FAO/GLOBAL ENVIRONMENT FACILITY
PROJECT DOCUMENT

PROJECT TITLE: Rehabilitation of degraded agricultural lands in Kandy, Badulla and Nuwara Eliya Districts in the Central Highlands **PROJECT SYMBOL**: GCP /SRL/063/GFF	
Recipient Country: Sri Lanka	**Resource Partner:** Global Environmental Facility (GEF)
FAO project ID: 619069	**GEF Project ID: 5677**
Government /other Counterpart(s): Ministry of Environment and Renewable Energy	
Expected OED (starting date): March 2015	
Expected NTE (End date): February 2019	
Contribution to FAO's Strategic Framework[1]	**a. Strategic objective/Organizational Result: SO2:** Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner. Organizational Outcomes 1 and 2, **b. Regional Result/Priority Area:** Asia-Pacific: RS1: strengthening food and nutritional security, RS2: fostering agricultural production and rural development, RS3: enhancing equitable, productive and sustainable natural resource management and utilization and RS4: improving capacity to respond to food and agricultural threats and emergencies. **c. Country Programming Framework Outcome:** CPF's priorities on 1) "Achieving Sustainable Food and Nutrition Security in the Country while Developing the Livelihood of Rural Agricultural Sector, and 2) "Preserving and Rehabilitation of Forestry and Biodiversity of Forestry".
GEF Focal Areas: Land Degradation	**GEF Strategic Objectives: [GEF-5]** LD-1. Maintain or improve flow of agro-ecosystem services to sustaining the livelihoods of local communities LD-3. Reduce pressures on natural resources from competing land uses in the wider landscape
Environmental Impact Assessment Category (insert √): A B C √	

Financing Plan: GEF allocation (USD):	**1,344,657**
Co-financing (USD):	
Government of Sri Lanka	9,740,000
FAO	120,000
Subtotal Co-financing:	**9,860,000**
Total Budget:	**11,234,657**

[1] For country office operated projects, link projects in FPMIS at OR level.

EXECUTIVE SUMMARY

Land Degradation has emerged as a serious problem in Sri Lanka. It has been estimated that nearly one third of the land in the country is subjected to soil erosion. The proportion eroded ranges from less than 10 percent in some districts to over 50 percent in others. The population has been expanding rapidly and this has led to an increased demand for land for economic purposes and social services. The demands from various users such as agriculture, industry, transport, and settlements have increased the pressures on the land, and these in turn have resulted in the misuse and degradation of land resources in many areas. Nationwide, the major contributors to land degradation are soil erosion and soil fertility degradation. However, chemical degradation, such as acidification of soils affects many areas under plantation crops, especially the tea sector, while eutrophication can be a problem in areas under annual crops. Land degradation in the Central Highlands has been threatening the ability of agro-ecosystems in the area to provide global environmental benefits and to sustain economic activities and livelihoods of people depending on ecosystem goods and services. The barriers to Sustainable Land Management (SLM) in Sri Lanka have been identified as:

Lack of enabling policy and regulatory frameworks. Land users have misused the land, as no coherent and effective Land Use Policy is in place taking into account, among others, the role of land rights and the importance of protection of critical areas.

Weak institutional capacity for SLM. Government organizations entrusted with the responsibility to manage land do not have adequate capacity to plan and implement national programmes to combat land degradation, such as the implementation of the Soil Conservation Act. The complexity of institutional arrangements is also a major obstacle. Policies and responsibilities relating to land management are fragmented and distributed among more than 10 agencies, each driven by a different agenda.

Scarce knowledge on the adverse impacts of land degradation and minimal experience in SLM practices/technologies by the farmers. The stakeholders and economic actors responsible for land degradation are largely unaware (and unconvinced) of the threats posed by land degradation. In the face of pressing needs for development, economic growth and poverty reduction, land degradation tends to be accorded a low priority in both public and private sector budgets, policies and actions.

Lack of coordination among different extension and training agencies. The current framework of the interventions to arrest land degradation in Sri Lanka, and in particular in the Central Highlands is by far too fragmented. The training and extension networks, belonging to and managed by five different institutions and Ministries, work in an uncoordinated manner, use different approaches, and are inconsistent in their capacity of involving the local stakeholders. This situation significantly reduces the efficacy of the baseline projects in terms of maintenance of agro-ecosystem services and protection of global environmental benefits.

Lack of sufficient funding to promote and incentivize SLM. The government and the farming community have not perceived adequately the real cost of land degradation and benefits of SLM to the economy. The on-farm and off-farm effects of land degradation, as well as ecosystem services generated by SLM practices, have not been well documented or evaluated, and are not reflected in the government accounting. Moreover, there is no financial mechanism in place to provide incentives to resource poor farmers to conserve land or that compensates them for additional labour or investments made in land management.

Against this background, the Project will build on the existing institutional and regulatory frameworks, as well as on a series of field programmes and activities currently under way. GEF incremental support by component will consist of:

Component 1: Strengthening institutional, policy and regulatory frameworks for SLM. Incremental GEF support will catalyze the mainstreaming of SLM and participatory land-use planning into policy and regulatory frameworks in the agricultural sector and its different ministries and agencies. GEF support will enable stakeholders from national, district to divisional level to develop and adopt a package of policy revisions in six key policy areas that will in turn lead to the development of a coherent national SLM policy that will be adopted across sectors. Strengthening of capacity in participatory land use development, through preparation of guidelines, and development of maps and establishment of a database will inform policy and decision-making on land resources development and upscaling of SLM, which is expected to put 50,000 ha of land in the Central Highlands under SLM.

Component 2: Implementation of identified SLM and land restoration technologies. GEF funding will be used to establish SLM demonstrations in four farming systems that suffer from severe land degradation, namely marginal tea land, poorly managed home gardens (i.e. Kandyan forest gardens), and low-input as well as high-input vegetable cultivations on steep slopes. The demonstration areas will cover a total of 10,000 ha of land where ecosystem services will be enhanced to deliver global environmental benefits, such as improved soil and sediment retention, improved water regulation, enhanced carbon sequestration and improved provision of habitats for biodiversity. SLM practices that will be introduced include structural, vegetative and agronomic measures.

Component 3: Support to development and implementation of innovative funding systems to promote SLM. GEF incremental funding will reinforce experiences from existing funding schemes, such as set-aside funds in public and private work contracts, by involving the private sector, NGOs and local stakeholder groups in identifying opportunities for innovative funding systems. Such systems could include Payment for Ecosystem Services (PES) schemes, establishment of Public-Private Partnerships (PPPs) in SLM, Corporate Social Responsibility (CSR) schemes, as well as accessing climate change finance for mitigation (i.e. carbon sequestration and reduction of methane emissions form agriculture) and adaptation to enhance the resilience of the agricultural sector.

Component 4: Knowledge management, awareness raising, and dissemination of best practices. GEF funding will be used to support SLM awareness campaigns that target key stakeholders such as government agencies, technical staff at district and divisional level, farmers, the private sector, NGOs and CBOs. GEF will fund the establishment of a monitoring and evaluation system, the establishment of a Project website as well as publication of regular newsletters. Experiences generated by the project will support adaptive results-based management, and they will also be widely disseminated to promote upscaling of SLM across Sri Lanka.

In the absence of the proposed project, opportunities for sustainable land management directly geared towards reversing and arresting accelerating land degradation in Central Highlands of Sri Lanka would be limited, both because of awareness and capacity barriers, but also because of a lack of access to knowledge about new and innovative SLM practices and technologies, as well as innovative financing mechanisms for scaling up of good practices across sectors. Investments made by communities at demonstration sites would be small and piecemeal, and they would fail to capture efficiencies and up-scaling opportunities from coordination of policy implementation across sectors, from divisional, district up to national level. The proposed project approach is deemed to be the most cost-effective and most likely to lead to sustainable results, because the funds from the GEF will leverage substantial investment from both the environment and agricultural sectors. With a baseline and co-financing of over $6.5 million, the costs to the GEF are less than 20% of the entire Project cost. That means that for every $1 invested, GEF gains over $5 of impact.

It is expected that the integrated and cross-sectoral approach to sustainable land management promoted by the Project will lead to both scaling up and out of SLM in Sri Lanka. It supports scaling up through support to policy and institutional reform across sectors. Out-scaling or replication will be driven by spontaneous adoption and replication, by individuals and communities participating in SLM practices that are seen as viable and effective by them.

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ACRONYMS & ABBREVIATIONS

AWP/B	Annual Work Plan and Budget
BH	Budget holder
CBD	Convention on Biodiversity
CBO	Community-Based Organization
CEO	Chief Executive Officer
CH	Central Highlands
CPF	Country Programming Framework (FAO)
CRIC	Committee of Review of the Implementation of the Convention
CSR	Corporate Social Responsibility
DEX	Direct Execution
DOA	Department of Agriculture
EC	European Commission
FAO	UN Food and Agricultural Organization
FAO-PTF	FAO Project Task Force
FBS	Farmer Business School
FFS	Farmer Field School
FPMIS	Field Programme Management Information System
GCU	FAO GEF Coordination Unit in Investment Centre Division
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse gases
HQ	Headquarter
ICT	Information and Communication Technology
IFAD	International Fund for Agricultural Development
IFS	Integrated Financing Strategy
IW	Inception Workshop
LADA	Land Degradation Assessment in Drylands
LD	Land Degradation
LoA	Letter of Agreement
LTO	FAO Lead Technical Officer
LTU	FAO Lead Technical Unit
LUPPD	Land Use Policy Planning Department of the Ministry of Land and Land Development
M&E	Monitoring and evaluation
MOA	Ministry of Agriculture
MOE&RE	Ministry of Environment and Renewable Energy
MPTF	Multi-Partner Trust Fund
MTR	Mid-Term Review
NAP	National Action Plan for Combating Desertification
NAQDA	National Aquatic Development Authority
NGO	Non-Governmental Organization
NPD	National Project Director
NPM	National Project Manager
NREG	Natural Resources and Environment Group (of FAO)
NRL	Land and Water Division
NRMC	Natural Resources Management Centre

OO	Organizational Outcome
PCC	Provincial Coordination Committee
PDOA	Provincial Councils, Director of Agriculture
PES	Payment for Ecosystem Services
PFO	Project Field Officer
PIR	Project Implementation Review
PLUD	Participatory Land Use Development
PLUP	Particpatory Land-Use Planning
PMU	Project Management Unit
PPP	Private Public Partnership
PPR	Project Progress Reports
PSC	Project Steering Committee
RAP	FAO Regional Office for Asia Pacific
REDD	Reduction of Emissions from Deforestation and Forest Degradation
RF	Project's results framework
SGP	Small Grants Programme
SLM	Sustainable Land Management
SO	Strategic Objective
TCC	Technical Coordination Committee (of the NAP)
TCI	Technical Cooperation Division (FAO)
TCIB	Asia and Pacific Service of the FAO Investment Centre Division
TCP	Technical Cooperation Programme
TEG	Technical Exert Group
ToR	Terms of Reference
TRI	Tea Research Institute
TSHDA	Tea Small Holdings Development Authority
UNCCD	UN Convention to Combat Desertification
UNDAF	UN Development Assistance Framework
UNDP	UN Development Programme
UOP	University of Peradeniya
USD	United States Dollar
WOCAT	World Overview of Conservation Approaches and Technologies

1 – RELEVANCE (STRATEGIC FIT AND RESULTS ORIENTATION)

A. GENERAL CONTEXT

General Development Context Related to the Project

Sri Lanka has a land area of around 6.5 million hectares divided into five topographical regions based on elevation and salient land forms. These regions are: (i) the central highlands, (ii) the southwest lowlands, (iii) the east and southeast lowlands, (iv) the northern and north-central lowlands, and (v) the coastal fringe. The country has a hot and humid climate throughout the year. There are four rainfall seasons in Sri Lanka2 and rainfall is unevenly distributed, varying from less than 1,000 mm per year in the semi-arid parts of the island to over 5,000 mm per year on the windward slopes of the central highlands. The seasonal distribution of rain is also very uneven, and while the wet zone experiences a fairly well distributed rainfall throughout the year with short dry spells during the inter-monsoon periods, the dry zone experiences a distinct bi-modal rain pattern with two dry periods from February to March and July to September.

Sri Lanka has a wide variety of soils that permit the cultivation of a number of crops including cereals, pulses, vegetables, fruit crops, cotton, tobacco, tea, rubber, coconut coffee, cocoa, cinnamon, pepper, and cloves. Although a wide variety of crops can be grown, most of the soils have to be carefully managed, as they are highly erodible and special conservation measures are needed for sustained production. Regarding water resources, surface water is primarily determined by the Central Massif, which intercepts the moisture laden monsoon winds. Surface water from the upper watersheds is transported by 103 natural river basins covering 90 percent of the island. Rivers originating in the wetter parts of the hill country are perennial while the majority of those in the dry zone are seasonal. Ground water resources in the country vary considerably from region to region. Ground water potential is highest in the northern and north-western parts of the country, which contain highly productive aquifers, while the remaining areas only have a modest ground water potential. The climate of Sri Lanka favours forest growth and at one time the country was rich in tropical forests. Over the years, a part of this forest cover has been lost due to the spread of human settlements and agriculture. Forest cover has decreased from 2,323 ha in 1991 to 1,845 ha in 2011, representing 29 percent of the land area[3].

The economy is dominated by services sector (57%) and industrial sector (24%) with agriculture contributing to around 13% to annual GDP. Performance in the agricultural sector is important as it directly accounts for over one-third of the national workforce, and in rural districts for half the district workforce. However, the agricultural sector is constrained by very small plots, high dependency on vagaries of weather, high cost of production and marginal revenues, poor market orientation and limited value addition. Farmers with few off-farm sources of family income account for a large share of the poor. Thus developing the agricultural sector is an enormous challenge to increase national productivity, farming income, and to reduce rural poverty and malnutrition.

Land Degradation

Land Degradation has emerged as a serious problem in Sri Lanka. It has been estimated that nearly one third of the land in the country is subjected to soil erosion. The proportion eroded ranges from less than 10 percent in some districts to over 50 percent in others. The population has been expanding rapidly and this has led to an increased demand for land for economic purposes and social services. The demands from various users such as agriculture, industry, transport, and settlements have increased the pressures on the land, and these in turn have resulted in the misuse and degradation of land resources in many

[2] These are the first inter- monsoon (March and April), the South-West monsoon (from May to September), the second inter-monsoon (October and November); and the North-East Monsoon (from December to February)

[3] Data on forest coverage from FAOSTAT (http://faostat3.fao.org/home/index.html)

areas. The updated National Action Programme (NAP) of the UNCCD that will start implementation in 2015, identifies a range of different land degradation processes. Nationwide, the major contributors to land degradation are soil erosion and soil fertility degradation. However, chemical degradation, such as acidification of soils affects many areas under plantation crops, especially the tea sector, while eutrophication can be a problem in areas under annual crops. Table 1 provides a summary of land degradation processes and impacts that affect different land uses in the mid- and up-country wet and intermediate zones.

Table 1. Land Use, Degradation Process in the Agricultural Lands and Their Impacts in the Mid and Up Country Wet and Intermediate Zones.

Land Use	Degradation Process	Impacts
Plantation crops		
Well managed VP & seedling tea lands with adequate soil conservation	Fertility decline, Acidification of soil	Decreased yield, Increased cost of production (COP)
Poorly managed tea lands	Soil erosion, fertility decline acidification of soil, soil compaction.	Decrease of soil water retention, increased COP, downstream sedimentation, decrease of land productivity, declining yields, water pollution
Conversion of tea lands for annual crop cultivation in hilly terrain	Heavy soil erosion	Downstream sedimentation, water pollution.
Annual Crops		
Vegetable and potato cultivation on sloping highlands and terraces lands (Former *chena* lands)	Soil erosion by rain and irrigation, soil erosion due to wild boar damage, eutrophication, fertility decline	Depletion of water resources, increased COP, downstream sedimentation, decrease in land productivity, water pollution
Rice, potato and vegetables on terraced paddy lands	Soil erosion by rain and irrigation, (Badulla and NE districts)	
Rice cultivation on terraced paddy lands	High soil erosion due to improper land preparation (Welimada area)	Decreased land productivity, downstream sedimentation, water pollution
Tobacco lands	soil erosion (in highland cultivations)	Depletion of water resources, decrease in land productivity, increased, downstream sedimentation and water pollution
Other Perennial Crops		
Kandyan forest gardens	Soil erosion and damage due to wild boars in certain areas	Downstream sedimentation, decrease in land productivity
Spice crops	Soil erosion, fertility decline	Downstream sedimentation, decrease in land productivity

Source: NAP for combatting land degradation in Sri Lanka, MOE&RE, NRMD, 2014**.**

Climate Change

Various climate change scenarios have been tested to predict climate trends in Sri Lanka and the average annual rainfall is predicted to increase by 14% to 5% across the country[4], especially in the wet zone. During the Southwest monsoon from May to September, rainfall across the country is predicted to increase by over 30% and south-western regions, such as Nuwara Eliya Distric,t will experience significant increases in rainfall, which in turn will increase the risk for flooding and landslides. Moreover, rainfall variability has increased significantly during recent decades[5], especially with respect to the north-eastern monsoon. As a result, both extremes, i.e. water scarcity and excess water have become recurrent problems faced by crop production in Sri Lanka. In addition, the fruit bearing seasons for the country's major fruit crops have also been affected due to irregular rainfall. For example, there have been incidents when Rambutan trees in the wet zone have not flowered due to sudden occurrence of unseasonal rains.

The average annual temperature is predicted to increase between 1.6 C and 1.2 C, with the lowest increase expected in Nuwara Eliya by only 1.1 C. Higher temperatures will lead to increased evapotranspiration and increase the risk for soil moisture deficits that can cause serious problems for agricultural activities, such as paddy rice and other field crops. Crop injuries due to high temperatures above 35 C are also becoming more common and are of particular importance for the country's main staple food, rice. The increasing night time minimum temperature is likely to cause negative impacts on tuber crop production in the country, especially for potato cultivation where the current temperature regime is already sub-optimal. Increases in insect damages and infestation of various pathogens can be expected with increasing temperatures and rainfall. Finally, climate change is also expected to exacerbate Sri Lanka's serious land degradation problems, with high intensity rains washing away fertile topsoil that in turn causes siltation and eutrophication of downstream reservoirs.

The Project Districts

The project will target three key districts located in the Central Highlands, namely Kandy, Nuwara Eliya and Badulla, covering an area of approximately 579,384 ha as shown in Table 2, below. The Central Highlands extend from the Central Massif in the south to the transverse valley of the Mahaweli River (Figure 1). The total extent of the highlands is about 1.1 million Ha or 16 % of the total land area of the country.

[4] Shanthi de Silva (2012). Impact of climate change on agriculture in Sri Lanka. IPS CLIMATEnet Blog.

[5] Fernando, T.K. & Chandrapala, L., (1995). Climate variability in Sri Lanka – a study of trends of air temperature, rainfall and thunder activity. Proceedings of international symposium on climate and life in Asia-Pacific, April 10-13, 1995, Brunei.

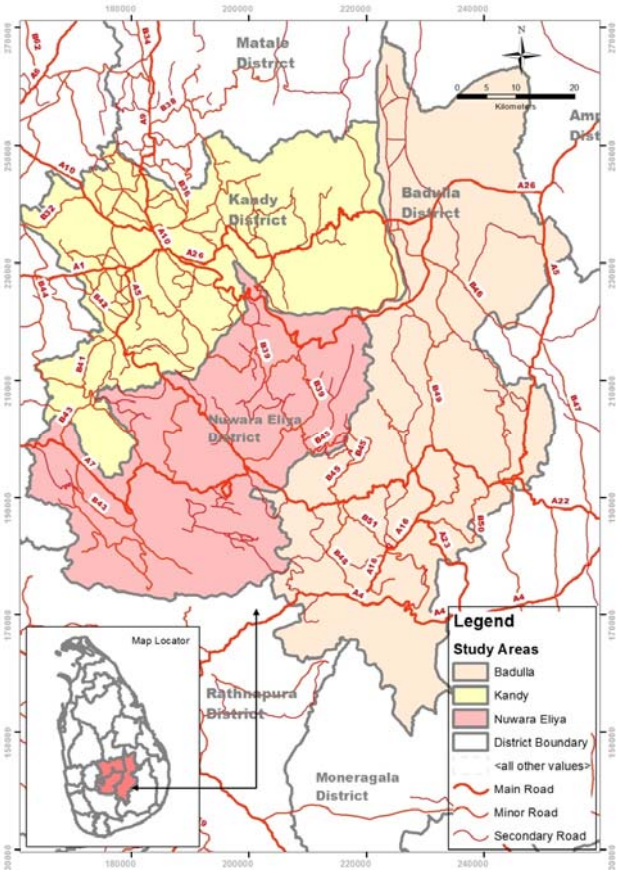

Figure 1: Location of the Central Highlands and the three target districts: Kandy, Nuwara Eliya and Badulla.

The region includes high plains and several high peaks, and consists of diverse agro-ecological systems such as forest and forest plantations, tea and rubber plantations, intensive vegetable cultivation, mixed economic crop cultivation (popularly known as Kandyan Forest Garden), pasture lands and homestead gardens, as well as the watersheds feeding major rivers in Sri Lanka that immensely contribute to agriculture, hydropower generation and water for human consumption. The central highlands were selected because of their importance in generating ecosystem services for the country as a whole, including provisioning of water for downstream areas of the island, provision of critical habitats for biodiversity, including agrobiodiversity, food production and its contribution to the national economy, as well as the high poverty level of the people living in the selected districts and divisions where poverty exceeds the national average of 6.7 percent in 2012/2013 (Table 2).

Table 2. Land area by type of land use for the three target districts (in hectares and percent of total).

District	Natural forest	Plantation (tea, etc.)	Cropland/ subsistence farming	Other land uses	Total population	People below the poverty line (%)	Total land area in the district	Land per capita
Kandy	38,357 (20%)	24,780 (13%)	37,576 (20%)	88,417 (47%)	1,331,226	5.2	189,130	0.15
Nuwara Eliya	48,621 (28%)	50,272 (29%)	57,149 (33%)	18,700 (10%)	761,000	4.6	174,741	0.23
Badulla	84,152 (39%)	45,920 (21%)	29,191 (14%)	56,250 (26%)	886,000	11.6	215,513	0.35
Total	**171,130**	**120,972**	**123,916**	**163,367**	**2,978,226**	**7.1**	**579,384**	**0.24**

	(30%)	**(21%)**	**(21%)**	**(28%)**		**(average)**		

Land Degradation within the target area

Soil erosion and soil fertility decline are the two main types of land degradation observed in the Central Highlands. Other important problems that have been identified include acidification, crusting and sealing, compaction, and pollution. As a result, nearly 50% of agricultural lands in the Central Highlands have been degraded, with the highest rates of degradation in the districts targeted by the project. Comparative studies of soil erosion by zones have shown that, out of 25 administrative districts in the country, the districts which represent the central highlands, including Kandy, Nuwara Eliya and Badulla, have the highest levels of land degradation. Severe erosion takes place on sloping lands under market gardens (vegetables and potatoes), tobacco, poorly managed seedling tea and C*hena* (slash and burn) cultivation. Erosion rates in the hilly region of the country are estimated to be as high as 100 t/ha/year, reaching up to 250 t/ha/year during replanting on tea lands[6].

Land degradation in the Central Highlands has been threatening the ability of agro-ecosystems in the area to provide global environmental benefits and to sustain economic activities and livelihoods of people depending on ecosystem goods and services. Soil fertility decline has led to a loss of productivity of agricultural lands, and the decline in yields of major food crops as well as plantation crops over the past decades has been attributed to the loss of topsoil due to erosion. In addition, the off-site effects of soil erosion can pose severe threat to food production of downstream areas due to siltation that affect irrigation schemes. Sedimentation also causes negative impact on hydropower generation. The main indirect drivers of land degradation in the Central highlands can be summarised as:

- Lack of awareness on land degradation
- High demand for agricultural land due to the lack of alternative income generating opportunities in other sectors in rural areas
- Insecurity of tenure
- Policy failures, including insufficient government commitment to mitigate land degradation, and lack of a government mechanism to provide incentives for SLM
- Inadequate capacity of government organizations to implement a systematic programme on conservation
- Drought and uncertain rainfall

Although many of the indirect drivers are interrelated, some of the resulting direct drivers include:

- **Encroachment:** Marginalized communities are driven to cultivate sloping lands to make a living in the absence of alternative employment opportunities (poverty being the real driver). Land degradation itself results in poverty due to low productivity. During the British colonial rule, traditional homelands of local people were taken by the British for cultivation where ownership could not be established. As a result, local people were confined to traditional villages. Expansion of the village was thus restricted due to lack of lands. After independence in 1948, new generations were compelled to encroach on the crown lands. The cleared lands in the central highlands were used for *Chena* (slash and burn) cultivation within dense forest areas. *Chena* cultivation is known for its devastating effects on the environment and loss of agricultural productivity, because removal of forest cover without conservation efforts leads to soil erosion and soil fertility degradation, especially with declining fallow periods. Vegetables, potato, and tobacco, crops known to cause high erosion rates, have been cultivated in these areas and soil erosion has been aggravated by steepness

[6] Nayakekorale, H.B. (1998). Human induced soil degradation status in Sri Lanka. NRMC, Dept of Agriculture, Peradeniya. Journal of Soil Science, Sri Lanka.

and high rainfall. Greater attention thus needs to be paid to developing suitable forms of rainfed farming.

- Lack of awareness and resources to take mitigating actions to conserve soil and lands, hence, **inappropriate use of land**. Slow and limited adoption of soil-conservation management practices in crop land has caused water erosion on sloping lands. Improper crop rotations, resulting from population growth, land shortage and economic pressures, contribute to decline of soil fertility. Unbalanced use of fertilizer, including excessive application of nitrogen fertilizers as a short-term measure to combating fertility decline, is leading to problems of nutrient imbalances. Tea production in the hill lands also leads to severe land degradation when poorly covered soil is struck by intense rainfalls. Although land over 60 percent slope is generally considered unsuitable for agricultural purposes, and ideally be left for forestry and recreation, a large extent of land exceeding this limit has been utilized by people for cultivation of crops. Soil erosion on these steep slopes is very high particularly in areas with fragile soils and high rainfall. Only level bench terraces could be recommended for such land, but these are very expensive to construct.
- **Lack of incentives** to implement permanent conservation measures, due to lack of permanent land tenure, and **inadequacy of policies and mitigating mechanisms** for implementation and enforcement. The importance of preserving upper watershed areas was recognized as far back as 1873 when a decision was taken to preserve the areas above 1,500 meters above sea level (masl). The Land Development Ordinance (1935) has empowered the Minister in charge of state lands to make regulations pertaining to alienation of lands over 1,500 masl. The land orders prepared under the Land Development Ordinance prohibits alienation of land over 1,500 masl to prevent soil erosion, the silting of lower areas and protecting sources of water. Similar powers were conferred on the Minister a little over a decade later under the State Lands Ordinance. Under this Ordinance, grant, lease or any other deposition on lands at an elevation over 1,500 masl has been prohibited. However, illegal use of land above 1,500 masl persists due to weak law enforcement and increasing population pressure.
- **Climate change** and other conditions beyond the control of the land users. As discussed above, climate change has brought about an increase in extreme events, particularly intense rains, which in turn are one of the main causes of landslides in the country. According to the National Building Research Organization (NBRO), about 125,000 ha of land in the hill country are vulnerable to landslides. Landslides frequently occur during the rainy season in areas with steep slopes and high rainfall. Human activities such as deforestation and poor land use have also contributed to the increased incidence of landslides. There has been a marked increase in the occurrence of landslides in recent years. It was reported that there were only 34 cases of landslides prior to 1980; between 1980 and 1991 the number increased to 171 with the majority of events occurring in the central highlands. Within the project target area, the National Physical Planning Department has identified a significant area of Nuwara Eliya, Kandy and Badulla districts as fragile area vulnerable to landslides. In Kandy district, the most affected district, almost 27% of the land area is vulnerable to landslides and 17% is highly vulnerable.

Although it is difficult to estimate the impact of each of these drivers, some estimates are available with regard to the economic impact of soil degradation. Unfortunately, even when available, the environmental costs of soil degradation are not necessarily reflected in national accounting. Somaratne (2000)[7] estimated land degradation induced cost per hectare per year to be in the range of Rs. 3529 to Rs. 5068. The cost per ton of soil loss per year was estimated to be Rs. 141 to Rs. 203. At aggregated level, the degradation cost per year ranged between, Rs. 2.7 Billion to Rs. 3.8 Billion, and as a percentage of total GDP it amounted to around, 0.72 to 1.0, and as a percentage of agriculture GDP, it ranged between 2.78 to 3.89, which is significant. These figures are on par with land degradation in many tropical developing countries. It is also noted that soil degradation is more under non-plantation crops compared to plantation crops.

[7] Somaratne. W.G (2000). Greening Sri Lankan Trade: Tariff policy liberalization in non-plantaion agriculture and the environment, SGAE, vol 3 (1), 2000.

Barriers to Sustainable Land Management

Lack of enabling policy and regulatory frameworks. Past policies for land management have been constrained by multiple and often conflicting objectives, including the equitable but non-strategic distribution of state alienated land, resulting in weak natural resource governance. Sometimes the politicized implementation objectives have hindered implementation of an efficient land use planning policy. Land users have misused the land, as no coherent and effective Land Use Policy is in place taking into account, among others, the role of land rights and the importance of protection of critical areas. For example, the cultivation of tobacco and potatoes on steep slopes has led to rapid land degradation. Land has been used as a means of solving unemployment issues rather than being rationally utilized under the guidance of a coherent policy. Recent alienation of state lands has been used to provide land to the poor as a means of improving livelihoods, without considering the overall efficiency and sustainability of the utilization of land resource and its environmental impacts.

Weak institutional capacity for SLM. Government organizations entrusted with the responsibility to manage land do not have adequate capacity to plan and implement national programmes to combat land degradation, such as the implementation of the Soil Conservation Act. This is due to a shortage of physical and human resources. This weak institutional capacity, both at national and district level, is a major barrier for effective formulation and implementation of sustainable land management policies.

In addition, the complexity of institutional arrangements is also a major obstacle. Policies and responsibilities relating to land management are fragmented and distributed among more than 10 agencies, each driven by a different agenda. Finally, the lack of adequate information on the status of land resource is also an important obstacle for the implementation of appropriate policies for sustainable land management in the agricultural sector. Old and incomplete data does not provide sufficient support to the on-going attempts to improve the use of natural resources, and makes it difficult to create new approaches for land use planning.

Scarce knowledge on the adverse impacts of land degradation and minimal experience in SLM practices/technologies by the farmers. The stakeholders and economic actors responsible for land degradation are largely unaware (and unconvinced) of the threats posed by land degradation. In the face of pressing needs for development, economic growth and poverty reduction, land degradation tends to be accorded a low priority in both public and private sector budgets, policies and actions. In particular, adverse impacts of land degradation are often not properly recognized by the poverty stricken, resource poor farmers who cultivate fragile soils on the hill slopes. Since the effects of land degradation are not seen in the short run, resource allocation for combating land degradation is given low priority.

Little opportunity for participation of local stakeholders in national efforts to tackle land degradation leads to low awareness on the issues and limited capacity to address them. The ability of farmers to achieve sustainable land management is hampered by their limited experience to plan and implement improved land management practices on their farms. Even large commercial estates run by the private sector, such as tea plantations located in potentially highly erosive lands do not have adequate capacity to manage natural resources in a sustainable way. Appropriate guidance and capacity building for farmers and the private sector, therefore, is essential to improve the overall capacity of combating land degradation and promote SLM.

Lack of coordination among different extension and training agencies. Lack of coordination among different extension and training agencies hinders effective dissemination and adoption of SLM practices by farmers. The current framework of the interventions to arrest land degradation in Sri Lanka, and in particular in the Central Highlands is by far too fragmented, resulting in lesser

achievements than would be justified by the invested resources. The training and extension networks, belonging to and managed by five different institutions and Ministries, work in an uncoordinated manner, use different approaches, and are inconsistent in their capacity of involving the local stakeholders. For example, in the three Districts covered by the Project, the provincial extension system needs to coordinate its activities with the extension systems of both the Tea Research Institute and the Export Agriculture Department. This leads to a fragmented output, a reduced impact and the lack of harmonization of management at the landscape or watershed scale. This situation significantly reduces the efficacy of the baseline projects in terms of maintenance of agro-ecosystem services and protection of global environmental benefits.

Lack of sufficient funding to promote and incentivize SLM. Poverty still affects a significant portion of the country's population, most of which live in rural areas. The low income of the population constitutes a barrier to the implementation of appropriate sustainable land management measures, as it is often coupled with short term perspective and high discount rates on land management. In addition, only limited government funds are available to conserve and improve the productivity of land. The government and the farming community have not perceived adequately the real cost of land degradation and benefits of SLM to the economy. The on-farm and off-farm effects of land degradation, as well as ecosystem services generated by SLM practices, have not been well documented or evaluated, and are not reflected in the government accounting.

Adequate public investment in SLM, generation of off-farm employment and creation of awareness among the farming communities with the introduction of new technologies is vital but lacking. Therefore, continuous inflow of resources to SLM is needed. It has been noted that in 2004, US$ 413M were spent on environmental protection mainly for pollution control. In the same year, US$ 640M was spent on forest conservation in the country. However, no dedicated funding was allocated to SLM. Only minor amounts are set aside by the general treasury in support of land management and conservation.

Moreover, there is no financial mechanism in place to provide incentives to resource poor farmers to conserve land or that compensates them for additional labour or investments made in land management. Since the conservation measures that the upstream farmers implement also benefits those who use water downstream for irrigation or power generation, it is necessary to provide some incentives to encourage land users to undertake SLM measures. The downstream users should also bear part of this cost.

B. SECTOR GOVERNANCE AND STAKEHOLDERS

Legislation and Policies

Over the years, several acts and ordinances have been promulgated to make provision for the grant and disposition of state lands in Sri Lanka; for the management and control of such lands and foreshore; for regulation of the use of the water of lakes and public streams; and for other matters incidental to or connected with the management of natural resources. However, several loopholes in the policies, lack of mechanisms to monitor, and inaction to wrongdoers, has resulted in misuse or non-optimal use of the land. For example, the cultivation of crops, such as tobacco and potatoes, on steep slopes has led to rapid land degradation. Hence, not only enactments of laws, but their implementation giving consideration to other drivers of land degradation is needed. Table 3 provides an analysis of these acts with respect to environment safeguards in general and land degradation/soil erosion in particular.

Table 3: Overview of relevant legislation and policies.

Name of legislation/Policy	**Relevance**
LEGISLATION	

Name of legislation/Policy	Relevance
1. LAND DEVELOPMENT ORDINANCE NO.19 – 1935	Section 8: Subject to the general or special direction of the Land Commissioner, State land may be mapped–out by the Government Agent for any one or more of the following purposes; (g) prevention of the erosion of the soil**.** Section 156 In particular and without prejudice to the generality of the powers conferred by section 155, regulations may be made for and with respect to, all or any of the following matters: (d) the maintenance of reserves for the preservation of the sources and courses of streams and for the prevention of erosion of the soil**.**
2. STATE LANDS ORDINANCE NO.8 – 1947	Section 49 Subject as herein after provided, the Minister may, by Notification published in the Gazette, declare that any state land is constituted a State reservation for any one or more of the following public purposes: (6) the prevention of the erosion of the soil**.**
3. SOIL CONSERVATION ACT –1951	The Act empowered the Director of Agriculture to undertake surveys and investigations to be made for the purposes of ascertaining the nature and extent of land degradation due to various factors including floods, droughts, salinization, desertification, siltation and soil erosion. It also empowered the Minister to declare "erodible areas", to specify measures regulating the use of land in such areas and to acquire land for carrying out measures to prevent erosion. Several decades later the government realized that the provisions laid out in this Act were inadequate to meet present day demands for a number of reasons. The chief among these were: • The identification of conservation activities as an extension function. • The implementation of the provisions of the Act and regulations could not be undertaken by normal extension staff of the Department of Agriculture as extension and regulatory functions are not compatible. At the time the Act was enacted all land matters were handled by one Ministry. As time went on many Ministries and agencies were made responsible for the management of land. This prevented the Director of Agriculture from adequately exercising his authority and functions under the Act to achieve the objectives of the Act. The institutional support made available under the Act was considered inadequate.
4. AMENDED SOIL CONSERVATION ACT - 1996	Some deficiencies in the 1951 Act have been rectified in the Amended Act of 1996. There has also been a shift of focus from the control of soil erosion to land resource management.
5. WATER RESOURCES BOARD ACT NO.29 – 1964	In section 12, It shall be the duty of the Board to advise the Minister on the following matters, and on any other matters that are referred to the Board for advice by the Minster: (d) the control of soil erosion.
6. LAND GRANTS (SPECIAL PROVISIONS ACT) – 1979	The Act provided for the transfer to the State land vested in the Land Reform Commission and the transfer of this vested land free of charge to landless persons. The transfers were subject to certain conditions, one of which was the stipulation that the transferee should carry out on his land, such soil conservation measures, which the District Secretary of the District may require from time to time.
7. AGRARIAN SERVICES ACT NO.58 – 1979	Section 34(2), The owner, cultivator or occupier of any agricultural land shall, in addition to such other duties as the Commissioner may in his discretion specify, ensure that: (d) the land is properly maintained in order to ensure the maximum conservation of soil and water.
8. MAHAWELI AUTHORITY OF SRI LANKA ACT NO.23 – 1979	Section 13; Notwithstanding the provisions of any other law and without prejudice to the generality of the powers conferred on the Authority by this Act, the Authority shall in or in relation to any Special Area have the power: (3) to take such measures as may be necessary for water-shed management and control of soil erosion**.**
9. NATIONAL ENVIRONMENT ACT NO.47 –1980	Section 22: The Authority in consultation with the Council shall, with the assistance of the Ministry charged with the subject of Soil Conservation, recommend soil conservation programmes including the identification and protection of critical watershed areas, encouragement of scientific farming techniques, physical and biological means of soil conservation, and short term and long term research and technology for effective soil conservation. Prevention or Mitigation of Soil Erosion. Accelerating soil erosion and devastating earth

Name of legislation/Policy	Relevance
	slips in the hill country convinced the government that strong legislative measures would be required to address the problem of land degradation. An Act was therefore passed to make provision for the conservation of soil resources, for the prevention or mitigation of soil erosion and for the protection of land against damage by floods and droughts.
10. GRASSLAND MANAGEMENT ACT NO.4 - 1983	In Sri Lanka, approximately 12,000 km2 out of the total land area of65,000 km2 are under grasslands. This Act ensures appropriate management of different categories of grasslands, but SLM has not yet been mainstreamed into its provisions.
11. AGRARIAN DEVELOPMEN ACT NO. 46 - 2000	This replaced the Agrarian Services Act of 1979, but there were no change in the clauses about land degradation.
12. TITLE REGISTRATION ACT NO. 21 – 1988	This act ensures land ownership legally and makes it possible to develop land resources better.
POLICIES	
1. National Forestry Policy – 1995	The forestry policy was formulated to address issues such as, unabated decrease in the forest cover, and to address issues related competition for forest resources for agriculture, timber and due to ineffectiveness in protecting forest resources.
2. National Policy Framework - Ministry of Agriculture Lands and Forests-1995	This framework amalgamated activities of three sectors which came under one ministry: Agriculture, Lands and Forestry. This was an achievement, for coordination of activities. The framework declared that a national land policy for Sri Lanka has been long overdue and that haphazard allocation of state lands without proper and systematic land use planning has caused enormous damage to the land base of the country and consequently to the environment.
3. National Forestry Policy of 1995	Objectives: to protect the natural forests, to conserve biodiversity, soil and water resources; to increase tree cover and productivity, to meet the demand for forest products and services; and to enhance the forestry sector's contribution to rural welfare. The policies are in operation since nearly 2 decades and many beneficial effects can be seen. The forest department is the responsible institution for implementing the forestry policy. The policy statements address the issues of degradation and rehabilitation of forests and protection of environmentally sensitive areas.
4. The National WildLife Conservation Policy of 2000.	It aims at conservation of wildlife resources, maintaining ecological processes and life sustaining systems, managing genetic diversity, and ensuring sustainable utilization and sharing of equitable benefits arising from biodiversity. It emphasizes the need for effective protected area management with the participation of local communities. The policies ensure proper land management in protected areas.
5. National Physical Planning Policy of 2002	Identifies the need of protection of some lands to benefit the country as a whole. The policy recommends establishment of a protected area network including watersheds, specific ecosystems, environmentally sensitive areas, habitats of endangered species, areas of scenic beauty, cultural, historical and recreational areas and wildlife reservation etc. The protected area network will be integrated for conservation purposes. The development in other areas will be allowed subjected to restrictions.
6. The National Environmental Policy of 2003	This aims to promote sound management of the environment while balancing social and economic development needs. With regard to biological resources it ensures their wise use consistent with the integrity of ecosystems and evolutionary process. With regard to physical (nonliving) resource use, the policies have ensured that the needs of the future generations are protected. The policy emphasizes participation, transparency and public accountability in the management of natural resources. The Central Environment Authority (CEA) has the responsibility of implementation of the environmental policies. The relevant policy statements are aimed at sustainable management of resources by recognizing the environmental services of them, keeping the viability of ecological processes, strengthening institutional framework through capacity building, legislative instruments and improved inter- institutional coordination.
7. National Water Shed Management Policy of 2004	The objectives are to manage the watersheds for conservation, protection, rehabilitation and sustainable use through participatory approaches involving communities and by enhancing rational investments. The "Mahinda Chinthana" policy framework of the present government also emphasizes the policy of ecosystem protection with participation of relevant line agencies, for the protection of water resources on a sustainable manner. A holistic approach in land management has been considered. As per this policy all agricultural practices with conservation measures including the selection of crops, cropping patterns and land and water management in critical watersheds has to be

Name of legislation/Policy	Relevance
	according to the guidelines issued under the Agrarian Services Act, Soil conservation Act and any other Acts that may seem relevant and the policies of the National Land Use Policy.
8. Land Use Policy of 2006	It is aimed to ensure proper land use, food security, economic development and the maintenance of the productivity of the land in the country. It also promotes protection, conservation and sustainable use of the land resource of the country and offers ideal framework that will best meet the needs of the present generation while safeguarding the needs of the future generation as well. The Land Use Policy Planning Department (LUPPD) is the responsible agency for implementation of the policy. The policies are very ambitious and aimed at directing land users for scientific land use. Mitigation of land degradation has been given high priority in the policies.
9. National Agricultural Policy of 2007	The present National Agricultural Policy has the objectives of increasing the agricultural production to ensure food and nutrition security of the country through sustainable growth by adopting farming systems and technologies that are environment friendly. Policy statements ensure the sustainable land use for crop production, to prevent water pollution and ensure soil conservation. In the "Mahinda Chinthana" (the development policy of the government) in overall policy directions for agriculture, due consideration has been placed on the environmental conservation. The past agricultural policies from 1984 paid attention to the need for conservation of agricultural lands.
10. National Climate Change Policy of 2012	The objectives are aimed at making communities aware of the country's vulnerability to climate change, taking adaptive measures to avoid/ minimize impacts on livelihoods and ecosystems and to mainstream and integrate climate change issues in the national development process. The policies are also aimed to make people consider impacts of climate change and incorporate mitigation activities in the development efforts.
11. National Policy on Protection and Conservation of Water Sources, Catchments and Reservations of 2014	SLM needs to be mainstreamed into this recently approved national policy.

The above are policies promulgated by various governments over the years to handle environmental issues. Most of the policies have been formulated through long consultative and participatory processes. They have also given rise to various strategies and plans. Under the UN Convention to Combat Desertification (UNCCD), the government was committed to prepare a National Action Programme (NAP) to identify the factors contributing to land degradation and practical measures necessary to combat land degradation. The 2002 NAP, developed by the Ministry of Environment and Renewable Energy, with the participation of all stake holders was the outcome. Many of the strategies and action plans developed were somewhat restricted to the activities of a particular Ministry.

Agencies and Stakeholders

The task of protecting and sustainably managing the environment is shared by number of state institutions and non-state institutions including the private sector and non-governmental organizations. The state sector institutions include a number of Ministries and their line departments and agencies at the national level; Provincial Ministries of Environment, Lands and Agriculture at the sub-national level and mainly Pradeshiya Sabhas at the local level. There are 12 ministries directly involved in addressing issues pertaining to land degradation: 1. Ministry of Forestry, Ministry of Environment and Renewable Energy, 2. Ministry of Agriculture, 3. Ministry of Lands, 4. Ministry of Mahaweli Development, 5. Ministry of Irrigation and Power, 6. Ministry of Plantation Industries, 7. Ministry of Defense and Urban Development, 8. Ministry of Housing, 9. Ministry of Public Administration and Home Affairs, 10. Ministry Parliamentary Affairs, 11. Ministry of Education and Higher Education, and 12. Ministry of Economic Development.

Under these Ministries, large number of departments and para-statal organizations were entrusted to carry out the activities identified in the programme. The main departments include: Departments Forests, Department Irrigation, Department of Regional Development, Department of Agriculture, Department of Wild Life Development, Department of Export Agriculture, Department of Agrarian Services, and Land Commissioner's Department, Hadabima Authority and the Divinaguma Programme.

The vast array of activities and organizations were to be coordinated by a National Coordinating Body, with the Ministry of Environment and Renewable Energy (MOE&RE) providing leadership. The Ministry would coordinate such activities with the necessary guidance and direction from a National Steering Committee on Land Management set up with representatives of all stakeholders concerned. This body was to monitor the implementation of the plan on a periodic basis. Local Level Coordination was to take place through a District Level Environmental Committee, comprising of officials from related agencies, and CBOs.

Though a comprehensive plan was developed, with leadership given by the Ministry of Environment and Renewable Energy, and a National Steering Committee, there has been no coordinated effort in implementation of the NAP. Therefore, stakeholder attention on NAP implementation has been minimal. Limitations of financial resources, lack of awareness on the NAP, priority changes of the successive governments and lack of coordinated effort were identified as some of the reasons for poor implementation of the NAP 2002. At present action has being taken to align and revise the NAP. Under the new programme 25 activities have been identified, several of them having impacts on land degradation in agricultural lands. It is proposed to have a more coordinated approach through Technical Coordination Committees (TCCs), with which the proposed Project will work closely.

The most important stakeholders for the success of this project are listed in Table 4. The lead national partner of the proposed project will be the Ministry of Environment and Renewable Energy (MOE&RE). Other national partners include the Ministry of Agriculture, the Ministry of Export and Agriculture Development, the Department of Agriculture and the Natural Resources Management Centre (NRMC), Hadabima Authority, Land Use Policy Planning Department (LUPPD) of the Ministry of Land and Land Development, Department of Animal Production and Health and the provincial council. The community based organizations, such as farmer organizations and environmental groups, will contribute to and benefit from the project by participating in community level activities. The village level farmer organizations will adopt soil conservation measures in their farmlands. Scientific institutions will integrate science into the analysis and implementation of SLM, and the private sector will also play a role in implementation of SLM, especially in areas with plantation crops.

Table 4: Project Stakeholders

Agency name	Role in the project
Ministry of Environment and Renewable Energy (MOE&RE)	MOE&RE will play the coordinating role in close coordination with other partners implementing partners.
Ministry of Agriculture, Department of Agriculture (DOA) and Natural Resources Management Centre (NRMC)	DOA is responsible for training, dissemination and communication of information, including mass media communication (electronic and print). NRMC is responsible for the national extension system, which will support relevant activities in the field in all selected farming systems.
Ministry of Land and Land Development, Land Use Policy Planning Department (LUPPD)	LUPPD will be closely involved in implementing the Participatory Land Use Development (PLUD) component of the project, which will be based on its existing guidelines that will be updated by the Project. The Ministry of Land is also responsible for land title registration through its Survey Department.

Ministry of Export and Agriculture Development, Export Agriculture Department	Responsible for export agriculture crops extension system, which will support relevant field activities of the project that focus on export crops.
Hadabima Authority	Responsible for community-based agricultural programme operating in the selected Districts that provide incentives and training to farmers to undertake soil and water conservation on their farms. It also supports Farmer Field Schools (FFS) and Farmer Business Schools (FBS). The Project will build on these initiatives to scale up SLM at watershed level.
The Mahaweli Authoriy and the Department of Animal Production and Health	Responsible for training and extension network on livestock management.
Tea Research Institute (TRI)	Responsible for tea crops extension system that will support project activities in marginal tea areas.
Provincial Councils, Director of Agriculture (PDOA)	Responsible for the provincial extension system that is mostly concerned with annual crops. It will be closely involved in implementation of field activities in vegetable cultivations
Tea Small Holdings Development Authority (TSHDA)	Responsible for training and extension of tea smallholders. I supports soil and water conservation and the use of organic fertilizers.
Farmer organizations, including Women's groups/organizations	Beneficiaries as well as collaborative partners that will be engaged in field activities of the project, and participate in FFS and FBS to support training in new SLM technologies, marketing, etc.
Non-Governmental Organizations (NGOs), village level Community Based Organizations (CBOs)	1. Laksetha Sahana Sewa 2.Green Movement 3.Nature Volunteers These NGOs will be involved in outreach, training and awareness programmes for farmers.
University of Peradeniya (UOP)	Postgraduate Institute of Agriculture – will be responsible for supervising students doing field work in the project, in collaboration with the PMU. Faculty of Agriculture – will conduct valuation of ecosystem services.
Private sector, especially regional tea companies	1. Thalawakele Plantation 2. Lankem Plantations 3. Mc Woods Plantation These tea companies will be involved in, and co-finance, demonstration activities on improved management of marginal tea lands.

C. RATIONALE

Baseline Initiatives and Investments

Under the baseline scenario, the Government of Sri Lanka will continue with its efforts to reduce land degradation via existing programmes and projects using its existing institutional and regulatory framework. The following programmes and projects constitute the baseline upon which the proposed GEF project will build upon:

National Land Title Registration Programme

The Ministry of Land and Land Development is currently undertaking, with its own resources, the continuation and scaling up of the pilot National Land Title Registration Program initially funded by the World Bank. This is being done through the implementation of systematic land title registration and regularization in ten districts including: Kandy, Badulla, Monaragala, Hambantota, Kurunegala, Polonnaruwa, Gampaha, Colombo, Ratnapura, and Trincomalee. The activity involves the updating of land transfers records, clarification of land boundaries and land disputes resolution, and issuing concerning titles and registration. It is expected that this programme will provide solutions to tenure security for private and state lands through:

- The transformation of the deeds registration system into a title registration one;
- Clarification and determination of land ownership where ownership is unclear;
- Development of a Land Information System for a better land tenure management.

These activities aim at improving the tenure security of the land in Sri Lanka, thereby leading to increased incentives of owners for sustainable land management. Even though the government of Sri Lanka estimates it will invest around USD10 million under this programme, it is not included as co-financing as it would benefit the project indirectly. The proposed GEF project, building on this baseline investment, will provide information and better understanding of the status of land resources, will strengthen the farmers' capacity to manage the land they have at their disposal, and enhance the planning capacity of the local and national technical institutions through development of land management decision-support tools.

Extension and training networks

The government of Sri Lanka has been attempting to disseminate soil conservations measures to farmers in the Central Highlands through extension and training networks managed by various institutions and Ministries. These institutions can be classified as: (i) institutions managed by the central government, and (ii) institutions managed by the provincial council. While the Ministry of Agriculture collaborates with the Natural Resource Management Centre to provide training services, the Department of Agriculture has also its own extension service with the objective of transferring technology to farmers. The *Hadabima* Authority has also its own training units. The Ministry of Plantation Industries has the Tea Research Institute (TRI), and the Tea Small Holdings Development Authority maintain their training network. Also the Department of Export Agriculture is engaged in training activities under the Ministry of Minor Export Crop Promotion. The *Mahaweli* Authoriy of Sri Lanka and the Department of Animal

Production and Health have their own training and extension network. The Provincial Council has deployed one agricultural instructor for every 2,000 farm families.

The existing training and extension institutions deliver a diverse mix of training courses and play a vital role in disseminating knowledge and imparting skills. The majority of the courses focus on soil erosion and land degradation. The Ministry of Agriculture has allocated Rs 0.9 million for its training activities in 2012 whereas the Natural Resource Management Centre (NRMC) of the Department of Agriculture spends over 1.1 million on its training activities. While the *Hadabima* Authority spends over Rs 5 million per year on its training programmes, the *Mahaweli* Authority of Sri Lanka has allocated Rs 1.25 million for training this year. The Tea Research Institute has started spending Rs 2.2 million for its training activities. Highest allocation for training is recorded by the Department of Export Agriculture which amounts to Rs 26.6 million in 2012. The Sugar Cane Research Institute also has allocated Rs 8.0 million for training in 2012.

A major weakness of this extension system is the lack of coordination among the different institutions, and therefore the information disseminated is not consistent and neither are the training methods. The incremental GEF investment by the proposed project will strengthen the coordination of networks of training and extension for sustainable land management and prepare and disseminate common manuals, training tools and curricula to the project area and countrywide.

Promotion of Sustainable Land Management (SLM) Practices

Several baseline activities have been implemented and are on-going to promote the adoption and utilization of SLM practices by the farmers, including the utilization of organic manure and the implementation of soil conservation techniques. Overall, the government has invested nearly 2 billion Rupees in these activities The activities implemented by the Ministry of Agriculture include (i) Implementation of the Soil Conservation Act and Soil Conservation Programmes, (ii) *Api Wawamu Rata Nagamu* Programme: promotion of home gardening, use of organic fertilizer, among others, to increase food production, (iii) Research and development for introducing modern technology and enhancing value addition in agriculture, and (iv) Production of organic fertilizer programme. The proposed GEF project will build on these baseline programmes and activities to upscale the application of proven SLM technologies and good practices to a larger landscape level in the Central Highlands.

Protection of environmental benefits through Corporate Social Responsibility (CSR) actions

In Sri Lanka, Corporate Social Responsibility (CSR) actions have been on-going for several years now. Those activities have been focusing on various aspects of social life, including environmental issues. Both national and multinational companies operating in the country have developed their own system to meet such kind of commitments. Nonetheless, still no financial scheme has been put in place that links the private sector's commitment and interest with the generation of environmental benefits by land users, such as in a Payment for Ecosystem Services (PES) scheme or in a carbon trading agreement.

Tea Research Institute (TRI)

The Tea Research Institute (TRI) has declared 2015 as the 'Year of Adoption of TRI Recommendations'. With respect to soil fertility management the TRI promotes to adopt soil conservation through improvement of the condition of drains, terraces and Sloping Agricultural Land Technology (SALT). Under soil improvement adoption the emphasis was made on green manure crops and burying of prunings. Soil conservation adoption has exceeded 45 %.

Hadabima Authority

Hadabima Authority of Sri Lanka has initiated a main development programme in 2011 covering Kandy, Matale, Kurunagela, Rathnapura and Kegalle districts under treasury funds and 14 special projects in Kandy, Monaragela, Badulla, Hambantota, Matara, Anuradhapura, Nuwaraeliya and Kurunagela Districts under the Ministry (MOA) funds. The main programme was planned to implement during three years considering soil conservation and watershed management as the activity in the first year. Sub-activities were: Participatory rural agricultural development planning; Training of selected community leaders; Soil conservation field training; Implementing soil conservation activities; Distribution of inputs & incentives; and Short term crop cultivation programme. These sub activities were performed in 7500 acres with the participation of 10,000 farmer families.

Government Subsidy Programme

A programme has been initiated according to the 2014 budget speech for granting the subsidy of Rs.5000/- per acre annually to the tea smallholders for water and soil conservation in tea lands. Through this programme, it is primarily envisaged to improve soil condition of the lands of tea small holders who make a significant contribution to the economy of the country, regularize the application of fertilizer and optimize the water conservation. The final result is to enhance the productivity and uplift living standard of the tea small holders thereby.

Ministry of Agriculture (MOA)

Soil erosion has become a grave environmental and socio-economic problem. The soil erosion is caused by irregular and unsafe human activities, the ultimate results of which are land degradation and silt depositing in natural water ways and irrigation tanks. Therefore, the Ministry of Agriculture has initiated various measures at district level to educate the public, particularly the farmer community on the importance of soil conservation. They include conducting of training and demonstration programmes, providing instructions and supporting services. Beneficiaries of the project are all Sri Lankans including the farmer community. Services provided to people under this project are:

- Assistance is provided for conservation of soil in land prone to soil erosion in the extent of $^1/_4$ acre to 1 acre.
- Instructions are given for soil conservation method/methods to be adopted in accordance with the location of the land. These could be obtained from Divisional Agriculture Officer under the supervision of the District Director of Agriculture.
- Subsidies in various forms are given for undertaking soil conservation activities.

In addition, planting materials are provided under 50% farmer contribution for cultivation in lands protected with soil conservation measures.

Ministry of Environment and Renewable Energy (MOE&RE)

Ministry of Environment and Renewable Energy implements a series of programmes, which are of some relevance directly or indirectly to the SLM approach.

Green Village Programme

The Green Village Programme has been initiated by the Ministry of Environment and Renewable Energy to achieve rural development through environment friendly agriculture. Restoration of the degraded lands and conservation of un-degraded lands are the key expected outcomes while conservation of forests, water resources and promotion of organic agriculture are the secondary objectives of the Green Village Programme. The programme was launched in 2008 and the model villages were established island-wide. Construction of pathways, planting of root bowled trees and establishment of flower beds were completed under stage-1.

Rehabilitation of Degraded Lands

The Ministry of Environment & Renewable Energy initiated a pilot project for rehabilitation of degraded lands in Walapane Divisional Secretariat, applying a number of domestic technologies introduced by the Natural Resources Management Centre (NRMC) of the Department of Agriculture (DOA). An awareness program was conducted in order to promote technologies that can be applied in farmlands degraded by soil erosion, drought and several other factors.

Review of the National Status Report for Combating Land Degradation

In order to meet the country obligation under the United Nations Convention on Combat Desertification (UNCCD), Sri Lanka has prepared second part of the Fourth National Communication on Land Degradation. It was reviewed according to the UNCCD 10 year strategic framework (2008-2018) and mainly focused on five operational objectives in the 10-year strategy. In addition to the above the best practices on sustainable land management technology, including adaptation and information of the past projects implemented related to land degradation were also included. That report has been completed and submitted to UNCCD Secretariat for considering at the Eleventh Session of the Committee of Review of the Implementation of the Convention (CRTC II).

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

Adhering to the UNCCD guidelines and considering the need for implementing the NAP, Sri Lanka is formulating an Integrated Financial Strategy (IFS) for Sustainable Land Management (SLM). The ultimate goal of the IFS is to create an enabling environment for mobilizing internal, external and innovative resources to provide an investment framework for SLM. The development of the IFS is linked to component 3 of the Project on Innovative Sources of SLM funding.

FAO Projects related to SLM in Sri Lanka

FAO has a large and growing portfolio of agriculture and natural resources management projects in its portfolio, and the most relevant one for this Project include:

European Union Support to District Development Programme (GCP/SRL/062/EC)

The project is funded by European Union with a Grant Amount: of EUR 13,320,000 and implemented during the period from July 2012 to June 2017. The total project is being implemented by UN agencies and the FAO Action aims at 'Poverty reduction through agricultural development & Provision of basic infrastructure & services for the vulnerable populations'. Local implementing partners are Department of Agriculture, Department of Animal Production and health, Department of Fisheries, NAQDA, Department of Agrarian Development and Department of Irrigation. The FAO has planned the following four activities of relevance to the proposed Project:

- Enhancement of income generation by supporting crop production, irrigation, livestock and inland and marine fisheries
- Improvement and sustained livelihoods through production increase, post-harvest technology and diversification for small scale primary producers
- Improved infrastructure offering services for local productive activities
- Strengthening capacity of Producer Organizations and local service providers/ institutions

Forestry Development (UNJP/SRL/064/UNJ)

The project is funded by the MPTF - UN - REDD Programme with a Grant Amount: of USD 4,000,000 and implemented during the period from June 2013 to May 2016. Implementing Agency is the Forest Department of the Ministry of Environment & Renewable Energy.

Management of Risks Associated with Pesticide Use in Agriculture in Sri Lanka TCP/SRL/ 3402)

The project aims at enhancing the Judicious use of pesticides by vegetable and paddy farmers in the Central, North Central, North Western and Western Provinces of Sri Lanka with regular pesticide residue monitoring system in place, minimizing environmental pollution threat from empty pesticide containers and enhancing the use of bio-pesticides in agriculture and overall promotion of good agriculture practices providing safe and healthy food for the nation. The project is funded by FAO with a Grant Amount: of USD 271,000 and implemented during the period from August 2013 to July 2015. Implementing Agency is FAO, Sri Lanka.

Despite the above mentioned efforts, adoption of SLM principles in land management and agricultural production system continues to be hampered due to policy, institutional, knowledge, and financial barriers. However, GEF incremental financing will contribute to the creation of an enabling environment for SLM, and to facilitate the creation of conditions necessary to establish new and innovative sources of financing for environmental services to incentivize farmers to undertake innovations in their farming practices towards a more sustainable management of land resources. Baseline sources of funding are summarized the Table 5 below.

Table 5: Summary of co-funding baseline projects: Co-financing for 2015, through the Annual Budget and total co-financing for 4 years.

Summary of co-financing	Co-financing, Million USD
01 - DOA	5.7200
02 - LUPPD	0.1541
03 - Forest Dept	0.6154
04 - Hadabima authority	2.0877
05 - MOERE	0.1685
06 - Irrigation Dept	0.0308
07 - UVA	0.1877
08 - Mahaweli Authority	0.7018
09 - Central Province	0.0731
10 - FAO	0.1200
Total	**9.8591**

Co-financing source	Amount in Letters Rs., millions	Annual cofinancing USD, millions	4 year period USD, millions
01 - DOA			
1. Land + land improvement	70.00	0.54	2.1600
2. BD garden	40.00	0.31	1.2400
3. Seed farm	60.00	0.46	1.8400
4. SCA	15.00	0.12	0.4800
Subtotal DOA			5.7200
02 - LUPPD			
1. LUP	6.25		0.0481
2. Maps + GIS	5.66		0.0435
3. LU models	8.13		0.0625
Subtotal LUPPD			0.1541
03 - Forest Dept			
1. Hilltop replantation	40.00		0.3077
2. Surveying and boundary	40.00		0.3077
Subtotal Forest Dept	80.00		0.6154
04 - Hadabima authority			
1. RDP	2.20		0.0169
2. Farmer training	2.20		0.0169
3. LDP	1.00		0.0077
4. Soil conservation - equipment	29.45		0.2265
4. Soil conservation- practices	173.32		1.3332

5. Crop Productivity program	58.63		0.4510
6. Model units	4.60		0.0354
Subtotal Hadabmia Authority	271.40		2.0877
05 - MOERE			
1. Home gardens	1.11		0.0085
2. Drought tolerant crops	3.04		0.0234
3. Cash-for-work support	9.74		0.0749
4. Farmer organizations	8.02		0.0617
Subtotal MOERE	21.90		0.1685
06 - Irrigation Dept			
Budget	1.00	0.01	0.0308
Subtotal Irrigation Dept	1.00	0.01	0.0308
07 - UVA			
Budget	24.40		0.1877
Subtotal UVA	24.40		0.1877
08 - Mahaweli Authority			
1. Catchment management	15.31	0.12	0.4711
2. Training and awareness	3.00	0.02	0.0923
3. Hydro monitoring	4.50	0.03	0.1385
Subtotal Mahaweli Authority	22.81	0.18	0.7018
09 - Central Province			
Budget	9.50		0.0731
Subtotal Central Province	9.50	-	0.0731
10 - FAO			
TCP			0.1200
Subtotal			0.1200
Grand Total			**9.8591**

Incremental Reasoning (added value of the GEF financing)

As discussed above, the project will build on the existing institutional and regulatory frameworks, as well as on a series of field programmes and activities currently under way. GEF incremental support by component will consist of:

Component 1: Strengthening institutional, policy and regulatory frameworks for SLM. Incremental GEF support will catalyze the mainstreaming of SLM and participatory land-use planning into policy and regulatory frameworks in the agricultural sector and its different ministries and agencies. GEF support will enable stakeholders from national, district to divisional level to develop and adopt a package of policy revisions in six key policy areas that will in turn lead to the development of a coherent national SLM policy that will be adopted across sectors. Strengthening of capacity in participatory land use development, through preparation of guidelines, and development of maps and establishment of a database will inform policy and decision-making

on land resources development and upscaling of SLM, which is expected to put 50,000 ha of land in the Central Highlands under SLM.

Component 2: Implementation of identified SLM and land restoration technologies. GEF funding will be used to establish SLM demonstrations in four farming systems that suffer from severe land degradation, namely marginal tea land, poorly managed home gardens (i.e. Kandyan forest gardens), and low-input as well as high-input vegetable cultivations on steep slopes. The demonstration areas will cover a total of 10,000 ha of land where ecosystem services will be enhanced to deliver global environmental benefits, such as improved soil and sediment retention, improved water regulation, reduction of emission of greenhouse gases from poor land management, and improved provision of habitats for biodiversity. SLM practices that will be introduced include structural, vegetative and agronomic measures, as well as alternative income generating activities that will take pressure off the land.

Component 3: Support to development and implementation of innovative funding systems to promote SLM. GEF incremental funding will reinforce experiences from existing funding schemes, such as set-aside funds in public and private work contracts, by involving the private sector, NGOs and local stakeholder groups in identifying opportunities for innovative funding systems. Such systems could include Payment for Ecosystem Services (PES) schemes, establishment of Public-Private Partnerships (PPPs) in SLM, Corporate Social Responsibility (CSR) schemes, as well as accessing climate change finance for mitigation (i.e. carbon sequestration and reduction of methane emissions form agriculture) and adaptation to enhance the resilience of the agricultural sector.

Component 4: Knowledge management, awareness raising, and dissemination of best practices. GEF funding will be used to support SLM awareness campaigns that target key stakeholders such as government agencies, technical staff at district and divisional level, farmers, the private sector, NGOs and CBOs. GEF will fund the establishment of a monitoring and evaluation system, the establishment of a Project website as well as publication of regular newsletters. Experiences generated by the project will support adaptive results-based management, and they will also be widely disseminated to promote upscaling of SLM across Sri Lanka. Table 6 below summarizes the incremental cost reasoning applied in the design of the project.

Table 6: Incremental reasoning and Global Environmental Benefits

Current Practice	Alternative Scenario	Global Environmental Benefits
Unsustainable and erosion-prone agricultural practices usually applied by both smallholders and large estate farmers, e.g. vegetable and potato cultivation on steep land without adopting soil conservation measures, and use of marginal tea lands for seedling cultivation without proper soils and water	Sustainable land management that enhances soil health and increases soil productivity applied in the project area and upscaled to agricultural landscapes in the project districts.	Improved provision of agro-ecosystem goods and services through direct restoration and improved management of agricultural landscapes over 10,000 ha in the project area, and 40,000 ha through training and capacity building in home garden development, restoration of

conservation.		marginal tea lands, and improved management of vegetable cultivations on steep slopes
Unplanned and scattered interventions mostly left to the goodwill of individuals, leading to an inconsistent management of watersheds and landscapes	Participatory planning methods developed, disseminated and applied in the project area and upscaled to district level. Local authorities and private stakeholders sharing the responsibility for coordinated management of watersheds and agricultural landscapes	Upscaling of SLM in the longer term to the total land area of the three districts of 550,000 ha. Land productivity improved by 10% and soil loss reduced by 40% on agricultural land, leading to improved food security for 25,000 farm households. Reduction of N_2O and NO emissions by 5% on land use for intensive vegetable cultivation (750 ha) by reducing N fertilizer usage. Reduced vulnerability to impacts of climate change and variability, including impacts of soil erosion

Lessons learned from past and ongoing efforts, including evaluations

Sri Lanka has a long experience in implementing different kinds of land management projects. The more important experiences gained through the projects implemented so far to combat land degradation and promote sustainable land management include:

Selection of Sites: The value of using watersheds, preferably, sub-watersheds or micro- catchments as areas of intervention.

Incentives for Land Management: The limited value of recommending a set of soil conservation measures to land users and providing them with incentives in the form of subsidies and cash payments. By and large land users have been encouraged to change their current land use practices mainly through the provision of incentives including material inputs, food grants, and subsidies. This type of assistance may not be forthcoming after the projects have been terminated. Such an approach has not been very successful because the subsidies: (a) favoured the more affluent farmers; (b) increased the dependency of farmers on external agents; and (c) made farmers lose interest in conservation measures once the assistance was withdrawn. Ways to motivate land users in the absence of external assistance has to be investigated and grants need to be linked to changes in the watershed as a whole.

Farmer Participation: It is important to promote farmer participation through (a) programmes designed to make them aware of the consequences of increased land degradation, and (b) training programmes designed to provide the required technical knowledge. Several participatory approaches have been adopted in promoting the sustainable use of land and water resources. In some projects the beneficiaries have been involved in participatory analysis to assess current resource use and future implications and to formulate a future plan of action. Some of the processes have been extended to involve beneficiaries from the planning stage through implementation and final assessment. In other projects the beneficiaries have been given the entire responsibility for managing the land and water resources in their respective areas. Participatory Land Use Planning methods (PLUP) are useful in this context.

Capacity of Implementing Agencies: It has been found that the strengthening of the implementing capacity of existing national and sub- national institutions should go in hand in hand with the building of local level and grassroots level institutions.

Tested Methods: In many instances new land use systems and technological packages have been introduced that are still in an experimental stage. Refinements and changes will have to be made in these systems before they can be replicated elsewhere.

Up-scaling to land users: Improved technologies have been transferred to beneficiaries both directly and indirectly. Direct transfers have been made either individually or through the formation of user groups. Indirect transfers have been in projects not directly involved in large scale field implementation. The area of focus of the projects has changed over time. In the early projects the focus was on the land and the interventions were designed to conserve and stabilize areas that had been degraded. In the later projects the emphasis has shifted from the land to the land users. The importance of focusing on land users rather on the land has been recognized. To combat Land Degradation there is a need to combine the transfer of technology to land users with the provision of required infrastructure and the building up of a database.

Institutional aspects: The large number of Ministries and agencies responsible for various activities and difficulty of coordinating among them needs to be addressed. Moreover, the authority of the National Steering Committee under the UNCCD NAP was not strong enough. There may therefore be the need for two separate Technical Coordinating Committees (TCCs) - one related to agricultural related land degradation issues, and another which looks at other activities, for example, illegal logging, gemming etc. Chair of the each TCC should be with the Ministry which has most of the activities coming under their purview.

In addition, the devolved nature of authority, especially in the agriculture field, makes it difficult to implement decisions taken at the national level. The Provincial Directors of Agriculture believe that there should be only one agency steering land issues at the policy level. Since coordination is difficult, decision making should be at national level and implementation should be decentralized to provincial level. Finally, protection through import substitution policies exacerbates soil eroding cropping practices. There is no adequate action for increasing the efficiency of farming to crops where protection has been given.

Monitoring and Evaluation: It appears that many activities are not subject to periodic monitoring and evaluation. Hardly any actions have been taken against those who violated laws pertaining to

land degradation due to lack of monitoring. Neither are positive impacts of SLM monitored in terms of yield increases and economic gains, which could serve to convince land users to adopt and scale up improved practices.

Other considerations: In most projects appropriate technologies and land use systems have been tested, developed, and introduced to land users mainly with the intention of minimizing land degradation. The need to step up the productivity of agricultural lands in a sub-watershed for reasons other than land degradation has not been sufficiently stressed. In most projects emphasis has been placed on the management of land resources. While the management of land resources may be important in sloping areas where water is not a constraint on production, water management could assume greater importance in water-deficit areas.

Land degradation is certainly an important issue affecting the use of land, and merits the attention that it has received. However, there are other issues affecting the use of land that are perhaps of equal importance. In fact some of these issues, such as insecure tenure, represent the underlying causes of land degradation. Such issues have not been adequately considered. In combating land degradation the importance of concentrating initially on the poorer segments of the farming population within the critical areas rather than on all the land users has been recognized.

The proposed Project integrates these lessons in its main components that combine legal, policy and institutional reform in support of SLM, with promotion of appropriate SLM technologies, and capacity building to access innovative funding mechanisms for scaling up of SLM. It will mainstream SLM into land-use planning and create economic incentives for land-users to engage in sustainable land management practices. The project will pay special attention to the role of rural women in natural resources management and support this role through capacity building.

D. FAO's COMPARATIVE ADVANTAGE

The country of Ceylon became a member nation of the Food and Agricultural Organization of the United Nations in 1948 and development support to Ceylon's agriculture and livestock sectors dates back to 1953. Since then, FAO has played an active role through trust fund arrangements and with the Technical Cooperation Programme to address government's national needs and priorities within the sectors of agriculture, animal husbandry, fisheries and forestry. The government and the people of Sri Lanka have significantly benefited from the technical expertise and support provided by FAO over time.

FAO has worked to assist the people of Sri Lanka by supporting the government in policy planning and legislation, while implementing projects and programmes to address needs and priorities in the different sectors. Given its wide spectrum of technical expertise, FAO has assisted in the collection, analysis, interpretation and dissemination of information related to food, nutrition, agriculture, forestry and fisheries that has provided farmers, scientists, government planners and the private sector with the information required to make rational decisions on planning, investment, marketing, research and training. A new planning exercise is now underway between FAO and the government to prioritize needs within each mandated sector for the next 5 years.

By providing the government with independent advice on agricultural policy and planning, FAO has assisted in the establishment of structures needed for development, which include national

strategies for development, programmes for food security and the alleviation of poverty. FAO's neutral forum has given Sri Lanka the opportunity to actively participate at many international conventions and major conferences, technical meetings and expert consultations which have paved the way for implementation of new policies targeted to bring about better management of resources. Also, the World Agricultural Information Centre has provided Sri Lanka with a gateway to FAO's wealth of data and analysis on agriculture, forestry, fisheries and rural development in a variety of forms including electronic/web based resources. A key contribution from FAO has been in the capacity building of government staff and departments. Over the years, FAO through various donor funded programmes has provided numerous long-term fellowships leading to post graduate degrees as well as regular short term international training programmes. Many trained officers have subsequently provided training to many farmers, directly impacting food security and livelihoods.

Regarding the technical aspects of this project, FAO has a long and solid experience in land use planning and sustainable land management, specifically focused on rural development and livelihood support. In particular, in recent years FAO has been executing the GEF-funded Land Degradation Assessment in Drylands project (LADA), that has developed several tools and methods for the assessment of land degradation in all kind of environment and climate, allowing the understanding of the causes of land degradation and the identification of the most appropriate measures to combat it. Moreover, LADA has developed a strong collaboration with the WOCAT network, reinforcing the capacity of disseminating the information on the SLM measures in terms of technologies and approaches. Also, FAO has developed a well-structured methodology for participatory land use planning and development at the local level (PLUD), already successfully applied in several countries, including island States like Philippines and Haiti.

A major advantage of FAO is its multidisciplinary expertise and capacity. FAO has for many years developed a range of **integrated landscape and ecosystem approaches** to facilitate collaboration across sectors and scales so as to improve natural resources management, make best use of resources and inputs and optimize productivity. Technical and policy guidelines are available on integrated watershed or river basin management, mountain/ highland, wetland and coastal area management, conservation and sustainable use of agricultural biodiversity, agro-silvopastoral systems, and more recently climate smart agriculture, and the food, water, energy nexus. Under FAO's Strategic Objective 2, Major Areas of Work are being developed with a view to enhance resource use efficiencies, optimize the use of inputs and sustain the range of ecosystem functions (provisioning of food, fibre, energy, soil health, water quality, cultural values and conservation of biodiversity) and enhance climate change adaptation and mitigation.

FAO will provide co-financing through a sub-regional TCP project in the amount of 122,000 USD, to provide technical assistance for the establishment of capacity for land degradation and SLM assessment following the LADA-WOCAT methodology.

E. LINKS TO NATIONAL DEVELOPMENT GOALS, STATEGIES, PLANS, POLICY AND LEGISLATION, GEF/LDCF/SCCF AND FAO'S STRATEGIC OBJECTIVES

Alignment to National Development Goals and Policies

Mahinda Chintana —Vision for the Future

The Development Policy Framework of the Government of Sri Lanka for 2010-2016 has set targets for development with the objective of transforming Sri Lanka into becoming the strategic economic hub of Asia. In this context, striking a balance between environmental conservation and economic development is extremely important in order to maintain sustainability and to conserve the natural resource base while meeting development needs. Therefore, the *Mahinda Chintana* development framework has identified environment as a major area of concern. In the Development Framework of the Government, among other objectives under environmental conservation, special emphasis has been set for land degradation. It says 'Land degradation will be reduced through the implementation of appropriate technology and enforcement of relevant legislation'. Under these circumstances, it is evident that the government has accorded high priority for land degradation, in its national agenda.

The government's broad vision for environmental conservation in the development framework has been transformed into a detailed action plan called 'National Action Plan for the Haritha Lanka (Green Lanka) Programme 2010-2016. It has set 10 missions namely: (i) *Clean Air - Everywhere, (ii) Saving the Fauna, Flora and Ecosystems, (iii) Meeting the Challenges of Climate Change, (iv) Wise Use of the Coastal Belt and the Sea Around, (v) Responsible Use of the Land Resources, (vi) Doing Away with the Dumps, (vii) Water for All and Always, (viii) Green Cities for Health and Prosperity, (ix) Greening the Industries, and (x) Knowledge for Right* Choices. *The fifth* objective refers to responsible use of land resources. In order to implement the strategies and actions in the Haritha Lanka programme, the government has established a National Council for Sustainable Development (NCSD) which is chaired by HE the President.

The United Nations Convention to Combat Desertification (UNCCD)

Sri Lanka signed in 1995 and ratified in 1998 the United Nations Convention to Combat Desertification (UNCCD) as the country experiences severe land degradation and droughts. As a party to the convention, Sri Lanka was expected to prepare and implement a *National Action Programme (NAP)* to identify the cause and effect relationships contributing to land degradation and measures necessary to arrest land degradation. By now, the Ministry of Environment has initiated action to align the NAP with 10 year strategy of the UNCCD. The NAP identifies main programmes as well as supportive programmes to arrest land degradation. The goals and objectives of NAP clearly identify land degradation and mitigation of the effects of drought as its main objective. In section 5.3 under Approach and Strategy of the NAP, it proposes the following strategies:

5.3.1 Adopt an integrated management approach to the management of land resources

5.3.2 In place of present command and control approach in the management of land resources, promote stakeholder participation in planning, implementation, monitoring and evaluation

5.3.3 Mainstream poverty alleviation into the national development agenda relating to conservation of land resources

5.3.4 Empower sub national level and local level agencies to implement NAP activities.

The action programmes proposed in section 5.4.1 in the NAP consists of (a) main programmes and (b) supportive programmes, and includes subsection 5.4.1.2 *Rehabilitate degraded agricultural lands* as a main programme. Recommended actions under the latter programme are:

(a) *Undertake soil erosion hazard classification and mapping of degraded land and prepare land suitability map;*
(b) *Promote proven low-cost soil improvement practices, vegetative conservation techniques, agronomic practices and agroforestry systems in degraded areas through demonstrations and awareness creation programmes;*
(c) *Conduct further research studies on soil fertility improvement measures, conservation farming practices, home garden models, and agroforestry systems including livestock;*
(d) *Promote and implement organic farming and other nutrient management programmes in degraded agricultural areas;*
(f) *Rehabilitate degraded tea lands in the upcountry and mid country intermediate zones and other field crops in the Dry Zone and Mid Country Intermediate Zones; Introduce better irrigation management practices/technologies to reduce soil erosion. Provide incentives through a revolving fund, improved seeds etc, and promote farmers self-help programmes for production and conservation through training and demonstrations; and*
(g) *Promote off farm employment in order to reduce encroachment into fragile areas by subsistence farmers.*

Though the 2002 NAP was a very comprehensive plan, it had its drawbacks. As per the plan, each agency was supposed to develop proposals and seek funds from the treasury or other sources. However, the Steering/coordinating committee which met infrequently was not able to ensure agencies complied with this decision. Hence, implementation was ad hoc and not coordinated. At present action has been taken to align and revised the **National Action Programme for the period 2015 to 2024**. Under the new programme, it is proposed to have a more coordinated approach through technical committees and a National Steering Committee comprising mainly of Ministry Secretaries. The Technical Committees will comprise of officers from lead agencies and supporting agencies responsible for each program. The TCs will plan the activities; identify resource requirements, arrange for sharing of the resources, coordinates among relevant agencies and the NSC. Implementation shall be through the existing mechanisms of each agency. The proposed project will directly implement the main programmes in the NAP outlined above and some of the actions recommended. It will work through appropriate TCs under the overall guidance of the NSC, and will thus contribute to strengthening the mechanisms for the implementation of the NAP of the UNCCD.

Other international conventions

Furthermore, Sri Lanka has signed and ratified the other two sister Rio Conventions, these are the Convention on Biodiversity (CBD) and the Framework Convention on Climate Change (UNFCCC). The Ministry of Environment acts as the focal point for all the three conventions. The project supports the overall goal and objectives of biodiversity conservation set out in the National Biodiversity Strategy and Action Plan (Biodiversity Conservation in Sri Lanka: A Framework for Action) through protection of forest and agriculture ecosystems. The project also contributes to implementing mitigation options expressed in the Second National Communication on Climate Change (2011).

National programs and plans

The Five Year Cooperate Plan of the Ministry of Agriculture (2011-2015) has identified the conservation of environment and natural resources through sustainable land use practices as a strategic goal of the Ministry along with the national goals of *Mahinda Chintana.* Under the recommended actions, implementation of the Soil Conservation Act, Plant Protection Act, Pesticides Control Act and promotion of use of organic fertilizers and awareness creation are of great importance and are in very good accordance with the objectives of the proposed project. It is also worth noting that in the NAP both the Ministry of Environment and the Ministry of Agriculture have been identified as implementing agencies of the Soil Conservation Act.

The National Land Use Policy (2007) has been formulated to ensure optimal productivity of the limited land resource. From the productivity point of view, the policy identifies that the situation is unsatisfactory since most of the lands that have been brought under cultivation does not produce the expected yields. Therefore the land use policy proposes rational use of land as a resource, in the national interest and in order to ensure food security, a high quality of life, equity and environmental sustainability.

The government's growing concerns about environmental issues and in particular land degradation over the past three decades or so, is reflected in policy initiatives, enactments, legislations as well as formulation of plans and strategies. Among them, the National Forestry Policy (1996), the National Policy framework of the Ministry of Agriculture Lands and Forests (1995), the National Land Use Policy (1996), the National Water Policy (2000), the National Agriculture Food and Nutrition Strategy (1984), the National Conservation Strategy (1988), the National Environmental Action Plan (1992), the Forestry Sector Master Plan (1995), the Coastal Zone Management Plan (2000), the National Disaster Management Plan (1999), the National Environment Policy (2007), the National Policy on Sand for the Construction Industry (2006), the Upper Watershed Management Policy (2008), the National Wetland Policy (2006), the Involuntary Resettlement Policy (2002) and the Green Lanka program (2008) show the government's dedication for environmental conservation and land management.

Alignment with FAO Strategic Framework and Objectives

This Project is aligned with FAO's Global Strategic Objective 2 (SO2)**:** *Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner. The Project's focus* to help local communities improve their land management practices while benefiting their own livelihoods will contribute in particular Organizational Outcome 1 (OO1) under SO2: *Producers and Natural Resource Managers Adopt Practices that Increase and Improve the Provision of Goods and Services in the Agricultural Sector Production Systems in a Sustainable Manner.* In addition, the Project's work to strengthen the relevant policy framework in Sri Lanka will contribute to SO2, OO2: *Stakeholders in member countries strengthen governance – the policies, laws, management frameworks and institutions that are needed to support producers and resource managers – in the transition to sustainable agricultural sector production system.*

At the national level, the Project is fully consistent with the "*FAO Country Programming Framework (CPF) for Sri Lanka (2013-2017)*". It will contribute to the CPF's priorities on 1) "Achieving Sustainable Food and Nutrition Security in the Country while Developing the Livelihood of Rural Agricultural Sector", which has three sub-sectors: food crops, livestock, and

fisheries, and 2) "Preserving and Rehabilitation of Forestry and Biodiversity of Forestry". All the priority areas are coherent to FAO sub-regional strategy for Asia-Pacific, such as: RS1: strengthening food and nutritional security, RS2: fostering agricultural production and rural development, RS3: enhancing equitable, productive and sustainable natural resource management and utilization and RS4: improving capacity to respond to food and agricultural threats and emergencies as well as the FAO guidelines on integrating gender issues into the CPF. It is also in harmony with UNDAF priorities such as Pillar 1: equitable economic growth and sustainable livelihoods, Pillar2: disparity reduction, equitable and quality social services and Pillar 4: environmental sustainability, climate change and disaster risk reduction (UNDAF).

Alignment with GEF Focal Areas

The project 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 to support the decision making process in the management of productive landscapes and to improve the community-based management of agricultural land. This will be achieved through the strengthening of the policy, institutional and regulatory frameworks of the partner institutions and the reinforcement of the partners' capacity of producing, managing and acting on information relevant to land resource management.

The project also addresses the Objective LD3 - Reduce pressures on natural resources from competing land uses in the wider landscape - by building technical and institutional capacity at country level for the harmonized and consistent management of landscapes and watersheds. This will be achieved by dissemination of SLM technologies and approaches tested in the three Districts to technical partners operating all over the Country. In addition, the project will promote the implementation of innovative funding mechanisms to support the implementation of SLM practices. The project will also contribute to meeting the international obligations of the country under the Climate Change Convention through reduced GHG emissions.

2. PROJECT FRAMEWORK AND EXPECTED RESULTS

A. PROJECT STRATEGY (OBJECTIVE, OUTCOMES, OUTPUTS)

The Project Environment Objective is to reverse and arrest land degradation in agricultural lands in Kandy, Nuwara Eliya and Badulla districts in the Central Highlands of Sri Lanka. The Project Development Objective is to increase the provision of ecosystem goods and services and enhance food security in the Central Highlands of Sri Lanka through the promotion of SLM. The Objectives will be achieved through the realization of four Outcomes and associated Outputs. The first Outcome focuses on the enabling environment for SLM through improving the policy framework for SLM and coordination among sectors, and ensuring that participatory land use development (PLUD) principles and practices are applied. The second Outcome focuses on implementation of identified land restoration technologies and approaches in the affected areas of the three districts through a participatory process leading to scaling up of SLM. The third Outcome further supports upscaling of SLM by building capacity to develop and implement innovative funding mechanisms to promote SLM. Outcome four on knowledge management, awareness raising and dissemination of

best practices will harness lessons from Outcomes 1, 2 and 3 that will continuously be fed into the planning and design of activities and contribute to strengthening the enabling environment for SLM in Sri Lanka as well as to results-based management of the Project.

Outcome 1: Enabling institutional, policy and regulatory frameworks for SLM established and operational in accordance with participatory land use development (PLUD) principles

This Outcome focuses on removing barriers related to (i) lack of enabling policy and regulatory frameworks; (ii) weak institutional capacity for SLM; and lack of coordination among different extension and training agencies. The Natural Resources Management Centre (NRMC) of the Department of Agriculture recently initiated an awareness programme about the importance of conserving soils and the laws under the Soil Conservation Act. These are steps in the right direction, but it is also necessary to integrate zoning of land use and restrictions to conversion of land, to modify policies and standards so as to come up with a coherent SLM policy. Moreover, such a policy should be implemented based on evidence-based decision making, and appropriate decision-making tools are to date lacking. These gaps will be closed through the following five outputs:

Output 1.1 Guidelines for PLUD established and agreed among the involved agencies for coordinated action

This output involves the development of participatory land-use planning (PLUP) guidelines and agreement on the guidelines among concerned sectors, especially environment, agriculture and water resources management. PLUD involves creating a sustainable territorial balance between socio-economic development and environmental conservation through improvements in local participation and development of land use plans and socio-economic networks at village level.

The Land Use Policy Planning Department of the Ministry of Lands (LUPPD) has developed guidelines for land use planning that will be updated. The most recent were published in 2013 and were based on the guidelines prepared in 2005. The guidelines are comprehensive and include components such as land use suitability information, land use maps, soil maps, land data bank and land use committees at different levels including, national, divisional and village level. The guidelines have identified 5 land suitability classes: (i) Highly Suitable; (ii) Average suitability; (iii) Marginally suitable; (iv) Not suitable now; and (v) Not suitable at all.

Suitability mapping is based on the cropping pattern and has identified the characteristics a land unit should have for a particular cropping pattern or crop. A questionnaire in the guidelines, to prepare a report on land use suitability include information such as administrative details including land tenure status, present land use pattern and management status, buildings, socio-economic status of the household, infrastructure facilities, access to service centres, utilities available, etc. Parameters considered in determining land use suitability include factors such as: slope, soil depth, erosion status, soil structure, drainage condition, whether land has rocks/stones, irrigation facilities, transportation of inputs and outputs. Based on this information a land suitability report is prepared with recommendations.

The guidelines also include land use planning at micro-catchment or village level. Since the proposed project will be considering this aspect the guideline will be very useful and the steps suggested are:

1. Selection of the watershed within the identified DS division.
2. Installing land use committees at the village or water shed level.
3. Collection of socio economic data with respect to the selected site through questionnaire surveys and secondary data,
4. Identification of areas where land use pattern needs to be changed and areas where improvements are needed. Here the views and suggestions of participating villagers are important.
5. The land use proposal to be discussed with land uses committee and plan an implementation schedule.
6. Final suggestions to sustain the initiatives.

Output 1.2 A package of modifications in policies and standards for SLM and good agricultural practices

Policies in six areas will be modified: (i) geographical boundaries as a basis for SLM planning will be integrated into existing policies; (ii) relevant traditional practices will be promoted: (iii) standardization of inputs (including organic) will be promoted: (iv) trade policy related to SLM will be revised with special focus on import substitution policies; (v) legal procedures to mitigate land degradation will be strengthened; and (vi) soil fertility testing will be made mandatory for areas where inputs are overused compared to recommendations from extension agents.

Output 1.3 National SLM policy endorsed

Based on the revision of policies in six areas under 1.2, a more coherent national SLM policy will be formulated and endorsed by concerned sectors, which will make it possible to factor in SLM into sectoral planning and budgeting, in the following sectors: Agriculture and Fisheries, Water Supply and Sanitation, and Forestry. The Project will explore the possibility to amend the Watershed Management Act to identify an apex authority for coordination of SLM activities. It will also be important to consider issues of land rights to expedite title registration to address the underlying problem of unclear and insecure land tenure.

Output 1.4 Establishment of a new coordination and information sharing platform among the stakeholders

Under this output, an ICT-based SLM coordination and information sharing platform will be established under the auspices of the Ministry of Environment and Renewable Energy, in its capacity as the UNCCD focal point of Sri Lanka. The platform will be hosted by the NRMC and make use of ICT available to local land users, such as mobile phones for transmission of information, as well as radio and audio visual material. It will also store GIS-based maps of land degradation and SLM that will be produced under Output 1.5 and make them available to decision-makers in an attractive format. To strengthen SLM coordination, the Technical Coordination Committee (TCC) on agriculture-related activities proposed under the UNCCD NAP will be established and made operational by MOE&RE.

Output 1.5 Degraded agricultural lands in the project areas in the central highlands classified and mapped

NRMC, together with extension agents and local land users will classify and map the land in the participating districts according to level of land degradation. Based on this, maps of land degradation extent and severity will be produced and disseminated to the extension services and

other concerned stakeholders. Where feasible, maps will also be produced on SLM best practices using the WOCAT/LADA methodology adopted by the UNCCD in the beginning of 2014, to promote upscaling of SLM.

Outcome 2: Appropriate technologies for rehabilitation of degraded lands demonstrated and scaled up by strengthened networks of training and extension institutions

This Outcome focuses on removing the barrier related to scarce knowledge of the adverse impacts of land degradation and minimal experiences in SLM technologies and approaches by farmers. Demonstration and implementation of SLM will take place in Kandy, Nuwara Eliya and Badulla districts in the Central Highlands, focusing on four land use systems covering a total of 10,000 ha of land (Table 7). Demonstration activities will be established in 8 Divisions in the fields of 185 farmers. Farmer Field Schools linked to the demonstrations will contribute to training of 1,800 farmers in SLM. By the end of the Project, it is anticipated that scaling up through training and dissemination will benefit a total of 18,000 farmers.

Field demonstration areas:

Farming System	Representative extent (ha)	No. of demonstrations
Marginal Tea Lands	6,000	60
Low input vegetable cultivation	2,500	40
Poorly managed home gardens	750	45
High input vegetable cultivation	750	40
Total	**10,000**	**185**

The outcome will be achieved through three outputs:

Output 2.1 Demonstration sites established in the three districts of the Central Highlands
The demonstration areas have been selected based on location in representative catchments as well as poverty level and farming systems in the three Project districts in the Central Highlands.

The extents to be covered in **Kandy District,** Deltota and Doluwa, DS Divisions are:

Farming System	Representative extent (ha)	No. of demonstrations
Marginal Tea Lands	1,500	15
Low input vegetable cultivation	800	20

Poorly managed home gardens	100	10
High input vegetable cultivation	150	10
Total	**2,550**	**55**

The extents to be covered in **Nuwara Eliya District,** Nuwara Eliya and Walapane DS Divisions are:

Farming System	**Representative extent (ha)**	**No. of demonstrations**
Marginal Tea Lands	2,500	25
Low input vegetable cultivation	500	10
Poorly managed home gardens	250	15
High input vegetable cultivation	400	20
Total	**3,650**	**70**

The extents to be covered in **Badulla District**, Uva Paranagama, Haliela, Welimada and Bandarawela DS Divisions are:

Farming System	**Representative extent (ha)**	**No. of demonstrations**
Marginal Tea Lands	2,000	20
Low input vegetable cultivation	1,200	10
Poorly managed home gardens	400	20
High input vegetable cultivation	200	10
Total	**3,800**	**60**

Output 2.2 Participatory land restoration plans using SLM technologies formulated and implemented

The Participatory Land Use Planning (PLUP) guidelines developed under 1.1 will be used to develop participatory land restoration/SLM plans at watershed and village level covering the selected demonstration sites. SLM measures will be selected based on their ability to increase soil cover, increase soil organic matter content, increase water infiltration, reduce runoff and improve rooting conditions, while increasing farmers' incomes. During the project preparation phase, the following SLM technologies were identified for possible interventions for controlling land degradation:

1. Traditional Technologies

(a) Water harvested in village tank systems in the dry zone
(b) Cultivation of tree species in river and stream banks
(c) Stone bunds and log barriers
(d) Hedgerows
(e) Kandyan Home Gardens
(f) Use of Palmyra leaf fences
(g) Terraced paddy fields
(h) Use of bio-fertilizer

2. New Technologies

(a) Mechanical Measures
    (1) Terracing
    (2) Stone bunds (and drains)
    (3) Lock and spill drains
    (4) Gully control structures
(b) Vegetative Measures
    (1) Grass hedges
    (2) Biological hedges: Sloping Agricultural Land Technology (SALT) System
    (3) Cover crops
(c) Agronomic Measures
    (1) Mulching
    (2) Application of organic fertilizer
    (3) Zero tillage
    (4) Mixed Cropping
    (5) Contour Planting
    (6) Bio-technology/ Bio-fertilizer
(d) Combined Measures
    (1) Conservation farming

3. Alternative income generating activities

(a) Bee keeping
(b) Cut flowers
(c) Foliage
(d) Backyard animal husbandry
(e) Poly-tunnels for cultivating high-value crops
(f) Fodder cultivation
(g) Medicinal plants

Careful selection of SLM measures suitable for the different watersheds and farming systems will be done together with farmers at the identified demonstration sites during the first three months of the project and be based on recommendations developed during the project preparation phase[8]. An integrated approach to land management will be taken and combination of measures will be tested, when feasible, to generate multiple environmental

[8] Dharmasena. P.B. (2014): Sustainable Land Management Practices in Sri Lanka: With Special Reference to Central Highlands. Rehabilitation of Degraded Agricultural Lands in Kandy, Badulla and Nuwara Eliya Districts of the Central Highlands. GCP/SRL/067/GFF. November 2014.

and socio-economic benefits, in line with conservation agriculture principles. The project will also actively work with promoting value addition to agricultural produce and connecting farmers to markets.

Output 2.3 SLM training programme developed and implemented

During the project preparation phase, a preliminary SLM capacity needs assessment was conducted, which indicated that, in general, availability of information on SLM was medium high, the capacity of land users to access this information was very low, while their capacity to analyse information was better. However, capacity in terms of resources, labour and financing to invest in SLM was very low.

A full SLM training programme will be developed during the first year of the project, using the Sustainable Rural Livelihood Framework. The first step will be to organise community focus group discussions to gather socio-economic and cultural information, including community mapping and wealth ranking, followed by transect walks and interviews with land users. Interviews with key informants, including technical experts, policy/decision makers, and other project staff will also be conducted. Based on this, a full capacity needs assessment of SLM and PLUD using the LADA local Manual and Sustainable Rural Livelihood Framework will be undertaken that will result in recommendations for design and implementation of a comprehensive SLM training programme.

Outcome 3: Capacity of developing innovative funding mechanisms established in both the public and private sector

At present, there are no significant public-private funding mechanisms for SLM. What is available is a Cess fund for the tea industry, which generates funds through tax mechanisms, which is used to fund the plantation crop research institutes. In addition, the Tea Smallholders Authority (THSDA) as well as the Export Agriculture Department (for spices) have certain subsidy schemes for replanting and new planting. A certain amount is allocated to soil rehabilitation under the Tea Subsidy Scheme, while no mention is made of land management under the Export Agriculture Scheme. With regard to the Soil Conservation Act, budgetary allocations are directed to identified soil erosion areas in the Project Provinces. Moreover, all agricultural land owners have to pay a land tax, but this tax does not necessarily go back to land management activities. Hence, this Outcome will remove the barrier related to lack of sufficient funding to promote and incentivize SLM. It will be achieved through four outputs:

Output 3.1 Tailored guidelines on innovative project financing prepared and disseminated to the stakeholders under the soil conservation act

The first step in generating this output is an assessment of possible funding sources and systems to fund and promote SLM, followed by development of guidelines on innovative SLM funding mechanisms, and finally dissemination of the guidelines to decision/policy-makers, technical staff, including the extension service, the private sector and the land users.

Some possible funding mechanisms and systems identified during the project preparation phase that will be assessed more thoroughly by the Project include:

1. Corporate Social Responsibility (CSR) funds
    a. *Government operated funds through the budgetary process (e.g. Soil Conservation Act)* For example, there is currently a three year programme, implemented by the Hadabima Authority, under the Ministry of Agriculture, to introduce soil conservation measures, especially under the Forest Garden System. During the last 3 year (including 2014), nearly Rs. 90 million has been allocated. Such funds and programmes can be linked to the proposed SLM programme
    b. *Funds channeled through reputed implementing agencies (e.g. IUCN, SGP)*
    c. *Direct funding through CBOs*
        i. Monitored by a government body
    d. The public funds can be partnered with CSR funds from Private companies to practice SLM activities. The private companies, who own estates, can benefit from these efforts in the long run.

2. Fiscal instruments
    a. Funds raised from tax or cess can be reinvested in SLM practices, which can be given as subsidies or incentive for SLM practices.

3. Charging for ecosystem services (PES)
    a. Public Private Partnership PPPs for e.g: conservation of degraded tea lands
    b. Government benefits
    c. Company benefits (e.g. Tea)

4. Awareness creation
    a. E.g. Get the involvement of the general public educating them for conservation of soil
    b. People benefit by way of increased harvest
    c. Government benefit by way of conserving ecosystems
        i. e.g. Electricity Board, Water Supply and Drainage Board may undertake conservation measures

5. Guaranteed Funding & Certification
    a. Eg. Cargils (a super market chain) ensure the purchasing once the goods are produced by the farmers on their requirements (Organic agriculture)
    b. Continuous monitoring is needed
    c. Recommended guidelines should be followed by the producer
    d. Certification from a third party is required
    e. Grouping on the basis of crop cultivated
    f. Voluntary mechanism for suitable groups

6. Regulating the overuse of resources (e.g. Overuse of fertilizer)
    a. Good for the soil condition
    b. Reduce Water pollution
    c. Undertake polluter pay principle if somebody need to use more
    d. Policy initiatives for discourage overuse of fertilizer

7. Preparation of data base for water quality monitoring

<u>Output 3.2 Training on innovative project financing organized and implemented in the project area, involving public officers and private sector stakeholders</u>

This output will make use of the guidelines on innovative financing of SLM developed under 3.1. to first of all train trainers from MOE&RE, NRMC, and the private sector for further

training in and dissemination of the guidelines. This will be followed by at least one training workshop organised by each field office to train extension agents as well as district-level policy- and decision makers in innovative funding of SLM.

Output 3.3 At least one workshop per district organized of innovative funding systems, involving both private and public sectors stakeholders

Trainers trained under 3.2 will support the training of stakeholders at the project demonstration sites in Kandy, Nuwara Elyia and Badulla, involving extension agents, NGOs, CBOs and the private sector. The training workshops will also include information tailored to the four farming systems that the project will operate in, i.e. home gardens, marginal tea lands, low input as well as high input vegetable cultivation.

Output 3.4 Main environmental services provided by the agricultural sector valuated as a basis for establishing innovative project financing

Ecosystem services are often highly undervalued, especially regulating and supporting ecosystem services (e.g. water and climate regulation, soil and sediment retention, nutrient cycling, etc.) that are not included in any market based payment schemes, leading to overconsumption and resource degradation. In Sri Lanka, free availability of irrigation facilities and subsidized inputs, such as fertilizers, can contribute to this. There is therefore a need to identify ecosystem services for valuation important for achieving SLM in the long-term. In this regard there are several non-market valuation techniques such as contingent valuation, travel cost method, willingness to pay etc. These methods can be used to estimate values for ecosystem services, which can be charged to the users of natural resources, such as the power sector, users of irrigation schemes, etc. Moreover, construction companies and others who use natural resources such as rocks (in quarries) sand (sand mining) soil (for landfills), timber (logging) could pay a levy which could be used for SLM. This could also be coupled with eco-tourism where visitors pay for use/enjoy natural forests, spice gardens, tea gardens, and wildlife sanctuaries common in the Central Highlands. The funds generated in this way could then be used for sustainable land management efforts and both the private companies and the public sector would benefit.

Outcome 4: Enhanced national knowledge base for SLM and project implementation based on results-based management

The objective of this component is to enhance awareness of SLM and to ensure systematic data collection from the field to effectively monitor and evaluate project progress indicators, monitor risk mitigation measures and design new measures to face unexpected risks, and to extract lessons learned (including successes and failures) and best SLM practices that might be useful for future SLM initiatives. Though the Soil Conservation Act has provisions to take legal actions against those who do not take action to reduce soil erosion, public awareness in this regard is minimal. Financing under this component will support: i) the project's communication and awareness raising strategy ii) the design and operation of the project's M&E system based on results-based management; iii) mid-term and final project evaluations, including defining response strategies to recommendations provided by these evaluations and, if necessary, (iv) adjustment of project implementation.

Output 4.1 Public awareness increased on the issues of land degradation and the benefits of SLM

Public awareness on SLM will be enhanced through development and implementation of an awareness raising strategy on SLM that will target the national level, as well as stakeholders from the public as well as private sector, NGOs, CBOs, etc.

Output 4.2 Targeted education, awareness and outreach campaigns for SLM implemented
This output is going to address the lack of knowledge and awareness of SLM with a capacity building program coupled with a nation-wide campaign on SLM and climate change resilience, and is implemented in cooperation with existing institutions, such as provincial schools, colleges and universities. Mass media will be included as well as NGOs with experience in environmental education and campaigning, and the private sector. The media needs to educate the public about the harmful health effects of overusing chemical fertilizers and other agrochemicals, as well as the impact on the soil micro-environment affecting the sustainable use of soil and water resources.

Output 4.3 SLM good practice guidelines developed and disseminated
A high level priority for all project actions will be to capture lessons learned, disseminate these lessons, and establish protocols for adaptive learning to continue well beyond project implementation. The project will create several pathways to use project results to inform sector investment in SLM. This effort will include the establishment of a website as a portal for capturing best practices. This website will reflect data generated by the project sponsored activities, and lead to summaries and recommendations of existing policies and proposed improvements. The existing WOCAT/LADA guidelines will be used for documentation of SLM good practices and the information will also be made available to the global WOCAT Network on SLM.

Output 4.4 M&E system established to measure project progress and impact
The project will undertake monitoring and evaluation (M&E) at the demonstration site, district and national levels. This will include monitoring of ecological, social and economic variables. The project will develop and implement participatory monitoring that is compatible with monitoring of SLM activities and impacts at the local level. The outcomes of this monitoring will be fed to national stakeholders to inform decision-making. Overall, this will support national capacity to monitor SLM environmental impacts and it will contribute to the national SLM Information System.

Output 4.5 Midterm review and terminal evaluation carried out and reports available
By the end of the second year, a mid-term review will be organised by the PMU to provide recommendations on results-based management and for achieving the expected results of the Project. By the end of the fourth year of project implementation, FAO's independent evaluation unit will arrange, in consultation with the project team and other partners, a terminal project evaluation. The provisions for the review and evaluation are discussed in greater detail below.

B. GLOBAL ENVIRONMENTAL BENEFITS

The proposed project will deliver following global environmental benefits:

- **Improved flow of agro-ecosystem goods and services in the Central Highlands:** Improved management of agricultural landscapes of 50,000 ha will sustain the livelihoods of local communities with upscaling in the longer term to more than 550,000 ha.

- **Improved land productivity (by 10%)** on 6,000 ha of marginal tea lands, 2,500 ha of low-input vegetable cultivations, 750 ha of poorly managed home gardens, and 750 ha of high-input vegetable cultivations leading to increased food production and enhanced food security in the Central Highlands.
- **Reduced N_20 emissions from agriculture:** Emission of N_20 will be reduced **by 5%** by reducing the use of N fertilizers on land with high-input vegetable cultivations (750 ha).
- **Reduced vulnerability of agro-ecosystems to climate change and other human induced impacts:** The adoption of SLM measures and improved cropping technologies will reduce the vulnerability of 18,000 farmers to climatic variability and change, by increasing the stability of the production in quantity and quality terms.

Finally, the proposed project will minimize the threat to biodiversity in the Central Highlands. The Central Highlands is rich in biodiversity and a number of endemic species have been recorded that are at risk due to deforestation and land degradation. A high proportion of its species are endemic, with the level of endemism exceeding 50% in many of the plant and animal taxonomic groups. All of the 58 species of the plant family *Dipterocarpaceae* are endemic, and as many as 11 out of 26 species of the endemic genius *Stemonoporus* were found exclusively in the mountainous region. In the faunal groups, endemicity among the amphibian species is 83% and a great many of them are restricted to the mountainous region.

C. COST EFFECTIVENESS

In the absence of the proposed project, opportunities for sustainable land management directly geared towards reversing and arresting accelerating land degradation in Central Highlands of Sri Lanka would be limited, both because of awareness and capacity barriers, but also because of a lack of access to knowledge about new and innovative SLM practices and technologies, as well as innovative financing mechanisms for scaling up of good practices across sectors. Investments made by communities at demonstration sites would be small and piecemeal, and they would fail to capture efficiencies and up-scaling opportunities from coordination of policy implementation across sectors, from divisional, district up to national level.

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The proposed project approach is deemed to be the most cost-effective and most likely to lead to sustainable results, because the funds from the GEF will leverage substantial investment from both the environment and agricultural sectors. With a baseline and co-financing of close to US$10 million, the FAO/GEF costs are only about 12% of the entire Project cost. That means that for every $1 invested, FAO/GEF gains over $10 of impact.

The Project design is also minimizing the use of international consultants where national expertise is available. This will reduce the travel costs and the costs of consultancy fees. Notwithstanding, where international expertise is unique or exceptionally credible, it will be utilized.

3 – FEASABILITY

A. ENVIRONMENTAL IMPACT ASSESSMENT

Outcome 1: Enabling institutional, policy and regulatory frameworks for SLM

There are no on-the-ground activities under this Outcome, so there is no apparent danger of unintended environmental impacts.

Outcome 2: Appropriate technologies for rehabilitation of degraded lands demonstrated and scaled up

Under this Outcome, the Project will work with three districts in the Central Highlands to introduce improved SLM technologies and approaches that generate environmental benefits in terms of enhanced provision of ecosystem goods and services that will reduce soil erosion, improve water regulation as well as provide habitat for indigenous species and biodiversity. Furthermore, under component 4, the Project will introduce mechanism to monitor the environmental impact of activities under this Outcome to ensure that they are indeed beneficial.

Outcome 3: Capacity of developing innovative funding mechanisms

Based on previous experience, there are no anticipated negative environmental impacts of these activities. To the contrary, valuation of ecosystem services will form the basis for introducing payment schemes for protection and conservation of ecosystem services.

Outcome 4: Enhanced national knowledge base for SLM and Project implementation

The project will undertake monitoring and evaluation (M&E) at the site, district and national level of ecological, social and economic variables. The outcomes of this monitoring will be fed up to national stakeholders to inform decision-making. Overall, this will support national capacity to monitor environmental impacts.

Certification

Project Category C	**Yes**	**No**
	X	

I affirm that I have performed an environmental review of this project and certify that the project conforms to the pre-approved list of projects excluded from environmental assessment and that the project will have minimal or no adverse environmental or social impacts. No further analysis is required.

Title, name and signature of project leader: _____

B. RISK MANAGEMENT

Risks and Mitigation measures

The project's potential risks, the risk rating and the mitigation strategy can be seen in Table 7, below:

Table 7. Risk matrix.

Risk description	**Cate-gory***	**Impact** (H, M, L)	**Likeli-hood** (H, M, L)	**Mitigation action(s)**	**Owner** (Unit in charge to monitor risk)	**Status** (No change, reduced, etc.)
Institutional framework and project coordination	C	Medium	M	National institutions capacity and technical expertise in SLM are fragmented and coordination across the more than 10 ministries involved is weak. To mitigate this risk, the project under Component 1will support the institutional coordination mechanisms and framework proposed under the Sri Lanka NAP 2015-2025 and in particular support the establishment of a Technical Coordination Committee (TCC) for the Agricultural Sector. It will also establish a Project Steering Committee chaired by MOE&RE, the national UNCCD focal point, and project implementation unit hosted by the NRMC, in order to improve coordination and collaboration between central organizations and field-based organization. Processes for stakeholder involvement will be structured to recognize and where possible to meet different needs and priorities, and to promote constructive dialogue, joint planning and problem-solving. The project focuses on strengthening functional partnerships between government, private sector and civil society.	FAO	
Insufficient funding to sustain SLM activities	R	Low	L	The project explicitly deals with this issue under Component 3 through identifying and piloting low cost SLM measures and sustainable and innovative financing strategies for SLM actions that involve both the public and private sectors. Moreover, effective mainstreaming of SLM into key sectors under Component 1 is expected to lead to increased government budgetary allocation s from key sectors implicated in SLM.	MOE&RE and NRMC	
Slow Uptake of Policy Recommend a-tions	E	Medium	M	Policy uptake of recommendations can be slow as a result of several factors including lack of financial capacity to follow policy advice, short term expectations and political priorities etc.The project will eliminate the risk through; (i) demonstration of new SLM approaches, technologies and practices in the field, (ii) training of relevant staff and stakeholders on SLM, and (iii) awareness creating activities in support of relevant policy reforms directed at both key decision makers as well as the public at large.	FAO	
Climate change	V	Medium	M	The project promotes an adaptive management approach underpinned by results-based M&E under Component 4, and strengthens stakeholder capacity to plan and respond to changing conditions. Short and medium-term risk analysis, that incorporates climatic parameters and trade dynamics, will be included.	MOE&RE, NRMC, FAO	
Changing trade patterns may introduce unforeseen demand for new crops thereby having	V	Medium	M			

impact on soil erosion					

*Risk categories: Clear intended purpose (impact & outcome), Effective delivery strategy, External stakeholder support, Internal stakeholder support, Right resources, Viable delivery structures, Strong delivery management.

4 – IMPLEMENTATION AND MANAGEMENT ARRANGEMENTS

A. INSTITUTIONAL ARRANGEMENTS

General Institutional Context and Responsibilities

Several government agencies have responsibilities for SLM related issues. The entities that will most directly be interacting with the projects are Ministry of Environment and Renewable Energy (MOE&RE) and the Natural Resources Management Centre (NRMC) of the Department of Agriculture.

MOE&RE has overall responsibility for the management of the environment, hosts the National UNCCD Focal Point and is in charge of the implementation and coordination of the NAP of the UNCCD. Hence, it will be responsible for ensuring that the project is executed in accordance with the project document and Government procedures.

NRMC's mission is to optimise soil and water resources use on scientific basis to improve the agricultural productivity in a sustainable manner while maintaining food security and improved livelihood of the people of Sri Lanka. It and will be the main implementing agency and host the Project Management Unit (PMU) and establish field offices in close coordination with the extension service.

In addition, the following agencies will have responsibility for delivering specific outputs, as outlined in the Project Workplan (Annex 2):

DOA is responsible for training, dissemination and communication of information on SLM, including mass media communication (electronic and print), and will be closely involved in the project's knowledge management activities.

LUPPD will be closely involved in implementing the Participatory Land Use Development (PLUD) component of the project, which will be based on its existing guidelines that will be updated by the Project. The Ministry of Lands is also responsible for expediting land title registration.

MOEAD/EAD is responsible for export agriculture crops extension system, which will support relevant field activities at demonstration sites that focus on export crops.

Hadabima Authority is responsible for community-based agricultural programmes operating in the selected Districts that provide incentives and training to farmers to undertake soil and water conservation on their farms. It also supports Farmer Field Schools (FFS) and Farmer Business Schools (FBS). The Project will build on these initiatives to scale up SLM at watershed level.

TRI is responsible for the tea crops extension system that will support project activities in marginal tea areas.

PDOAs are responsible for the provincial extension systems that is mostly concerned with annual crops. They will be closely involved in implementation of field activities in vegetable cultivations in Central and Uva Provinces.

UOP and its Postgraduate Institute of Agriculture will be responsible for supervising students doing field work in the project, in collaboration with the PMU. The Faculty of Agriculture will conduct valuation of ecosystem services.

Coordination with other Ongoing and Planned Related Initiatives

The project will work closely with other GEF initiatives related to Land Degradation in Sri Lanka and in the region. Other GEF initiatives are described below, and information is provided on their areas of intervention and links to the proposed Project.

The UNEP/GEF project "Mainstreaming Agrobiodiversity Conservation and Use in Sri Lankan Agro-ecosystems for Livelihoods and Adaptation to Climate Change" aims to strengthen the national capacity to identify, develop and implement sustainable agricultural production systems that will enhance food production systems while maintaining agrobiodiversity. The proposed FAO/GEF project will coordinate with the UNEP/GEF project to share information, knowledge and approach for sustainable land management, especially related to management of agrobiodiversity in the Kandy Forest/Home Gardens.

Synergies will be established with the UNDP/GEF project “Enhancing Biodiversity Conservation and Sustenance of Ecosystem services in Environmentally Sensitive Areas”. It will develop an enabling framework to designate and manage Environmentally Sensitive Areas (ESA) under the auspices of MOE&RE, and collaboration will be established with regard to land use planning that integrates biodiversity considerations.

The Small Grants Programme (UNDP/GEF SGP) has been operational in Sri Lanka since 1994 providing community level grants to address local environmental problems. The current Project will make use of lessons learnt by the programme especially in mobilizing local communities for community-based natural resource management activities under the Project.

The proposed Project will also aim to foster a close collaboration with other international organisations working to address the problems associated with land degradation, and will draw heavily on their experiences, lessons learned and information. The UN-REDD Programme has been supporting Sri Lanka in its initial REDD Readiness activities. The programme will help Sri Lanka to reduce deforestation and forest degradation, gain concrete economic incentives for enhancement and maintenance of forest carbon stocks, and provide multiple benefits by the conservation of the island's forest resources. The UN-REDD Programme will complement the proposed FAO/GEF SLM project by providing the country with the opportunity to address drivers of land degradation and deforestation by re-orienting the development of the forestry sector.

The National Expert Committee on Land Degradation in the Ministry of Environment will serve as the advisory body of the proposed project. This Committee consisting of representatives of the Ministry of Environment, Natural Resources Management Center and Land Use Policy Planning Division of the Ministry of Agriculture, Forest Department, University faculties of. Agriculture, Dept. of Meteorology, National Building Research

Organization, will build a mechanism for coordination with other related institutions. Close relations will be established also with other FAO projects, like the IFAD-sponsored land tenure project, the subregional TCP on land degradation and the EC-funded project "Integrated Irrigation & Agricultural Livelihood Development in Kilinochchi, and Mullaitivu Districts".

B. *IMPLEMENTATION ARRANGEMENTS*

a) Roles and responsibilities of Government partner.

Main project partners: The project will be implemented by the Government of Sri Lanka, represented by the Ministry of Environment and Renewable Energy (MOE&RE), in close consultation with the Natural Resources Management Centre (NRMC) of the Department of Agriculture, and district governments. The MOE&RE will be the centre of the project's work as described below and be the lead government counterpart. NRMC will be the main Project Implementing Partner. As such, the NRMC will have lead technical responsibility for the project, with FAO providing administrative and procurement support through MOE&RE. See Annex 8 for ToRs for key Project bodies.

The MOE&RE will carry out its responsibilities to support Project execution through the **National Project Director** (NPD). The NPD will be a senior staff member designated by MOE&RE, and will be the lead person responsible for ensuring smooth execution of the project on behalf of the Government of Sri Lanka. The NPD is **not** financed by the Project. The NPD is responsible to the Government for the successful implementation of the Project and the Project's impacts. The duties of the NPD include (i) acting as the responsible focal point at the political and policy level within MOE&RE, and (ii) ensuring all necessary support input from Government personnel are provided by MOE&RE to enable the project to implement all of the proposed component activities; and (iii) reviewing and providing input to annual work plans and budgets in consultation/collaboration with the FAO representative; (iv) and to participate in the selection of recruitment of consultants. The Terms of Reference for the NPD can be found in Annex 6.

Project Steering Committee (PSC): A PSC will be established and chaired by the Ministry of Environment and Renewable Energy and will be comprised of representatives from Ministry of Agriculture, Ministry of Export Agriculture, Ministry of Lands, Ministry of Local Government and Provincial Counties, Ministry of Finance, FAO, NGOs, the private sector, and the three concerned district governments. Project co-funders will be standing invitees to PSC meetings. The PSC will provide policy guidance, review results-based Annual Work Plans and Budgets and provide recommendations for resolving any constraints faced by the project. The PSC will be critical to ensuring:

- close linkages between the Project and other ongoing projects and programmes relevant to the project;
- sustainability of key Project outcomes, including up-scaling and replication; and,
- effective coordination of Government partner work under this Project.

Technical Expert Group (TEG): The TEG will comprise leading national SLM experts and representatives from Farmer Organizations and Women Organizations. It will operate on an ad-hoc basis and could, for example, be constituted to exercise quality control of technical

reports prior to final dissemination. It will also be responsible for reviewing proposals for postgraduate students applying for grants to do their thesis under the Project.

Provincial Coordination Committees (PCCs): PCCs will be established to coordinate stakeholders at provincial levels, including farmer representation, women groups, and NGOs involvement in project activities. The Chair will be elected by the Committee.

Project Management Unit (PMU): The PMU will be hosted by the NRMC and will act as secretariat to the PSC. The PMU will be led by the National Project Manager (NPM), a full-time Project position. The PMU will also have a Financial and Administrative Assistant. The PMU staff will be recruited by the project and report to the BH. The PMU will carry out its functions in line with FAO rules and regulations.

The following are some of the key functions of the PMU:

- to technically identify, plan, design and support all activities;
- to liaise with government agencies and to regular advocate on behalf of the Project;
- to prepare the Annual Work Plan and Budget (AWP/B);
- to be responsible for day-to-day implementation of the project in line with the AWP;
- to ensure a results-based approach to project implementation, including maintaining a focus on project results and impact as defined by the RF indicators;
- to coordinate project interventions with other ongoing activities;
- to monitor project progress;
- to be responsible for the elaboration of FAO PPRs and the annual GEF PIR, and;
- to facilitate and support the midterm review and terminal evaluation of the Project.

The PMU will also be supported by a series of international consultants to provide short term inputs to the Project. These will be finalised during the project implementation, and are tentatively identified as experts on SLM, gender mainstreaming, policy and institutions, monitoring and assessment, and innovative SLM financing.

Field Offices will be responsible for demonstration site activities and work under supervision of the PMU. Field Offices will be established in Kandy and Badulla hosted by Provincial Agricultural Departments. The Field Offices will work closely with land users and other local stakeholders and each consist of a **Field Officer** funded by GEF and reporting to the PMU, and local district staff seconded to the project**.**

National Project Manager (NPM) will lead the PMU and work closely with the NPD. The NPM reports to the BH on operational issues and to the LTO on technical issues. The NPM is a full-time position funded by GEF. The NPM will lead and organize the day-to-day execution of the project. The NPM will also take the lead in communications with government agencies and advocacy. The NPM will also be responsible for providing technical advice and guidance in his/her area of technical expertise. The NPM will report on Project progress to PSC meetings, and will develop and submit semi-annual PPRs and annual PIRs. In addition to technical and substantive duties, the NPM will:

- Oversee creation of a participatory monitoring system for the Project's work;
- Ensure real-time monitoring of Project progress and the alerting of the NPD, BH and the LTO to potential problems that could result in delays in implementation;

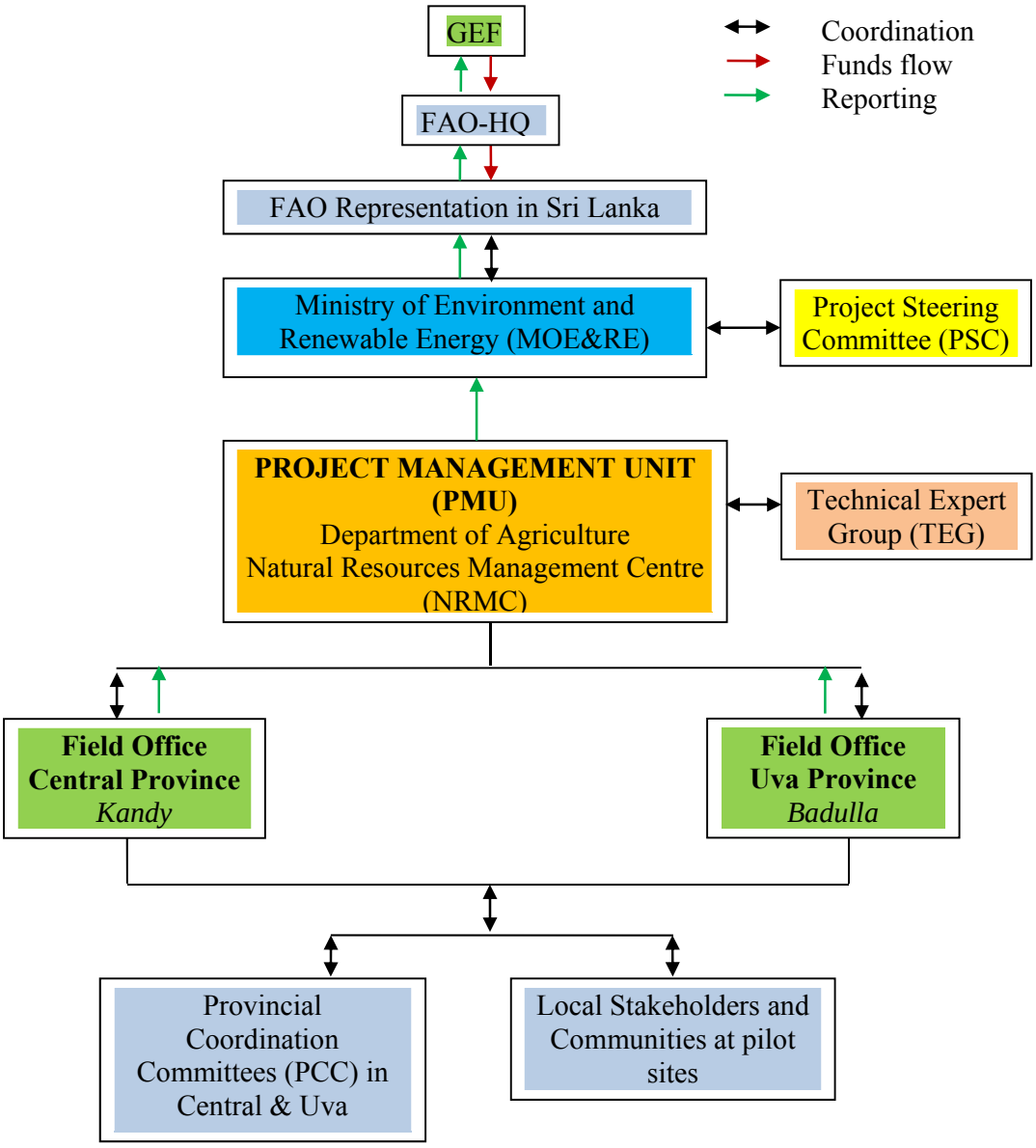
- Help identify consultant candidates and work with the BH to ensure their timely recruitment;
- Ensure the Project's effective and efficient work with stakeholders in the pilot areas;
- Help organize and supervise consultant inputs;
- Oversee creation of the Project's approach to managing and sharing knowledge, and to identifying and disseminating lessons learned;
- Communicate, advocate and engage in policy dialogue.

Project Field Officers (PFOs) Two PFOs will be recruited and will be responsible for the coordination and planning of all PLUD activities at district level. The PFOs are the Project's key strategic mechanism for delivering PLUD to districts and for building the capacity of local governments. The PFOs will take the lead in communicating with local government, advising on the preparation of local work plans, designing and running training for local government officials and other district-level stakeholders, designing local activities, trouble shooting at the local level, ensuring Project inputs are delivered effectively to local governments.

Other key partners. Other partners supporting the execution of the Project will work closely with the MOE&RE and NRMC through their nominated technical focal points at the national and local levels.

One important vehicle for collaboration will be through Letters of Agreement (LoA) that will be elaborated and signed between FAO and the respective collaborating partner. This will include government and civil society organizations. Funds received under an LoA will be used to execute Project activities in conformity with FAO's rules and procedures.

Figure 2. Project Organigramme



b) FAO's role and responsibilities, both as the GEF Agency and as an executing agency, including delineation of responsibilities internally within FAO

FAO will be the GEF implementing and executing agency. As the GEF Agency, FAO will be responsible for Project oversight to ensure that project implementation adheres to GEF policies and criteria, and that the Project efficiently and effectively meets its objectives and achieves expected outcomes and outputs as delimited in the Project document. FAO will report on Project progress to the GEF Secretariat and financial reporting will be to the GEF Trustee. FAO will closely supervise and provide technical guidance to the Project by drawing

upon its capacity at the global, regional and national levels, through the concerned units at FAO-HQ, the Regional Office in Bangkok and the FAO Representation in Sri Lanka.

In addition, at the request of the Government of Sri Lanka, the project will be executed by FAO via its Direct Execution (DEX) modality in close consultation with MOE&RE. FAO, in consultation with the NPD, will deliver procurement and contracting services to the project using FAO rules and procedures, as well as financial services to manage the GEF resources. For more detail, please see description below.

Executing Responsibilities (Budget Holder): Under FAO's Direct Execution modality, the FAO Representation in Sri Lanka will hold the budget and operational responsibilities for this project. The budget holder (BH) will schedule the technical backstopping and monitoring missions as required. The FAO Representative will ensure timely operational, administrative and financial management of the Project's GEF resources, including the disbursement of funds. The BH will in consultation with the NPD: (i) review and clear annual work plans and budgets and monitor them once approved; (ii) review procurement and subcontracting material and supporting documentation and obtain internal FAO approvals; (iii) schedule technical backstopping and monitoring missions; (iv) participate in project supervision missions; (v) prepare financial and monitoring reports (see section "Financial management of and reporting on GEF resources" below); (vi) provide operational oversight to contracted activities carried out by the Project partners; and (vii) prepare budget revisions; (viii) be accountable for safeguarding resources from inappropriate use, loss, or damage; (ix) be responsible for addressing recommendations from oversight offices, such as Audit and Evaluation; and (x) establish a multi-disciplinary FAO Project Task Force to support the project.

Operations and reporting - including the procurement of goods and contracting of services for Project activities - will be done in accordance with FAO rules and procedures. As such, FAO will, in close coordination with the NPD, be responsible for the timely recruitment of key project posts listed above such as the NPM, and the PFOs. In accordance with FAO rules and procedures, final approval of the use of GEF resources rests with the FAO Representation in Sri Lanka.

The FAO Lead Technical Unit (LTU). The FAO Land and Water Division (NRL) will be the LTU within FAO for this Project and will provide overall technical guidance to its implementation. NRL will delegate the responsibility for direct technical supervision to the FAO Regional Office for Asia Pacific (RAP) - Natural Resources and Environment Group (NREG).

FAO Lead Technical Officer (LTO) The Senior Land Resources Officer of RAP/NREG will be the LTO for the Project and will have primary accountability for the timeliness and quality of the technical services provided throughout project execution. The LTO will work in close collaboration with the National Project Director. Under the general technical oversight of the LTU, the LTO will provide technical guidance to the Project team to ensure delivery of quality technical outputs. The LTO will coordinate the provision of appropriate technical backstopping from all the concerned FAO units represented in the Project Task Force. The Project Task Force is thus composed of technical officers from the participating units (see below), operational officers, the Investment Centre Division/GEF Coordination Unit and is chaired by the BH. The primary areas of LTO support to the project include:

(i) review and ensure clearance by the relevant FAO technical officers of all the technical Terms of Reference (ToR) of the project team and consultants;
(ii) ensure clearance by the relevant FAO technical officers of the technical terms of reference of the Letters of Agreement (LoA) and contracts;
(iii) In close collaboration with MOE&RE and NPD, lead the selection of the project staff, consultants and other institutions to be contracted or with whom an LoA will be signed;
(iv) review and clear technically reports, publications, papers, training material, manuals, etc.;
(v) monitor technical implementation as established in the project RF;
(vi) review the Project Progress Reports (PPRs) and prepare the annual Project Implementation Review (PIR);
(vii) Represent FAO in the PSC;
(viii) Provide technical support to the National Project Director;
(ix) Provide technical inputs to procurement and contract documentation;
(x) Review and clear final technical products delivered by consultants and contract holders financed by GEF resources before the final payment can be processed;
(xi) Support the PMU in preparing the AWP/B, with support from the Budget Holder and clearing it prior to submission to the PSC;

FAO Project Task Force (FAO-PTF). The FAO-PTF will be led by the Budget Holder and include the LTU, LTO, TCI Asia Service and GEF Coordination Unit, and other technical units supporting the project's work. The main role of the task force is to provide technical guidance to the LTO and the PMU for the implementation of the project, contribute to specific project activities as required, and troubleshoot should implementation issues arise.

Participating units from across FAO will be involved in supporting the Project's work and in ensuring that the Project stays on track to achieve its overall objectives and indicators of success. When appropriate, these units within RAP or HQ will provide technical support in areas such as: land and watershed management, innovative funding mechanisms, gender, and climate change resilience. The Asia and Pacific Service (TCIB) of the FAO Investment Centre Division will provide adaptive management support and results-based management oversight and guidance to the LTO and the participating units.

FAO GEF Coordination Unit in Investment Centre Division (GCU) will review and approve PPRs, annual PIRs and financial reports and budget revisions. The GCU will undertake supervision missions if considered necessary in consultation with the LTU, LTO and the BH. The PIRs will be included in the FAO GEF Annual Monitoring Review submitted to GEF by the GCU. The GCU will ensure that the project's mid-term review and final evaluation meet GEF requirements by reviewing evaluation ToRs and draft evaluation reports. Should the PIRs or mid-term review highlight risks affecting the timely and effective implementation of the project, the GCU will work closely with the BH and LTO to make the needed adjustments in the project's implementation strategy.

The FAO Finance Division will provide final clearance of any budget revisions, will provide annual Financial Reports to the GEF Trustee and, in collaboration with the GCU, will call for project funds on a six-monthly basis from the GEF Trustee.

C. FINANCIAL PLANNING AND MANAGEMENT

Financial Plan - by Component

Component/Output	Dept. Of Agriculture (DOA)	Ministry of Environment and Renewable Energy (MOE&RE)	Land Use Policy Planning Dept (LUPPD) & Forest Dept (FD)	Provincial Contribution (PDOA) & Mahaweli Authority	Hadabima Authority	FAO	Total Co-financing	% Co-financing	GEF	% GEF	Total
Component 1: Strengthening policy, regulatory and institutional frameworks for SLM	480,000	48,000	350,000	-	25,000	20,000	1,216,000	86%	200,000	14%	1,416,000
Component 2: Implementation of the identified land restoration technologies in the affected areas of the hree districts through a participatory process	4,750,000	28,000	330,000	650,000	1,850,000	-	7,444,000	90%	842,364	10%	8,286,364
Component 3: Support to the development and implementation of innovative funding systems to promote SLM	-	-	-	-	45,000	75,000	107,000	53%	95,000	47%	202,000
Component 4: Knowledge management, awareness raising and dissemination of best practices	-	56,000	40,000	250,000	-	15,000	249,000	75%	85,052	25%	334,052
Project Management	490,000	36,000	50,000	90,000	172,000	10,000	874,000	88%	122,241	12%	996,241
Total Project	**5,720,000**	**168,000**	**770,000**	**990,000**	**2,092,000**	**120,000**	**9,860,000**	**88%**	**1,344,657**	**12%**	**11,234,657**

GEF Inputs

The GEF funds will finance inputs needed to generate the outputs and outcomes under the Project. These include: (i) local and international consultants for technical SLM support and Project management; (ii) support to designing and piloting of innovative funding mechanisms; (iii) support to knowledge management; (vi) LoA/contracts with technical institutions and service providers supporting the delivery of specific Project activities on the ground; (v) international flights and local transport and minor office equipment; and (vi) training and awareness raising material.

Government Inputs

The Government of Sri Lanka, through the **Ministry of Environment and Renewable Energy,** will provide support to development of diversified home gardens, and introduction and promotion of drought tolerant crops and agronomic practices. It will also provide in-kind support to project coordination and appoint a National Project Director.

The **Department of Agriculture** will co-fund field activities related to land and land improvement, establishment of biodiversity gardens and accelerated seed farm development. The **Natural Resources Management Centre**, through its support to the implementation of the Soil Conservation Act, will host and provide management support to the Project Management Unit and ensure that all project activities are consistent with the Soil Conservation Act.

The **Land Use Policy Planning Department** will co-fund activities related to the preparation and implementation of participatory land use plans, and provide support to improvement of land use maps. The **Forest Department** will support hilltop replantation and surveying and boundary demarcation of conservation areas within the context of land use planning.

The **Provincial Departments of Agriculture** for Central and Uva will provide support to training and extension, promote SLM in the field and also link the Project to its organic fertilizer programme. The **Mahaweli Authority** will provide support to catchment management approaches and training and awareness raising activities in the Upper Mahaweli catchment areas.

The **Hadabima Authority** will provide support to rural development planning, farmer training programmes, as well as soil conservation and crop productivity enhancing activities in the field.

The Government will thus provide substantial investments into SLM and PLUD across the three concerned Districts and in-kind support in terms of office facilities (including electricity, telephone and fax line, internet line facility, cleaning, etc.) and time of key staff. These investments – both cash and in-kind – are estimated to value in total USD9.86 million

FAO Inputs

FAO will provide technical assistance, backstopping, training and supervision of the execution of activities financed by GEF resources. The GEF project will complement and be co-financed by several projects and activities implemented by the FAO Representation in Sri Lanka funded by the FAO Technical Cooperation Programme and by various donors through trust fund arrangements. Total in-cash support to the Project is estimated to amount to a total of USD120,000.

Financial Management of, and Reporting on, GEF Resources

Financial Records. FAO shall maintain a separate account in United States dollars for the Project's GEF resources showing all income and expenditures. Expenditures incurred in a currency other than United States dollars shall be converted into United States dollars at the United Nations operational rate of exchange on the date of the transaction. FAO shall administer the Project in accordance with its regulations, rules and directives.

Financial Reports The BH shall prepare six-monthly project expenditure accounts and final accounts for the project, showing amount budgeted for the year, amount expended since the beginning of the year, and separately, the un-liquidated obligations as follows:

1. Details of project expenditures on a component-by-component and output-by-output basis, reported in line with project budget codes as set out in the Project document, as at 30 June and 31 December each year.
2. Final accounts on completion of the Project on a component-by-component and output-by-output basis, reported in line with project budget codes as set out in the Project document.
3. A final statement of account in line with FAO Oracle Project budget codes, reflecting actual final expenditures under the Project, when all obligations have been liquidated.

The BH will submit the above financial reports for review and monitoring by the LTO and the FAO GCU. Financial reports for submission to the donor (GEF) will be prepared in accordance with the provisions in the GEF Financial Procedures Agreement and submitted by the FAO Finance Division.

Budget Revisions. Semi-annual budget revisions will be prepared by the BH in accordance with FAO standard guidelines and procedures.

Responsibility for Cost Overruns. The BH is authorized to enter into commitments or incur expenditures up to a maximum of 20 percent over and above the annual amount foreseen in the Project budget under any budget sub-line provided the total cost of the annual budget is not exceeded.

Any cost overrun (expenditure in excess of the budgeted amount) on a specific budget sub-line over and above the 20 percent flexibility should be discussed with the GCU/TCIB with a view to ascertaining whether it will involve a major change in Project scope or design. If it is deemed to be a minor change, the BH shall prepare a budget revision in accordance with FAO standard procedures. If it involves a major change in the Project's objectives or scope, a

budget revision and justification should be prepared by the BH for discussion with the GEF Secretariat.

Savings in one budget sub-line may not be applied to overruns of more than 20 percent in other sub-lines even if the total cost remains unchanged, unless this is specifically authorized by the GCU upon presentation of the request. In such a case, a revision to the Project document amending the budget will be prepared by the BH.

Under no circumstances can expenditures exceed the approved total Project budget or be approved beyond the NTE date of the project. **Any over-expenditure is the responsibility of the BH.**

Audit. The Project shall be subject to the internal and external auditing procedures provided for in FAO financial regulations, rules and directives and in keeping with the Financial Procedures Agreement between the GEF Trustee and FAO.

The audit regime at FAO consists of an external audit provided by the Auditor-General (or persons exercising an equivalent function) of a member nation appointed by the Governing Bodies of the Organization and reporting directly to them, and an internal audit function headed by the FAO Inspector-General who reports directly to the Director-General. This function operates as an integral part of the Organization under policies established by senior management, and furthermore has a reporting line to the governing bodies. Both functions are required under the Basic Texts of FAO which establish a framework for the terms of reference of each. Internal audits of imprest accounts, records, bank reconciliation and asset verification take place at FAO field and liaison offices on a cyclical basis.

D. PROCUREMENT

Careful procurement planning is necessary for securing goods, services and works in a timely manner, on a "Best Value for Money" basis, and in accordance with the Rules and Regulations of FAO. It requires analysis of needs and constraints, including forecast of the reasonable timeframe required to execute the procurement process. Procurement and delivery of inputs in technical cooperation projects follow FAO's rules and regulations for the procurement of supplies, equipment and services (i.e. Manual Sections 502 and 507). *Manual Section 502*: "Procurement of Goods, Works and Services" establishes the principles and procedures that apply to procurement of all goods, works and services on behalf of the Organization, in all offices and in all locations, with the exception of the procurement actions described in Appendix A – Procurement Not Governed by Manual Section 502. *Manual Section 507* establishes the principles and rules that govern the use of Letters of Agreement (LoA) by FAO for the timely acquisition of services from eligible entities in a transparent and impartial manner, taking into consideration economy and efficiency to achieve an optimum combination of expected whole life costs and benefits ("Best Value for Money").

As per the guidance in FAO's Project Cycle Guide, the BH will draw up an annual procurement plan for major items which will be the basis of requests for procurement actions during implementation. The plan will include a description of the goods, works, or services to be procured, estimated budget and source of funding, schedule of procurement activities and proposed method of procurement. In situations where exact information is not yet available, the procurement plan should at least contain reasonable projections that will be corrected as information becomes available.

E. MONITORING AND REPORTING

Monitoring and evaluation of progress in achieving project results and objectives will be done based on the targets and indicators established in the project Results Framework (RF) (Annex 1 and described below). The project Monitoring and Evaluation Plan has been budgeted at USD 60,000 (see Table 7). Monitoring and evaluation activities will follow FAO and GEF monitoring and evaluation policies and guidelines. Integrated into all Outcomes, the Project monitoring and evaluation approach will also facilitate learning and mainstreaming of project outcomes and lessons learned into international good practice as well as national and local policies, plans and practices.

Oversight and Monitoring Responsibilities

The M&E tasks and responsibilities clearly defined in the project's detailed Monitoring Plan (see below) will be achieved through: (i) day-to-day monitoring and supervision missions of Project progress (PMU); (ii) technical monitoring of indicators (PMU); (iii) district-level monitoring of participatory land restoration plans (districts with support from FFs and PMU); (iv) midterm and final evaluations (independent consultants and FAO Evaluation Office); and (v) continual oversight, monitoring and supervision missions (FAO).

At the initiation of implementation of the GEF project, the PMU will set up a project progress monitoring system. Participatory mechanisms and methodologies for systematic data collection and recording will be developed in support of outcome and output indicator monitoring and evaluation.

The Project's Inception Phase begins upon FAO approval of the Project and signature of the Execution Agreement. During the three-month inception phase, specific Project M&E issues will be refined and subsequently discussed at the Inception Workshop (IW): (i) the Project's RF indicator targets and their means of verification, and assumptions and risks; (ii) the M&E indicators and their baseline; (iii) drafting the required clauses to include in consultants' ToRs to ensure they complete their M&E reporting functions (if relevant); and (iv) provision of a detailed overview of reporting, M&E requirements and the respective M&E tasks among the project's different stakeholders; (iv) based on the Project RF and the GEF Tracking Tool for Land Degradation (LD TT), finalization of the first annual work plan; (v) financial reporting procedures and obligations, and arrangements for annual audit; (vi) schedule of PSC meetings. Roles and responsibilities of all project organization structures will be clarified and meetings planned.

The Inception Phase will conclude with the holding of an Inception Workshop (IW) organized by the PMU. The IW will: (a) assist all stakeholders to fully understand and take ownership of the Project; (b) review and confirm/finalize Project indicators and results framework with stakeholders; (c) Review the Project's first AWP with results-based annual budget; (d) discuss the roles, functions, and responsibilities within the Project's decision-making structures; (e) review a detailed M&E work plan and budget based on the M&E plan summary presented in Table 10 below. The first PSC meeting will be held within the two months of the IW.

The day-to-day monitoring of the Project implementation will be the responsibility of the PMU under the leadership of the NPM. One PMU staff member will be clearly mandated to be responsible for Project M&E. M&E is to be driven by the preparation and implementation

of an AWP/B followed up through six-monthly PPRs. The preparation of the AWP/B and semi-annual PPRs will represent the product of a unified planning process between main project partners. As tools for results-based-management, the AWP/B will identify the actions proposed for the coming project year and provide the necessary details on output targets to be achieved, and the PPRs will report on the monitoring of the implementation of actions and the achievement of output targets.

Indicators and Information Sources

The project's RF indicators will be the main reference point for M&E of Project outcomes including contributions to global environmental benefits (see Annex 1). The RF's indicators and means of verification will be applied to monitor Project performance and impact. Data collected will be of sufficient detail to track outputs and outcomes and flag Project risks early on, using FAO's monitoring procedures and progress reporting formats. The PMU will link each AWP/B to the RF indicators to ensure that Project implementation maintains a focus on achieving the impact indicators as defined. A key element to this will be the elaboration and monitoring of output target indicators in each AWP/B that cumulatively lead to outcome level results. Output targets will be monitored on a semi-annual basis and outcome target indicators will be monitored on an annual basis if possible or as part of the mid-term and final evaluations.

The main sources of information to support the M&E programme will be: (i) participatory progress monitoring and workshops with beneficiaries; (ii) on-site monitoring of the implementation of participatory land restoration plans; (iii) PPRs prepared by the PMU; (iv) consultants reports; (v) participants training tests and evaluations; (vi) mid-term and post project impact and evaluation studies completed by independent consultants; (vii) financial reports and budget revisions; (viii) PIR prepared by the LTO supported by the BH and the PMU; and (ix) FAO supervision mission reports.

Reports and their Schedule

Specific reports that will be prepared under the M&E programme are: (i) project inception report; (ii) Annual Work Plan and Budget (AWP/B); (iii) PPRs; (iv) annual PIR; (v) technical reports; (vi) co-financing reports as necessary; and (vii) terminal report. In addition, assessment of the GEF Land Degradation Tracking Tool against the baseline (completed during project preparation) will be required at midterm and final project evaluation.

Project Inception Report. Immediately after the IW, the PMU will prepare a Project inception report in consultation with the BH and other project partners. The Inception Report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the IW. To insure smooth transition between project design and inception, the IW and work planning process will benefit from the extensive input of parties responsible for providing technical support to the original project design. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed first year AWP/B, a detailed project monitoring plan based on the monitoring and evaluation plan summery presented below. The draft inception report will be circulated to the LTO and the GCU and the NPD for review and comments before its finalization, no later than one month after the IW. The report should be

cleared by the BH, LTO and the GCU and uploaded in Field Programme Management Information System (FPMIS) by the BH.

Annual Work Plan and Budget (AWP/B). The draft of the first AWP/B will be prepared by the PMU in consultation with the Project Task Force and reviewed at the project IW. IW inputs will be incorporated and the PMU will submit a final draft AWP/B within two weeks of the IW to the BH. For subsequent AWP/B, the PMU will organize a project progress review and planning meeting for its review. Once comments have been incorporated, the BH will circulate the AWP/B to the LTO and the GCU on a no-objection basis prior to uploading in FPMIS by the BH. The AWP/B must be linked to the project's RF indicators so that the project's work is contributing to the achievement of the indicators. The AWP/B should include detailed activities to be implemented to achieve the project outputs and output targets and divided into monthly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year (See AWP/B format in Execution Agreement).

Project Progress Reports (PPR): PPRs will be prepared based on the systematic monitoring of output and outcome indicators identified in the project's RF (Annex 1). The purpose of the PPR is to identify constraints, problems or bottlenecks that impede timely implementation and to take appropriate remedial action. In consultation with the PCC, the PMU will prepare semi-annual PPRs and submit them to the BH in a timely manner. Each PPR will be submitted by the BH to the LTO and GCU for review on a no-objection basis. In the event of LTO/GCU comments, the PMU will incorporate them and the revised PPR is re-submitted to the LTO for final endorsement prior to final approval by the GCU, uploading in FPMIS and sharing with stakeholders. (See PPR format in Execution Agreement).

Annual Project Implementation Review (PIR): The PMU will prepare the annual PIR covering the period July (the previous year) through June (current year). The draft PIR will then be reviewed by the LTO and subsequently submitted by the BH to the GCU for review and approval no later than 10 September each year. The GCU will upload the final report on FPMIS and submit it to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The GCU will provide the updated format when the first PIR is due.

Annual Financial and Operational Report. The Government of Sri Lanka requires the project to submit an annual financial and operational report to MoE by the 15 August.

Technical Reports: Technical reports will be prepared as part of Project outputs and to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by the PMU to the BH who will share it with the LTO. The LTO will be responsible for ensuring appropriate technical review and clearance of said report for uploading to FPMIS. Copies of the technical reports will be distributed to Project partners as appropriate.

Co-financing Reports: The PMU will be responsible for collecting the required information and reporting on in-kind and cash co-financing as indicated in the project document/CEO Request. The PMU will submit the report to the BH in a timely manner on or before 31 July of every year covering the period July (the previous year) through June (current year). (See co-financing report format in Execution Agreement Annex 6.D).

GEF-6 Tracking Tools: Following the GEF policies and procedures, the tracking tool for Land Degradation will be submitted at three moments: (i) with the Project document at CEO endorsement; (ii) at the project's mid-term evaluation; and (iii) with the Project's terminal evaluation or terminal report. At Project mid-term and end, the tracking tools will be completed by the PMU in close consultation with the NPD.

Terminal Report: Within two months before the end date of the Execution Agreement, the PMU will submit to the BH a draft Terminal Report. The main purpose of the Terminal Report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the project, and to provide the donor with information on how the funds were utilized. The Terminal Report is accordingly a concise account of the main products, results, conclusions and recommendations of the project, without unnecessary background, narrative or technical details. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results. Work is assessed, lessons learned are summarized, and recommendations are expressed in terms of their application to Sri Lanka's ongoing work to develop SLM. This report will specifically include the findings of the final evaluation. A final Project review meeting should be held to discuss the draft Terminal Report before it is finalized by the PMU and approved by the FAO LTO and the GCU. (See instructions for Terminal Report in Execution Agreement).

Monitoring and Evaluation Plan Summary

Table 8: Summary of the main M&E reports, responsible parties, timeframe and costs.

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs
Inception Workshop (IW)	PMU, supported by the LTO, BH, and GCU	Within three months of project start up	USD 10,000
Project Inception Report	PMU, LTO, BH, and GCU	No later than one month post IW.	-
Field based impact monitoring	PMU, MoE and other relevant agencies to participate.	Periodically - to be determined at inception workshop.	USD 10,000
Supervision visits and rating of progress in PPRs and PIRs	LTO, other participating units and GCU	Annual or as required	The visits of the LTO and the GCU will be paid by GEF agency fee. The visits of the NPM will be paid from the project travel budget
Project Progress Reports	PMU, with inputs from NPD, PSC and other partners	Semi-annual	USD 0 (as completed by PMU)
Project Implementation Review report	PMU supported by the LTO and cleared and submitted by the GCU to the GEF Secretariat	Annual	Paid by GEF agency fee
Co-financing Reports	PMU, NPD	Annual	0 (as completed by PMU)
Technical reports	PMU, LTO & Participating Units	As appropriate	-

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs
Mid-term Review	External Consultant, FAO Country Office and PMU	At mid-point of project implementation	USD 10,000 for independent consultants and associated costs. In addition the agency fee will pay for expenditures of FAO staff time and travel
Final evaluation	External Consultant, FAO independent evaluation unit in consultation with the project team including the GCU and other partners	At the end of project implementation	USD 30,000 for external, independent consultants and associated costs. In addition the agency fee will pay for expenditures of FAO staff time and travel
Terminal Report	NPM, LTO, TCSR Report Unit	At least two months before the end date of the Execution Agreement	0 (as completed by PMU)
Total Budget			**USD 60,000**

PROVISION FOR EVALUATION

An independent Mid-Term Review (MTR) will be undertaken towards the middle of Project Year Two to review progress and effectiveness of implementation in terms of achieving Project objective, outcomes and outputs. Findings and recommendations of this review will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term if necessary. FAO Country Office will arrange for the MTR in consultation with project management. The review will, *inter alia:*

(i) review the effectiveness, efficiency and timeliness of project implementation;
(ii) analyse effectiveness of partnership arrangements;
(iii) identify issues requiring decisions and remedial actions;
(iv) propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
(v) highlight technical achievements and lessons learned derived from project design, implementation and management.

An independent final evaluation will be carried out three months prior to the terminal review meeting of the project partners. The final evaluation would aim to identify the project impacts and the sustainability of project results and the degree of achievement of long-term results. This evaluation would also have the purpose of indicating future actions needed to expand on the existing project in subsequent phases, mainstream and up-scale its products and practices, and disseminate information to management authorities responsible for related issues to ensure replication and continuity of the processes initiated by the project.

COMMUNICATION AND VISIBILITY

Giving high visibility to the project and ensuring effective communications in support of the Project's message it to be addressed through a number of activities that have been incorporated into the Project design. These include: (i) the preparation of documents and

communication tools that capture the Project's economic, ecological and social benefits; (ii) SLM training programme developed and implemented; and (iii) national and district awareness events on SLM and innovative project financing to promote upscaling of SLM best practices. These inputs and activities are integrated into the Project Workplan for each component, and result from the Project's technical activities rather than being stand-alone events.

5. SUSTAINABILITY OF RESULTS

A. SOCIAL SUSTAINABILITY

Benefits of soil conservation and land management measures generally take some time to yield results. Hence, some incentive structures or alternative income generating activities will be introduced, to make this a sustainable activity:

- Income generating activities during the off season, when no cultivation takes place: The slopes that are cultivated can be put to use by growing crops such as gliricedia in rows, which can be sold to electricity plants in the area, can act as additional organic matter to the soil, reduces wind erosion as well as slow down soil erosion as practiced in the SALT method.
- Traditionally vegetables (carrots, leeks, cabbages) that are transported and sold to urban dwellers, have been grown in the hill country. Increasingly, the urban consumers are now exposed to many village based food materials in processed form, such as sliced lotus roots, sliced kohila roots, cut banana inflorences, boiled baby jack fruit as pieces. Hence, taking this as an example, many cottage industries are possible, provided the market links are built.
- With reference to changing the farming system, in areas where perennials are recommended, in the short term annual crops can be grown to generate income (Dalpitiya farm already practices this). In areas where grasses/pasture is recommend introduction of livestock needs to be considered. Since, small diaries are already found in the hill country, private sector need to be encouraged to expand their chilling facilities, so that farmers will have easy access.

Hence, by promoting these incentives, the proposed Project will have immediate socio-economic benefits and impacts on the wellbeing of vulnerable local people, particularly women, in project areas. The project will tackle the gender issue by promoting participation of both women and men in PLUD raining activities, and by identifying SLM measures that can be implemented by women without need to using heavy implements. By improving the provision of goods and services of agro-ecosystem ecosystems, the project will have significant implications for food production, rural development, productivity of sustainable economic activities, such as home garden products, and economic costs of addressing environment-related natural disasters, such as landslides and flooding.

B. ENVIRONMENTAL SUSTAINABILITY

To ensure that project activities are continued and benefits sustained beyond the time frame of this GEF funded project the project approach and strategy will be internalized by state-level and local institutions. The Project will lead to enhancement of land cover and productivity, as well as carbon stocks in agricultural land, which in turn will lead to improved provision of important regulating ecosystem services related to erosion control, water retention and control

of natural hazards. The Project will also enhance the resilience to climate change of sustainable land management technologies by applying existing tools for screening of climate change sensitivity and vulnerability developed by e.g. LADA/WOCAT.

C. FINANCIAL AND ECONOMIC SUSTAINABILITY

At the national level, financial sustainability of sustainable land management technologies and approaches introduced by the Project will be ensured through mainstreaming of best practices into sectoral policies related to SLM, which includes more than 10 ministries, and integration of SLM priorities and frameworks into sector budgets. At the local level, SLM measures will be promoted that give local land users, communities, and the private sector financial and economic incentives to adopt them, i.e. the measures have to generate economic benefits to the communities in the short as well as longer term in order to be considered sustainable, as already discussed above under A. Financial and socio-economic sustainability thus go hand in hand. The SLM technologies and approaches promoted are expected to increase land productivity by 10% and the Project is expected to generate socio-economic benefits and enhance the food security for a total of 25,000 farm households that will benefit from SLM demonstration activities and upscaling through training and capacity building. 32 training events will be organized and the Project will ensure that at least 50% of people trained are women and that attention be paid to gender division of labour and incomes from SLM.

D. SUSTAINABILITY OF CAPACITIES DEVELOPED

The project will dedicate significant resources to capacity building, training and awareness creation efforts to overcome barriers to adoption of SLM which currently prevent moving to improved practices. All capacity building activities will be implemented on the basis of a training-of-trainers approach through Farmer Field Schools, etc., which is deemed more sustainable. Once the new SLM approaches and technologies are adopted it is expected that farmers will continue to apply them to see greater profitability while at the same time generating environmental benefits.

E. APPROPRIATENESS OF TECHNOLOGY INTRODUCED

The selected SLM practices related to sustainable management of marginal tea lands, home gardens and low as well as high input vegetable cultivation have already been documented and analysed by LADA/WOCAT for their environmental and socio-economic sustainability and appropriateness for different types of natural environments and socio-economic contexts. Moreover, the final selection of SLM technologies will be undertaken in close consultation with local stakeholders, including private sector companies, local communities, and individual farmers, depending on the type and nature of the technology.

F. REPLICATION AND SCALING UP

It is expected that the integrated and cross-sectoral approach to sustainable land management promoted by the Project will lead to both scaling up and out of SLM in Sri Lanka. It supports scaling up through support to policy and institutional reform across sectors. Out-scaling or replication will be driven by spontaneous adoption and replication, by individuals and

communities participating in SLM practices that are seen as viable and effective by them. The participatory land-use planning and methodologies adopted for demonstration sites in partnership with communities will also support continuity of the process. Further, the adaptation of technologies to local realities via experimentation by the beneficiaries themselves will also help sustain spontaneous adoption and replication. Finally, the promotion of innovative funding mechanisms and incentives, such as social responsibility funds, PES schemes, etc. will further support the scaling up SLM in Sri Lanka.

ANNEXES

Annex 1: Results Framework

Annex 2: Work Plan (results based)

Annex 3: Results-Based Budget

Annex 4: Project Districts: Suggested Locations (Agro-Ecological Regions)

Annex 5: Terms of Reference for Short and Long Term Personnel

Annex 6: Terms of Reference for the Project Steering Committee (PSC)

Annex 7: Terms of Reference of Key Project Bodies

Annex 1: Results Framework

Project Objectives:

Objectives	Outcome/impact indicators	Baseline	Mid-project Target	End of Project Target	Assumptions
Project Environment Objective: To reverse and arrest land degradation in agricultural lands in Kandy, Nuwara Eliya and Badulla districts in the Central Highlands of Sri Lanka **Project Development Objective:** To increase the provision of ecosystem goods and services and enhance food security in the Central Highlands of Sri Lanka through the promotion of SLM	• Area under SLM • Soil loss reduced by X % on agricultural land • X% improvement in soil productivity • Improved food security for X number of people	SLM not implemented in a coordinated and coherent way in the CH leading to high soil erosion rates and continuous loss of soil productivity	25,000 ha of agricultural land of the central highlands managed under SLM methods	50,000 ha of agricultural land of the central highlands managed under SLM methods with long-term upscaling to more than 550,000 ha Soil loss on agricultural land reduced by 40% 10% improvement in soil productivity Improved food security for 18,000 people	Policy, institutional and regulatory reform processes in support of SLM continue to receive government support at the highest level Relevant training and capacity building of government staff and other stakeholders delivered in a timely manner and low turn-over of trained staff. Land users have economic incentives to apply SLM practices through improvement in incomes due to increased productivity and/or other incentives The GoSL and other stakeholder support M&E processes, and are committed to continuous learning and exchange of knowledge on SLM

Outcomes and outputs per component:

Outcomes and outputs	Indicators	Baseline	Year 1 Project Target	Year 2 Project Target	Year 3 Project Target	Year 4 Project Target	Means of Verification and Responsible Entity
Component 1: Strengthening policy, regulatory and institutional frameworks for sustainable land management							
Outcome 1: Enabling institutional policy and regulatory frameworks for SLM established and operational in accordance with participatory land use development (PLUD) principles	• Ha of agricultural land of the Central Highlands managed under SLM methods • Mainstreaming of SLM in planning and budgetary processes	The enabling environment for SLM in Sri Lanka is weak and fragmented, and does not properly integrate PLUD principles, which impede the scaling up of SLM.		25,000 ha of agricultural land of the central highlands managed under SLM methods		50,000 ha of agricultural land of the central highlands managed under SLM methods SLM mainstreamed into 3-4 sector plans and budgets (Agriculture and Fisheries, Water Supply and Sanitation, and Forestry)	GEF LD Tracking Tool, PIR, Midterm and Final Evaluations (MOE&RE, FAO) National and District level land-use plans (NRMC)
Output 1.1: Guidelines for Participatory Land Use Planning (PLUP) established and agreed among the involved agencies for coordinated action	• PLUP guidelines developed • PLUP guidelines agreed among X agencies • Existing guidelines from LUPPD revised	Guidelines from the Land Use Policy and Planning Division (LUPPD) already exist, but need to be revised and updated.	Revision of existing LUPPD guidelines and PLUP guidelines finalised	PLUP guidelines agreed among relevant agencies			PLUP Guidelines (PMU, LUPPD)
Output 1.2: A package of modifications in policies and standards for SLM and good agricultural practices	• SLM standards agreed • 6 policies revised in support of SLM principles (i.e. geographical	No SLM standards have been agreed at national level and the policy framework is full of loopholes. E.g. trade	Review of existing policies relevant to SLM and agreement on SLM	Revision of existing policies in 6 areas to integrate agreed SLM	Adoption of policy revisions in agreed areas to fully integrate		Policy documents, minutes from meetings - amendments to 6 policy areas (MOE&RE, NRMC)

Outcomes and outputs	Indicators	Baseline	Year 1 Project Target	Year 2 Project Target	Year 3 Project Target	Year 4 Project Target	Means of Verification and Responsible Entity
	boundaries, traditional practices, standardization of inputs, trade policy, legal procedures, soil fertility testing)	and import substitution policies result in increased land degradation due to cultivation of unsuitable crops (potatoes & tobacco) on steep slopes)	standards	standards	SLM standards		
Output 1.3: National SLM policy endorsed	• National SLM policy (based on 1.1.2)	No coherent and effective Land Use Policy is in place taking into account the role of land rights and the importance of protection of critical areas. Should be based on the 6 areas identified under 1.1.2.		Drafting of National SLM Policy based on revisions to 6 policy areas (1.1.2)	Consultations on National SLM Policy	Adoption of National SLM Policy	SLM Policy document and its proclamation (MOE&RE)
Output 1.4: Establishment of a new coordination and information sharing platform among the stakeholders	• Coordination and information sharing platform • X number of agencies join the platform • Technical Coordination Committee (TCC) established for agriculture-related activities	The NAP 2015-2025 recommends the establishment of TCCs and enhanced information sharing on SLM , but the recommendation have not been operationalised.	TCC for Agriculture established with participation of relevant sectors.	Information sharing platform fully functional	Enhanced information sharing on SLM across sectors	Enhanced information sharing on SLM across sectors	TCC meeting minutes, budget assigned for TCC operations, annual implementation progress reports; minutes of meetings; PPR (MOE&RE)

Outcomes and outputs	Indicators	Baseline	Year 1 Project Target	Year 2 Project Target	Year 3 Project Target	Year 4 Project Target	Means of Verification and Responsible Entity
Output 1.5: Degraded agricultural lands in the project areas in the central highlands classified and mapped	• X ha of land classified and mapped according to level of land degradation	No maps indicating degradation available	Land in the Central Highlands classified according to level of LD	Maps of degraded land produced			Land degradation maps (NRMC)
Component 2 Implementation of the identified land restoration technologies in the affected areas of the three districts through a participatory process							
Outcome 2: Appropriate technologies for rehabilitation of degraded lands demonstrated and scaled up by strengthened networks of training and extension institutions	Number of farmers benefitting (disaggregated by gender) from enhanced capacity of the three district training units providing consistent training and transfer of technologies to farmers X ha of agricultural land restored and under SLM X% improvement in yields on Y ha of land % reduction in N_2O and NO emissions from Y ha of land	Farmers in Kandy, Nuwara Elyia and Badulla have scarce knowledge of the adverse impacts of land degradation and climate change on agricultural productivity and sustainability, and minimal experiences in SLM technologies and approaches. They therefore continue old land management practices that exacerbate soil erosion and cause other LD problems.				25,000 farm households benefitting from SLM training and technology transfer 10,000 ha of agricultural land restored and under SLM 10% improvement in yields in area of intervention 5% reduction in N_2O and NO emissions from 750 ha of land	GEF LD Tracking Tool, PIR Midterm and Final Evaluations National agricultural statistics (MOE&RE, NRMC, FAO)
Output 2.1: Demonstration sites established in the three districts in the CH	• Number of demonstration sites • Number of ha of land with SLM	There are no demonstrations of SLM in marginal tea land and vegetable	Demonstrations established on: Marginal Tea	Marginal Tea land: 2700 ha Low input	Marginal Tea land: 4550 ha Low input	A total of 180 demonstrations established on: Marginal Tea	Report on SLM options, participatory monitoring reports of SLM, meeting and

Outcomes and outputs	Indicators	Baseline	Year 1 Project Target	Year 2 Project Target	Year 3 Project Target	Year 4 Project Target	Means of Verification and Responsible Entity
	demonstration activities that improve productivity and reduce N_2O and NO emissions	cultivations on steep slopes. Only the Kandyian forest gardens have demonstrations of good management practices, but land and water management has to be better integrated into the models.	land: 1050 ha Low input vegetable cultivation: 250 ha Poorly managed home gardens: 85 ha High input vegetable cultivation:75 ha	vegetable cultivation: 1000 ha Poorly managed home gardens:310 ha High input vegetable cultivation: 300 ha	vegetable cultivation: 2000 ha Poorly managed home gardens: 600 ha High input vegetable cultivation: 600 ha	land: 6000 ha Low input vegetable cultivation: 2500 ha Poorly managed home gardens: 750 ha High input vegetable cultivation: 750 ha	attendance reports from FFS, FBS, field survey reports (PMU, Field Offices)
Output 2.2: Participatory land restoration plans using SLM technologies formulated and implemented	• Number of plans formulated and area covered • Number of plans implemented and area covered	No SLM land restoration plans exist in the Central Highlands	32 SLM plans formulated in 8 districts	25,000 ha of land in the CH covered by participatory land restoration plans	40,000 ha of land in the CH covered by participatory land restoration plans	All plans under implementation and 50,000 ha of land in the CH covered	Technical reports from participating Districts and Divisions on SLM and land restoration planning (PMU, Field Offices)
Output 2.3: SLM training programme developed and implemented	• Number of training events • Number of farmers trained, disaggregated by gender	Availability of information on SLM is limited and the capacity of land users to access this information is very low.				32 training events organised and 1800 farmers trained, including at least 900 women	Reports from trainings, including attendance, awareness survey, PPR (PMU, Field Offices, NRMC)
Component 3 Support to the development and implementation of innovative funding systems to promote SLM							
Outcome 3: Capacity of developing innovative funding mechanisms	• Increased resources flowing to SLM from diverse	At present, there are no significant public-private		US$12 million in public	US$12 million in increased	A total of US$24 million mobilised by	Sector budgets CSR schemes

Outcomes and outputs	Indicators	Baseline	Year 1 Project Target	Year 2 Project Target	Year 3 Project Target	Year 4 Project Target	Means of Verification and Responsible Entity
established in both public and private sector	sources such as social responsibility funds and other innovative funding systems (e.g. CSR, PES, PPPs, etc.)	funding mechanisms for SLM. However, with regard to the Soil Conservation Act, budgetary allocations are directed to identified soil erosion areas in the Project Provinces.		funding mobilised through mainstreaming of SLM under Component 1	resource flow to SLM from innovative funding mechanisms	end of Project.	PES schemes PPPs established
Output 3.1: Tailored guidelines on innovative project financing prepared and disseminated to the stakeholders under the Soil Conservation Act	• Guidelines on innovative project financing available to key stakeholder groups (public officers and private sector stakeholders)	No guidelines on innovative SLM project financing exist	Guidelines developed				Published guidelines (PMU, MOE&RE, NRMC)
Output 3.2: Training on innovative project financing organized and implemented in the project area, involving public officers and private sector stakeholders	• Number of training events on innovative project financing organized • Number of public and private sector participants			1 workshop per province organised for training of trainers			Meeting and attendance reports from Central Province and Uva Province (PMU, Field Offices)
Output 3.3: At least one workshop per district organized of innovative funding systems, involving both private and public sectors stakeholders	• Number of workshops • Number of participants from private and public sectors, respectively				3 district level workshops organised		Meeting and attendance reports from Kandy, Nuwara Elyia and Badulla Districts (Field Offices, PMU)
Output 3.4: Main	• Identification of X		Selection of	Valuation of	Identificatio	At least 3 new	Approved project

Outcomes and outputs	Indicators	Baseline	Year 1 Project Target	Year 2 Project Target	Year 3 Project Target	Year 4 Project Target	Means of Verification and Responsible Entity
environmental services provided by the agricultural sector valuated as a basis for establishing innovative project financing	number of innovative project funding mechanisms		valuation techniques for valuation of ecosystem services	selected ecosystem services provided by the Central Highlands	n of options for innovative project financing	projects funded by innovative and novel sources of SLM funding	documents (MOE&RE)
Component 4: Knowledge management, awareness raising and dissemination of best practices							
Outcome 4: Enhanced national knowledge base for sustainable land management and project implementation based on adaptive results-based management	• National knowledge base on SLM to support adaptive results-based management and monitoring of SLM upscaling resulting from the project.	No SLM knowledge base or M&E system in place	M&E system in place	Adaptive results-based M&E	Adaptive results-based M&E	Strengthened national SLM knowledge base Adaptive results-based M&E	GEF LD Tracking Tools, PIR, Midterm and Final Evaluations (PMU, MOE&RE, NRMC, FAO
Output 4.1: Public awareness increased on the issues of land degradation and the benefits of SLM	• Project website • X number of project newsletters • X number of awareness/outreach events organized	PPG survey demonstrated low awareness of SLM	Project website established Outreach event organised in connection with project launch	2 project newsletters Outreach event organised in connection with annual steering committee meeting	4 project newsletters Outreach event organised in connection with annual steering committee meeting and adoption of new SLM policy	6 project newsletters 4 outreach events	Awareness/outreach events & materials Statistics of website visitors (PMU)
Output 4.2: Targeted education, awareness and outreach campaigns for	• Increased awareness among land users and	PPG survey demonstrated low awareness of SLM	SLM campaign organised		Evaluation of SLM campaign		Report on evaluation of awareness campaign

Outcomes and outputs	Indicators	Baseline	Year 1 Project Target	Year 2 Project Target	Year 3 Project Target	Year 4 Project Target	Means of Verification and Responsible Entity
SLM implemented	policy makers of SLM						
Output 4.3: SLM good practice guidelines developed and disseminated	• Guidelines available • Guidelines disseminated to X stakeholder groups (specify)	No SLM guidelines for Sri Lanka available, only global guidelines, such as WOCAT	Drafting of SLM guidelines	Finalisation of SLM guidelines	Dissemination of SLM guidelines through Project website	Dissemination of SLM guidelines through Project website, etc.	Published SLM guidelines (PMU, NRMC)
Output 4.4: M&E system established to measure project progress and impact	• Baseline and targets for project indicators refined • Annual project implementation review (PIR) reports submitted to GEF Secretariat • Six monthly project progress reports	0 0	System in place for annual M&E of SLM indicators	Annual monitoring report	Annual monitoring report	Annual monitoring report	Monitoring reports (PMU, MOE&RE, NRMC)
Output 4.5: Midterm and terminal evaluations carried out	• Mid-term and final evaluation reports	0		Midterm project evaluation	Evaluation recommendations included in lessons learned	Terminal evaluation	Evaluation reports (FAO evaluation office)

Annex 2: Work Plan (results based)

Output	Activities	Responsible institution/ entity	Year 1				Year 2				Year 3				Year 4			
Component 1: Strengthening policy, regulatory and institutional frameworks for Sustainable Land Management			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1.1: Guidelines for PLUD established and agreed among the involved agencies for coordinated action	*Activity 1: PLUP guidelines developed*	**LUPPD**																
	Activity 2: PLUP guidelines agreed among concerned sectors																	
	Activity 3: Updating of divisional level guidelines																	
Output 1.2: A package of modifications in policies and standards for SLM and good agricultural practices	*Activity 1: Integration of geographical boundaries as a basis for SLM planning*	**NRMC**, TRI																
	Activity 2: Identification and promotion of relevant traditional practices																	
	Activity 3: Standardization of inputs (including organic)																	
	Activity 4: Trade policy related to SLM revised																	
	Activity 5: Strengthening of legal procedures to mitigate land degradation																	
	Activity 6: Soil fertility testing made mandatory for areas where inputs are overused																	
Output 1.3: National sustainable land management (SLM) policy endorsed	*Activity 1: National SLM policy developed based on revisions in 6 policy areas (1.1.2)*	**MOERE**																
	Activity 2: National SLM policy endorsed by concerned sectors																	
	Activity 3: SLM factored into sectoral planning and budgeting																	
	Activity 4: Land rights considered and title registration expedited	**Survey Dept**																
Output 1.4: Establishment of a new coordination and information sharing platform among the stakeholders	*Activity 1: Establishment of ICT-based SLM coordination and information sharing platform*	**NRMC**																
	Activity 2: Establishment of TCC on agriculture-related activities under the UNCCD NAP	**MOERE**																
Output 1.5: Degraded agricultural lands in the project areas in the central highlands classified and mapped	*Activity 1: Land classified and mapped according to level of land*	**NRMC**, Survey Dept																

	degradation																			
	Activity 2: Maps of land degradation extent and severity produced and disseminated to the extension service and other concerned stakeholders																			
	Activity 3: Maps of SLM best practices produced using the WOCAT/UNCCD methodology																			
Component 2: Implementation of the identified land restoration technologies in the affected areas of the three districts through a participatory process																				
Output 2.1: Demonstration sites established in the three districts of the central highlands	*Activity 1: Delineation of demonstration areas based on both administrative and geographical (Catchment) boundaries*	**PDOAs,** TSHDA, Dept of Exp Agric, Plantation companies, TRI																		
	Activity 2: Implementation of new and innovative SLM practices in marginal tea lands																			
	Activity 3: Implementation of new and innovative SLM practices in low input vegetable cultivation																			
	Activity 4: Implementation of new and innovative SLM practices in poorly managed home gardens																			
	Activity 5: Implementation of new and innovative SLM practices in high input vegetable cultivation																			
Output 2.2: Participatory land restoration plans using SLM technologies formulated and implemented	*Activity 1: Application of PLUP guidelines in project demonstration areas*	**PDOA,** TSHDA, Dept of Exp Agric, Plantation companies, TRI, NRMC																		
	Activity 2: Generation of land restoration/SLM plans at village level																			
	Activity 3: Selection of integrated SLM measures for demonstration and upscaling together with land users																			
Output 2.3: SLM training programme developed and implemented	*Activity 1: Community focus group discussions to gather socio-economic and cultural information, including community mapping and wealth ranking*	**PDOA**, NRMC, TSHDA, TRI																		
	Activity 2: Transect walks and interviews with land users																			

	Activity 3: Interviews with key informants (technical experts, policy/decision makers, other project staff, etc.)																			
	Activity 4: Capacity needs assessment of SLM and PLUD using the LADA local Manual and Sustainable Rural Livelihood Framework																			
	Activity 5: Design and implementation of full SLM training programme																			
Component 3: Support to the development and implementation of innovative funding systems to promote SLM																				
Output 3.1: Tailored guidelines on innovative project financing prepared and disseminated to the stakeholders under the Soil Conservation Act	*Activity 1: Assessment of possible funding sources and systems to fund and promote SLM*	**PMU**/MOERE																		
	Activity 2: Development of guidelines on innovative SLM funding mechanisms																			
	Activity 3: Dissemination of the guidelines																			
Output 3.2: Training on innovative project financing organized and implemented in the project area, involving public officers and private sector stakeholders	*Activity 1: Training of trainers from MOE&RE, NRMC, and the private sector in innovative SLM financing*	**PMU**/NRMC																		
	Activity 2: At least one training workshop organised by each field office using the guidelines developed under 3.1.1.																			
Output 3.3: At least one workshop per district organised of innovative funding systems, involving both private and public sectors stakeholders	*Activity 1: Training of stakeholders at the project demonstration sites in the three districts involving extension agents, NGOs, CBOs and the private sector*	**PMU**/NRMC																		
Output 3.4: Main environmental services provided by the agro-ecosystems valuated as a basis for establishing innovative project financing	*Activity 1: Selection of ecosystem services for valuation (e.g. water regulation, soil retention, etc.) and valuation technique, such as contingent valuation, etc.*	TRI, **UOP Faculty of Agric**, DOA																		
	Activity 2: Valuation of selected ecosystem services using appropriate valuation techniques																			
	Activity 3: Dissemination of results to public and private sector stakeholders																			
Component 4: Knowledge management, awareness raising and dissemination of																				

best practices																						
Output 4.1: Public awareness increased on the issues of land degradation and the benefits of SLM	*Activity 1: Capacity building and development of awareness raising strategy*	**DOA**, PDOA, NGO, Hadabima, TSHD																				
	Activity 2: Establishment of Project website																					
Output 4.2: Targeted education, awareness and outreach campaigns for SLM implemented	*Activity 1: National SLM campaign*	**DOA**, PDOA, NGO, Hadabima, TSHD																				
	Activity 2: Evaluation of campaign																					
Output 4.3: SLM good practice guidelines developed and disseminated	*Activity 1: Capture and dissemination of lessons learnt*	**NRMC**, DOA, PDOA, NGO, Hadabima, TSHD																				
	Activity 2: Establishment of protocols for adaptive learning																					
Output 4.4: M&E system established to measure project progress and impact	*Activity 1: Establishment of M&E system*	**PMU**/NRMC																				
	Activity 2: Annual monitoring of progress and impact indicators																					
Output 4.5: Midterm and terminal evaluation carried out and reports available	*Activity 1: Midterm evaluation*	PMU/**FAO**																				
	Activity 2: Final evaluation																					
Project Management																						
	Activity 1: Recruitment of operational, financial and administrative staff	**FAO**/MOERE/ NRMC																				
	Activity 2: Establishment and operation of PMU																					
	Activity 3: Establishment and operation of 2 Field Offices																					

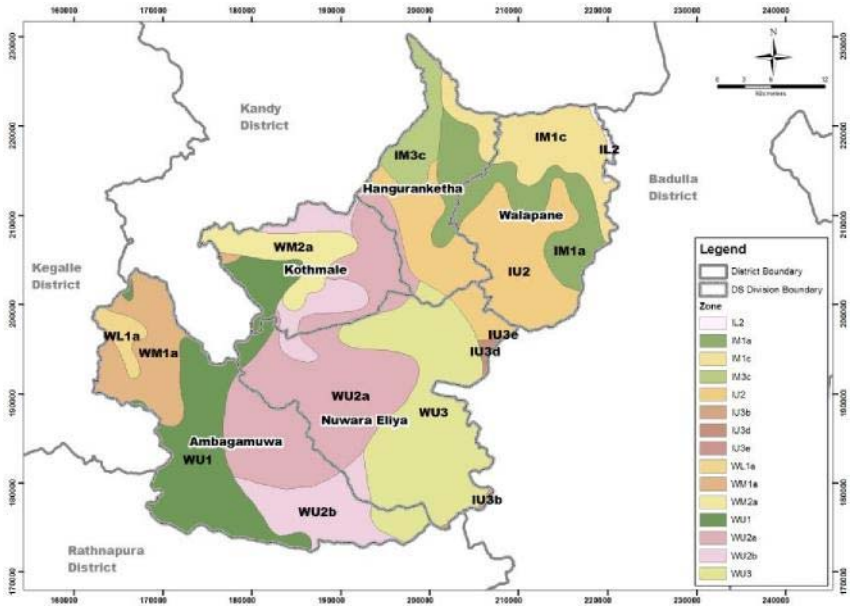
Annex 3: Results-Based Budget

					BUDGET in USD				Total
Oracle code and description	Unit	No. of units	Unit cost	Component 1: Total	Component 2: Total	Component 3: Total	Component 4 Total	PM	GEF
5300 Salaries professionals									
Programme assistant	month	42	911	-	-	-	-	38,262	38,262
Administrative Assistant	month	42	911	0	-	-	-	38,262	38,262
5300 Sub-total salaries professionals				0	0	0	0	76,524	76,524
5570 Consultants									
5542 International Consultants									
1 SLM expert	days	30	500	0	15,000	0	-		15,000
1 Gender expert	days	15	500	0	7,500	0	-		7,500
1 Policy and institutional expert	days	30	500	15,000	0	0	-		15,000
1 M&A expert	days	20	500	0	0	0	10,000		10,000
1 SLM financing expert	days	20	500	0	0	10,000	-		10,000
Sub-total international Consultants				15,000	22,500	10,000	10,000	0	57,500
5543 National consultants									
National Project Manager	month	48	1,935	0	92,880	0	-		92,880
Project finance and admin assistant	month	48	906	43,488	0	0	-		43,488
Field Officer Central Province	month	48	1,530	0	73,440	0	-		73,440
Field Officer Uva Province	month	48	1,530	0	73,440	0	-		73,440
Nationa l Policy and Coordination Expert	month	44.15	906	40,000	0	0	-		40,000
Driver	month	48	486	0	23,328	0	-		23,328
Sub-total national Consultants				83,488	263,088	0	0	0	346,576
5570 Sub-total consultants				98,488	285,588	10,000	10,000	0	404,076
5650 Contracts (LoAs)									
Finalisation of PLUP guidelines	Lump sum	1	44,512	44,512	0	0	0		44,512
Development of guidelines for innovative SLM financing	Lump sum	1	25,000	0	0	25,000	-		25,000
Alternative income generation and connecting farmers to markets	Lump sum	1	50,100	0	50,100	0	-		50,100
Development of participatory land restoration plans and training on SLM technologies (e.g. WOCAT)	Lump sum	1	53,220	0	53,220	0	-		53,220
Training on innovative project financing	Lump sum	1	20,000	0	0	20,000	-		20,000
Evaluation of ecosystem services provided by selcted agro-ecosystems	Lump sum	1	25,000	0	0	25,000	-		25,000
Knowledge management and up-scaling of best practices	Lump sum	1	17,000	0	0	0	17,000		17,000
Mid-term review and Final Evaluaion	Lumsump	2	20,000	0	0	0	40,000		40,000
5650 Sub-total Contracts				44,512	103,320	70,000	57,000	0	274,832

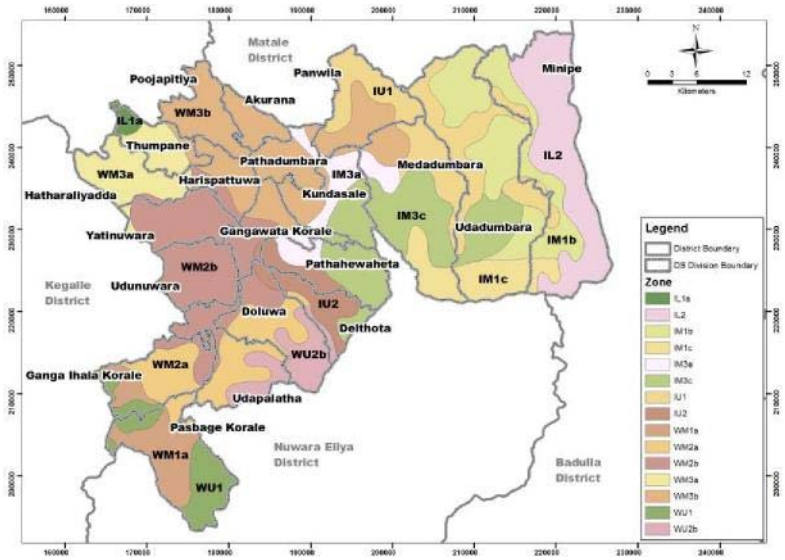
5900 Travel									
PMU (National, local and int. incl DSA)	Lump sum year	4	15,000	0	60,000	0	-		60,000
Local travel (field Offices, DSA))	Lump sum year	4	6,000	0	24,000	0	-		24,000
Exhange visits by farmers to demonstrations	Lump sum	1	6,000	0	6,000	0	-		6,000
Postgrad students for 2 years each	lump sum	4	6,000	24,000	0	0	-		24,000
International consultants' travel	Trips	5	10,000	0	50,000	0	-		50,000
5900 Sub-total travel				24,000	140,000	0	0	0	164,000
5020 Training and workshops									
Annual work planning meetings and Technical Working Group meetings	Meetings	4	10,000	0	0	0	-	40,000	40,000
District workshops on innovative financing of SLM	WS.	3	5,000	0	0	15,000	-		15,000
National Workshop to endorse new SLM policy	WS.	1	10,000	10,000	0	0	-		10,000
5020 Sub-total training				10,000	0	15,000	0	40,000	65,000
6000 Expendable procurement									
Brochures design and printing	Copy	2	1,000	0	0	0	2,000		2,000
Six-monthly project news letter	Issue	8	250	0	0	0	-	2,000	2,000
Best practices and lessons learned publications	Publication	1	12,052	0	0	0	12,052		12,052
Bi-annual status reports	Report	8	250	0	0	0	-	2000	2,000
Posters	Poster	4	1,000	0	0	0	4,000		4,000
Seeds for tree nurseries	Lump sum	1	82,000	0	82,000	0	-		82,000
Seeds, planting materials, organic manure, etc. for agricultural plots	Lump sum	1	84,140	0	84,140	0	-		84,140
Sub-offices expendables	Lump sum	2	7,500	0	15,000	0	-		15,000
Billboard signs -info and demarcation	Signs	10	1,000	0	10,000	0	-		10,000
6000 Sub-total expendable procurement				0	191,140	0	18,052	4,000	213,192
6100 Non-expendable procurement									
Vehicle for field work at project sites	Vehicle	1	35,000	0	35,000	0	-		35,000
Motorcycles for field work	Motorcycle	2	2,500	0	5,000	0	-		5,000
GPS	GPS	3	400	0	1,200	0	-		1,200
Small field implements	Lump sum	2	10,000		20,000	0			20,000
Digital cameras	Camera	3	500	0	1,500	0	-		1,500
LDC projector	Projector	1	2,000	2,000	2,000	0	-		4,000
Laptops	Laptop	3	1,500	0	4,500	0	-		4,500
Color printer/photocopier/scan	C Printer	1	2,000	2,000	0	0	-		2,000
Desktop computer	Desktop	1	2,000	2,000	0	0	-		2,000
6100 Sub-total non-expendable procurement				6,000	69,200	0	0	0	75,200
6300 GOE budget									
Miscellaneous including contingencies				6,000	12,000	0	-	1,717	19,717
Fuel, maintenance, etc.				11,000	41,116	0	-	0	52,116
6300 Sub-total GOE budget				17,000	53,116	0	0	1,717	71,833
TOTAL				200,000	842,364	95,000	85,052	122,241	1,344,657

Annex 4: Project Districts: Suggested Locations (Agro-Ecological Regions)

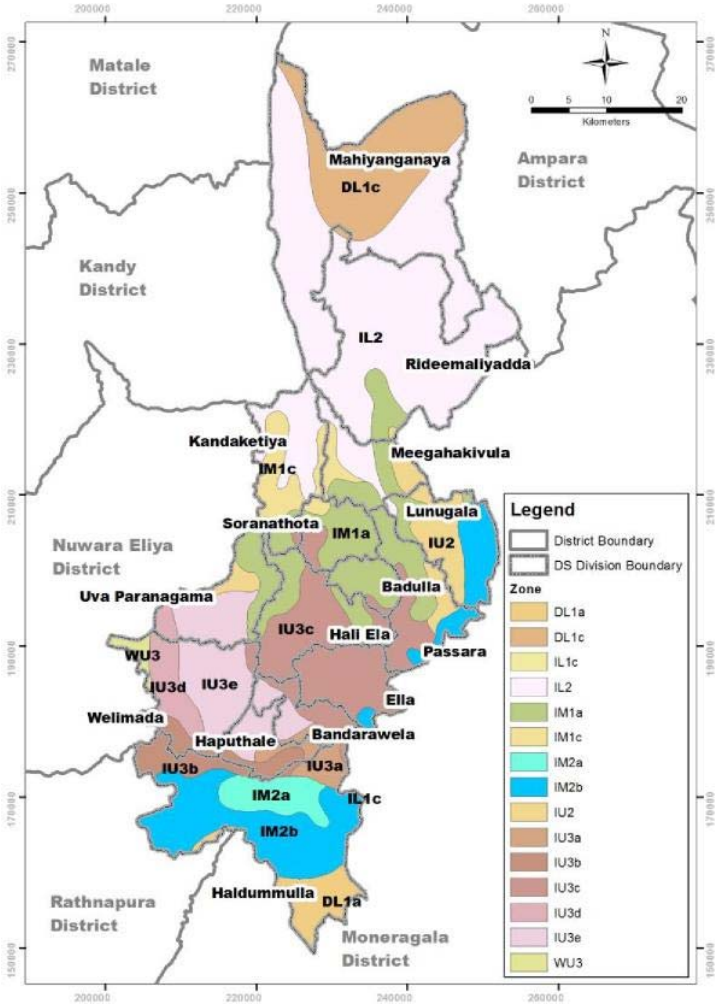
Nuwara Eliya: Nuwara Eliya and Walapane DS Divisios.



Kandy: Deltota, Doluwa DS Divisions



Badulla: Uva Paranagama, Haliela, Welimada, Bandarawela DS Divisions



Annex 5: Terms of Reference for Key Project Staff

National Project Director

Timing/Duration Part-time for project duration
Background To be completed

Main tasks

- Assume overall responsibility for the successful execution and implementation of the project, accountability to the Government and FAO for the proper and effective use of project resources;
- Serve as a focal point for the coordination of projects with other Government agencies, FAO and outside implementing agencies;
- Ensure that all Government inputs committed to the project are made available;
- Supervise the work of the National Project Manager and ensure that the National Project Manager is empowered to effectively manage the project and other project staff to perform their duties effectively;
- Select and arrange, in close collaboration with FAO, for the appointment of the National Project Manager;
- Supervise the preparation of project work plans, updating, clearance and approval, in consultation with FAO and other stakeholders and ensure the timely request of inputs according to the project work plans;
- Represent the Government institution (national counterpart) at the tripartite review project meetings, and other stakeholder meetings.

PMU National Staff

Title **National Project Manager**
Timing/Duration Full time for project duration based in PMU
Background To be completed

Main tasks

- Manage Project management office
- Prepare annual and quarterly workplans and prepare ToR for all inputs;
- Ensure all PMU staff and all consultants fully understand their role and their tasks, and support them in their work;
- Oversee day-to-day implementation of the project in line with the workplans;
- Assure quality of project activities and project outputs;
- Organise regular planning and communication events, starting with inception mission and inception workshop;
- Oversee preparation and implementation of M&E framework;
- Oversee preparation and implementation of Project communication and knowledge management frameworks;
- Prepare progress reports and all monitoring reports.

- Lead interactions with stakeholders
- Liaise with government agencies and regularly advocate on behalf of the Project;
- Coordinate project interventions with other ongoing activities, especially those of co-financers and other GEF projects;

- Regularly promote the project and its outputs and findings on a national, and where appropriate, regional stage.

Key competencies/qualifications

- At least ten years' experience in the Sri Lankan agricultural sector;
- Demonstrated ability to adopt new ideas;
- Demonstrated commitment to participatory SLM in Sri Lanka;
- Demonstrated ability to communicate, including advocating to government agencies;
- Demonstrated ability to manage, including project management, office management ;
- English language skills

Title **Field Officers** (2)
Timing/Duration Two x Full time for project duration
Background To be completed

Main tasks

The Field Officers will provide and channel guidance to local governments and to land users.

- Provide capacity development to district land units
- Provide training and awareness raising on PLUD
- Oversee the preparation of participatory land restoration plans, and their implementation at Project demonstration sites
- Lead field-based M&E, together with local communities, of project environmental and socio-economic impacts
- Liaise regularly with district government and with PMU and national government;
- Provide regular feedback and advance warning on conflicts, and assist with conflict resolution.

Key competencies/qualifications

- Demonstrated experience on operationalizing SLM in Sri Lanka
- Excellent communication skills, with national government, national and international experts and local land users
- Demonstrated ability to open up to new approaches and new practices

Title **National Finance and Administrative Assistant**
Timing/Duration Full time for project duration based in PMU

Background To be completed

Main tasks

- Insert standard TORs

Key competencies/qualifications

- Insert standard qualifications

Title **National Policy and Coordination Expert**
Timing/Duration 44 months based in MOE&RE

Background Insert standard qualifications

Main tasks

- Support the NPD with organizing coordination and annual work

planning meetings;
- Facilitate communications and advocacy with Ministry officials;
- Support the international Policy and Institutional expert.

Key competencies/qualifications

Insert standard qualifications

International Experts

Title **SLM Expert**

Timing/Duration 6 weeks over four years

Background

To be completed

Main tasks

Support the National Project Manager, ensuring:
- Best international experience and practices on SLM are mainstreamed into the project activities;
- Participatory SLM is fully addressed through all activities;
- Provide technical guidance to TORs and contracts on SLM under the project.
- Take a lead role in the preparation of project knowledge outputs on SLM.

Key competencies/qualifications

- Higher degree related to land or natural resources management;
- At least ten years of experience successfully supporting the development of participatory land management in developing countries;
- Demonstrated knowledge of SLM technologies and approaches;
- Demonstrated ability to effectively communicate, using written, verbal and IT techniques, with all forms of forest stakeholders – including government, international partners, national experts and forest users;
- Previous experience in Sri Lanka is highly preferable;

Title **Gender expert**

Timing/Duration 3 weeks over four years.

Background

To be completed

Main tasks

The aim of this assignment is to ensure that gender considerations are integrated into all project approaches, strategies, activities, inputs and outputs. Specifically:
- Assess and analyze the project from a gender perspective;
- Identify key gender issues in the project and key gender entry points;
- Prepare a practical strategy for integrating gender into the project, including a training programme and a gender monitoring framework;
- Work with the PMU staff to (i) integrate gender into all project workplans (ii) integrate gender into all project ToR (iii) review all outputs from a gender perspective;
- Prepare lessons learnt and best practices material on gender mainstreaming in SLM.

Key competencies/qualifications	• Higher degree related to social issues or gender; • At least ten years of experience working on gender issues in developing countries; • Demonstrated experience successfully working with international partners on natural resource management issues; • Demonstrated ability to interact effectively with a range of stakeholders – national government, local government and local land users;
Title	**Policy and institutional expert**
Timing/Duration	6 weeks, during years 1-2
Background	To be completed
Main tasks	This assignment will provide inputs and guidance to all Outputs under the first Outcome. The consultant will provide support to Output 1.2 on developing a package of modifications in policies and standards for SLM: • Help establish the inter-sectoral platform on SLM; • Provide support to drafting the new national SLM policy • Help review legislation and regulations pertaining to SLM.
Key competencies/qualifications	• Higher degree related to land management and legal issues; • Demonstrated experience supporting the preparation of land management laws related to SLM;
Title	**Monitoring and Assessment Expert**
Timing/Duration	4 weeks over four years.
Background	To be completed
Main tasks	This assignment will support the PMU on monitoring, evaluation and assessment of the Project. Specific tasks include: • Ensure that M&A are up to international standards. • Design a system for monitoring the impact of the Project and the effectiveness of the project's activities; • Work with the PMU staff to support the use of communication tools as the project evolves, conveying the project impacts and outputs.
Key competencies/qualifications	• Higher degree in natural resources management or equivalent • Ten years of experience in project monitoring and evaluation, and impact assessment • Demonstrated ability to use modern communication tools to convey Project results.
Title	**Expert on innovative financing mechanisms for SLM**
Timing/Duration	4 weeks during years 1-2
Background	To be completed
Main tasks	This assignment focuses on support to development and

	implementation of innovative funding mechanisms to scale up SLM. Specifically, • Design a study on ecosystem services and opportunities for PES schemes for the Central Highlands; • Design a study on opportunities for social responsibility funds, involving both the public and private sectors; • Analyse findings from above; • Help finalize outputs to international standards.
Key competencies/qualifications	• Higher degree in Environmental Economics, financing, etc. • Demonstrated experience in undertaking general studies on innovative environmental finance.

Annex 6: TERMS OF REFERENCE FOR THE PROJECT STEERING COMMITTEE (PSC)

Role of the PSC

The PSC will be the policy setting body for the project; as and when required, the PSC will be the ultimate decision making body with regard to policy and other issues affecting the achievement of the project's objectives. The PSC will be responsible for providing general oversight of the execution of the Project and will ensure that all activities agreed upon under the GEF project document are adequately prepared and carried out. In particular, it will:

- Provide overall guidance to the Project Management Unit in the execution of the project.
- Ensure all project outputs are in accordance with the Project document.
- Review, amend if appropriate, and approve the draft Annual Work Plan and Budget of the project for submission to FAO.
- Provide inputs to the mid-term and final evaluations, review findings and provide comments for the Management Response
- Ensure dissemination of project information and best practices

Meetings of the PSC

1. The Project Steering Committee meetings will normally be held annually, but the Chairperson will have the discretion to call additional meetings, if this is considered necessary. Meetings of the PSC would not necessarily require a physical meeting and could be undertaken electronically. No more than 13 months may elapse between PSC meetings.
2. Invitations to a regular PSC meeting shall be issued not less than 90 days in advance of the date fixed for the meeting. Invitations to special meetings shall be issued not less than forty days in advance of the meeting date.

Agenda

1. A provisional agenda will be drawn up by the National Project Manager and sent to members and observers following the approval of the Chairperson. The provisional agenda will be sent not less than 30 days before the date of the meeting.
2. A revised agenda including comments received from members will be circulated 5 working days before the meeting date.
3. The Agenda of each regular meeting shall include:
a) The election of the Vice-Chairperson
b) Adoption of the agenda
c) A report of the National Project Manager on Project activities during the inter-sessional period
d) A report and recommendations from the National Project Manager on the proposed Annual Work Plan and the proposed budget for the ensuing period
e) Reports that need PSC intervention
f) Consideration of the time and place (if appropriate) of the next meeting;
g) Any other matters as approved by the Chairperson
4. The agenda of a special meeting shall consist only of items relating to the purpose for which the meeting was called.

The Secretariat

The Project Management Unit (PMU) will act as Secretariat to the PSC and be responsible for providing PSC members with all required documents in advance of PSC meetings, including the draft Annual Work plan and Budget and independent scientific reviews of significant technical proposals or

analyses. The PMU will prepare written report of all PSC meetings and be responsible for logistical arrangements relative to the holding of such meetings.

Functions of the Chairperson

1. The Chairperson shall exercise the functions conferred on him elsewhere in these Rules, and in particular shall:
a) Declare the opening and closing of each PSC meeting
b) Direct the discussions at such meetings and ensure observance of these Rules, accord the right to speak, put questions and announce decisions
c) Rule on points of order
d) Subject to these Rules, have complete control over the proceedings of meetings
e) Appoint such ad hoc committees of the meeting as the PSC may direct

f) Ensure circulation by the Secretariat to PSC members of all relevant documents
g) Sign approved Annual Work Plans and Budgets and any subsequent proposed amendments submitted to FAO
h) In liaison with the PSC Secretariat, the Chairperson shall be responsible for determining the date, site (if appropriate) and agenda of the PSC meeting(s) during his/her period of tenure, as well as the chairing of such meetings

Participation

The PSC members will include representatives the Ministry of Environment and Renewable Energy and will be comprised of representatives from Ministry of Agriculture, Ministry of Export Agriculture, Ministry of Lands, Ministry of Local Government and Provincial Counties, Ministry of Finance, FAO, NGOs, the private sector, and the three concerned district governments. The Project management will also be represented on the PSC, in ex-officio capacity. The Project Coordinator will be the Secretary to the PSC. Other active institutions may be requested to participate as observers.

Decision-making

1. All decisions of the PSC shall be taken by consensus.

Reports and recommendations

1. At each meeting, the PSC shall approve report text that embodies its views, recommendations, and decisions, including, when requested, a statement of minority views.
2. A draft Report shall be circulated to the Members as soon as possible after the meeting for comments. Comments shall be accepted over a period of 20 days. Following its approval by the Chairperson, the Final Report will be distributed and posted on the Workspace as soon as possible after this.

Official language

The official language of the PSC shall be English.

Annex 7: TERMS OF REFERENCE OF KEY PROJECT BODIES

1. *Ministry of Environment and Renewable Energy (MOE&RE)*

Ministry of Environment and Renewable Energy is having the main responsibility to ensure that the project is executed in accordance with the project document and in accordance with Government procedures.

Duties & Responsibilities

1). Receive funds from Food and Agriculture Organization (FAO) Sri Lanka office and maintain in the general accounts.
2). Serve as the Chief Accounting Officer (CAO) for the project in connection with the public accounts.
3). Deal with the Treasury in disbursement of imprests.
4). Report the progress to the Treasury.
5). Review the progress through Project Steering Committee, supervising the work of the PMU through meetings at regular intervals to receive project progress reports and provide guidance on policy issues;

6). Taking the lead in developing linkages with the relevant authorities at national, provincial and governmental level and supporting the project in resolving any institutional or policy related conflicts that may emerge during its implementation.

2. *Natural Resources Management Centre (NRMC) of the Department of Agriculture – Project Management Unit*

Natural Resources Management Centre (NRMC) of the Department of Agriculture is the main implementing agency and technical coordination unit of the project.

1). Maintain a project staff and serve as the main implementing agency.
2). Collect information in relation to the demonstration sites, degraded tea lands and other level data.
3). Evaluate the progress of the field office functions.
4). Report the overall progress to the Steering Committee summoned by the MOE&RE and submission of annual project Implementation reviews and other required progress reports to the Steering Committee/ Executing agency

5). Obtain necessary technical assistance from relevant institutions or personnels and supervising and coordinating the contacts of the experts working for the project.

6). General coordination, management and supervision of project implementation.7
7). Maintain a separate accounts for the project funds.
8). Managing the procurement and the project budget by undertaking necessary procurement and payments.

9). Ensuring effective dissemination of and access to information on project activities and results (including an regularly updated project web site).