutional and individual levels for the implementation of the three conventions in Sri Lanka. The study revealed that, among others, inordinate delays occurred in the legal system, soft implementation of land laws, capacity issues at different hierarchical levels, fragmentation of responsibilities among agencies and subsequent ownership issues hinder full implementation of the Conventions¹⁹. Analysis further revealed that there is some progress toward compliance with UNCCD obligations since its ratification in Sri Lanka. These include preparation of NAP and mainstreaming it to the national development programs (through for e.g. the *Haritha* (green) Lanka program), preparation of a project proposal for international funding, conducting a series of awareness programs for the community on SLM activities, and a number of workshops and conferences on combating Land degradation. Some of these

¹⁹ NCSA report, MOE&RE, 2007

activities are already completed and some of them are still continuing. For example, the *Haritha Lanka* program is a long term activity aimed at forging relationship with nature with all the activities aimed at improving quality of life of people. Similarly, *Haritha Piyasa* (green shelter) program is aimed at reforesting the hill country and catchment areas etc. and these programs are still continuing. The National Council for Sustainable Development (NCSD) under which the *Haritha Lanka* program is being implemented, is headed by H E the President assigning highest priority to the council.

2.4 Legal framework and resource mobilization

This section reviews and analyses the legislative framework related to SLM activities in Sri Lanka. The legislative and regulatory framework in Sri Lanka is considered in light of whether it facilitates or hinders resource mobilization for SLM and describes the implications for resource mobilization and provides recommendations for improving the legislative and regulatory framework.

2.4.1 Legal and regulatory framework in Sri Lanka

The broader framework relating to legal and regulatory aspects consist of the judiciary and the administrative network of the country. The constitution and its subsequent amendments empower the judiciary and the administrative setup of the country. The administrative network comprises the government ministries, departments and subsidiary bodies empowered by acts and ordinances. The judiciary consists of the court system including the Supreme Court, court of appeal and district courts.

The government of Sri Lanka has included two specific clauses in the second constitution adopted in 1978 to minimize the exploitation of natural resources in Sri Lanka. The two clauses are read as follows:

- 1). "The state shall protect, preserve and improve the environment to the benefits of the community" and,
- 2). "The exercise and employment of rights and freedoms is separable from the performance of duties and obligations and accordingly it is the duty of every person in Sri Lanka to protect nature and conserve its riches".

In 1987, the 13th amendment was brought to the constitution of the Democratic Socialist Republic of Sri Lanka by the parliament to establish Provincial Councils (PCs) for each province of Sri Lanka. Each province constitutes a separate administrative unit with its own Provincial Council, and Chief Minister and provincial Cabinet of Ministers. The Chief Minister communicates all decisions of the provincial Cabinet of Ministers related to administration of the province and the proposals for legislation.

Government has delegated powers and authority to PCs in some matters related to sustainable resources management of the provinces *inter alia*, are;

1. Planning and implementation of provincial economic plans;
2. Agriculture and agriculture services and irrigation;
3. Land / land rights regarding land, land tenure, transfer and alienation of land, land use, land settlement and land development to the extent set out in this amendment.
 - a. Accordingly, a National Land Commission (NLC) was proposed by the 13th amendment responsible for the formulation of national policy with regard to the use of state lands. The NLC will include representatives from all PCs of the island. The NLC however, is yet to be established.
 - b. The NLC will have a Technical Secretariat representing experts in all the relevant disciplines required to evaluate the physical as well as the socio economic factors relevant to natural resources management, with specific reference to the vital resource; the land resource. The experts will be in the areas of economics, environment, resource economics etc., and the relevant government agencies.
 - c. National Land Use Policy (NLUP) will be based on technical aspects (not on political or communal aspects) and the Commission will lay down general norms in regard to the use of land, with consideration for soil, climate, rainfall, soil erosion, forest cover, environmental factors, economic viability, etc.
 - d. In the exercise of the powers devolved on them, the powers shall be exercised by the PCs having due regard to the national policy formulated by NLC.
 - e. The powers vested on the PCs shall be exercised by them with due regard to the national policy formulated by NLC.
4. Protection of environment within the province to the extent permitted by or under any law made by the parliament.

2.4.1.1 Environmental legislation

The legal provisions pertaining to SLM are indicated in about 15 major enactments and are enforced by a number of national agencies. The issue of combating land degradation has been addressed by the Government through the adoption of two strategies. One strategy is the introduction of legislation directly related to mitigation of soil erosion and combating land degradation. The other strategy is the introduction of environmental safeguards in legislative enactments pertaining to land and water resources management.

The legal enactments which provide legislative provisions for environmental safeguards pertaining to land and water resources management and development are:

The Forest Ordinance (1907) and its Amendments

The Forest Ordinance had been amended several occasions and the last was in 2009 which was the Forest (Amendment) Act No 65 of 2009. Major amendments made to the Forest Ordinance are on the long title and the name of the ordinance.

Long title of the Forest Ordinance substituted as “An Ordinance to consolidate and amend the law relating to the conservation, protection and sustainable management of the forest resources and utilization of forest produce; to provide for the regulation of the transport of timber and forest produce and other activities related to such transport; and to provide for matters connected herewith or incidental thereto”. The words “Forest Ordinance” of the principal enactment substituted as “Forest Conservation Ordinance”. Therefore the new amended Act has given more emphasis on the conservation, protection and sustainable management of forest reserves.

Forests are designated as reserved forest and conservation forests and are protected under the Ordinance. Act prohibits *inter alia* the fresh clearing of forests, setting fire to forests, clearing or breaking up forested lands for cultivation or any other purpose, pollute or poison water resources and pollute forest environment. All these activities are punishable and indirectly helping to control soil erosion in the forest areas.

Land Development Ordinance (1935) and Land Development (Amendment) Act No 10 of 1983.

Laws passed to make provisions for the systematic development and alienation of state lands in Sri Lanka. These legal instruments empower the Government Agent (GA) of a district to undertake the mapping out of state land for the systematic allocation of the available land in a given area for various purposes according to the nature of the land and the needs of the community.

Particularly the Section 08 of the Land Development (Amendment) Act states the purpose for which state land may be mapped out by GA for anyone or more of the following purposes of village expansion, village forest, village pasture, human settlement, any village purposes not specified, protection of the sources and courses of streams and prevention of the erosion of the soil. Hence, one of the objectives of the mapping is to ensure the prevention of soil erosion and the protection of the sources of the water.

State Land Ordinance (1947)

This Ordinance was enacted to provide for the grant and disposition of state lands in Sri Lanka and for the management and control of such lands. The Ordinance empowered the minister to declare and state lands as a state reservation for a number of public purposes two of which were the prevention of the erosion of the soil and the preservation of water supplies.

The Water Resources Board Act No 29 of 1964 and Water Resources Board (Amendment) Act No 42 of 1999

The Act made provision for the establishment of Water Resources Board, to advise the Minister or any other matters referred to the Board by Minister for advices, on matters pertaining to water resources.

Under these enactments the Water Resource Board has powers *inter alia* for 1). The control, regulation and development (including the conservation and utilization) of the water resources of the country, 2). The prevention of pollution of rivers, streams and other water sources, 3). The control of soil erosion, 4). The formulation of national policies relating to the control and use of water resources, 5). Promotion of afforestation and 6). control of salinity of water. (However, duties of the control of soil erosion and promotion of afforestation have been omitted in the new amended Act, 1999).

The Land Grants (Special Provisions) Act No 43 of 1979

The Act provided for the transfer to the state land vested in the Land Reform Commission (LRC) and the transfer of this land to landless persons free of charge. The transfer of land to an individual under the section 5 (ii) of the Act, was subject to several conditions one of which was the stipulation that the receiver of the land should carry out his land such soil conservation measures as the GA of the district in which the land is situated may require from time to time. The failure to comply with this or any other stipulated condition entitled the state through a court decree to cancel the transfer.

The National Heritage Wilderness Areas Act No 03 of 1988

The Act is intended to preserve unique ecosystems, genetic resources, the habitats of threatened species of animals and plants and for enhancing the natural beauty of the wildness of Sri Lanka. Any area of state land which has unique ecosystems, genetic resources or any outstanding natural features can be declared as a national heritage wilderness area. The Act prohibits pollution of water, fresh clearings and the clearing or breaking up of any land for cultivation or any other purpose in the declared areas.

Agrarian Development Act No 46 of 2000 and Agrarian Development (Amendment) Act No 46 of 2011

Government realized the necessity to set out a national policy in relation to the rights of tenant cultivator's and the restrictions to be imposed on persons using agricultural lands for non-agricultural purposes in order to ensure maximum utilization of agricultural lands for agricultural productions. Therefore the Agrarian Services Act (1979) was enacted with several amendments. Later, new Agrarian Development Act No 46 was enacted in 2000 and amended again in 2011 to provide for matter relating to landlords and tenant cultivator of paddy land, for the utilization of agricultural lands in accordance with agricultural policies, for establishment of agrarian development councils, to provide for the establishment of a Land Bank and agrarian tribunals, to provide for the repeal of the Agrarian Services Act, No 58 of 1979 and for matters connected herewith.

The owner cultivator or tenant cultivator of any agricultural land was expected *inter alia* a). to utilize land for maximum productivity, and to maintain the land property in order to ensure the maximum conservation of soil and water, b). to manage irrigation water effectively, and c). to take joint measures with other cultivators to conserve soil and water in the area for better management of paddy lands.

Environmental Conservation Levy Act – No 26 (2008)

Government enacted the Environmental Conservation Levy Act in 2008 to secure financial resources in environmental management based on the “polluter pays principle”. By enacting this act, government aims to achieve environmental sustainability for the benefits of present and future generations. This act is imposed on (a). Specified items owned by a customer, (b). Specified items imported into or manufactured in Sri Lanka or, (c). Specified services provided within Sri Lanka. Even though the regulations were made initially under this act for products and services related to mobile phones and telecommunication instruments the government took a right direction based on the polluter pays principle. The provisions of the act can be extended to land degradation and on sustainable land management once necessary regulations are drafted.

In the current national policy document – the Manifesto of the HE the President **Rajapaksa–Mahinda Chintana-Vision for the Future**, the development policy framework of the government 2010²⁰ - the need for polluter pays principle in addressing environmental issues in the country was reiterated. The President states that “my administration will be based on policies aiming at conserving the environment, nationally and internationally. Due to the application of the principle that the “abuser should pay for the abuse”, the Environment Ministry is self-financing reducing the burden on the Treasury”.

Each of these enactments’ contains provisions designed to address the problem of soil erosion. A number of legislative enactments directly address soil conservation and arresting soil erosion. These are;

- The State Agricultural Corporations Act (1972) –*HADABIMA* Authority
- *Mahaweli* Authority Act (1979) –*Mahaweli* Authority
- National Environmental Act (1980) and its amendment (1988) – Central Environment Authority (CEA)
- Sri Lanka Disaster Management Act (2005) -
- Coast Conservation Act (1981) and its Amendment (1988)
- Soil Conservation Act (1951) and its Amendments (1996) (This Act was again amended and submitted to the Cabinet for approval in 2004)

However, Soil Conservation Act (1951) and its Amendments (1996) is the only piece of legislation dedicated to soil conservation and land resources management. The following section briefly discusses some of the main soil conservation and controlling land degradation acts in Sri Lanka.

²⁰*MahindaChintana –vision for the future, 2010*

The State Agricultural Corporations Act (1972) - *HADABIMA* Authority of Sri Lanka

By extraordinary Gazette notification in 1978 under the State Agricultural Corporations Act (1972), the Government established a Corporation named the “National Agricultural Diversification and Settlement Authority” or NADSA in 1978. Later in 1991 again by Gazette notification the name NADSA changed to *HADABIMA* Authority of Sri Lanka. There are privately owned lands and state owned lands in the country. The government alienates state lands to people for different purposes including agriculture. Government agencies have been established to manage these state lands. One of the objectives of the Authority was to manage all lands vested in, or transferred to, the Corporation with a view to ensuring optimum productivity, environment protection, land and water resource conservation and settlement development. This clearly spelt out the Authority’s mandate to conserve land and water resources in the framework of sustainable land resources management. *HADABIMA* Authority is operated as Statutory Board under the Ministry of Agriculture (MOA).

***Mahaweli* Authority of Sri Lanka Act (1979) – *Mahaweli* Authority**

The *Mahaweli* Authority was established by the *Mahaweli* Authority Act (1979). The Act provided for the establishment of the *Mahaweli* Authority of Sri Lanka with responsibility for the implementation of the *Mahaweli* river development scheme. Under this act, the Minister was empowered to declare any area which can be developed with the water resources of the *Mahaweli* river or of any other major river as a “special area”. The Authority was expected to conserve and maintain the physical environment in any given area, and had been empowered to take such measures that are necessary to control soil erosion.

National Environment Act (1980) and its amendment (1988)

The Act provided for the establishment of the Central Environmental Authority (CEA) and the making of provisions for the protection management and enhancement of the environment and the regulation, maintenance and control of the quality of the environment. The Authority was expected to conduct, promote and coordinate research in relation to any aspect of environmental degradation of the prevention thereof and to develop criteria for the protection and improvement of the environment. The Authority was also expected to recommend soil conservation programs including the identification and protection of critical watershed areas, encourage physical and biological means of soil conservation, and promote long term research and technology for effective soil conservation. Today the Authority functions as the major regulatory body for environmental matters.

Section 22 of the Action particular makes provisions for the implementation of soil conservation activities in the country. It says “The Authority in consultation with the council shall, with the assistance of the Minister in charge of the subject of soil conservation, recommend soil conservation programs including therein the identification and protection of critical watershed areas, encouragement of scientific farming technique, physical and biological means of soil conservation, and short term, and long term research and technology for effective soil conservation”. The National Environmental Regulations No 1 of 2006 under

the Act has given powers to prohibit conversion of plantations and clearing of new lands for annual crop cultivation and re-cultivation of annual crops in high gradient areas which are the most vulnerable and prone to soil erosion and identified as one of the direct causes of land degradation in Sri Lanka.

Sri Lanka Disaster Management Act (2005)

Sri Lanka Disaster Management Act makes provisions to establish the National Council for Disaster Management, the National Disaster Management Centre (NDMC) and to appoint technical advisory committees to prepare disaster management plans. The Act also provides for the declaration of a state of disaster and the award of compensation. The disaster management council has been established and chaired by His Excellency the President of Sri Lanka. Main functions of the council are: 1). to formulate a national policy and program on the management of natural and man induced disasters; 2). to formulate, implement and monitor the national disaster management plans national emergency operation plans prepared based on the national policy on disaster management.

Even though the Act does not address directly land degradation, it identifies related disasters such as landslides, floods, drought, urban and forest fire, earth quake, tsunamis and coastal erosion which contribute significantly to the land degradation in Sri Lanka. Therefore this act incorporates some environmental safeguards pertaining to the land and water resources development.

NDMC established under the Act has its mission of protecting human life, property and the environment from natural disaster through awareness, prevention, preparedness, mitigation and coordination. Protection of environment of the mission of the NDMC well covers the various aspects of land degradation problem in Sri Lanka. Main activities carried out by NDMC are planning/implementing/monitoring of disaster management awareness and education programs, disaster mitigation programs, research and development, legislation and a national disaster mitigation plan, establishing a data bank on disasters, etc. NDMC has already planned to implement a number of activities, *inter alia*, setting up Disaster Resource Centers (DRCs) at district level, implementation of disaster mitigation programs such as construction of rain water harvesting systems in drought prone areas, setting up disaster management coordinating committees at divisional secretariat level, and in 2006 achieving the *Mahinda Chintana* program which is the development framework of the Government.

Coast Conservation Act (1981) and its Amendment (1988)

The Coast Conservation Act and its Amendment make provisions for a survey of the coastal zone and the preparation of a Coastal Zone Management Plan mainly to regulate and control development activities on the coastal zone, to make provision for the formulation and execution of schemes of work for coast conservation and to make necessary amendments to the written laws. One of the main tasks identified in the Act is to prepare a report based on the survey of the coastal zone which includes sea erosion of coast and assessment of lost due to sea erosion. The Act gives due concern to the degradation of coast as a result of sea

erosion and human activities, land lost, etc. Coastal zone management plans were prepared based on the survey on coastal resources to conserve the coastal zone.

Soil Conservation Act (1951) and its Amendments (1996)

The provisions in the Soil Conservation Act (1951) were considered inadequate to combat soil erosion. A primary reason was the identification of conservation activities as an extension function, the inability of the extension staff of the Department of Agriculture to implement the provisions of the Act due to incompatibility of extension and regulatory functions, the divided responsibility for the management of land which prevented the Director of Agriculture from exercising his authority and functions effectively, and the inadequate institutional support made available under the Act.

The Soil Conservation Act was therefore amended in 1996 - Soil Conservation (Amendment) Act No 24 of 1996 - to overcome the deficiencies in the 1951 Act. The new Act widened the scope in addressing land degradation issues, as evident in the long title of the new Act: "An act to make provision for the enhancement and sustenance of productive capacity of the soil; to restore degraded land for the prevention and mitigation of soil erosion; for the conservation of soil resources and protection of land against damage by floods, salinity, alkalinity water logging, drought, and to provide for matters connected therewith or incidental thereto". Further, to give wider scope, the new Act substituted the term "land degradation" in place of "soil erosion" and the term "conservation area" in place of "erodible area".

A significant departure from the earlier Act was the shift in focus from the conservation of soil resources to land resources management. Unlike the earlier Act the new Act emphasizes the enhancement and sustenance of the productive capacity of the soil, the restoration of degraded land for the prevention and mitigation of soil erosion and; the conservation of soil resources and land against damage by floods, salinity and water logging.

Major technical provisions included in the new Act are: (a). to establish a Soil Conservation Board and a Soil Conservation Fund. The Soil Conservation Board is comprised by senior government officials, representatives from non-governmental organizations engaged in activities related to soil conservation and land use and persons with special knowledge pertaining to the environment; (b). to declare sensitive areas for land degradation as "conservation areas"; and (c) to formulate regulations pertaining to the conservation and mitigation of land resources. The Act also empowered the Director-General to delegate to the Divisional Secretary in charge of a division any power, duty or function conferred or assigned to him under the Act.

However, the Soil Conservation Board could not be established until now because of the impracticality of arranging meetings with senior Government officials (Most of them are Secretaries of the Ministries) with their busy schedule and other representatives listed in the Act. Further, Act does not make any provisions to nominate an officer from the Ministries to represent the Board on behalf of the senior Government officials. Because of that, the Soil Conservation Fund could not be also established and operational to date.

According to the Act, the board is expected to co-ordinate activities pertaining to soil conservation and sustainable land resources management. Some of the major activities are to propose measures and co-ordinate activities, research and programs relating to:

- The enhancement and the sustenance of the productive capacity of the soil.
- The restoration of the productive capacity of land which has been degraded due to lack of proper conservation measures.
- The protection of land vulnerable to degradation
- The conservation of water and watersheds, in so far as it is necessary for the conservation of the soil and the maintenance of its productivity.

To prevent soil erosion resulting from non-agricultural activities leading to:

- Siltation or degradation of agricultural land of a degree likely to affect the productivity of such land; and
- Siltation of water bodies and irrigation system capable of supporting agricultural productivity.

Some of the legislative provisions that could be supportive for financing mechanisms in SLM related activities in terms of penalties, fines and other sources are given in Table 2.

Table 2: The legislative provisions for financing mechanism in SLM related activities.

Legal enactment	Related article	Legal statement
National Environment (Amendment) Act 1988	Article 31	Every person who contravenes or fails to comply any provision of this act or any regulation made by the reunder shall be guilty of an offence and shall on conviction before a Magistrate be liable to imprisonment of either description for a term not exceeding two years or to a fine not exceeding ten thousand rupees or to both such imprisonment and fine.
Soil Conservation (Amendment) Act 1966	Article 1(d) (1), (2) a, (2)b	<p>There shall be established a fund called the "Soil Conservation Fund"</p> <p>(2) (a) There shall be paid into the fund –</p> <ul style="list-style-type: none"> i. all such sums of money as may be voted from time to time by parliament for the use of the fund; ii. all sums of money required to be paid into the fund under this act or any other written law; iii. any donation or grant from local or foreign sources; and iv. all such sums of money as the board may from time to time determine as being payable into the fund; <p>(b) There shall be paid out of the fund, all such sums of money required to defray any expenditure incurred by the Director General in the exercise, discharge and performance of its powers, functions and duties under this act or any other written law, and such sums of money as are required to be paid out of such fund by or under this act.</p>
Environment Conservation Levy Act 2008	Article 4	All moneys collected as environment conservation levy in terms of this act shall remit to the "Environment conservation levy account" of the consolidated fund. (At present regulation have been made for only electronic telecommunication services at present. This act may make provisions to have regulations for land degradation activities too)
Water Resources Board Act 1964 and Amendments (1999)	Article 20	Any person who is guilty of an offence under this Act shall, upon conviction after summary trial before a Magistrate, be liable to a fine of five hundred rupees or to a term of imprisonment of either description not exceeding one month, or to both such fine and imprisonment.

		<p>Where an offence under this Act is committed by a body corporate, any person who at the time of the commission of the offence was a director, general manager, secretary or other similar officer of such body corporate, or was purporting to act in any such capacity, shall be deemed to be guilty of that offence, unless he proves that the offence was committed without his consent or connivance and that he exercised all such diligence to prevent the commission of the offence as he ought to have exercised having regard to the nature of his functions in that capacity and to all the other circumstances.</p>
<p>Agrarian Development Act 2000</p>	<p>Articles 96 and 97</p>	<p>Any person who is guilty of an offence under this Act or under any regulation made thereunder shall on conviction after trial before a Magistrate and except as otherwise provided in this Act, be liable to a fine not exceeding five thousand rupees or to imprisonment of either description for a term not exceeding six months or to both such fine and imprisonment.</p> <p>There shall be established a Fund to be known as the Agrarian Development Fund. There shall be paid into the Fund-</p> <ul style="list-style-type: none"> • All fines imposed by court for any offence under this Act; • All sums required under this or any other law to be paid into the fund and all such sums which are received as donation; • All sums of money as may be voted from time to time by Parliament to the Fund; • All such sums of money as the commissioner-General may from time to time require to be paid into the fund; and • Such percentage as may be prescribed of all sums of money collected as acreage tax under the provisions of this Act.
<p>Mahaweli Authority of Sri Lanka Act 1979</p>	<p>Articles 26 and 27</p>	<p>There shall be a fund established for the general financial purpose of the authority. There shall be paid into the fund.</p> <ul style="list-style-type: none"> (a) All such sums of money as may be voted from time to time by the parliament for the use of the authority; (b) All rates, taxes, duties, fees, charges and penalties levied by the Authority under the

		<p>regulations or rules made or deemed to be made under the provisions of this Act or in the exercise of any powers conferred by or under this Act;</p> <p>(c) All revenue derived by the Authority from any property vested in or administered by the Authority;</p> <p>(d) All revenue derived by the Authority for services provided by the Authority;</p> <p>(e) All donations or grants made to the Authority; and</p> <p>(f) All sums accruing to the credit of the Authority.</p> <p>(1) The Authority may utilize the funds of the Authority for the purpose of defraying any expenditure incurred in the management of the affairs of the Authority, the transaction of the business of the Authority, the payment of remuneration of the Directors and the employees of the Authority and the exercise of the powers and the performance of the duties of the Authority under this Act, and such other purposes as the Authority may authorize from time to time.</p> <p>(2) The Authority shall make rules for the withdrawal of any moneys from the fund and no sum shall be withdrawn from the fund except in accordance with such rules.</p>
<p>Sri Lanka Disaster Management Act 2005</p>	<p>Article 17</p>	<p>fund of the council disaster management council</p> <p>1. The council shall have its own fund. There shall be credited to the fund of the council –</p> <p>a. Money received from the consolidated fund, as initial capital of the council;</p> <p>b. All such sums of money as may be received by the council in the discharge of its functions; and</p> <p>c. All such sums of money as may be received by the council by way of loans, donations, gifts or grants from any lawful source whatsoever, whether in or outside Sri Lanka.</p> <p>2. There shall be paid out of the fund of the council all such sums of money as may be required to defray any expenditure incurred by the council in the discharge of its functions under this Act.</p>

2.4.2. Analysis and shortcomings of existing legal system towards enhancing enabling environment for SLM

In analyzing the existing legal framework and consultation with stakeholders, the following shortcomings were identified.

1. There are many legal enactments which address directly or indirectly land degradation issues in Sri Lanka formulated by the government from pre independence period to date. All the enactments are technically acceptable in combating and controlling of land degradation. However, all enactments have a deficiency in providing legal provisions and weak in enforcement to enhance the financial flows to land degradation and SLM activities. This is the major drawback in all enactments.
2. All the enactments lack the basic principle of resource mobilization to SLM. Polluter pays principle was not included in these enactments except recently enacted Act - which was the “Environmental Conservation Levy Act No 26, 2008” to secure financial resources in environmental management based on the polluter pays principle. However, this Act at present only has provisions to deal with disposal of products and services of the telecommunication systems and not for matters related to SLM activities. Similar steps have to be taken in the future on land resources management as well.
3. Divided responsibility for implementing the Acts. The Acts remain fragmented and scattered amongst several ministries, departments and statutory agencies leading to divided responsibility and loyalty and a lack of proper definition and direction. This is one the major problem that has prevented the effective implementation of existing legislation. The problem is aggravated by inadequate coordination among the various institutions administering the Acts.
4. There are overlaps, gaps, inconsistencies and controversies among the provisions available in these Acts. These acts are administered by a number of agencies with different mandates and create an array of conflicting situations. For example, the CEA under the MOE&RE implements the National Environmental Act and makes recommendations for soil conservation programs after consultation of minister in charge of the subject of soil conservation whereas MOA is responsible for the implementation of the Soil Conservation Act, make regulations and implements soil conservation programs.
5. The lack of implementation capacity and capability in some of the enactments. The Land Development Ordinance for example does not make provisions for monitoring the misuse of land at higher elevations and for regulating the alienation and unauthorized use of land in fragile areas.
6. Uncertainly in interpreting some of the provisions in the Acts. The State Lands Ordinance provides for the maintenance of stream reservations on state lands while

the Soil Conservation Act empowers the Minister in charge to reserve a prescribed width of land along the banks of streams. Whether the latter provisions apply to both state and private land is not specified.

7. Non implementation of the Act fully. The Soil Conservation Amended Act in 1966 made provisions to establish “Soil Conservation Board” and “Soil Conservation Fund”. But so far those two are not functioning.

- 7.1 Powers delegated to the Divisional Secretaries under the amended Soil Conservation Act. However, activities cannot be implemented as the Soil Conservation Board is not functioning yet.

- 7.2 The establishment of Soil Conservation Fund under the Act make provisions to defray any expenditure incurred by the director General of Agriculture in exercise of functions and duties under the Act. Further, apart from the government funds, any donation or grants from local and foreign sources can be allowed for the proposed fund. The Soil Conservation Fund cannot be established and funds cannot be raised without establishing the Soil Conservation Board first. This can be identified as a major constraint in enhancement of resource mobilization in SLM.

8. Provincial Department of Agriculture under the purview of the PCs is expected to implement the Act at provincial level. The Soil Conservation Act is administered and implemented by the Natural Resource Management Centre (NRMC) of the Department of Agriculture (DOA) of MOA. Since these two institutions function in two different administrative frameworks, many controversies may occur in the implementation of the Act.

2.5. Institutional and coordination framework

MOE&RE is the focal point institution for UNCCD activities in Sri Lanka. However, , there are a large number of agencies including ministries, departments and institutes at national and local level involved in addressing land degradation in the country. However, without a strong and properly aligned institutional set up the implementation of the NAP and the IFS has not become a reality. Coordination among institutions is also an essential element in the successful implementation of NAP and IFS. The role of main stakeholders and the coordination system is analyzed in this section. An effective mechanism which guarantees the successful coordination of all stakeholders involved is required in implementing NAP and IFS activities in the country. A coordination mechanism is required to bring all the stakeholders under one umbrella to materialize UNCCD obligations. The duties, functions and resource allocation of the main Ministries involved in SLM activities are given in the Table 3.

Table 3. Duties and functions of key Ministries in SLM activities and resource mobilization

Ministries	Duties and functions in SLM activities	Role of institution in resource mobilization
Ministry of Environment and Renewable Energy (MOE&RE)	<ul style="list-style-type: none"> • Responsible for formulating and implementing environmental policies, strategic action plans, programs and projects at national level. • Serves as Secretariat to NCSA and coordinates relevant line ministries and agencies. • Responsible for implementing NAP in Sri Lanka being the focal point of UNCCD. • Undertakes capacity building programs at various levels: institutional and individual. • Conducts awareness programs for public. • Creates enabling environment for public and political commitment towards sound environment management. 	<ul style="list-style-type: none"> • Mobilization of internal resources • Makes link with donor agencies/countries • Capacity building of human resources in SLM activities • Requests funds in budgetary allocation to promote SLM activities
Ministry of Agriculture (MOA)	<ul style="list-style-type: none"> • Responsible for formulating and implementing policies, strategic action plans, programs and projects on agriculture and all subjects that come under the purview of departments and statutory institutions listed under the ministry at national level. • Undertake crop diversification and increase the production of agriculture sector. • Training and capacity building of human resources. 	<ul style="list-style-type: none"> • Mobilization of internal resources • Makes link with donor agencies/countries • Capacity building of human resources in SLM activities • Requests funds in budgetary allocation to promote SLM activities • Subsidy programs for farmers
Ministry of Irrigation and Water Resources Management (MOI&WRM)	<ul style="list-style-type: none"> • Formulation of policies, strategic action plans, programs and projects on irrigation and water resources management. • Direction of implementation of such policies, strategic action plans, programs and projects with a view to adhering the relevant national objectives within budgetary allocation. • Undertakes activities of <i>Mahaweli</i> 	<ul style="list-style-type: none"> • Mobilization of internal resources • Makes link with donor agencies/countries • Capacity building of human resources in SLM activities • Requests funds in budgetary allocation to promote SLM activities • Integrating SLM

	<p>development program</p> <ul style="list-style-type: none"> • Adopting plans and programs for the prevention of pollution of rivers, reservoirs and other water sources. • Promote the rain water harvesting programs. 	<p>activities in to policies and projects</p> <ul style="list-style-type: none"> • Integrating sustainable water resources management into the policies and implementation
<p>Ministry of Economic Development (MOED)</p>	<ul style="list-style-type: none"> • Formulation of policies, strategic action plans, programs and projects on inter alia economic development and poverty alleviation and all subjects that come under the purview of departments and statutory institutions listed under the ministry at national level. • Direction of implementation of such policies, strategic action plans, programs and projects with a view to adhere the relevant national objectives within budgetary allocation. • Implementation of rural livelihood development initiatives (<i>Samurdhi</i> program, <i>Gama Neguma</i> programs and <i>Divi Neguma</i> program) • Formulation and implementation of rural and regional economic development policies and strategies, and All development programs including district development programs 	<ul style="list-style-type: none"> • Mobilization of internal resources • Makes link with donor agencies/countries • Requests funds in budgetary allocation to promote SLM activities • Integrating SLM activities in to policies, projects and programs • Subsidy and loan programs for activities which promote livelihood of farmers and rural community • Building human resources capacity in sustainable economic development
<p>Ministry of Land and Land Development (MOL&LD)</p>	<ul style="list-style-type: none"> • Formulation of policies, strategic action plans, programs and projects on land development and all subjects that come under the purview of departments and statutory institutions listed under the ministry at national level. • Direction of implementation of such policies, strategic action plans, programs and projects with a view to adhere the relevant national objectives within budgetary allocation. • Alienation of land and development of settlement projects as specified by the law. • Administration and management of 	<ul style="list-style-type: none"> • Mobilization of internal resources • Makes link with donor agencies/countries • Requests funds in budgetary allocation to promote SLM activities • Integrating SLM activities in to policies, projects and programs • Coordination and implementation of land use planning aiming controlling of soil erosion. • Resources allocation for

	<p>state lands and land use planning initiatives.</p> <ul style="list-style-type: none"> • Acquisition of lands for development projects. 	<p>arresting landslides in steep areas</p>
<p>Ministry of Plantation Industries (MOPI)</p>	<ul style="list-style-type: none"> • Formulation of policies, strategic action plans, programs and projects on plantation industry and all subjects that come under the purview of departments and statutory institutions listed under the ministry at national level. • Direction of implementation of such policies, strategic action plans, programs and projects with a view to adhere the relevant national objectives within budgetary allocation. • Optimum utilization of plantation lands to multiple cropping and integrated farming and increasing production and employment. 	<ul style="list-style-type: none"> • Mobilization of internal resources • Requests funds in budgetary allocation to promote SLM activities • Integrating SLM activities in to policies, projects and programs • Subsidy and loan programs for activities which promote livelihood of plantation sector community.
<p>Ministry of Disaster Management (MODM)</p>	<ul style="list-style-type: none"> • Coordination and management of relief activities pertaining to natural and manmade disasters • Formulation of policies, strategic action plans, programs and projects for disaster mitigation, response and recovery. • Direction of implementation of such policies, strategic action plans, programs and projects. • Coordinating awareness programs on natural and manmade disasters 	<ul style="list-style-type: none"> • Mobilization of internal resources • Requests funds in budgetary allocation to mitigate disasters related with natural resources. • Integrating SLM activities in to policies, projects and programs
<p>Ministry of Finance and Planning (MOF&P)</p>	<ul style="list-style-type: none"> • Formulation of national policies, strategic action plans, programs and projects in regard to the subjects of finance and planning, economic reforms, taxation and all subjects that come under the purview of departments and statutory institutions listed under the ministry. • Direction of implementation of such policies, strategic action plans, programs and projects with a view to adhere the relevant national objectives. • Preparation of national development 	<ul style="list-style-type: none"> • Allocation of financial resources for government institutions • Monitoring and follow up of allocated funds • Assisting in receiving foreign funds from donor agencies

	<p>and public investment programs.</p> <ul style="list-style-type: none"> • Preparation of annual budget and management of financial resources. • Coordination with Central Bank and international agencies and mobilization of foreign resources for economic development. • Liaising with donor agencies and international financing agencies. 	
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2.5.1. Coordination mechanism

At the surge of rapid economic development, it is imperative that every economic activity has an implication on environment. The economic development targets are always fulfilled at the expense of the environment. Therefore, it is required to strike a balance between development and environment to ensure sustainability of economic benefits for future generations.

The MOE&RE having understood the requirement of such a compromise have established several coordination mechanisms to make sure that the economic activities place minimum pressure on environment. The MOE&RE is vested with the full responsibility of meeting the UNCCD obligations through the NAP.

Committee on Environment Policy and Management (CEPOM)

As the environmental issues are multi-faceted requiring effective environmental planning and management, MOE&RE must establish close link and co-ordination mechanisms with line ministries and agencies in the areas of land, water, agriculture and industry. Giving high priority to this need, in 1999, with the new National Environment Action Plan (NEAP) a novel approach had been taken by the MOE&RE by appointing eight national committees, namely the Committee on Environment Policy and Management (CEPOMs) for different sectors like, industry, irrigation and water management and power etc., aiming at integrating all environmental concerns into the development agenda at national level which considered as a major co-ordination mechanism at that time²¹. One CEPOM which is responsible for the land, agriculture, mining and plantations deals with complex issues of land degradation in the country. The Secretaries in charge of the issue concerned and the Secretary in charge of environment jointly chair the committee. Therefore, the CEPOMs could be considered as an effective forum to discuss collectively and take policy decisions with concerned sectoral ministries and agencies.

However, at present the CEPOMs are not functioning and with the change of ministry portfolios and with the introduction of the coordinating body called National Council for

²¹Sri Lanka's middle path to sustainable development in the 21st century, national report, 2002

Sustainable Development (NCSD) under the *Haritha* (Green) Lanka program by the MOE&RE in 2009.

National Council for Sustainable Development (NCSD) under *Haritha* (Green) Lanka program

The presidential Secretariat and MOE&RE developed an action plan called *Haritha* (Green) Lanka program with short, medium and long –term goals for the period 2009 to 2016. This action plan is a product of the concerted efforts of all relevant ministries. During its preparation a high level participatory process was followed to ensure that sustainability would not just remain a concept but would translate into a reality. Under *Haritha* (Green) Lanka program the government established the NCSD chaired by HE the President with 22 ministries serving as members to ensure political commitment at highest level²². MOE&RE acts as the secretariat to the NCSD. This is the highest level co-ordination body to plan and implement policies on sustainable development in the country. The objective of the NCSD is to function as national platform to launch and promote the process of achieving sustainable development and to oversee and guide the implementation of its action plan for 2009 – 2016²³. The action plan developed 10 broad environmentally sensitive mission areas including the land resources management as one mission area. The ten mission areas are,

1. Clean air- everywhere;
2. Saving the fauna, flora and ecosystems;
3. Meeting the challenges of climate change;
4. Wise use of the coastal belt and the sea around;
5. **Responsible use of the land resources;**
6. Doing away with the dumps;
7. Water for all and always;
8. Green cities for health and prosperity;
9. Greening the industries;
10. Knowledge for the right choices.

The strategies have a set of targets to achieve within a short, mid or long term time frames. The action plan is to be coordinated by the MOE&RE and its progress monitored by the Ministry of Plan Implementation (MOPIM). This program had been incorporated into Sri Lanka’s national development agenda “*Mahinda Chintana – Vision for the Future*”. However, there does not appear to be close co-ordination between the line ministers responsible for the implementing programs and the MOE&RE. Many of the short-term targets that were to be achieved by 2010 are yet to be realized.

However, under the mission of “**Responsible Use of the Land Resources**” in *Haritha Lanka Program* there are several strategies and actions *inter alia* address to enhance enabling environment and opportunities for financing to SLM in Sri Lanka (Table 4).

²²National action plan for *harithalankaprogramme*, MOE&RE, 2009

²³Rathnasiri, 2012

Table 4: Strategies and actions related to SLM in *Haritha Lanka* program

Strategy	Action	Short term 2009-2010	Med. Term 2009- 2013	Long term 2009 - 2016	Responsibility
1. Reduce land degradation in agricultural areas	Provide incentives for undertaking of land improvement measures	20%	30%	50%	MOA DOA
2. Rehabilitate deteriorated lands	Promote the action plan (to replace <i>chena</i> system to sustainable farming system) among farmers and provide incentives to the farmers to implement the plan.		25%	35%	MOA, DOA MONB&ED (Ministry of National Building and Economic Development)
3. Optimize soil conservation through mandatory and other measures	a. Establish committees of representations from relevant authorities. b. Divert a part of the taxes levied on export of plantation products especially tea to finance soil conservation measures instead of cutting down the subsidies of planters who do not adopt soil conservation measures.	75%	80%	100%	MOA, DOA LUPPD (Land Use Policy Planning Department) District Secrétaires.
4. Promote the integrated management of upper watersheds	Promote and strengthen co-ordination among different organizations dealing with land and water management practices.	40%	60%	25%	MOA, MOE&RE, MOL&LD
5. Review land related laws	a. Review all existing land related laws and regulations and			90%	MOL&LD

	<p>assesses legal impact on land degradation and suggests necessary changes.</p> <p>b. Explore the possibility of developing an umbrella framework law to deal with land related issues in a manner.</p>				
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A fully authorized national coordinating body does not exist at present for implementation of NAP and IFS in the country, instead a number of agencies have their own mandates to act on land degradation and soil conservation issues and activities. It has become the responsibility of the MOE&RE to take the leadership and liaise with all the actors and to bring them under one umbrella to implement the NAP and other obligations of UNCCD. However, the MOE&RE cannot interfere in the activities of other agencies. Rather, the MOE&RE under the umbrella atmosphere can request other agencies to implement the NAP related programs. This is a major shortcoming of the coordination mechanism prevailed. However, it is expected that with the establishment of NCSD, which has the full authority under the chairmanship of H E the President, will form a successful coordination mechanism. Since environmental management, especially land and water resources management, is a multifaceted and multi-sectoral activity, MOE&RE needs to establish a close relationship and coordination system with relevant line ministries and agencies.

National Expert Committee on Land Degradation and Mitigation of Drought (NECLD)

The NECLD was set up to advice the Minister of MOE&RE on matters pertaining to land degradation and drought, including in implementation of UNCCD activities in Sri Lanka and acts as a coordination mechanism bringing all the stakeholders who engage on activities relating to land degradation. The Committee comprises experts in land and water resources sector state sector officials, academia and NGOs. They meet once in two months and at the times sudden needs arise. The main tasks of the NECLD are to provide guidance and directions towards adopting an integrated approach in mitigating land degradation and drought effects, provide advice on policy matters, and recommend the strengthening of laws related to combating land degradation. This Committee was also expected to oversee and guide the preparation of NAP.

The NECLD was initiated in 2000 and reactivated by appointing new members to the committee in 2012. The NECLD plays an advisory role and has no mandatory powers or authority in decision making processes and implementation of policies related to land degradation. However, with the consultation of the officials of the MOE&RE, it was understood that there will be a proposal to establish two sub committees, namely: 1).

Technical Advisory Committee, and 2). Steering Committee on Implementation of NAP. This may be a right direction and Committees should be empowered with some authority. The NECLD should be transformed into a fully authorized coordinating body to implement NAP activities in Sri Lanka. Only by doing that full implementation of NAP can be ensured.

Soil Conservation Board

Even though the MOE&RE functions as the focal point and implementing body of the NAP in Sri Lanka, the Director General of the DOA is responsible for implementing soil conservation activities under the powers vested on him by the Soil Conservation Act. The establishment of a Soil Conservation Board, which will be the main coordinating body in all soil and water conservation activities, was proposed by the Soil Conservation (Amendment) Act 1966. The board should consist of Secretaries and Director Generals of relevant ministries and institutions. The Secretary to the MOA and Director General of the DOA would serve as the chairman and secretary to the board respectively. This novel approach would:

1. Improve coordination among line ministries and agencies;
2. Reduce overlapping of responsibilities and work effectively towards common goal;
3. Provide opportunities for sharing experience, knowledge and resources efficiently.

However, there are several drawbacks in proper functioning of the Soil Conservation Board. These are;

1. Practical difficulty in convening meetings with sufficient participation since the composition of the board is of the highest caliber officials in the Government (Secretaries from the Ministries and other officers).
2. Alternate members cannot participate at the board meetings, since there is no such provision in the Act.

Due to these structural weaknesses, the functioning of the board has come to standstill.

Appointments of Environmental Management Officers to key Ministries

In order to establish close link with the MOE&RE, environment management officers have been appointed to key ministries who implement development programs that have major impacts on environment. This is an institutional arrangement made to establish close link with the MOE&RE with other ministries. This arrangement facilitates soft implementation of development programs without inordinate delays giving due concern to environmental concerns. Among others, the ministries for which such officers have been appointed are power and energy and agriculture are to name a few.

2.5.2. Shortcomings in the institutional and coordination frameworks

1. MOE&RE is the focal point institution for implementing UNCCD activities in Sri Lanka. The establishment of NCSD with MOE&RE as the secretariat, as a way to make decisions and policies for environmental safeguards at highest level, is a positive

move taken by the government. This is to help coordinate activities on environmental management among government authorities. However, this is at highest policy level and but not at operational or implantation level.

NECLD set up by MOE&RE is only an advisory body and gives advice to Minister of the MOE&RE on matters pertaining to land degradation and drought including in implementation of UNCCD activities in Sri Lanka. However, it revealed from the NCSA study and through stakeholder consultations that there is an urgent need of a fully authorized coordinating body at operational level to coordinate all matters related to land degradation and SLM activities in the country.

2. The existing institutional set up does not have the required capacity. Even though the enactments provide legal platform for combating land degradation issues technically, the existing institutional set up does not have required human and financial resources capacity to implement such legislations at field level. There is inadequate number of staff particularly grass root level staff (Field level officers) to implement the Soil Conservation Act. This is the major limitation or drawback in implementing the Act. Institutions in charge of implementing the laws have been constrained by the shortage of trained personal and sufficient funds.
3. There is a weak coordination among government authorities that have mandates in the environmental management activities since these agencies have their own priorities and limited resources are being prioritized accordingly in order of preference.
4. Non-functioning of Soil Conservation Board and Soil Conservation Fund under the Soil Conservation Act.
5. Very slow progress of implementation of activities related to land resources indicated in the *Haritha Lanka* action program. Many of the short-term targets to be achieved by 2010 are yet to be realized.
6. Lack of awareness of all stakeholders from top level to grass root level; particularly, environmental education and public awareness has been seriously lacking.

2.6 Policy framework and national planning process in Sri Lanka

2.6.1 Institutional framework for policy preparation

The Central Government comprising HE the President, Parliament and the Cabinet of Ministers set national priorities. The MOF&P, through its Department of National Planning (DONP), bears the responsibility of preparing major policies of the Central Government and granting approval to all national plans prepared by line Ministries in par with the ten year strategic document.

The Government realized very recently that the current practice of relying on separate committees to formulate and implement policies have reduced the efficiency of the government due to lack of ownership and participation in policy formulation process. There is also no effective coordinating body to ensure speedy implementation. The government has therefore, set up the National Council for Economic Development (NCED) – a permanent secretariat under the MOF&P which will be managed by a team of well qualified professionals drawn from both private and public sectors to improve policy formulation and implementation in a well-coordinated framework.

Therefore, NCED is presently assist the DONP for the formulation of national policies by coordinating all sectors involving all stakeholders and monitoring and implementation of such policies through the relevant line ministries and agencies. The NCED will also coordinate donor activities and provide a forum for the private sector to take up their concerns and any unresolved issues. It will also promote private public partnership in policy formulation and provide a conduit for the private sector and other stakeholders for a regular dialog with the Government.

The NCED, together with the DONP and MOF&P, engages in a dialogue with line Ministries, private sector, civil society, donor community and trade unions to formulate detailed action plans consistent with the broad economic policy framework of the Government. The planning framework of the Government is presented in Figure 1 with entry points where the decisions can be reviewed and discussed further. Furthermore, the NCED takes care of the MDGs for which Sri Lanka is obliged to achieve.

The budgeting process converts long term national plans into actions through the provision of funds for actual implementation of the plans, preferably annual plans. MOED is responsible for addressing rural poverty which declined from 26% in 1990/91 to 15% in 2006/07. It is expected to halve poverty by 2015.

The MOE&RE is geared towards maintaining a pleasant and healthy environment that sustains nature and the wellbeing of people and economy. All the line Ministries, including MOA, MOI&WRM, MOPI, MOL&LD, that have impacts on the environment through their actions, have their own sectoral plans. The NECLD has been set up under the MOE&RE to advise the Minister of MOE&RE on policy matters relating to land degradation. A Project Management and Monitoring Department (DOPMM) has been set up under the MOF&P to improve effective public expenditure management.

Government has devolved powers and authority to PCs by the 13th amendment to the constitution. The responsibility of approving provincial plans is vested with the PCs implemented at provincial level in Sri Lanka's nine provinces.

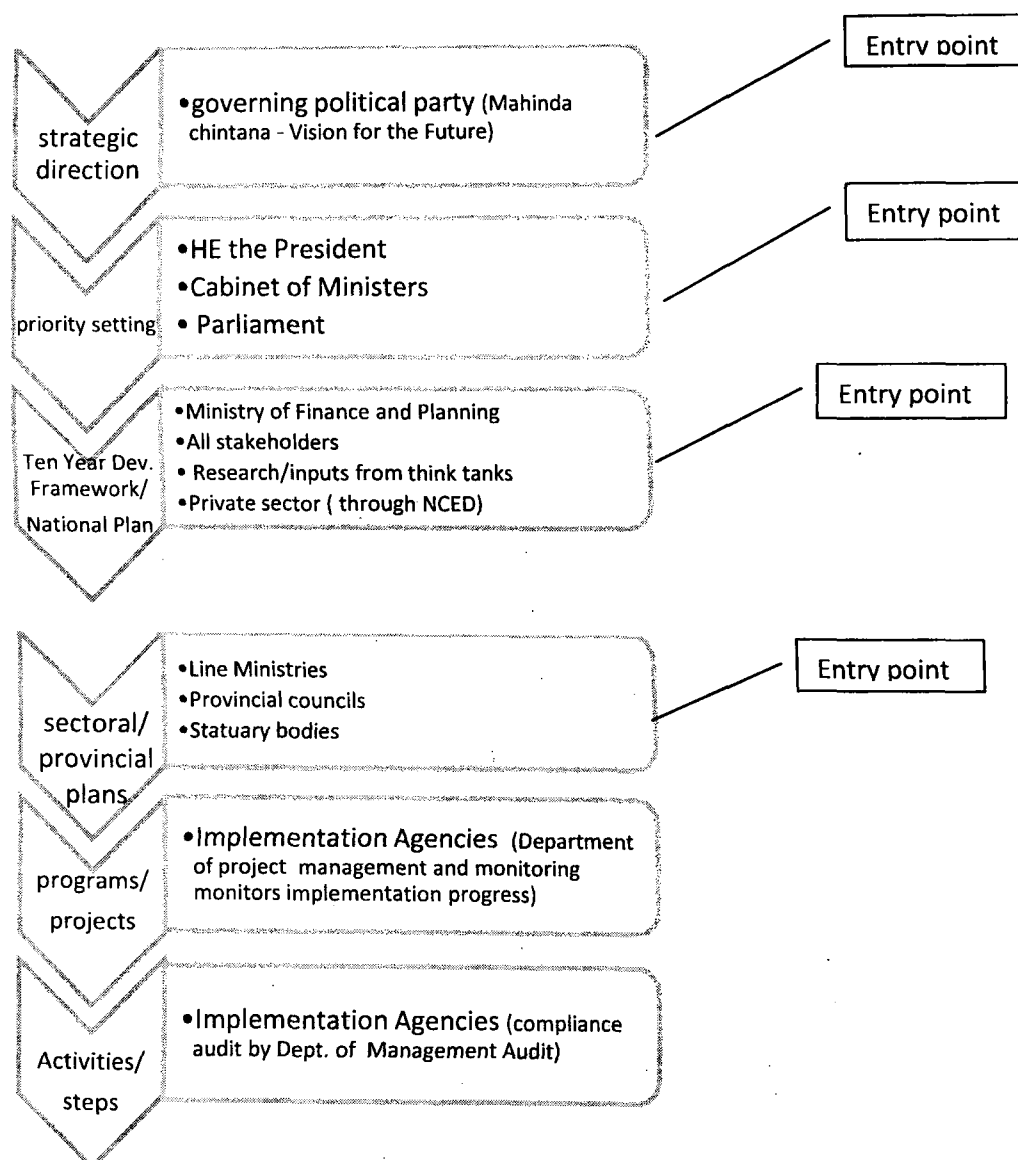
2.6.2 Review of the policy /planning framework

A paradigm shift took place in Sri Lanka's policy/ planning framework in 1978 with the change from a closed economy to a market economy. The implementation of wide-ranging policy reforms and institutional changes designed to move Sri Lanka towards a liberal,

outward oriented, market economy were argued to be essential to accelerate the pace of economic growth.

Policy shifted from an inward and state reliant orientation to an outward oriented, pro market stance. Major policy changes put in place in 1977/78 included an extensive trade liberalization program. The Government was meant to be a facilitator whereas the private sector was expected to become the major economic operator. The share of the Government in economic activities started to change.

Figure: 1 Graphical presentation of planning framework and entry points



The political party in power still continued to provide strategic direction. HE the President, Cabinet of Ministers and the Parliament set national priorities. The *Mahinda Chintana Vision for a New Sri Lanka (2005)* was the policy framework/political manifesto of the present government which represented the overall policy direction of the country. *Mahinda Chintana Vision for the Future (2010)* was subsequently developed. Based on the above

two, the MOF&P formulated a 10 year Development Framework to translate it into reality through a 5 year plan framework and a 3 year medium term budgetary framework.

As mentioned in this text, the Ten Year Development Framework was prepared having obtained the views of major segments of the country i.e. trade chambers, industrialists, farmers, workers, NGOs, Trade Unions, Media, Service Sector Personnel etc. Therefore, the Framework is based on representations from all the stake holders to ensure that their concerns are represented in the development agenda and thereby to ensure ownership and thereby to obtain their contribution for the development of the country.

All national plans were expected to be prepared by line Ministries in par with the ten year strategic document which is the road map for sustainable development. Project based programs are incorporated into sectoral development plans.

Furthermore, through the Fiscal Management (Responsibility) Act No 3 of 2003, the MOF&P is mandated to submit updated midyear fiscal position to the Parliament before 30th June every year which ensures that public finance is managed in a transparent manner.

DOPMM set up under MOF&P also has a mandate to monitor performance of all larger development projects in Sri Lanka. The Management Audit Department (DOMA) does compliance audits so as to ensure that there are no managerial, system or process lapses in disbursement of public funds.

It is important to note that there are four major entry points in the planning framework, where the public and policy makers have access to represent their views in the planning process (Figure 1). Furthermore, the members of Parliament can intervene or make suggestions with regard to these processes at the parliamentary sessions.

2.6.3 National and sectoral policies

National Environmental Policy objectives

Broadly speaking, the National Environmental Policy objectives can be categorized as follows:

- To promote the sound management of Sri Lanka's environment in its entirety without compromise, balancing the needs for social and economic development and environmental integrity to the best extent possible;
- To manage the environment by linking together the activities, interests and perspectives of all groups, including the population, Non-Government Organizations and Government at both the central and local levels;
- To ensure environmental accountability.

Major national and sectoral policies of the country and elements related to SLM in the policies are indicated in Table 5 below.

National Policies

The Emerging Wonder of Asia – ***Mahinda Chintana Vision for the Future*** and the *National Physical Planning Policy and Plan* are the two major National Development Plans presently being implemented.

Many plans and strategies have been implemented related to environmental conservation with land degradation as a significant component within it. Even at the early 1900s, actions have been suggested in the Land Development Ordinance No 19 of 1935 to protect lands from erosion. The State Lands Ordinance No 08 of 1947 had been introduced to make provision for the management and control of state lands and foreshores, for the control of water in lakes and public streams.

The *National Agriculture, Food and Nutrition Strategy* (1984) aimed at assessing Sri Lanka's agriculture and food situation and establish priorities for sectoral development. Further, the Strategy has emphasized that proper land use planning is required since land is being allocated for competing demands. Investments in the area of watershed development have been substantial but emphasis on watershed management is less and the strategy proposed various measures to improve watershed management.

The *National Conservation Strategy* (1988) was prepared by the government of Sri Lanka, promoted by The World Conservation Union (IUCN), to alert the government on the urgent need to conserve living natural resources in the country. The strategy aims to ensure sustainable development in the country and spelt out specific measures needed to conserve the environment and the natural resource base in the country.

The *National Forestry Policy* (1995) was formulated to address several issues such as continuing deforestation (forest cover in year 1900 declined from 80% to 24% in 1992), constant conflicts between agriculture and forestry, inefficient management of state forests, the inability of forests to meet the future demand for wood and loss of biodiversity due to deforestation and land degradation etc.

National Land Use Policy (2007) is expected to provide a framework for the best possible use of land. The policy has several objectives some of which related to the control of land degradation. The policy objective of Land Use Policy is 'rational utilization of land as a resource in the national interest, while ensuring high quality of life, equity and ecological sustainability'. The land use policy aims at generating a pattern of land use through protection, conservation and sustainable use. This is vital since the optimal utilization of land has to be ensured due to its limited nature. A new department for land use planning has been established to meet these objectives. Land use planners have been appointed on district basis to meet this objective.

National Watershed Policy (2001) - The policy was expected to provide a blueprint for the formulation of legislation and implementing mechanisms to protect the environmentally sensitive watersheds in the central hill country. The policy has paved the way for future actions to protect the important watersheds in the country.

National Environmental Policy and Strategy was formulated in year 2002 to promote ecologically sustainable development through protecting the integrity of the nation's

environment and natural resource base with due recognition to the contribution of natural resources to economic development and to quality of life.

Caring for the Environment – The National Agenda for Sustainable Development (2002-2006) was the national action plan that set the national agenda for sustainable development. Land degradation has been adequately addressed in this action plan. Several recommendations had been made in the document including (a) Taking appropriate action regarding encroachments on environmentally sensitive areas (b) Promoting crop diversification (c) Promoting adoption of crop diversification techniques (d) Maintaining the catchment areas of river systems under undisturbed natural forests (e) Reviewing the country's protected area network to identify gaps and ensure that these areas represent the country's species, genetic and ecosystem diversity etc., There are 20 such policy recommendations which have been subsequently translated into action by the respective agencies.

Sectoral policies

Sri Lanka's *National Agricultural Policy* (2007), of MOA covers food, floriculture and export agriculture crop sectors and aims to achieve food and nutrition security for the nation.

National Plantation Industry Policy Framework, (2009) of MOPI endeavors productivity, profitability and sustainability of the corporate and small holding sector of the plantation industry. The plantation industry covers mainly the tea, rubber and coconut sectors.

National Climate Change Policy of Sri Lanka (2012), *National Climate Change Adaptation Strategy of Sri Lanka* (2011-2016) and *National Action Plan for Harita (Green) Lanka Program* (2009 -2016) of MOE&RE are three major environment related policy documents prepared recently. The *Climate Change Adaptation Strategy* provides strategic directions for all the stakeholders for climate change mitigation, technology transfer, and management of risks.

The *National Action Plan for Harita (Green) Lanka Program* aims at addressing the major environmental issues in Sri Lanka. the *National Policy on Wild Elephant Conservation* in Sri Lanka (2006), Department of Wildlife Conservation (DOWC)), aims to ensure sustainability of the elephant population, to minimize human-elephant conflicts, and manage elephant populations.

Elements of SLM appearing in the major national and sectoral policies of Sri Lanka are summarized in Table 5.

Table: 5 Major National and Sectoral Policies in Sri Lanka

Year/ National/ Sectoral	Ministry/ Agency	Name of the policy	Elements of SLM appearing in the policy
1995/National	MOE&RE	National Forest policy	<ul style="list-style-type: none"> Existing Protected Area System (PAS) will be rationalized covering both flora and fauna, ensure PAS will be of a size to protect biodiversity Forests will be zoned to strict and multiple use areas Degraded lands will be restored with community participation and CBOs Incentive schemes are developed to restore degraded lands
2002/National	MOE&RE	National Environment Policy and Strategy	<ul style="list-style-type: none"> Develop and promote land use systems that protect soils from erosion Restore previously degraded lands Provide legislative protection for areas that have significant landscape value Prevent the degradation of quality and flow of water
2002/National	MOE&RE	Caring for the Environment – National Agenda for Sustainable Development (2002-2006)	<ul style="list-style-type: none"> Activate the Soil Conservation Act Promote soil conservation measures and good land management practices Take appropriate action for encroachments in sensitive areas Promote crop diversification Review existing instruments to combat soil erosion etc.,
2006/Sectoral	DOWC	National Wild Elephant Conservation in Sri Lanka	<ul style="list-style-type: none"> Establish corridors for elephants Ensure protected areas are established for wild fauna
2007/Sectoral	MOA	Sri Lanka National Agricultural Policy	<ul style="list-style-type: none"> Implement sustainable agricultural practices Introduction of environmentally friendly farming practices Appropriate use of fertilizer Crop diversification
2008/ National	MOE&RE	National Action	<ul style="list-style-type: none"> Establishment of a protected area network

		Plan (NAP)	<ul style="list-style-type: none"> • Management of environmentally sensitive areas • Introduction of a reforestation program • Rehabilitate degraded forest lands as forests for conservation • Incentives for appropriate land use • Crop diversification etc.
2009/Sectoral	MOPI	National Plantation Industry Policy (2009)	<ul style="list-style-type: none"> • Introduce soil conservation measures for tea small holdings • Ensure proper soil conservation methods are adopted in state sector plantations <p>Take appropriate action to conserve watershed</p>
2009/ National	LUPPD	National Land Use Policy	<ul style="list-style-type: none"> • Protect and conserve environmentally sensitive areas • Reclaim degraded lands • Identify and protect environmentally sensitive areas • Protect all lands lying above 1500m MSL • Encourage both private/public to convert areas with slope exceeding 60% to agro forestry systems, if already utilized • Only soil stabilization activities will be allowed in earth slip prone areas etc.,
2009/ National	MOE&RE	National Watershed Policy	<ul style="list-style-type: none"> • Irrespective of the ownership, lands in these areas will be protected • Government will be the highest authority to make decisions on matters relating to watersheds • Participation of local people will be obtained in managing watersheds • Lands will be zoned for better management <p>The government will monitor activities of other agencies that have impact on watersheds</p>
2010/National	MOF&P	Emerging wonder of Asia- <i>Mahinda Chintana</i>	<ul style="list-style-type: none"> • Forest cover will be increased from 23% to 35% • Catchment areas will be reforested • Environmental education will be strengthened • Intervention to protect catchment areas and water resources and Implementation of <i>Haritha (Green)</i> Lanka program

2010/National	MOE&RE	National Action Plan for <i>Harita (Green)</i> Lanka program	<ul style="list-style-type: none"> • Meet the challenges faced due to increasing demand of land for developmental needs • Implement suitable programs to arrest sea erosion • Implementing program to increase forest cover • Reclaim problem soils
2012/ National	MOE&RE	National Climate Change Policy (2012)	<ul style="list-style-type: none"> • Adopt appropriate strategies to meet the risks of climate change • Build synergies between climate change and land degradation

2.6.4 Weaknesses in policy formulation process

The major weaknesses, gaps, and barriers that can be seen in the policy formulation processes are outlined below:

- Fragmented responsibilities among institutions; the subject of SLM is divided among many institutions that have an impact on each other. For example, land alienation is vested with the MOL&LD whereas agricultural activities are responsibility of the MOA.
- Overlapping functions; due to the fragmented nature of responsibilities, there is a tendency in overlapping functions by the institutions that creates inefficiencies in time, energy and resources. Also it leads to policy complications.
- Lack of coordination among agencies related to SLM; Due to fragmented responsibilities and overlapping functions, lack of coordination has become inevitable.
- Ad hoc implementation of projects and programs by the agencies; Political aspirations sometimes lead to implementation of ad hoc programs and projects although there are clearly visible policies governing which lead to weak implementation. These activities question the presence of policies.
- SLM activities are heavily dependent upon scientific research. However, there is weak collaboration between scientific institutions (e.g. Universities, Research Institutions) and policy makers.
- It is evident that every effort has been made to obtain interests of different segments of the society in the policy making processes. However, there is possibility that the poorer segments of the farmer community interests are not represented because of very low bargaining power.
- If we consider SLM as a subset of broader Natural Resource Management (NRM) framework, weaknesses in NRM framework has affected successful implementation of SLM.

- Lack of economic valuation of ecological services and their contribution to GDP is not appropriately represented in national budgets. For example, the tourism industry is heavily dependent upon the aesthetic value of natural forests, parks, beaches etc. The Ceylon Electricity Board (CEB) generates hydropower electricity through the water retained by the upper catchment areas. However, no funds are made available by the CEB budget for catchment area development. Therefore, policies and budgeting should reflect this scenario.
- Insufficient data on SLM has affected policy formulation. SLM includes data on agriculture, soil erosion, climate, livestock, droughts and demography. This data is not centralized, rather it is scattered and therefore inter-relationships of different sets of data are not visualized. As such, inferences that are vital for decision making/policy formulation cannot be made.
- Impacts of land degradation are not visible in the short term. Deterioration of soil quality (depletion of soil nutrients and soil organisms) is not seen by farmers within a short period of time. Therefore, rapid results/changes are not reflected and as a result, attention of the policy makers is not focused towards SLM. Agriculture itself is a high priority sector by the policy makers. However, allocation of funds usually is dependent upon urgent needs of the agricultural community. Although the political will is there, due to limitations of resources, lesser priority is given for investments in land degradation.

2.7. Financial flows to sustainable land management

In order to have an understanding on the financial flows to SLM extensive data was collected. The performance reports and action plans published by the agencies who perform SLM related activities, literature review, workshop reports, review reports were studied and processes studied, web based and desk studies conducted, and consultations and focus group discussions with stakeholders were held.

The financial flows to SLM come in the thematic area of the environment. It was revealed in the analysis that any environment project comprises several or many elements of SLM. Even in rural poverty alleviation programs, as an example, we are able to see application of organic fertilizer for agriculture, which contribute to SLM immensely. In light of the above, financial flows to environment sector from year 2008 to 2011 are given in Table 6, below.

In addition, during the above period of four years, substantive investments have been made in the agriculture sector as well as in poverty alleviation programs. During year 2005 to 2007, Rs 9,888 m, Rs 25,965 m and Rs 36,336 m were invested for poverty alleviation programs respectively²⁴. These investments had been focused on sustainable agriculture programs including organic farming, development of high yielding crops etc., In the poverty alleviation programs, main focus had been on the development of home gardens, alternative employment creation to agriculture, self-employment creation etc. Investments on agriculture tend to generate high yields and thereby horizontal expansion of agriculture gets reduced and pressure on land reduces. At the same time, pressure on land and cultivation of marginal

²⁴DONP, 2008

lands get reduced with the alternate income sources are created. These activities reduce pressure on land. The total investment is formed from domestic funds and foreign assistance.

Table: 6. Investment in the environment sector (US\$ M)

Sector	2008	2009	2010	2011
Forest and natural resources	5.7	1.0	14.3	9.5
Waste management	7.6	13.0	21.9	17.0
Wild life conservation	3.8	1.6	4.3	4.4
Clean development	1.9	1.1	1.6	2.1
International conventions	0.5	0.46	0.47	0.42
Monitoring and coordination	1.3	2.3	1.4	4
Other	5.0	4.3	2.2	3.4
Total	26.0	23.4	46.0	36.8

Source: DONP, 2008

Poverty in Sri Lanka is a rural phenomenon and mainly explained as the inability of the rural economy to provide adequate livelihood opportunities to rural people in a substantial manner. Nearly 70% of the rural population makes their living out of agriculture and mainly dependent upon crop cultivation. The vicious cycle of poverty could be seen among the rural populations. Low investment on land, basically inadequacy of soil conservation measures, leads to low yields. As a result soil nutrient depletion continues thereby aggravating soil degradation. Alternate income sources are also not abundant and therefore land cannot be allowed fallow for extended periods, thereby leading to land being degraded. Therefore, investment in poverty reduction has direct impact on land degradation/SLM.

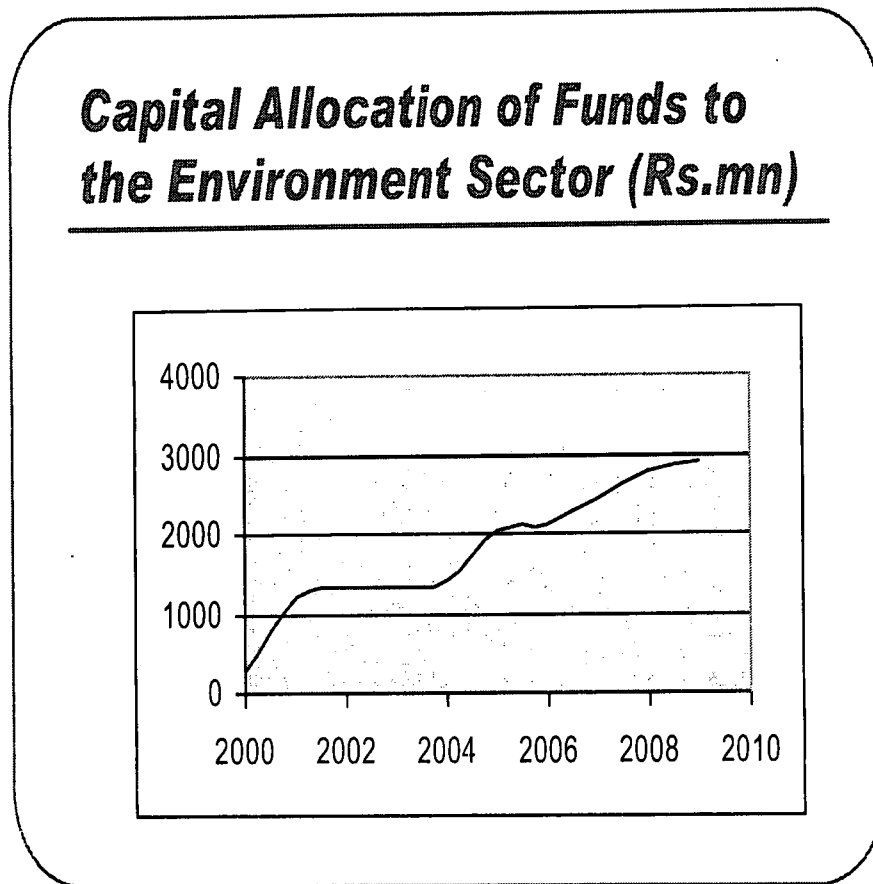
2.7. 1 Internal sources of financing

Internal sources of financing come from the national budget, which is prepared for a calendar year and approved by the Parliament. The national budget is based on the strategic directions of the government which rests upon the development framework of the government.

2.7.2 Budgetary process

The domestic budget that comes under the Appropriation Bill is the main internal source of funding. The budget is based on the current fiscal management policies and rests largely upon the macroeconomic policies of the present government and preferably a reflection of the investment plans of the government. The public budget is essentially annual and responsibility of preparation lies with the MOF&P. The following Figure 2 shows the capital allocations made for the environment sector and depicts an upward trend.

Figure 2. Capital allocation of funds to the environment sector (SLR in Million)



Source: DONP, 2011²⁵

The constitution of Sri Lanka, the Appropriation Act, Fiscal Management Responsibility Act No 3 of 2003, Finance Act, Financial Regulations, Standing Orders of the Parliament, other related laws passed by Parliament and the Treasury Circulars and guidelines provide strong legal basis for financial management. Article 148 (Chapter 17) of the Constitution depicts control of Parliament over public finance. The Appropriation Act basically provides provision for: (i) expenditure on Appropriation Law, (ii) Expenditure on Special Law, (iii) Borrowing limit and (iv) Advance account activities. The Fiscal Management Responsibility Act ensures government's responsibility over: (i) Sound fiscal management, (ii) Public scrutiny over fiscal performance, (iii) Fiscal consolidation with a degree of sustainability and predictability, (iv) Flow of information over public finance and, (v) Maintaining intergenerational equity. Also, reporting of the midyear fiscal position to the Parliament in June every year is mandatory under this Act. Also submission of the fiscal strategy statement, economic and fiscal position of the budget, final budget position report and pre-election budget position report to the Parliament have been mandatory under this Act.

²⁵DONP, 2011

Chapter 1 of the Government Financial Regulations (FR) refers to provision of estimates on expenditure and revenue. Standing order No 131 of the Parliament refers to procedure on how the Parliament should act on the Appropriation Bill. Other important and related laws passed by the Parliament are Customs Ordinance, Foreign Loans Act, Treasury Bills Act and Excise Ordinance. Among the important treasury circulars are Authorization Circular, Budget Circular 150 and Public Finance Circulars.

The budgetary process begins with the preparation of the macroeconomic framework by the MOF&P within which is the budget. The macro economic framework is usually in longer terms. The present macroeconomic framework is 5 year in duration. The framework considers the strategic directions the economy should move. The present day budget is based upon the *Mahinda Chintana*, the visionary document of the Government. Once it is prepared, the macroeconomic framework is submitted to the Cabinet of Ministers for approval.

With the approval of the Cabinet on the framework, the circular named *budget call* is issued inviting all the line Ministries to submit their budget estimates along with new proposals that have already been approved. The agencies under respective Ministries are expected to submit their estimates through the line Ministry. The investors, industrialists, trade chambers, farmer organizations etc., are also informed about the budget call and they also are invited to submit their interests to the MOF&P. Subsequently, budget discussions are held on sector basis to obtain their views.

The public budget is part of the Appropriation Bill and therefore goes to the Legal Draftsman and the Attorney General (AG) for concurrence. With the concurrence received from AG, the budget will be finalized incorporating the concerns of all the sectors. Thereafter, a Cabinet Memorandum is prepared to submit the Appropriation Bill to the Cabinet. With the approval of the Cabinet, the bill is gazetted and a period of one month is allowed to submit objections, if any.

The budget is presented to the Parliament by HE the President, MOF&P or any other senior Minister. After first reading, second reading and third reading is completed, the vote is cast and with the approval of the majority, the bill is passed in Parliament. The Minister of MOF&P subsequently signs the authorization paper or the '*Warrant Paper*' which gives approval to incur expenditure for the upcoming year. Schematic diagram of the budget preparatory process in Sri Lanka is illustrated in figure 3.

2.7.3 Budget monitoring

Beginning the 1st of January every year, the line Ministries can access required funds from the Department of Treasury Operations (DOTO) for their capital and recurrent expenditures. They are requested to submit a cash flow statement prior to beginning of the next month and end of each month they are requested to submit an expenditure statement.

The agencies are obliged to incur their expenditures as per the prevailing rules and financial regulations and are liable to be questioned at the Public Accounts Committee (PAC). Every

Head of Department is an accounting officer. Further, the DOPMM monitors the physical and financial progress of all the mega projects and DOMA examines for compliance.

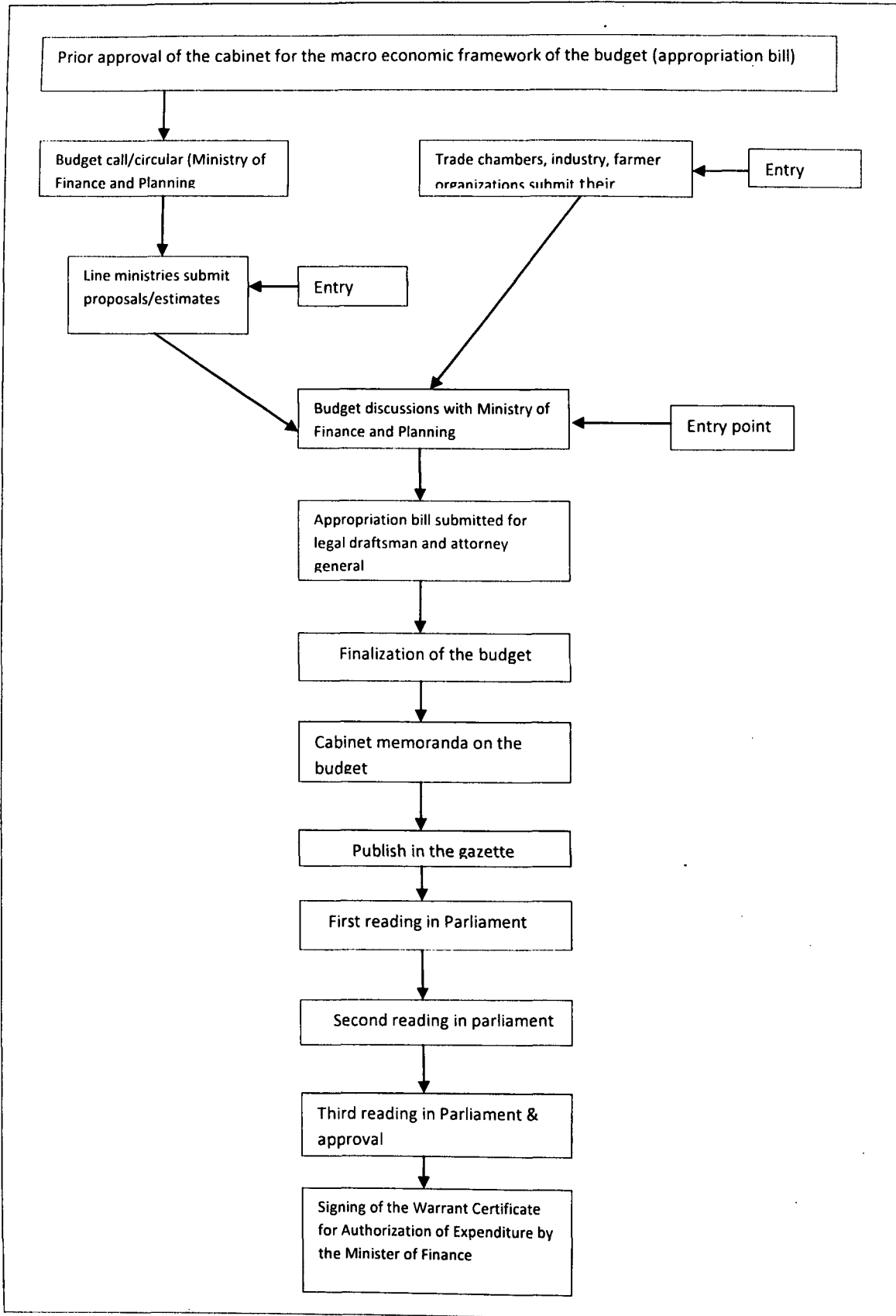
At the end of the fiscal year, all the agencies are answerable for unspent funds they have obtained. Under the Fiscal Management Responsibility Act (2009) the General Treasury is expected to submit a midyear fiscal position report to the Parliament.

2.7.4 Provincial Council budgets

Under the 13th Amendment to the Constitution, there have been PCs established vested with the powers to prepare their own budgets. The elected members in the council representing political parties pass the budget. Contribution from the central government is also taken into consideration in preparing the budget. The revenue earned in the form of taxes or levies are spent on development programs of the province.

The local authorities, Urban Councils (UCs), Municipal Councils (MCs), Town Councils (TCs) and *Pradeshiya Sabas* (smallest local authority in size) prepare their own budgets every year depending on their income and expenditures. In the event they suffer from financial difficulties, the central government extends support through the Finance Commission.

Figure 3 Schematic diagram of the budgetpreparatory process in Sri Lanka



2.7.5 Budgetary allocation and performance

As mentioned previously, the national budget is based on the strategic directions of the government. The budget preparatory process, to a certain extent, is a cumbersome process which involves a diverse mix of stakeholders in order to maintain transparency. Given below are government allocations for key areas that are linked to SLM. In other words, the performance of these sectors, have impact on environment.

The following tables show the budgetary allocation for years 2010, 2011 and 2012 and the performance in utilizing the allocation.

Table 7. Budgetary allocation and performance 2010 -SLR (Millions)²⁶

Ministry	Total Provision	Recurrent Utilized Provision	Total Provision	Capital Utilized Provision
Local Govt.	155.8	143.9	7677.6	6902.8
MOA	302.8	227.3	1835.7	1,675.9
MOPI	1480.7	1362.1	2420.2	1960.3
MOI&WRM	1987.2	1,908.2	7,415.1	4,956.3
MOL&LD	226.4	220.8	1211.6	1141.6
Ministry of water supply and drainage (MOWS&D)	147.8	139.3	26,302.5	26,516.0
MOE&RE	490.1	490.0	1458.5	678.5

Source: Annual Report - 2010 MOF&P

²⁶Annual report, MOF&P,2010

Table 8. Budgetary allocation and performance 2011 -SLR (Millions)²⁷

Ministry	Total Provision	Recurrent	Total Provision	Capital
		Utilized Provision		Utilized Provision
Local Govt.	172.1	162.8	6389.2	6389.2
MOA	431.7	396.3	2010.4	1722.9
MOPI	1012.2	877.7	1145.8	689.9
MOI&WRM	2000.8	1976.3	14799.3	9345.8
MOL&LD	115.8	114.5	2439.9	1777.1
MOWS&D	148.9	148.5	30,270.9	27,073.6
MOE&RE	533.4	508.3	1,517.7	857.8

Source: Annual Report - 2011 MOF&P

Table 9. Budgetary allocation and performance 2012 -SLR (Millions)²⁸

Ministry	Total Provision	Recurrent	Total Provision	Capital
		Utilized Provision		Utilized Provision
Local Govt.	94,309	92,059	36,094	25,566
MOPI	1,873	1,487	1,152	776
MOI&WRM	3,405	3,229	30,849	28,155
MOL&LD	2,423	2,416	2,761	2,235
MOWS&D)	190	169	32,492	31,110
MOE&RE	1,405	1,329	1,871	955

Source: Performance Report 2012, MOF&P

(In year 2012, 2% of saving was declared by the government in recurrent expenditure to bring down the recurrent costs)

²⁷Annual report, MOF&P, 2011

²⁸Performance report, MOF&P, 2012

The investment in the environment sector shows an upward trend over the recent years. The recurrent allocation shows 8 percent increase in year 2011 compared to year 2010. It shows a 163 percent drastic increase in 2012 compared to 2011 from Rs 533.4 million to Rs 1405 million. Subsequently, there is a 8 percent increase in capital allocation in 2011 compared to 2010. And, it shows a 20 percent increase in 2012 compared to year 2011. This is an indication of the government's commitment towards environmental development. A sum of Rs 1,405 m has been allocated in year 2012 but the actual performance in the recurrent sector was 95.6 percent. In other words, out of the total allocation of funds for the government agencies from the general treasury, only 95.6 percent had been spent during the year. In the capital expenditure, the total allocation was Rs 1,871 million. However, there is high degree of under- performance of 49 percent meaning nearly half of the allocation of funds remained unspent which needs severe attention.

As per the schematic diagram (Figure 3) that shows the budget preparatory process in the country, wider consultations are carried out before the budget so that concerns of all the important sectors are represented. Any government agency, including that of environment related, can access the budgetary provisions through sound proposals subject to the resource availability. However, there are limitations since the government has to priorities the allocation of funds. For example, during the three decade internal conflict period, the government had to accord high priority to defense. With the end of the conflict, fund allocation structure has changed with a more development oriented outlook, including environment sector development and therefore there is high potential to tap government sources through the national budget.

Table 10 shows some of the key activities/programs implemented recently. The largest project was implemented with the financial support from the Australian government. The other programs had been funded by the general treasury. *Api Wawamu Rata Nagamu* program, was initiated as a rural livelihood development program implemented in 2010 by the MOA and included promotion of home gardening, use of organic fertilizer and self-employment programs etc., to increase food production and employment generation. This was an island wide program and was able to make a significant impact on the standard of living of the rural communities. The program aimed at increasing farmer income by diversifying income sources addition to agriculture.

Table 10. Government sponsored major projects/ programs implemented during recent years

Sources of Funding	Co-financier	Project Activities	Amount (SLRMn)
Treasury		Implementation of Soil Conservation act and Soil Conservation programs in the field through MOA (2010)	50
Australian Government	Government of Sri Lanka	Sri Lanka Australia Natural Resource Management Project (2003-2009) The project assisted Forest Department and other agencies involved in natural resource management to develop and implement policy, legislation and practices to work with local communities in the participatory management of forests and other natural resources (MOE&RE)	10,818,532
Treasury		<i>Api Wawamu Rata Nagamu</i> Program- Promotion of home gardening, use of organic fertilizer etc to increase food production (2010) (MOA)	456
Treasury		Research and Development for introducing modern technology and enhancing value addition in agriculture-2010 (MOA)	1021
Treasury		Production of organic fertilizer program -2010 (MOA)	137

2.7.6 Private sector financing

2.7.6.1 Contribution from the banking sector

Both the state and the private sector banks, as a part of their Corporate Social Responsibility (CSR), among other activities, have started to divert a remarkable proportion of their resources for environmental conservation as well as community support programs linked to poverty alleviation. The Peoples Bank, Bank of Ceylon (BOC), National Savings Bank (NSB) are some of the state banks engaged in environmental conservation activities. One of the private banks, *Sampath* Bank, has funded for establishing a nature protection society and has engaged in conducting awareness programs for nature conservation. Close liaison with such agencies will pave the way for more investments in environmental conservation.

The BOC through its strategic corporate initiatives such as entrepreneurship development program for empowering the under-privileged segment in the society to become self sufficient and building up of thrift culture among students as part of their education program and preservation of national heritage, environmental conservation, social development and supporting infrastructure development and philanthropic initiatives fulfils its cooperate social

responsibilities. In order to support the students who are under privileged, BOC has introduced a scholarship program for those who pass the grade 5 scholarship examination with an award of Rs 20,000 per student.

The environmental dimension of CSR of BOC includes nature friendly business practices, environmental conservation and protection, green building concept and proactive initiatives focused on long term sustainability of environment. Organic farming, green investments, nature friendly agro-livestock projects, forestry, recycling and bio gas generation are some of the other initiatives by BOC.

The Peoples Bank under its CSR has initiated many environment and social uplifting projects. In 2005, among other works, the bank offered Rs 250,000 for the families affected by Tsunami killer tidal waves to build their houses as part of the social uplifting program. Rs 100,000 were offered for the partially damaged houses. In 2006, school books, stationary and educational material were distributed among 10,000 school children who were under numerous hardships. In 2009, the bank partnered in the government's major drive 'plant today – reap tomorrow' to ensure food security in the country by planting 3 million fruit bearing and vegetable trees. In 2010, the bank embraced green banking concept in the projects funded by offering incentives for environment-friendly projects, creating awareness and introduction of community based projects to eliminate use of non-biodegradable polythene products. Incentives were given for eco-friendly building projects and eco-friendly industrial practices. Industrial practices largely contribute to pollution which is a major cause for land degradation.

The Commercial Bank, which is also a private bank, under its SCRs, has initiated concessionary loan schemes for technology transfer projects aimed at reducing industrial emissions, water treatment etc which have directly links with land degradation.

Sampath Bank PLC, which is a private sector bank has committed to its CSR through, entrepreneurship development, education, community empowerment and investment in environmental projects. Under the environmental projects, the bank has established a Nature Protection Club. It engaged in waste management programs, and in collaboration with the DOF, the bank has engaged in a reforestation program for 4.92 ha in *Pattipola* area, in *Nuwara Eliya* district of the hill country.

The above examples provide clear evidence as to the willingness of the private sector agencies for financing under CSR for different themes including social uplifting and environment. The agencies have to be well convinced on the potential benefits of environmental financing. This is not a difficult task since they are already engaged in such initiatives.

2.7.6.2 Contribution by private sector Companies

Like the banking sector, large private sector companies also, under their corporate social responsibility programs, have implemented many environmental programs. Implementation of initiatives on social responsibility is a symbol of good governance of an organization.

Although it is not a legal requirement, it adds value, ensures responsible behavior of the organization. It makes their businesses to grow especially in the international market due to due diligence of the organization and its commitment towards the national development efforts of the government.

One such large company called MAS Holdings (a large apparel manufacturing company) has adopted a more structured approach to driving Environmental Sustainability within the organization. They have systematized existing localized environmental initiatives at the manufacturing plants of MAS has also focused on sustainable products, launching eco-elastics, and carbon neutral products. MAS has worked with customers in promoting organic cotton, BCI cotton, recycled nylon and recycled polyester to bring more environmentally sustainable products to the market.

In 2006, MAS Holdings launched 'MAS Eco Go Beyond', a community outreach initiative together with the support of the Ministry of Education of Sri Lanka, to create awareness on sustainability among the school children of the country. Sustainability is becoming a critical area of knowledge globally. This program has benefitted 7,500 school children and MAS incorporated concepts from the United Nations Environment Program (UNEP) and several other organizations to develop a sustainability curriculum for Sri Lankan schools. The program not only provides rural students with the opportunity to implement projects, but also fosters an educated and activated youth community who will in turn nurture sustainable livelihoods for themselves.

A similar program has been introduced by ODEL Lanka (supermarket chain) for forest conservation. ODEL is a large scale retail establishment with a branch network island wide and under its CSR, among other activities; it has contributed in environment programs as well. Organized by the Wildlife and Nature Protection Society in collaboration with MAS Linea Aqua LTD, ODEL contributed in removing two invasive plant varieties in wild life parks; cactus and *Proposis Juli flora* in 60 hectares.

Sri Lanka Telecom (SLT) which is the largest telecom provider in Sri Lanka is body corporate. Under CSR of Sri Lanka Telecom, it has implemented programs in three areas; waste management, energy management and ecosystem management.

In order to minimize use of energy, and thereby to protect the environment and reduce energy use, SLT has taken initiatives by adapting to new technologies such as Next Generation Networks and also low power consumption technology such as Passive Optical networks.

Under the waste management initiative, SLT works with the CEA, Local Government Authorities, DOWC and DOF to ensure compliance with regulations. A team of staff are appointed to overlook the environment management of the Company which includes the proper usage of resources etc. SLT uses only approved refrigerants for air conditioners and ECO tests are followed for air emissions. Additionally, SLT workshop uses AC gas recovery system made by employees to reduce air emissions by vehicle air conditioners.

Under ecosystem management activity, SLT has conducted environment cleaning campaigns (*sharamadanas*) in 2013 to clean environment and offer a healthier life for people free of diseases. There is a necessity to consolidate all such environment related programs to ensure more focus on SLM.

2.7.6.3 Contribution by NGOs

A Number of NGOs in Sri Lanka are substantially engaged in environmental conservation activities, mainly in forest conservation, wildlife conservation, land restoration activities, tree planting programs, conducting awareness programs, etc. NGOs play a vital role due to many reasons (i) they are small in size and therefore easy to operate, (ii) they are community based and receives community support, (iii) they can reach every location of the country or any remote area, (iv) they are well focused on their targets (v) they have, in most of the cases, limited no of project activities and therefore easy to perform (vi) no hierarchical organizational structure (vii) no salaries are paid for members of these organizations and therefore operational costs are very low. Their financial contribution as well as in kind contribution substantially contribute to SLM and not fully accounted in social development and do not appear in budget estimates. Some of the NGOs are, Environmental Foundation Ltd, Green Movement of Sri Lanka, *Saviya* Foundation, *Maduganga* Wetland Conservation and Development Foundation, Young Zoologists Association and *Nagenahiru* (rising sun) Foundation.

Nagenahiru Foundation during last 9 years was able to continue and expand its mangrove rehabilitation activities in several wetland systems located in the south west coast of Sri Lanka including *Maduganga and Madampa* Lake wetland systems. *Nagenahiru* Foundation in Sri Lanka initiated its mangrove restoration program in early 2005 to recover degraded lands just after the Indian Ocean Tsunami in 2004 hit Sri Lanka's coastal belts. The main objective is to facilitate the sustainable community management of mangrove ecosystems of the *Madampa and Maduganga* Lake Wildlife Sanctuary in Sri Lanka. This wildlife sanctuary is an extensive lake system facing several threats due to uncontrolled community activities such as land reclamation, dumping of household and industrial waste, and the logging of mangrove trees for timber and firewood.

The Green Movement of Sri Lanka (GMSL) is engaged in many environmental related activities. Among the activities that are being conduct in year 2013, planting of 6000 mangrove trees in *Puttalm* lagoon (estuary) is an important task since the mangrove tree populations are threatened by human activities. *Puttalam* Lagoon (Estuary) is one of the most mangrove rich coastal ecosystems in Sri Lanka. During last three decades a large part of it has been destroyed due to extensive prawn farming, unplanned infrastructure development, constructing salt pans and deferent type of anthropogenic activities. Currently it can be seen large number of abandoned prawn farms, fully destroyed or opened mangrove margins in inter tidal zone of the lagoon.

The Fisheries and Coastal Resources Management program of Green movement of Sri Lanka was conducted many deferent activities targeting conserving mangroves in the *Puttalam* lagoon. Most of the project activities in 2011 were targeted this important ecosystem. As a demonstration GMSL established 3 mangrove conservation sits and planted 6000 mangrove plants in *Puttalam* lagoon.

Water contamination is somewhat a neglected issue in Sri Lanka where industrial water pollution is among the cause for this. Some serious cases in recent history are among the worst examples for this. With this backdrop, Green Movement of Sri Lanka organized a seminar on industrial water pollution and prevention on 1st October 2013 at Colombo. A report titled ‘Public Water Right, Industrial Water Pollution and It Prevention’ was also launched at this event.

In Sri Lanka, the farmers apply in-organic fertilizers and toxic chemicals (pesticides and weedicides) in their farmlands. These applications have made water bodies and soils toxic which have severe impact on human health. Excessive application of fertilizers has caused eutrophication (excessive growth of plants due to increased nutrients) which lead to water logging. This is a form of land degradation. The ecological agriculture program implemented by GMSL, work with small-scale farmers who are the largest producers of food in the country, and ensure that they de-toxic their lands, secure their water sources, reduce expenses, increase the range of foods that they consume, decrease the incidence of ill-health, increase the academic success of their children, increase their economic strength.

Environment Foundation Ltd (EFL) is another NGO engaged in environment related activities. It engaged in an important conservation program at *Hakgala* Strict Nature Reserve (SNR). It is one of the nation’s most important Protected Areas . It is the only SNR in the country at high altitude, and provides exceptional ecological services. Not only does HSNR contain unique and endangered biodiversity, it is also the critical watershed for the *Uva* Basin, which is one of the under privileged areas in the country. *Hakgala* represents an extremely valuable combination of natural resources and ecological services that benefit local, regional, national and even international populations.

Despite being accorded the strictest protection by the state, SNR has been progressively degraded over time, especially over the past 3 decades. Little decisive action has been taken by relevant authorities to address the causes of environmental degradation and the resultant loss of vital ecological services. Rampant illegal encroachment (both within and outside the SNR boundaries) encouraged by powerful political groups, lies at the root of this environmental degradation. EFL made a big campaign against environmental damage caused to SNR and to restore it which has drawn the attention of the authorities. At the same time EFL has initiated an awareness campaign for the adjacent villages on the importance of the conservation of the reserve.

The investments that have been made by these NGOs provide empirical evidence on the potential support that can be obtained from environmental NGOs for land degradation recovery programs.

2.8 External sources of financing for SLM

2.8.1 Development partners in Sri Lanka

As per the “*Mahinda Chintana; Vision for the Future*” policy framework, Government committed to maintain 6 percent GDP annually for public investment during 2006 -2013. As such foreign financing has been utilized to bridge the investment gap to realize the country’s development goals. At present 40 percent of public investment expenditure is financed through external financing.

MOF&P has formulated a “Framework for mobilization of external finance in the medium term” considering the need assessment and underlying public investment strategy of the government. Under the medium term strategy for mobilization of external finance, Government has also focused on environment among other major infrastructure and socio economic development priorities. Priority has been given to address climatic challenges and adopt sustainable environment centric priorities because of the occurrence of frequent landslides, floods and droughts in Sri Lanka.

The availability of concessional financing becomes limited, with the advancing of the country towards the upper middle income status. As such the requirement for funds will have to be supplemented through non-concessional borrowings which will include export credit, commercial credit etc. and tapping of international capital markets to finance major viable development projects.

At present, conventional financing is available for selected development areas. Each lending institutions have their own institutional or corporate priorities and development themes in their operations. The Table 11 shows the development themes of selected development partners. Most of the multilateral and bilateral development partners have focused on poverty reduction as their central theme. The donor funding could be broadly categorized as economic development aid including poverty alleviation, and aid directly related to environmental conservation including land degradation. As discussed in this text elsewhere, poverty alleviation programs have direct link to land degradation.

Table 11. Development themes of selected development partners

Development partner	Central theme
WB	World free of poverty
ADB	Asia free of poverty
OFID	Uniting against poverty
WFP	Fighting hunger worldwide
UNICEF	Unite for children
AUSAID	Making real difference, delivery real results
UNDP	Reduction of poverty, environment sustainability
Japan	Sustainable development
UNEP	Environment for development
IFAD	Enabling poor rural people to overcome poverty
GEF	Investing in our planet

There are several development partners present in Sri Lanka. The main multilateral development partners are Asian Development Bank (ADB), World Bank (WB), OPEC for International Development (OFID), International Monetary Fund (IMF), IFAD, UNDP, United Nation Environment Program (UNEP) and GEF. The bilateral partners are mainly Japan, Australia, China, United Kingdom, India, USA, Germany, Middle East Countries, Belgium and Netherlands.

The amounts committed and the forms of the external financial assistance by the donor countries, institutes and agencies to Sri Lanka in the year 2012 are summarized in the Table 12. Major fraction of financial assistance received from donors was as loans.

Sector-wise external financing commitment is also presented in Table 13. According to the table 13, highest external financing commitment or 22 percent of total commitment from 2006 to 2013 was made for development of roads and bridges. About 13 percent of total commitment was made for power and energy sector and 11 percent for port and shipping sector.

Table 12. Foreign financing commitment by development partners in 2012 (USD Mn)²⁹

Development Partner	Loan	Grant	Total
Bilateral	2262.0	275.3	2537.3
China	1055.0	0.16	1055.16
India	443.06	257.28	700.34
Japan	508.74	12.59	521.33
Netherlands	102.5	-	102.5
Saudi Arabia	60.0	-	60.0
United Kingdom	44.14	-	44.14
Germany	34.42	5.27	39.69
Spain	14.14	-	14.14
Multilateral	698.85	75.26	774.11
WB	324.82	7.0	331.82
ADB	312.0	1.5	313.5
UN agencies	-	66.76	66.76
OFID	40.0	-	40.0
IFAD	22.03	-	22.03
Total	2960.85	350.56	3311.41

Source: DOER, 2012

Table 13. Sector-wise external financing commitments (USD Mn)³⁰

Sector	2006	2007	2008	2009	2010	2011	2012	2013	Total
Agriculture and Irrigation	183	38	546	40	96	14	35	-	952
Defense	50	-	100	-	300	-	-	-	450
Education	91	108	40	-	51	14	107	212	623
Ground Transport	-	65	153	-	597	391	439	283	1928
Health and social welfare	50	12	164	40	41	3	184	315	809
Housing and urban development	25	9	41	-	-	10	471	-	556
Port and shipping	124	607	116	65	35	24	809	155	1935
Power and energy	155	1	74	1084	199	217	362	166	2258
Rehabilitation	15	34	2	187	253	215	-	-	706
Road and bridges	360	329	421	320	916	1021	246	335	3948
Water and supply	140	238	233	198	312	177	69	249	1616

²⁹ Annual report, DOER, 2012

³⁰ Annual report, DOER, 2013

Other	234	234	177	279	458	37	431	253	2103
Total	1427	1675	2067	2213	3258	2123	3153	1968	17,884

GEF Small Grants Program (SGP)

Mainly the SGP has allocated 13% of its projects for the thematic area of land degradation. In addition, 18% of its projects go to multifocal area in which projects with elements of land degradation/SLM. It is necessary to note that under GEF, land degradation as a focal area emerged only on 2007 and the GEF projects implemented during year 2007 up to is given below in Table 14.

Table 14. GEF Small Grants programs and projects implemented in the land degradation focal area during 2007 – 2012(GEF/SGP) in Sri Lanka.

(N.B. Land degradation as a focal area came into operation in operational phase III year 2, 2007)

NAME OF PROJECT	DISTRICT	PROJECT PERIOD	PROJECT COST US\$	PROJECT STATUS
Minimizing Land Degradation in the <i>Murutoluwa and Waththawa Areas Grameeya Sanvardana Maha Sangamaya</i>	<i>Matale</i>	Feb 2007 - Mar 2008	US\$ 20370	Completed
Minimizing Land Degradation in the <i>Mikkamawatte Haragama Pubudhugama Mountain Range Sri Dheeranandha Savings and Credit Organization</i>	<i>Kandy</i>	Feb 2007 - Mar 2008	US\$ 22700	Completed
Reduce Land Degradation in <i>Muththattupola,, Galpaya, Bambaragala Ekabadda Praja Sanwardhana Kantha Maha Sangamaya (EPSKMS)</i>	<i>Ratnapura</i>	Feb 2007- Mar 2008	US\$ 25360	Completed
Environment Conservation through mitigation of Land Degradation Community Resource Protection Centre	<i>Buttala</i>	Mar 2007- Mar 2008	US\$ 17200	Completed

Riverbank Conservation of Selected Spots through laying of coconut to reduce erosion and planting of trees. <i>Navoda Farmer Organization (NFO)</i>	<i>Chilaw</i>	Mar 2007- Mar 2008	US\$ 17600	Completed
Rehabilitation of farm lands through the reconstruction of a waste water canal and conservation of river banks. Muslim Youth Council Social Welfare Organization <i>Nintawur (MYCSWON)</i>	<i>Ampara</i>	Mar 2007- Mar 2008	US\$ 12350	Completed
Sustainable land management and reduction of land degradation in land slide areas. Foundation for Rural Community Development	<i>Ratnapura</i>	Mar 2007- Mar 2008	US\$ 27800	Completed
Sustainable Land Management practices with community participation. Beacon of the East Social Services Organization	<i>Batticaloa</i>	Mar 2007- Mar 2008	US\$ 18750	Completed
Empowerment of communities in addressing land degradation issues and prevention of forest fires <i>Mihimaw Science Foundation (MSF)</i>	<i>Monaragala</i>	Mar 2007- Sep 2008	US\$ 26900	Completed
Conservation of the watershed of the <i>Gaddadehi Attha</i> reservoir Sri Lanka <i>Samaja Sanwardana Pushthakala Ayath anaya</i>	<i>Badulla</i>	June 2007- Dec 2008	US\$ 38000	Completed
Minimize land degradation in 100 acres of the GS division by introducing soil conservation practices and supplying water. <i>Laksetha Sahana Sewa</i>	<i>Kandy</i>	July 2008- Dec 2009	US\$ 26000	Completed
Restoration of degraded lands using sustainable agricultural methods. Foundation for Strengthening Human Skills	<i>Badulla</i>	July 2008- Dec 2009	US\$ 19868	Completed
Stabilization of degraded banks of the <i>Deduru Oya</i> river to provide water to community farmers <i>Navoda Environment Conservation Society</i>	<i>Puttalam</i>	July 2008 Dec 2009	US\$ 36421	Completed

Rehabilitation of <i>Walikadagama</i> Micro Water Shed, <i>Walikadagama</i> Farmers Organization	<i>Badulla</i>	Nov. 2008 May 2010	US\$ 21000	Completed
The restoration of the upper watershed of the <i>Walawa Ganga</i> Greenfield's Tea plantation, <i>Thotilagala</i> Neo Synthesis Research Centre	<i>Nuwara Eliya</i>	Nov. 2008 May 2010	US\$ 25000	Completed
Rehabilitation of degraded lands in <i>Hanguranketha</i> <i>IsuruJeevithodayaPadanama</i>	<i>Nuwara Eliya</i>	March 2009 Dec. 2010	US\$ 24000	Completed
Minimize soil erosion through watershed conservation and sustainable land management <i>Janothsa</i> Development Foundation	<i>Ratnapura</i>	May 2010 June 2011	US\$ 24,691	Completed
Minimizing land degradation in <i>Maduhel</i> mountain range. Community Resource Protection Centre	<i>Moneragala</i>	Dec 2008 May 2010	US\$ 22000	Completed
Promotion of the Organic farming system through the adoption of related new technologies towards sustainable usage of national ecosystem to prevent land degradation. <i>Marumalarchy Social Elevation Organization</i>	<i>Ampara</i>	Dec 2008 May 2010	US\$ 19000	Completed
Land degradation and conservation of water reserves in <i>Hitigegama</i> <i>Peramaga Prajamoala Sanvidhanaya</i>	<i>Nuwara Eliya</i>	Dec 2011 Dec 2013	US\$ 28008	On going
Minimizing land degradation in <i>Serupitiya</i> to facilitate community based adaptation to climate change <i>Ekabadda Praja Sanwardhana Kantha Maha Sangamaya (EPSKMS)</i>	<i>Nuwara Eliya</i>	Nov. 2010 Nov. 2012	S\$ 45504	Completed

The GEF's SGP is community based and is implemented solely with the CBOs and NGOs. In order to ensure speedy implementation and establish ownership by the community, the program has been designed in such a way that community participation is maximized. The NGOs and CBOs are community based and mostly housed in rural areas and they are capable of reaching extreme corners where public officers are reluctant to reach. Therefore this program has been able to demonstrate good results.

For the 2013/2014 period, US\$ 1.5 million has been allocated for the land degradation focal area under GEF with a ceiling of US\$ 50,000 per project. Project proposals are being evaluated by now with a team of 15 experts in the subject area of land degradation. The project will be implemented within year 2014 as well. There is high potential to access GEF funds under these circumstances.

The GEF's SGP will enter to phase vi in year 2015 and it will be a new platform for GEF grants. The modalities are yet to be worked out according to GEF.

FAO funding

A project proposal has been submitted to FAO to seek funds which will be channeled through GEF with a total project cost of US\$ 1,559,999 for rehabilitation of degraded agricultural lands in three districts in the central hill country of Sri Lanka. Agricultural lands in these districts are heavily degraded due to soil erosion. Major cultivations in these districts are tea, vegetable including potato and tobacco. Vegetables are cultivated in terraced and sloping fields. Vegetable cultivations are erosive in nature due to high tillage. The tea cultivation, especially seedling tea cultivations are also erosive in nature. Therefore, extensive measures are needed to arrest soil erosion in these districts.

The project was designed in light of the above and it is consistent with the GEF Land Degradation Focal Area. In particular, it contributes to the Objective LD1 - *Maintain or improve flows of agro-ecosystem services to sustain livelihood of local communities* - by building capacity in support to the decision making process in the management of productive landscapes and to the community-based management of agricultural land. This will be achieved through the strengthening of the training network of the partner institutions and the reinforcement of the partner's capacity of producing and managing relevant information. Also, it will promote the implementation of innovative funding mechanisms in support to the implementation of Sustainable Land Management practices. This will be done by linking the farmers organizations at grassroots level with interested actors of the private sector working in the field of energy, environment, construction or other sectors of relevance.

Details of the proposed project are given below;

Name of the project	Project Duration From To.....	No of Years	Project Cost for SLM/LD components	Actual project cost incurred (For completed project Only)	Loan/grant/ any other
"Rehabilitation of Degraded Agricultural Lands in Kandy, Badulla and Nuwara Eliya Districts of the Central Highlands (CH)	01 Jan 2014 to 31 Dec 2017	4 years (48 months)	1,559,999	----	Grant

The project proposal is under scrutiny by FAO and GEF and it is expected that the project is in par with the FAO and GEF guidelines and will be implemented once the approval is granted.

UNDP funding

UNDP has been an active partner in providing development assistance to Sri Lanka, especially in the environment sector. The development partnership with the UN Agencies is guided by the UN Development Assistance Framework (UNDAF) which a five year strategic framework is prepared jointly by the MOF&P and UN agencies. As per the existing UNDAF for 2008-2012, US\$ 434M has been allocated in the form of grant. The funds will be utilized for development for the knowledge economy, promote value addition in the agriculture sector, improve equitable and quality social services and improve environmental sustainability.

Table 15 shows the list of projects currently in operation and assisted by UNDP. The some of the current projects in operation are directly linked to SLM

The project on sustainable biomass energy production supports to remove barriers to fuel wood production thereby to reduce pressure on natural forests for fuel wood. The low income groups who depend on natural forests for fuel wood, receives an opportunity to plant fuel woods and generate income and meet family requirements for fuel wood. The project on community forestry focuses to mitigate forest degradation. The forest cultivations have been introduced in the country to obtain maximum community participation.

ADB funding

The Medium Term Country Partnership Strategy (CPS) has been jointly developed by ADB and the Government of Sri Lanka for 2012-2016 which is closely aligned with the government strategy –*Mahinda Chintana* 2010 -2016. Sri Lanka will receive US\$ 900 m at concessional rates and non-concessional rates and major portion of the funds will be utilized for transport and energy sectors. The Asian Development Fund (ADF) resources at concessional rates will be used for rural development and social development which has high impact on SLM. The funds received under Ordinary Capital Resources (OCR) will be used for economic and social infrastructure development which generates high economic returns to support economic growth in the medium term.

International Monetary Fund (IMF)

Resources from the IMF are primarily used for macroeconomic management. Sri Lanka has negotiated a Standby Agreement (SBA) with IMF of SDR 1.6 billion (approximately US\$ 2.6

Table 15. UNDP funded projects with SLM/LD components operating in Sri Lanka

Project	Period and (years)	Cost US\$	Cost for SLM/LD component	Name of the SLM/LD components
Strengthening Resilience of Post-Conflict Recovery & Development	Oct 2013-Sept 2018 (5 years)	3,500,00	80,000	1). National rural development programs <i>Divi Neguma</i> and <i>Gama Naguma</i> integrate climate risk information and adaptation measures in 12 target districts 2). Concrete adaptation actions defined and implemented in selected vulnerable villages/ village clusters in the 12 target districts to increase resilience of rural development
Promoting Sustainable Biomass Energy Production and Modern Bio Energy Technologies with FAO	Aug 2013-July 2017 (4 years)	1,100,000	200,000	1). Policy-institutional support for effective fuel switching using fuel wood 2). Barrier removal for sustainable fuel wood production 3). Enabling environment for fuel wood suppliers
Strengthening Capacity to Control Invasive Alien Species (IAS)	Jul 2011 – 2016 (4 years)	1,800,000	350,000	1). A Comprehensive national regulatory framework for the control of IAS in Sri Lanka is in place 2). A well-coordinated institutional mechanism is in place for integrated planning and decision making at national and local levels with greater access to information on the status, threat and means of controlling IAS
Community Forestry Program	Aug 2012-July 2016 (4Years)	4,700,000	2,000,000	Community level programs to reduce forest degradation and deforestation implemented
Sri Lanka UNREDD National Program with UNEP and FAO	Mar 2013-Jan 2016 (3 years)	970,050	200,000	National REDD+ Strategy and Implementation Framework developed Forest monitoring system for REDD+ Activities Provided
Biodiversity: Ecosystems and Sensitive Area Management (preparatory grant)	Sept 2013-Aug 2014 (1 year)	100,000	45,000	Technical review

billion). This was arranged in 2009 during the world economic recession period to strengthen the country's reserves. The policy measures for this SBA were based on 'Mahinda Chinthana -Emerging Wonder of Asia- Vision for the Future: The Development Policy Framework of the Government of Sri Lanka'.

World Bank

The CPS with WB is expected to support implementation of the development framework of the Government. Sri Lanka has secured funds from International Development Association (IDA), International Bank for Reconstruction and Development (IBRD) and International Finance Cooperation (IFC) and accordingly an indicative total envelop of US\$ 900mn has been proposed for the implementation of priority projects during 2012-2015. The projects include Conflict Affected Areas Project, the Emergency Northern Recovery Project, and the North and East Pilot Water, Sanitation and Hygiene Project for post conflict resettlements. Government's social protection strategy and *Samurdhi* program; a trust fund on economic integration of vulnerable groups; vocational training for the disabled etc., are some of the projects that are related to poverty alleviation.

Bilateral donors

Bilateral partnerships have enhanced receiving concessional and non- concessional resources with varying financing options. Sri Lanka has secured project financing through bilateral partnerships with Australia, Belgium, Brazil, Thailand, Russia, USA, UK and Saudi Arabia. These investments are expected to maintain balanced regional development while maintaining a rapid economic growth.

2.9 Innovative sources of financing for SLM

Innovative or non-traditional financing sources, instruments and mechanisms were explored in this section. It has become necessary to identify and introduce non-traditional funding sources that are of potential relevance for SLM. Such schemes may include taxes, levies and cess schemes, ecotourism charges, insurance schemes and any other financial mechanisms from other sister conventions particularly from UNFCCC. Since climate change and land degradation are closely interlinked climate change related funding sources and mechanisms can also be used for SLM financing. For example, climate change Adaptation Funds and CDMs could be used for synergy programs.

There are several new financing mechanisms suggested below that are not traditional. Some of the mechanisms are suggested ones whereas some of them are already in place..

Catchment area development levy

The Ceylon Electricity Board (CEB) presently consumes water from the Upper Catchment Area for electricity generation. It is desperately needed to invest in catchment area development to sustain the services provided by the catchment area. The government has not imposed any levy on electricity for catchment area development. There is possibility to impose a levy from the electricity bill for forest conservation and arrest soil erosion in the upper catchment areas. Investment on catchment area conservation is beneficial for the CEB since reduction of soil erosion reduces sedimentation of reservoirs and improves water retention capacity for a constant volume of water flow for power generation and irrigation for agriculture. For example, in *Randenigala* reservoir, it has been estimated that annually 0.25gwh is reduced due to sedimentation.

Compensation for ecosystem services

Sri Lanka is expected to attract more than 5 million tourists this year. The cold climate, greenery, aesthetic value, fauna and flora, in the natural evergreen forests in Sri Lanka attract many tourists and the area needs protection. Especially, the *Sinharaja* natural evergreen forest is a world heritage site and many tourists, both foreign and local, visit the forest. This is merely due to its ecosystem services provided by the forest. The forest has to be well managed to protect. Therefore it is possible to impose a tax on the ecosystem services provided by the natural forest. In some cases, tourists have to pay for the tickets to enter parks and gardens etc. It can be extended further to include an environmental conservation levy.

Conservation leasing

Degraded land lots could be alienated to farming families for agro-forestry. A similar program was in place about ten years back by the DOF where land plots were distributed among farmers for forest plant cultivation. They could grow vegetables and other perennial crops in these plots until the forest plantation reaches to harvesting stage after about 25 years depending on the forest type. This was a successful program and it could be re-established since the program was abandoned due to change of policy regime.

Green tax

Disposal of electronic equipment place heavy threat to environment and involve costs and cumbersome processes since they contain heavy metals. CFL bulbs, TV monitors computers, mobile phone, phone and car batteries are some of them. These equipment contain heavy metals like Arsenic, Cadmium, Chromium, Copper, Lead, Mercury and Nickel or have been used in the production processes. Therefore, systematic discharges of these items are extremely important. The Environment Conservation Levy Act no 26 of 2008 provides for imposition of environment conservation levies for any item referred to above. A green tax has been imposed on CFL bulbs and this can be extended to other products as well. Since,

disposal of these used items has a direct impact on the land, and the tax revenue could be used to mitigate such impact.

Cess on tea exports

Tea is a dominant cultivation in the hilly region in Sri Lanka, but seedling tea cultivated lands in particular are subject to high soil erosion. A cess on tea has already been imposed for the development of tea cultivations and it is not used for SLM purposes. In 2013 total tea export income was USD 1.4 billion and Sri Lanka Tea Board (SLTB) targets tea export revenue of USD 2.1 billion in coming years³¹. Cess on bulk tea export with effect from 2013 was SLR 10 per one kilo of tea or 2.5 percent of Colombo tea auction average price, whichever is higher³². A slight increase in the tea cess could be easily used to arrest soil erosion and uplift soil conservation activities in the hill country. Cess on tea, therefore, is an innovative source of funding which has to be explored further to find the possibility of financing SLM in Sri Lanka.

Cess on export of minerals in raw form

Silica quartz, limonite, rutile and other minerals and gems are exported in raw form. Extraction of such minerals have resulted in serious land degradation. Already a small cess in the form of customs duty has been imposed on raw export of minerals to discourage such exports. Similarly, gem mining has posed severe threat to environment due large pits dug and washed off soils. Both these activities pose serious environmental threats due to land degradation. The Geological Survey and Mining Bureau (GSMB) have imposed a regulation to deposit refundable sum of money to recover the cost of refilling the gem pit, if the license holder did not refill it. This is not enough and a cess could be imposed at the time of export by the Gem and Jewelry Authority (GJA). Export cess of minerals and gems could generate a substantial amount of money. These resources could be used for SLM activities.

Import tax on agro chemicals

Sri Lanka is one of the countries that use agrochemicals for its cultivations. Use of agrochemicals have been increased due to increase in food production to feed increasing populations and this has replaced traditional pest and weed control methods including biological methods which were environment friendly.

Some studies have suggested that agrochemicals have contributed to increasing toxicity in soils especially in the irrigated paddy lands in the dry zone. WHO has conducted a study on the spread of the kidney disease in the dry zone and has found out that there is a relationship between the use of agrochemicals and the kidney disease. It is a costly and strenuous activity to reclaim the toxic soils in the dry zone. It is therefore reasonable to impose a tax to mitigate the toxic condition in soils at the time of import of the agrochemicals to the country. This money could be used to reclaim problem soils.

³¹Daily news, 2013

³²Sri Lanka Custom, 2013

Eco-labelling and environmental certification

All the goods for human consumption are produced using scarce natural resources extracted from the environment. Waste materials after the consumption are dumped back into the environment. Efficient resource use and environment friendly production process are to be rewarded. No much attention given yet for such eco-labelling and this is an area where there is huge potential to harvest benefits of such a scheme. There is growing demand for food crops grown using organic fertilizers, and the potential for certification of such products can generate substantial revenues.

Incentive and market based mechanisms

The socio economic development strategy of the government aims to attain rapid socio - economic growth by transforming the structure of the economy to be a modern, environmentally friendly and well-connected rural - urban economy that can create employment opportunities with better remuneration. Targeted annual investment level in 2014 is 32% of the GDP³³. The government has taken several initiatives such as lowering taxes, strengthening banking and non-banking financial institutions, improving infrastructure etc., to boost investment. The fiscal policy strategy of the government is within the macro economic framework ‘*Mahinda Chintana - Development Framework*’

As given under the private sources of funding, an investment climate has been created in the country with the opening of the economy in 1978 as against the state controlled economic climate prevailed before. The fiscal policy strategy of the government is focused towards strengthening the fiscal consolidation process expecting further improvements in the medium term. In line with that strategy, fiscal policy in the recent past was directed towards reducing the budget deficit while encouraging economic activities to achieve a sustainable high growth momentum in the country and to reduce regional disparity. The fiscal policy of the government, therefore maintain a vision towards reducing regional disparities. This will affect the rural masses where their mainstay is agriculture.

In broader terms, investments in the areas related to SLM shows a positive growth. That is why several companies have invested in commercial forest plantations. Market based mechanisms have promoted such investments. Small and medium scale entrepreneurs have made investments in organic fertilizer production. Use of organic fertilizers in place of inorganic fertilizers avoids soils being toxic, water pollution and increases soil microorganism levels. There is a high demand both locally and internationally, for fruits and vegetables grown using organic fertilizers. Market forces have encouraged such products through high demand which ultimately create high prices.

Philanthropic sources of funding

Grants in the form of charitable aid are rare in the area of SLM except, in kind contributions. Both NGOs and CBOs provide people planting materials, plants, fertilizers and other in kind

³³Annual Report, MOF&P, 2013

contributions to people. Usually, plants so distributed are medicinal plants, coconut plants, forest plants and vegetable plants. Other than that, charitable contributions in the area of SLM are negligible.

Funding from Climate Change related projects and mechanisms

In order to mitigate effects of climate change, action has been to introduce carbon trading concept. Carbon emissions trading is a form of emissions trading that specifically targets carbon dioxide (calculated in tons of carbon dioxide equivalent) and it currently constitutes the bulk of emissions trading.

Article 12 of the Kyoto Protocol under the UNFCCC there are mechanisms such as CDM and Adaptation Fund established with the purpose of emission reduction in cost effective way and to support developing countries adapt to the negative effects of climate change respectively. This also allows contributions for the sustainable development of developing countries including Sri Lanka.

CDM is one the Protocol's "project based" mechanisms, in that CDM is designed to promote projects that reduce emissions.

Sri Lanka has formed a rational platform to address climate change related issues with the establishment of the Climate Change Secretariat (CCS) within the MOE&RE which is the focal point for UNFCCC. It provides an institutional mechanism for climate change responses. Sri Lanka has no obligation to reduce GHGs emissions under Kyoto Protocol. Rather, Sri Lanka involves in CDM activities and adaptation programs in order to ensure environmental sustainability.

Sri Lanka has prepared a national Climate Change Adaptation Strategy (CCAS) (2011-2016). At the same time, areas have been identified for CDM projects in energy sector (renewable energy and fuel quality improvement), transport sector (low emission methods, alternative fuels, and fuel efficiency), waste management (methane recovery from landfill capping), forestry sector (reforestation and afforestation, bio fuel plantations) and industry sector (fuel efficiency and energy conservation).

Sri Lanka has created Sri Lanka Carbon Fund (Private) Limited which is a private- public partnership company to provide technical assistance for CDM project developers and facilitate CDM negotiations, to bundle small scale CDM projects, engage in carbon trading through purchasing and subsequent sale of carbon credits.

Renewable energy projects such as biomass power and hydropower projects have proven to be viable as CDM projects. There is a possibility that about 1.7 million hectares of scrub and chena lands of the country could be used for reforestation and energy plantations making them ideal for CDM projects. It was also suggested that Sri Lanka could earn SLR 5740 per ton of carbon by using only 10 percent of 1.7 million hectares lands for reforestation³⁴.

³⁴Rodrigo, 2013

Several initiatives have been taken by Sri Lanka to implement CDM projects. As at September, 2011, there are 7 projects registered at UNFCCC. Another 20 projects were approved in principle by the CCS on afforestation and reforestation, biomass and hydropower. There are possibility of using the CDM projects aimed at afforestation and reforestation, biomass and hydropower to support SLM activities in Sri Lanka. Sri Lanka has created the platform for climate change mitigation activities and there are no materialized projects yet.

Adaptation Fund

The Adaptation Fund was established under the Kyoto Protocol and the expectation of the fund was to finance concrete adaptation programs and projects in developing nations that are parties of the protocol to meet the costs associated with adaptive actions to reduce the impact of climate change.

Societal vulnerability to the risks associated with climate change may accelerate ongoing social and economic challenges, particularly for those parts of societies dependent on resources that are sensitive to changes in climate. Risks are apparent in agriculture, fisheries and many other components that constitute the livelihood of rural populations in developing countries. Therefore, the country needs to enhance the adaptive capacity to face the present and future climatic change challenges. Sri Lanka already has one project approved in 2012 by the Adaptation Fund Board titled "Addressing climate change impacts on marginalized agriculture communities living in the *Mahaweli* river basin of Sri Lanka" cost amounting to USD 7,989,727. The implementing agency is World Food Program (WFP).

3. Major outcomes from the analysis of the national context

Outcome 1: Enhanced enabling environment for resource mobilization

The first outcome of the IFS implementation is creating an enhanced enabling environment for resources mobilization for SLM activities in Sri Lanka. One of the main objectives of the preparation of the IFS is to analyze whether existing legislations, institutional and coordination mechanisms are supportive or hinder the effective mobilization of resources for SLM activities. The aim is then to propose recommendations to target the shortcomings which hinder resource mobilization. The review and analysis of the national context revealed some constraints in the enabling environment that could hinder resource mobilization for SLM in Sri Lanka. This objective may be achieved by resolving following outputs.

1. Enhanced legal framework for effective resource mobilization
2. Enhanced institutional and coordination framework
3. Effective policy formulation and planning process

Output 1.1: Enhanced legal framework for effective resource mobilization

Justification

In the existing legal framework there are major shortcomings that hinder the effective mobilization of resources for SLM activities. The following shortcomings were identified in the existing legal system by consultation and meetings with stakeholders, and through the literature review.

1. All enactments related to environment have a deficiency in providing legal provisions to enhance the financial flow to combating and controlling of land degradation and to SLM activities. This is the major drawback in all enactments.
2. All the enactments lack the basic principle of resource mobilization to SLM except the recently enacted “Environmental Conservation Levy Act No 26, 2008”.
3. Penalties and fines are insufficient to deter violations against the protection of environment.
4. There is a lack of incentives by the government to safeguard and protect environment activities that promote SLM activities.
5. The divided responsibility for implementing the Acts. The Acts remain fragmented and scattered amongst several ministries, departments and statutory agencies leading to divided responsibility and little action.
6. There are overlaps and gaps among the provisions available in these Acts. Inconsistencies and controversies among the acts. These acts are administered by a

number of agencies, with different mandates and create an array of conflicting situations.

7. The lack of implementation capacity in some of the enactments. The Land development Ordinance, for example, does not make provisions for the monitoring of the misuse of land at higher elevations and for regulating the alienation and unauthorized use of land in fragile areas.
8. Uncertainty in interpreting some of the provisions in the Acts. The State Lands Ordinance provides for the maintenance of stream reservations on state lands while the Soil Conservation Act empowers the Minister in charge to reserve a prescribed width of land along the banks of streams. Whether the latter provisions apply to both state and private land is not specified.
9. Non implementation of Acts fully. The Soil Conservation Amended Act in 1966 made provisions to establish “Soil Conservation Board” and “Soil conservation Fund”; however, so far those two are not functioning due to the complexity of the composition of the board. All the members are Secretaries of Ministries and higher Officials and it has become difficult to bring them together.
10. Provincial Department of Agriculture (PDOA) under the purview of the Provincial Councils is expected to implement laws at provincial level. The Soil Conservation Act is administered and implemented by the NRMC of the DOA, MOA. Since these two institutions functions in two different administrative frameworks, many disputes may occur in the implementation of the Act.

Proposed activities

1. All enactments related to environment particularly National Environmental Act (1988) and the Soil Conservation Act (1966) have to be enacted with legal provisions to enhance the financial flows for SLM activities.
2. All environmental related laws should be updated with polluter pays principles including an ability to personally claim for environmental damages, environmental insurance, economic incentives for environmental investments and fairly high amounts of fines and penalties. Necessary regulations should be brought in to action. For example, an Environmental Conservation Levy Act may be enacted and make regulations for SLM too.
3. Existing environment legislations should be consolidated to remove inconsistencies and overlaps.
4. Full implementation of the Soil Conservation Act should be finalized by establishing the “Soil Conservation Board” and “Soil Conservation Fund” to facilitate resource mobilization for SLM activities.

Priority

Legal reform is a high priority activity and takes substantial time period. Once this is done, it provides a significant contribution to the enhanced resource mobilization to the SLM.

Sources of financing

This activity may be financed by internal or external sources. The cost approximately 5 million SLR

Implementation

MOE&RE should initiate and coordinate this activity with relevant other Ministries and agencies such as MOF&P, MOJ, MOA, MOL&LD, MOI&WR, MOED etc.

Output 1.2: Enhanced institutional and coordination framework

Justification

Effective coordination and a well-organized institutional system are required for successful implementation of activities in SLM and for the mobilization of resources. Some of the drawbacks identified in this analysis are given below.

1. Lack of fully authorized national level coordinating body to coordinate effective implementation of activities related to SLM. (NCSA project also recommended to establish a such coordinating body)
2. The existing institutional set up does not have required capacity to implement such legislations at field level. Institutions in charge of implementing the laws have been constrained by the shortage of trained personal and sufficient funds.
3. There is a lack of co-ordination among government authorities that have mandates in the environmental management activities and inadequate number of staff particularly grass root level staff to implement the Acts.
4. Environmental education and public awareness has been seriously lacking. As a result offences done under the law are not recognized as such.

Proposed activities

1. Establish a fully authorized coordinating body to facilitate resources mobilization to SLM. In this purpose, the NECLD should be empowered for coordinating SLM and land degradation activities in the country.
2. NECLD must be restructured to represent all relevant stakeholders that are not already included. For example, the MOED is a recent ministry established by the government

consolidating all the agencies conducting economic development activities. Also, the NDMC has to be included in the expert committee.

3. Improve the capacity building of staff involved in SLM of the MOE&RE and Staff of the NRMC of the DOA and other related agencies
4. Develop the capacity building of field level officers involved in implementing Soil Conservation Act at field level.
5. Strengthen the environmental education and awareness of NGOs and CBOs and of communities on SLM activities.
6. Strengthen the coordination between national government and local governing agencies.

Priority

Institutional and coordinating framework is also a high priority activity. Once in place, an effective framework creates a conducive environment and provides a significant contribution to the enhanced resource mobilization for SLM.

Sources of financing

This activity may be financed by external sources. Fund required is 2 million SLR.

Implementation

MOE&RE should initiate and coordinate this activity with relevant other ministries and agencies such as MOF&P, MOJ, MOA, MOL&LD, MOI&WR, MOED and also in partnership with donors, development partners etc.

Output: 1.3: Effective policy formulation and planning process

Justification

Effective policy formulation and planning are required for a successful resource mobilization process. Without a sound policy framework and a result based SLM integrated planning process, sustainable natural resources management is impossible. Appropriately designed plans and polices improve the enhanced resources mobilization to SLM. Followings are the major drawbacks identified in the analysis:

1. The fragmented responsibilities among institutions; the subject area of SLM is divided among many institutions. This has resulted in less coordination among agencies and duplication of work. Resource waste is also a visible phenomenon resulting in none of the agencies is fully capable of performing tasks.

2. Overlapping functions due to the fragmented nature of responsibilities and resources. It also leads to policy complications.
3. Lack of coordination among agencies relating to SLM due to fragmented responsibilities and overlapping functions.
4. Adhoc implementation of projects and programs by the agencies of government: Political aspirations sometimes lead to implementation of ad hoc programs and projects.
5. The SLM activities are heavily dependent upon scientific research. However, there is a weak collaboration between scientific institutions (e.g.: Universities, Research Institutions) and policy makers.
6. Poor participation of rural communities and CBOs in policymaking processes.
7. Lack of awareness of key stakeholders, including policymakers, on the importance SLM in environmentally friendly socio-economic development of the country.
8. Lack of economic valuation of ecological services and their contribution to GDP is not understood nor appropriately represented in national budgets.
9. Insufficient and scattered data on SLM has affected policy formulation. Data is vital for informing decision making and policy formulation.
10. Impacts of land degradation are not visible in the short term. Therefore, rapid results/changes are not reflected and as a result, attention of the policy makers is not focused towards SLM.

Proposed activities

1. Improve awareness of key stakeholders particularly policy makers on SLM through awareness programs such as workshops and seminars etc.
2. Build strong linkages between the scientific community and policy makers.
3. A centralized database on SLM must be established.
4. Develop the capacity building of the officers involved in SLM related activities.
5. Integrate economic valuation of ecosystem services in national budgeting/policy making process.
6. SLM has to be strengthened as a key investment are although awareness raising and lobbying

Priority

This activity is also of high priority. After the activities completed, it will pave the way to the new approach of integration of SLM into the national policy formulation process.

Sources of financing

For these activities, funds may be borne from local as well as from foreign sources. Amount needed is approximately 3 million SLR. (Rates calculated as cost per head * no of programs)

Implementation

MOE&RE should initiate and coordinate this activity with relevant other ministries and agencies such as MOF&P, MOJ, MOA, MOL&LD, MOI&WR, MOED etc.

Outcome 2: Internal resource mobilization strengthened and rationalized

The report examines the measures that are required to support mobilization of resources effectively. The budgeting process and the monetary flows to development within the country in the context of broader fiscal and macroeconomic policies are the major areas of concern. The major outputs to be achieved are:

1. Awareness creation of the policy makers on SLM, its linkage to national development in the context of its contribution to GDP.
2. Capacity building of officers in budget preparation with specific reference to economic valuation of ecological services and integration of the same into GDP thereby enhance resource mobilization
3. Promotion of NGOs and private sector large scale companies in investing on SLM through companies' CSR through lobbying, offering special privileges by the government such as tax holidays, duty free concessions for motor vehicle imports, recognition by the government as gold card holders for those who spend CSR etc.,

Output 2.1: Awareness creation of the policy makers on SLM

Justification

The focus group discussions with officers engaged in environment-related policy preparation revealed that their concerns are burning issues. Therefore, allocation of limited resources for diverse activities, they should be well equipped with required knowledge on areas like valuation of ecological services in economic terms in order for them to make decisions on priority setting. Likewise, revenue from tourism industry has a certain portion embedded in, due to aesthetic value of the environment.

Proposed activities

1. Identification of key policy makers and institutions involved in policy making related to SLM
2. Identification of the extent of awareness to be given, agency and the number of policy makers
3. Conduct awareness sessions and observe changes in perspective towards environmental conservation/SLM

Priority

The activity is of high priority since this activity significantly affects financing for SLM. These policy makers make decisions on strategic directions that the country should lead.

Sources of financing

Since this activity employs high priority, the government should fund these activities, since seeking donor funds require time. Although the correct assessment for the activity cannot be made at this juncture, the funds required will be 1million SLR.

Implementation

The MOE&RE will be vested with the responsibility of conducting of this program in collaboration with a training agency, preferably with the Sri Lankan Institute of Development Administration (SLIDA) which conducts training programs for government officials

Output 2.2: Enhanced capacity of officers involved in budget preparation

Justification

It is observed that the real contribution to GDP from the environment sector is not reflected in the GDP and always under estimated. As mentioned, officers involved in budgetary preparations lack knowledge on, for example, the economic and social value of environmental goods. Enhanced knowledge itself will make a significant difference in financing for SLM.

Proposed activities

1. Appointment of a consultancy team to prepare a *training module* to incorporate SLM principles as well as environment related in other areas like Strategic Environmental Assessments (SEAs), project implementation and monitoring etc.
2. Train officers involved in Ministries and the Treasury as per the training module prepared.
3. Monitor progress of the training program

Priority

This activity is of high priority since this activity too can make a significant difference on SLM financing

Sources of financing

This activity is to be completed within a short time period (within six months) using domestic funds.

Implementation

The MOE&RE will be vested with the responsibility of conducting of this program with the team of consultants since the long term experiences of the Ministry also to be shared with the participants.

Output 2.3: Increased investments by the NGOs and large scale private sector companies

Justification

NGOs, both national and international in Sri Lanka are actively engaged in environment related activities in the country basically at the village level. They are involved in green sector activities and brown sector activities as well. But there is an increasing trend towards green sector activities. Green sector usually refers to environment development activities (e.g.: tree planting programs) where brown sector activities are aligned with pollution control (e.g.: programs to reduce industrial emissions).

At the same time large scale private sector companies are also concerned about their CSR due to their obligations to the nation, although it is not a legally binding activity. The large scale banks both government owned and private, other large scale cooperate entities are to a certain extent engaged in environment related activities. This is due to the growing global concerns towards CDM activities and to avoid constant charges that are aimed at industries as 'polluters'. Through more awareness and lobbying, the attention of such companies can be brought to investment in SLM.

Proposed activities

1. Assessment of NGOs that are currently operative in the field of environment and companies that are more concerned about their social responsibilities.
2. Assess the capacity and willingness of these two categories of agencies to support SLM activities.
3. Develop a program to lobby these agencies and hold a national level conference for them to have a clear understanding on the level of interference they can make in SLM activities.
4. In relation to Sri Lanka, soil erosion in the hilly region, landslides, lowering of productivity of agricultural lands due to nutrient depletion and associated high

nutrient replacement costs, reclaiming of problem soils, salinization are major issues relating to SLM. Large agencies can be assigned with one of the above activities as a public private partnership programs.

5. Form a steering committee to monitor progress.

Priority

The activities referred to above can be categorized as medium term activities.

Sources of financing

Activities that need funding are (i) the assessment stock take, (ii) national level conference (iii) expenses for meetings including the steering committee meetings. The NGOs and the private sector will share the costs partly and the government will have to bear part of the cost. The NGOs and private sector will accept to share costs since their activities are recognized by the government.

Implementation

Implementation of this program of activities will be a responsibility of the MOE&RE. However, active participation of NGOs and private sector are required.

Outcome 3: Enhanced mobilization of external resources

External sources of financing play a key role in development arena in Sri Lanka. Funds obtained from donors are either grants, loans, soft loans or other miscellaneous fund arrangements. Through proper coordination with the donors, there is high potential of obtaining funds. The major outputs to be achieved are:

1. Enhancing knowledge on potential donors, donor requirements, fund modalities and other logistical requirements for fund disbursement
2. Strengthening donor coordination at the MOE&RE

Output 3.1: Enhanced knowledge on donor funding

Justification

A number of government agencies, NGOs and the local people do not have clear understanding on what is required by the donors to approve funding. Many donors have country strategies as well as performance based mechanisms (e.g.: STAR). Also, the donors change their disbursement modalities from time to time. Sometimes these changes are not known to many. In some cases, they have project cycles and timelines. GEF and UNESCO can be taken as examples. GEF has fairly descriptive project proposal format for medium and long term projects.

Proposed activities

1. Establish a *facilitation center (incubator)* at the DOER at the General Treasury.
2. Establish an environmental cell at the MOE&RE.

Priority

This is a medium priority activity. The resources required to be sought and therefore, to establish these two units may need sufficient time. Workshops also can be held.

Sources of financing

Existing facilities and human capital need to be assessed and depending on the assessment, the cost may vary. Approximately 3 million SLR will be sufficient and can be supported by donors since this activity facilitates their functions as well.

Implementation

The DOER and the MOE&RE are responsible for the implementation. The donors may assist in providing logistical support.

Output 3.2: Strengthening donor coordination at the MOE&RE.

Justification

The MOE&RE has been functioning as focal point for Rio conventions namely, UNCBD, UNFCCC and UNCCD. In Addition, it is the focal point for the GEF and many donors channel funds for environmental management through the Ministry. In addition to the activity proposed above under output 3.1 to establish an environment cell, much work has to be done, including capacity building of the officers in project report writing, cost benefit analysis (especially extended cost benefit analysis for environmental projects) etc.,

Proposed activities

1. Capacity building of the officers in the MOE&RE involved in donor funding activities.
2. Development of education tool kits for the NGOs and other stakeholders on donor matrix and funding who are beneficiaries of donor funding. This is critically needed since community leaders in farmer organizations and CBOs cannot access such funds unless they are well equipped. For example, GEF small grants project funds can be assessed by the local community organizations.
3. Take measures to obtain the participation of community organizations and NGOs in environmental planning. The activity can be coordinated by UNDP or UNEP.

Priority

Medium priority

Sources of financing

This can be funded by the donor community with some funds from the government. Estimated cost will be 2.5 million SLR.

Implementation

The responsibility of implementation lies with the MOE&RE and other stakeholder agencies, NGOs and CBOs.

Outcome 4: Enhanced mobilization of innovative resources

As a result of this assignment for the preparation of IFS, several innovative financing mechanisms were revealed. Some of them to be implemented fully and some of them are already in existence but need strengthening. These include:

1. Environmental taxing including levies, cess etc.,
2. Funding solicited through Incentives and market based mechanisms.
3. Funds from climate change activities (adaptation fund, funds for CDM activities and mechanisms etc.)

Output 4.1 Environmental Taxing strengthened

4.1.1 Catchment area development levy

Justification

The Ceylon Electricity Board (CEB) presently consumes water from the Upper Catchment Area for electricity generation. It is a compelling need to invest in catchment area development to sustain water flow. The government has not imposed any levy on electricity for environmental conservation. There is possibility to impose a levy from the electricity bill for forest conservation and arrest soil erosion in the upper catchment areas.

Proposed activities

1. Conduct a study on the impact of a levy on electricity bill of the consumers and legal amendments.
2. Conduct a study on the areas of catchments that are severely damaged and need restoration.

Priority

The output is of high priority and can be implemented soon.

Sources of financing

This activity will need only little financing since study on electricity bill and the legal impediments will involve no cost, but study on the degraded catchment area will require aerial photographs and will involve costs. SLR 1 million will be sufficient.

Implementation

Implementation will be the responsibility of Ministry of Power and Energy (MOP&E), MOF&P and MOE&RE.

4.1.2 Compensation for ecosystem services

Justification

Sri Lanka is expected to attract more than 5 million tourists in year 2013. The comfort climate, greenery, scenic beauty in the hilly region, fauna and flora and flower gardens etc in the central hilly area attracts many tourists and the area needs protection. Therefore it is possible to impose a tax on the ecosystem services provided by nature to protect nature.

Proposed activities

1. Conduct a study on the type of the tax and how it could be utilized.
2. Study the legal impediments and its impact on the tourist industry. Part of the funds could be utilized for SLM financing.

Priority

This matter has not been properly addressed and for the time being this activity will accrue low priority.

Sources of financing

The activities referred to above, will bear very low cost and SLR 0.25 will be sufficient for the activity.

Implementation

The implementation will require coordinated support from all the sectors. Therefore, government, NGOs, donors support is needed.

4.1.3 Green tax

Justification

A green tax has been imposed on CFL bulbs and this can be extended to other products as well. Since, disposal of these used items has a direct impact on the land, and the tax revenue could be used to mitigate such impact. Disposal of electronic equipment creates heavy threat to environment since they contain heavy metals. CFL bulbs, tv monitors, computers, mobile phone batteries are some of them.

Proposed activities

1. Identification of the volume and the tax revenue that could be earned.
2. Study the impact on consumers of imposing the tax.

Priority

This has been already implemented and can be extended and assures high priority.

Sources of financing

The activity will require very little financing and SLR 0.25 million will be sufficient.

Implementation

The CEA will bear the responsibility

4.1.4 Cess on tea

Justification

Tea is a dominant crop cultivated in the hilly region in Sri Lanka and especially seedling tea leads to high soil erosion. A cess on tea has already been imposed and it is not used for SLM purposes. A slight increase in the tea cess could be easily used to arrest soil erosion in the hill country

Proposed activities

1. Conduct a study on the impact on tea prices in international and domestic market once the cess is increased.
2. Identify the areas where cess money could be utilized.

Priority

This has been already implemented and can be extended and accords high priority.

Sources of financing

The activity will require very little financing and SLR 0.25 million will be sufficient.

Implementation

MOPI, MOF&P, SLTB and MOE&RE.

Output 4.2 Funding solicited through Incentives and market based mechanisms enhanced

Justification

The socio economic development strategy of the government aims to attain rapid socio - economic growth by transforming the structure of the economy to be a modern, environmentally friendly and well-connected rural - urban economy. Targeted annual investment level in 2014 is 32% of the GDP. The government has taken several initiatives such as lowering taxes, strengthening banking and non-banking financial institutions, improving infrastructure etc., to boost investment. The fiscal policy strategy of the government is within the macro economic framework ‘*Mahinda Chintana - Development Framework*’ in this context, using fiscal incentives, investments in SLM can be strengthened since high priority has been accorded to environment. For example, importation of wood in log form to the country has been released from all the taxes (VAT- Value Added Tax, PAL- Port Authority Levy, CID – Customs Import Duty, NBT – Nation Building Tax and Cess) to avoid use of forests for timber requirements. Timber in log form is one of the few commodities that have freed from all levies.

Proposed activities

1. Conduct a comprehensive study on the existing and potential market based instruments that can be effectively used to strengthen investments in SLM and how far they have been successful.
2. Propose the policy makers on such instruments to make necessary adjustments.

Priority

The required adjustments can be made within a fiscal year and results could be seen in the short run. Therefore high priority should be accorded.

Financing

This activity will require nearly SLR 1 million and it could be borne by the government.

Implementation

MOE&RE and MOF&P

Output 4.3 Funds from climate change activities enhanced

Sri Lanka has prepared a national Climate Change Adaptation Strategy (2011-2016) to meet the present and future climatic change challenges. The UNFCCC has several financing mechanisms such as CDM and Adaptation Fund which could be used to support SLM activities in Sri Lanka. These financial mechanisms provide additional financing opportunities for implementation of UNCCD activities. However, these mechanisms are not

explored and at present, underutilized. Therefore, all relevant stakeholders particularly, awareness of policy makers, public and private sector project and programs developers has to be strengthened. So that they can explore possibilities of using these funds for SLM activities and for co-financing relevant projects and programs.

Sri Lanka has created 'Sri Lanka Carbon Fund (Private) Limited to provide technical assistance for CDM project developers and facilitate CDM negotiations, to bundle small scale CDM projects, engage in carbon trading through purchasing and subsequent sale of carbon credits.

Proposed activities

1. Make awareness of relevant stakeholders (policy makers and public and private sector project and programs developers) on climate change challenges and mitigation activities and potential CDM projects which can be incorporated with SLM component.
2. Strengthen 'Sri Lanka Carbon Fund (Private) Limited in terms of human capacity as a technical service provider to both public and private sectors.
3. Review procedures for Adaptation Fund and explore the opportunities for incorporating SLM component to the future projects

Priority

These activities require sufficient time frame to obtain tangible results. Medium priority could be accorded.

Financing

Funds from climate change mitigation activities could be diverted to this purpose and nearly SLR 5 million will be required.

Implementation

MOE&RE and CCS

IFS ACTION PLAN

Outcome 1: Enhanced enabling environment for resource mobilization in Sri Lanka

Output	Activities	Key performance Indicators	Associated risks	Implementation	Priority	Resources required	Time Frame
1.1. Enhanced legal framework for effective resource mobilization	<p>1. All enactments related to environment particularly National Environmental Act (1988) and the Soil conservation Act (1966) have to be enacted with legal provisions to enhance the financial flow to SLM</p> <p>2. All Environmental related laws should be updated with polluter pays principles – including ability to claim environmental damage, Environmental insurance, provisions for economic incentives and fairly high penalties etc. Prepare necessary regulations in</p>	<p>No of enacted legislations to facilitate financing for SLM.</p> <p>Insertion of economic principles to the enactments. Regulations made based on Polluter pays principle. (Provisions in Environmental Conservation Levy Act)</p> <p>Establishment of Soil Conservation Board and Soil Conservation Fund operational</p>	<p>Time needed is lengthy. The portfolio of the Ministries may change, There may be a change of interest or lack of dedication (Political will)</p>	<p>Lead; MOE&RE Support: MOJ, MOA, ML&LD, Attorney Generals Department Private sector and NGOs.</p>	High	SLR 5 million	3 years

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	<p>Environment conservation Levy Act for SLM</p> <p>3. Existing environment legislations should be consolidated to remove inconsistencies and overlaps</p> <p>4. Fully implementation of the Soil Conservation Act to establish "Soil Conservation Board" and "Soil conservation Fund"</p>						
1.2.Enhanced institutional and coordination framework	<p>1. Establish a fully authorized coordinating body to facilitate resources mobilization to SLM. In this purpose, the NECLD should be empowered for coordinating SLM and LD activities in the country.</p>	<p>Establishment of restructured NECLD with full powers</p> <p>No of workshops, training programs conducted all level of Officers. Preparation of TOR and tainting manuals</p>	<p>Time taken to for the activity may be lengthy. Need enactment to existing laws.(National Environmental Act)</p> <p>There may be a conflict of interest among institutes having</p>	<p>Lead; MOE&RE Support: MOJ, MOA, ML&LD, MOI &WR, Attorney Generals Department, Private sector and NGOs.</p>	High	SLR 2 million	2 years

	<p>2. NECLD has to be restructured to represent all relevant stakeholders</p> <p>3. Capacity building of the staff involved in SLM of the MOE&RE and Staff of the NRM Division of the DOA have to be improved</p> <p>4. Capacity building of Field Level Officers who involved in implementing Soil conservation Act</p> <p>5. Strengthen the environmental education and awareness of NGOs and CBOs</p> <p>6. Strengthen the coordination between national government and local governing agencies, donors and other development partners</p>	<p>No of awareness programs conducted for public, NGOs and CBOs</p>	<p>different mandates.</p>				
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<p>1.3.Effective policy formulation and planning process</p>	<p>1. Improve the awareness for key stakeholders particularly policy makers on SLM</p> <p>2. Build the strong linkages between scientific community and the policy makers</p> <p>3. Centralize the data base relating to SLM has to be established under the MOE&RE</p> <p>4. Develop the capacity building of the officers involved in SLM related activities</p> <p>5. Integrate economic valuation of ecosystem services in national budgeting/policy making process</p> <p>6.SLM has to be strengthened as a key area of investment area</p>	<p>Assessment of the changing attitudes and dedication towards SLM by monitoring the work performance</p> <p>No of training programs and workshops conducted.</p> <p>No of workshops with Scientific community and policy makers.</p> <p>Creation of a unit under the MOE&RE to centralize the data base of LD and SLM and related subjects.</p> <p>Insertion of economic valuation in to budgeting process.</p> <p>No of NGOs and private sector companies involved in investment in environmental projects.</p>	<p>Assessments may be subjective and difficult.</p>	<p>Lead: MOE&RE Support: MOA, ML&LD, MOI & WR and SLIDA, Private sector, NGOs and CBOs.</p>	<p>High</p>	<p>SLR 3 Million</p>	<p>3 years</p>
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Outcome 2: Internal resource mobilization strengthened and rationalized

Output	Activities	Key performance Indicators	Associated risks	Implementation	Priority	Resources required
2.1 Policy maker's increased awareness on SLM	<p>1. Identification of key policy makers and institutions that involve in policy making</p> <p>2. Identification of extent of awareness to be given, agency and the no of policy makers</p> <p>3. Conduct awareness</p>	Changes in thinking (e.g. Policy makers speak the same language related to SLM)	Changes in thinking is a qualitative trait and difficult to measure	Lead: MOE&RE Support: MOF&P, DOPP, SLIDA.	High	SLR 1 million
2.2: Enhanced capacity of officers involved in budget preparation	1.Appointment of a consultancy team to prepare a <i>training module</i> to incorporate SLM principles as well as environment related other areas like Strategic Environmental Assessments (SEAs), project implementation and monitoring etc.,	<p>Training module developed.</p> <p>No of training programs conducted.</p>	Time taken to for the activity may be lengthy	Lead: MOE&RE and the team of consultants. Support: MOF&P, and SLIDA	High	SLR 5 million

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	<p>2. Train the officers involved in Ministries and the Treasury as per the training module prepared.</p> <p>3. Monitor progress of the training programs</p>					
<p>2.3: Increased investments by the NGOs and large scale private sector companies</p>	<p>1. Assessment stock take of NGOs that are currently operative in the field of environment and companies that are more concerned about their social responsibilities.</p> <p>2. Assess the capacity and willingness of these two category of agencies to support SLM activities</p> <p>3. Develop a program to lobby these agencies and hold a national level conference for them to have a clear understanding on the level of interference they can make in SLM activities</p>	<p>No of Stakeholders identified.</p> <p>Programs developed.</p>	<p>Assessment of willingness are subjective attributes</p>	<p>Lead: MOE&RE Support: MOA, MOL&LD, MOI&WR, Provincial Councils, Private sector, NGOs</p>	<p>Medium</p>	<p>SLR 5 Million</p>

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	<p>4. In relation to Sri Lanka, soil erosion in the hilly region, landslides, lowering of productivity of agricultural lands due to nutrient depletion and associated high nutrient replacement costs, reclaiming of problem soils, salinization are major issues relating to SLM. Large agencies can be assigned with one of the above activities as a public private partnership program.</p> <p>5. Form a steering committee to monitor progress.</p>					
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Outcome 3. Enhanced Mobilization of External Resources

<p>3.1: Enhanced knowledge on donor funding</p>	<p>1. Establish a <i>facilitation center (incubator)</i> at the Department of External Resources (DER) at the General Treasury</p> <p>2. Establish an environmental cell at the MOE&RE</p>	<p>Cell and the facilitation center established</p>	<p>Time taken to establish the units</p>	<p>Lead: DOER and MOE&RE</p>	<p>Medium</p>	<p>SLR 3 million</p>
<p>3.2: Strengthening donor coordination at the MOE&RE.</p>	<p>1. Capacity building of the officers in the Ministry involved in donor funding activities.</p> <p>2. Development of education tool kits for the NGOs and other stakeholders on donor matrix and funding who are beneficiaries of donor funding. <i>(This is critically needed since community leaders in farmer organizations and other CBOs cannot access such funds unless they are</i></p>	<p>Ability to solicit donor funding</p> <p>Education Tool kits</p>	<p>Mobilization of farming community</p>	<p>MOE&RE</p>	<p>Medium</p>	<p>SLR 2.5 million</p>

	<p><i>well equipped. For example, GEF small grants project funds can be assessed by the local community organizations).</i></p> <p>3. Take measures to obtain the participation of community organizations and NGOs in environmental planning</p>					
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Outcome 4: Enhanced mobilization of innovative resources

<p>4.1 Environmental taxing streamlined</p> <p>4. 1. 1 Catchment area development levy</p>	<p>1. Conduct a study on the impact of a levy on electricity bill of the consumers and legal amendments.</p> <p>2. Conduct a study on the areas of catchments that are severely damaged and need restoration</p>	<p>study maps on degraded lands</p>	<p>Nil</p>	<p>Lead: MOE&RE Support: other related agencies</p>	<p>Medium</p>	<p>SLR 2.5 million</p>	<p>1 - 2 years</p>
<p>4.1.2: Compensation for</p>	<p>1. Conduct a study on the type of the tax</p>	<p>Study</p>	<p>Nil</p>	<p>Lead: MOE&RE.</p>	<p>Low</p>	<p>SLR 0.25 million</p>	<p>09 months</p>

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Ecosystem services	and how it could be utilized. 2. Study the legal impediments and its impact on the tourist industry			Support: MOT, NGOs,			
4.1.3 Green tax	1. Identification of the volume and the tax revenue that could be earned. 2. Study the impact on consumers of imposing the tax	Study	Nil	Lead: Central Environmental Authority (CEA)	High	SLR 0.25 million	6 months
4.1.4 Cess on Tea	1. Conduct a study on the impact on tea prices in international and domestic market once the cess is increased 2. Identify the areas where cess money could be utilized	Study	Nil	Lead: MOPI, MOF&P, Support: Sri Lanka Tea Board and MOE&RE	High	SLR 0.25 million	1 year
4.2 Funding solicited through Incentives and market based mechanisms enhanced	1 Conduct a comprehensive study on the existing and potential market based instruments that can be effectively used to strengthen investments in SLM and how far they	Study Proposed adjustments appear in the respective annual budgets of the government	Nil Success depend on capacity to convince the policy makers	MOE&RE and MOF&P	High	SLR 1 million	1 year

	<p>have been successful</p> <p>2 Propose the policy makers on such instruments to make necessary adjustments</p>						
4.3 Funds from climate change activities enhanced	<p>1 Make awareness of relevant stakeholders (policy makers and public and private sectors projects and programs developers) on climate change challenges and mitigation activities and potential CDM projects</p> <p>2 Strengthen 'Sri Lanka Carbon Fund (Private) Limited in terms of human capacity as a technical service provider</p> <p>3. Review procedures for Adaptation Fund and explore the opportunities for incorporating SLM component to the future projects</p>	<p>Public well aware on the impacts of climate change</p> <p>The agency's human and technical capacity increased</p>	<p>Nil</p> <p>Nil</p>	MOE&RE and Climate Change Secretariat	Medium	SLR 5 million	1 1/2 years

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