



PROJECT IDENTIFICATION FORM (PIF)¹
PROJECT TYPE: MEDIUM-SIZED PROJECT
TYPE OF TRUST FUND: GEF TRUST FUND

PART I: PROJECT IDENTIFICATION

Project Title:	Rehabilitation of degraded agricultural lands in <i>Kandy, Badulla and Nuwara Eliya</i> districts of the Central Highlands (CH)		
Country(ies):	Sri Lanka	GEF Project ID:²	
GEF Agency(ies):	FAO	GEF Agency Project ID:	619069
Other Executing Partner(s):	Ministry of Environment	Submission Date:	January 09, 2014
GEF Focal Area (s):	Land Degradation	Project Duration (months):	48
Name of parent program (if applicable): 31. For SFM <input type="checkbox"/>	N/A	Agency Fee:	127,742

A. FOCAL AREA STRATEGY FRAMEWORK³:

Focal Area Objectives	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-Financing (\$)
LD1. Maintain or improve flow of agro-ecosystem services to sustaining the livelihoods of local communities	GEFTF	299,305	2,413,509
LD3. Reduce pressures on natural resources from competing land uses in the wider landscape	GEFTF	1,045,352	4,118,260
Total project costs		1,344,657	6,531,769

B. PROJECT FRAMEWORK

Project Objective: To reverse and arrest land degradation in agricultural lands in <i>Kandy, Nuwara Eliya and Badulle</i> districts in the Central Highlands of Sri Lanka						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
1. Strengthening policy, regulatory and institutional frameworks for sustainable land management	TA	1.1 Enabling institutional, policy and regulatory frameworks for SLM established and operational in accordance to participatory land use development (PLUD) principles resulting in: -50,000 ha of agricultural land of the central highlands managed under SLM methods, including 10,000 ha directly implemented by the project (comp. 2) and 40,000 ha from indirect outreach through institutional and capacity	1.1. Guidelines for PLUD established and agreed among the involved agencies for coordinated actions 1.2. A package of modifications in policies and standards for SLM and good agricultural practices 1.3. National sustainable land management (SLM) policy endorsed 1.4. Establishment of a new coordination and information sharing	GEFTF	200,000	770,000

¹ It is very important to consult the PIF preparation guidelines when completing this template.

² Project ID number will be assigned by GEFSEC.

³ Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.

		<i>building</i>	platform among the stakeholders. 1.5. Degraded agricultural lands in the project areas in the central highlands classified and mapped.			
2. Implementation of the identified land restoration technologies in the affected areas of the three districts through a participatory process.	INV	2. Appropriate technologies for rehabilitation of degraded lands demonstrated and scaled up by strengthened networks of training and extension institutions resulting in: <i>- Enhanced capacity of district training units providing consistent training and transfer of technology to the farmers in the three districts</i> <i>- 10,000 ha of degraded agricultural land restored</i> <i>- Improved yields in area of intervention</i>	2.1. Demonstration sites established in the three districts of the Central Highlands. 2.2. Participatory land restoration plans using SLM technologies formulated and implemented. 2.3 SLM training program developed and implemented.	GEFTF	842,364	2,050,000
3. Support to the development and implementation of innovative funding systems to promote SLM.	TA	3. Capacity of developing innovative funding mechanisms established in both public and private sector, resulting in: <i>- Increased resources flowing to SLM from diverse sources such as Social responsibility funds and other NGO-backed innovative funding systems</i>	3.1. Tailored guidelines on innovative project financing prepared and disseminated to the stakeholders under the soil conservation act. 3.2 Training on innovative project financing organized and implemented in the project area, involving public officers and private sector stakeholders. 3.3. At least one workshop per district organized of innovative funding systems, involving both private and public sectors stakeholders. 3.4 Main environmental services provided by the agricultural sector valued as a basis for establishing innovative project financing.	GEFTF	95,000	2,300,000
4. Knowledge management, awareness raising and dissemination of best practices		4. Enhanced national knowledge base for sustainable land management and project implementation based on adaptive results- based management	4.1. Public awareness increased on the issues of land degradation and the benefits of sustainable land management 4.2. Targeted education, awareness and outreach campaigns for SLM implemented 4.3 SLM good practice guidelines developed and disseminated	GEFTF	85,052	300,000

			4.3. M&E system established to measure project progress and impact		
			4.4 Midterm and terminal evaluation carried out and reports available		
Sub-Total				1,222,416	5,420,000
Project management Cost				122,241	1,111,769
Total project costs *				1,344,657	6,531,769

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	Government of Sri Lanka	In-kind	344,000
National Government	Government of Sri Lanka	In-kind	25,000
National Government	Government of Sri Lanka	In-kind	600,769
National Government	Government of Sri Lanka	Cash/In-kind	3,480,000
National Government	Government of Sri Lanka	Cash/In-kind	790,000
National Government	Government of Sri Lanka	In-kind	1,040,000
National Government	Government of Sri Lanka	In-kind	130,000
GEF Agency	FAO Technical Cooperation Program	Grant	122,000
TOTAL			6,531,769

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY¹

GEF Agency	Type of Trust Funds	Focal Area	Country Name/ Global	(in \$)		
				Project amount (a)	Agency Fee (b)	Total c=a+b
FAO	GEFTF	LD	Sri Lanka	1,344,657	127,742	1,472,399
Total Grant Resources						

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

E. PROJCT PREPARATION GRANT (PPG)

Please check on the appropriate box for PPG as needed for the project according to the GEF Project Grant:

	<u>Amount Requested (\$)</u>	<u>Agency Fee for PPG (\$)⁴</u>
<ul style="list-style-type: none"> • No PPG required • (Upto) \$50k for projects up to & including \$ 1 million • (Upto) \$100k for projects up to & including \$ 3 million • (Upto) \$150k for projects up to & including \$ 6 million • (Upto) \$200k for projects up to & including \$ 10 million • (Upto) \$300k for projects above \$ 10 million 	USD 80,000	USD7,600

PPG AMOUNT REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES) FOR MFA AND/OR MTF PROJECT ONLY

Type of Trust Funds	GEF Agency	Focal Area	Country Name/ Global	PPG (\$) (a)	Agency Fee (\$) (b)	Total (\$) c=a+b
GEFTF	FAO	LD	Sri Lanka	80,000	7,600	87,600
Total Grant Resources						

⁴ PPG fee percentage follows the percentage of the GEF Project Grant amount requested.

PART II: PROJECT JUSTIFICATION

A. PROJECT OVERVIEW:

A.1. PROJECT DESCRIPTION: *Briefly describe the project, including: 1) the global environmental problems, root causes and barriers that need to be addressed; 2) baseline scenario and any associated baseline projects; 3) the proposed alternative scenario, with a brief description of expected outcomes and components and the project; 4) incremental cost reasoning and expected global benefits (GEFTF, NPTF) and adaptation benefits (LDCE/SCCF); 5) innovativeness, sustainability and potential for scaling up.*

1. 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 Lanka⁵ 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.

2. 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 favors 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.⁶

A.1.1. Global Environmental Problems, root causes, and barriers to be addressed

Land Degradation

3. Land Degradation has emerged as a serious problem in Sri Lanka.⁷ 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 set up pressures on the land, and these in turn have resulted in the misuse and degradation of land in many areas. Nationwide, the major contributors to land degradation are soil erosion and soil fertility degradation. Other important contributors to land degradation are: (i) over exploitation of ground water, (ii) salinization, (iii) water logging, and (iv) water pollution. According to the Global Assessment of Soil Degradation (GLASOD), about 50 percent of land in Sri Lanka is degraded. Approximately 61 percent of the total agricultural land in the country is affected by soil fertility decline.

Climate change

4. An analysis of historical temperature and rainfall data was carried out for Sri Lanka's in the context of its Second National Communication to the UNFCCC for the 40 year period between 1961 and 2000.⁸ During this period, both maximum and minimum temperatures showed an increasing trend in most of the meteorological stations surveyed.⁹ At the same time, an analysis of the rainfall data available shows that, while the annual mean rainfall has decreased

⁵ 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)

⁶ Data on forest coverage from FAOSTAT (<http://faostat3.fao.org/home/index.html>)

⁷ See National Action Programme for Combatting Land Degradation in Sri Lanka (http://www.unccd.int/ActionProgrammes/sri_lanka-eng2002.pdf).

⁸ http://unfccc.int/essential_background/library/items/3599.php?rec=j&preref=7647#beg

⁹ A small decreasing trend in minimum and maximum temperatures was found for two meteorological stations, but unfortunately no statistical tests are shown to determine whether these trends are statistically different from zero.

throughout the country, there have been clear changes in intensity and its temporal and spatial distribution. In particular, the incidence of floods and droughts has increased. Recently, the country has experienced stronger rains causing floods and erosion. Constant landslides in the hilly areas have become a common phenomenon during these rainy days. On the other hand, drought is becoming a common occurrence not only as a local phenomenon anymore, but often spread over a large area. Longer drought periods have caused shortage of drinking water and damages to crops during recent years, exacerbating erosion.

Project location

5. 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 hectares (Ha) as shown in Table 1, below. The Central Highlands extend from the Central Massif in the south to the transverse valley of the Mahaweli River (see Figure 1). The total extent of the highlands is about 1.1 million Ha or 16 % of the total land area in the country. 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 Kandiyana Forest Garden), pasture lands and homestead gardens, as well as the watersheds feeding major rivers in Sri Lanka that immensely contribute to agriculture, hydro power generation and water for human consumption. The central highlands were selected because of its importance as the main source of water for the island and because of its contribution to the national economy as well as to the livelihood of the people living in the central highlands.

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

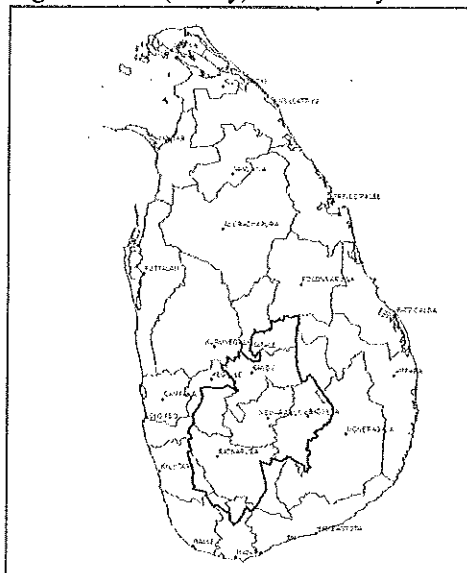


Table 1: Land area, in hectares, by type of land use for the three target districts

Districts	Land use (ha and %)				Total land in the district
	Natural Forest	Plantation (tea, etc.)	Cropland/subsistence farming	Other land uses	
1. Kandy	38,357 (20%)	24,780 (13%)	37,576 (20%)	88,417 (47%)	189,130
2. Nuwara Eliya	48,621 (28%)	50,272 (29%)	57,149 (33%)	18,700 (10%)	174,741
3. Badulla	84,152 (39%)	45,920 (21%)	29,191 (14%)	56,250 (26%)	215,513
Total	171,130 (30%)	120,972 (21%)	123,916 (21%)	163,367 (28%)	579,384

Land Degradation within the project location

6. Soil erosion and soil fertility decline are the two main types of land degradation observed in the Central Highlands. The other important features have been identified as dystrification (acidification), crusting and sealing, compaction, and pollution. As a result, nearly 50% of the 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, claim for the highest value of land degradation. Table 2 below shows the percentage of land degradation in the three districts targeted by the project. Erosion rates in the hilly region of the country are estimated to be as high as 100 t/ha/year.¹⁰

Table 2: Percentage of Land Degradation

District	Area subjected to erosion as a % of total land area
Kandy	41%
Badulla	54.8%
N'Eliya	58%

Source: N.B. Nayakekorala (1998), as quoted in : "Sri Lanka: State of the Environment – 2001", page 32.

7. 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 agro-ecosystem goods and services. The table below provides information on economic cost of loss of ecosystem services represented by onsite costs of land degradation in Mahaweli catchment area (Gunatilake 1988 and 1999). The top soil is washed off due to surface runoff, and the nutrients have to be replaced. The replacement costs associated with farming is to be borne by the farmer. If the farmers do not replace the nutrients, the yield will be invariably reduced, and in the long run, the lands may go out of production. In addition, the off-site effects of soil erosion may pose severe threat to food production of downstream areas due to siltation that would affect irrigation schemes. Sedimentation also causes negative impact on hydropower generation.

Table 3: Total on site cost estimates based on replacement cost and productivity change

Land Use	Area (ha)	On site cost Rs Million (Replacement cost)	On site cost Rs Million (Productivity change)
Degraded grass lands	14,188	47.96	33.08
Seedling tea 1	34,474	204.59	180.59
Seedling tea 2	25,266	43.82	33.07
VP tea	11,491	4.17	3.42
Paddy	28,569	44.17	30.47
Home gardens	53,766	10.33	7.12
Tobacco & shifting	48,458	297.41	203.18
Market gardens	16,361	69.24	54.99
Total		712.7	545.92

8. The main causes of land degradation in the Central Highlands are: (i) inappropriate land use practices, (ii) encroachment, (iii) illegal use of lands, and (iv) climate change.

9. **Inappropriate land use practices:** Slow and limited adoption of soil-conservation management practices in crop land has been causing 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 of combating fertility decline, is leading to a problem of nutrient imbalance. Tea production in the hill lands also lead to severe land degradation when poorly-managed soil is struck by rainfalls.

10. Although land over 60 percent slope is generally considered unsuitable for agricultural purposes, and thus such land should be ideally 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 erosivity. Only level bench terraces could be recommended for such land, but these are very expensive to build.

¹⁰ Sri Lanka Environment Outlook, 2009.

11. **Encroachment:** Encroachment refers to instances where unauthorized possession of land takes place for cultivation and settlements. 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, the local people were cornered in traditional villages. Expansion of the village was thus restricted due to lack of lands. After the independence in 1948, the new generations were compelled to encroach the crown lands. The cleared lands in the central highlands were used to *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. Vegetables, potato, and tobacco, crops known to be highly erosive, have been cultivated in these areas and the soil erosion was aggravated by steepness and high rainfall regimes. Greater attention needs to be paid to develop suitable forms of rainfed farming.

12. **Illegal use of land:** The importance of preserving upper watershed areas was recognized as far back as 1873 when a decision was taken to preserve the area above an elevation of 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.

13. **Climate Change:** As discussed before, 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 uses 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 occurred 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 (see Table 4).

Table 4. Land area vulnerable to landslides in the districts of Kandy, Badulla and Nuwara Eliya

District	Total land area of the district (sq km)	Land area identified as vulnerable to landslides	Percentage of the hazardous area
Badulla	2,872.46	549.34	19%
Kandy	1,863.63	492.70	27%
Nuwara Eliya	1,707.08	373.26	22%

Information is based on 1:50000 landslide hazard zonation maps
Land area excludes areas covered by rivers and other water bodies

Barriers to be addressed by the GEF Project:

14. **Barrier 1: 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 that should take 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 living without considering the overall efficiency of land resource use and its impacts on environmental sustainability.

15. **Barrier 2: Weak institutional capacity for SLM.** Government organizations entrusted with the responsibility to manage land do not have adequate capacity to plan and implement national programs 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.

16. In addition, the complexity of institutional arrangements is also a major obstacle. Policies and responsibilities relating to land management are fragmented and distributed among many agencies, each driven by a different agenda.

Lack of an integrated policy and coordination among institutions responsible for land management has been a major obstacle to combat land degradation.

17. 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.

18. **Barrier 3: 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, resources allocation for combating land degradation receives low priority.

19. Little opportunity for participation or responsibility accorded to these 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 little 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 an adequate capacity to manage natural resources in a sustainable way. Appropriate guidance and capacity building for farmers and private sector, therefore, is essential to improve the overall capacity of combating land degradation and promote SLM.

20. **Barrier 4: 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 different institutions and Ministries, work in an uncoordinated manner, use different approaches, and are inconsistent in their capacity of involving the local stakeholders. This leads to a fragmented output, a reduced impact and the lack of harmonization in landscape management. This situation significantly reduces the efficacy of the baseline projects in terms of maintenance of agro-ecosystem services and protection of global environmental benefits.

21. **Barrier 5: Lack of sufficient funding to promote and incentivize SLM.** Poverty still affects about the 23% of the country's population, most of which lives 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.

22. 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 for SLM. Only minor amounts are set aside by the general treasury in support of land management and conservation.

23. There is no financial mechanism in place to provide incentives to resource poor farmers to conserve land or that compensates them for additional labor or investments made for 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.

A.1.2. The baseline scenario and baseline projects

24. 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:

National Land Title Registration Programme

25. 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 of concerning titles and registration. It is expected that this programme will provide solutions of tenure security for private and state lands through:

- (i) the transformation of the deeds registration system into a title registration one;
- (ii) clarification and determination of land ownership where ownership is unclear; and
- (iii) development of a Land Information System for a better land tenure management.

26. 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

27. The government of Sri Lanka has been attempting to disseminate soil conservation 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. *Mahaweli* Authority 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 every 2,000 farm families.

28. 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 Natural Resource Management Centre (NRM) 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.

29. 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.

Sri Lanka soil erosion map

30. A government project for the preparation of the soil erosion map of Sri Lanka has been on-going since the year 2000. This map, however, focuses mainly on macro level soil erosion, and thus other types of land degradation such as nutrient depletion, salinization, alkalization, water logging, over grazing and excess application of inorganic fertilizers, are not integrated. Building on the baseline programme of the preparation of soil erosion map, the proposed GEF project will help Sri Lanka to prepare *comprehensive land degradation maps* for GSN level or the smallest administrative unit of the three districts to assess the multi-faceted nature of land degradation. The availability of these maps will assist people and village level organizations in combating land degradation more effectively at village level.

Promotion of Sustainable Land Management (SLM) Practices

31. 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 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.

Management of UNESCO Natural World Heritage Sites in the Central Highlands:

32. In recognition of its natural value, and to protect biodiversity rich montane forests from degradation, the Peak Wilderness Protected Area (PWPA), the Knuckles Conservation Forest (KCF) Range and the Horton Plains National Park (HPNP), have been declared as a 'Natural World Heritage Site' by UNESCO in 2010. The three sites of this serial property constitute nearly 75% of the Central Highlands and possess features of outstanding universal value in both cultural and natural spheres. The respective agencies i.e. the Department of Wildlife Conservation and the Forest Department will manage these three constituent properties by formulating and implementing three management plans so as to meet the requirements of UNESCO. 7 million Rupees have been committed by the government for the management plans for the Horton Plains National Park (HPNP). Similarly, 4 million Rupees have been set aside for the management of the Peak Wilderness Protected Area (PWPA). Finally, 6 million Rupees have been allocated for the management of the Knuckles Conservation Forest (KCF). Also under an UNESCO program is, the *Sinharaja* Rainforest, the only rain forest of Sri Lanka, managed by the Department of Forests. The Sinharaja forest is a tropical wet evergreen forest and extends over 7,650 ha. It is designated as Biosphere Reserve by UNESCO and it is also known as one among the twenty five biodiversity hotspots in the world. It is a treasure trove of endemic species especially birds, trees, reptiles, amphibians, mammals and insects. The incremental support by the proposed GEF project will build on these programmes to secure the continued flow of ecosystem goods and services from the Central Highlands.

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

33. 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 private sector's commitment and interest with the generation of environmental benefits by land users, as is seen in a PES scheme or in a carbon trade agreement. GEF incremental financing will facilitate the creation of conditions necessary to establish new and innovative sources of financing for ecological services to be provided by the farmers who will be willing to undertake innovations in their farming practices towards a more sustainable land management.

Table 5: Summary of co-funding baseline project:

Co-financing sources from baseline project	Name of Co-financier	Brief Description of Co-funded Baseline Project Activities	Amount USD
Training and extension	Government of Sri Lanka	Training and Extension Expenditure by the Training Network of Agencies in the Central Highlands	344,000
Soil erosion map	Government of Sri Lanka	Preparation of the soil erosion map	25,000
SLM	Government of Sri Lanka	Implementation of Soil Conservation act and Soil Conservation Programmes in the field through Ministry of Agriculture/ Mahaweli Authority of Sri Lanka	600,769
SLM	Government of Sri Lanka	<i>Api Wawamu Rata Nagamu</i> Programme- Promotion of home gardening, use of organic fertilizer etc to increase food production (Ministry of Agriculture)	3,480,000
SLM	Government of Sri Lanka	Research and Development for introducing modern technology and enhancing value addition in agriculture (Ministry of Agriculture)	790,000

SLM	Government of Sri Lanka	Production of organic fertilizer programme (Ministry of Agriculture)	1,040,000
UNESCO sites	Government of Sri Lanka	Implementation of the management plans for Knuckles Conservation Forest (KCF), Peak Wilderness Protected Area (PWPA), Horton Plains National Park (HPNP)	130,000
GEF Agency	FAO	Technical Cooperation Program (Grant)	122,000
		TOTAL	6,531,769

34. 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.

A.1.3. The proposed alternative scenario and brief description of project components

35. The objective of the proposed project 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 incremental GEF resources will be used to strengthen the capacity of the national stakeholders to plan and implement SLM measures in the central highlands, allowing the generation of significant global environmental benefits in terms of improved provision of agro-ecosystems goods and services and reduced vulnerability to climate change. The global benefits are detailed in the following table.

36. **Component 1: Strengthening institutional, policy and regulatory frameworks for SLM.** Under Component 1, GEF support will help Sri Lanka to mainstream SLM and participatory planning concepts into the land use planning policy and the regulatory framework in order to institutionalize sustainable participatory land use management in the agricultural sector. This will be done through strengthening institutional capacity at national, local and community levels. GEF incremental resources will enable stakeholders to develop and adopt a package of modifications in the policy and regulatory framework to promote participatory land use development (PLUD) as the primary mechanism to achieve SLM mainstreaming.

37. This work will include the review and modification of land related policies and programs, plans and project and the elaboration of by-laws and guidelines on how PLUD can be used to achieve healthy and sustainable agro-ecosystems, including management standards for SLM and guidelines for enforcement. Strengthened SLM regulations and by-laws will enable the improved management of 50,000 hectares of agricultural lands in the central highlands. Inter-sectoral coordination and information-sharing mechanism will be established to enable formulation and implementation of integrated and coherent land use policies.

38. Also, under this component the technical capacity of the relevant institutions will be strengthened, by preparing guidelines and tools for SLM and by creating a complete database and cartographic tool on the status of land resources in the project area. The geo-referenced database will be created by using tools and methods developed under the FAO/UNEP LADA project. A country-tailored decision support tool for SLM identification and up-scaling will be prepared, based on LADA and WOCAT methods and tools, and drawing from the knowledge base established in the Natural Resources Management Centre of the Department of Agriculture and other stakeholders such as the Tea Research Institute and the Department of Export Agriculture. Participatory methods will be applied to ensure that the generated knowledge will be made widely available to interested stakeholders. An upscaling of those methods at national level will be pursued in order to set the basis for its larger utilization, leading in the longer term to a higher level of achievement in terms of global environmental benefits. Maps and databases will be produced, and made available online to users countrywide.

39. **Component 2: Implementation of the identified land restoration technologies.** Under this component, GEF funds will be used to implement model SLM activities in the areas covering 10,000 ha in the central highlands. Those interventions will help achieve local and global environmental benefits in terms of improved provision of agro-ecosystem goods and services, increased production and reduced vulnerability to climate change. The proposed project will serve as demonstration cases for further up-scaling and dissemination of the SLM measures to other areas of the Central Highlands and the rest of the country. SLM measures to be introduced and disseminated will include increase in organic fertilization, control of water runoff through mechanical and/or biological barriers, minimum or no-tillage, increase of the soil cover through intercropping and mulching, crop rotation, and the application of the following technologies:

- **Integrated Soil Fertility Management** is a strategy that incorporates both organic and inorganic plant nutrients to attain higher crop productivity, to prevent soil degradation and to reduce the loss of nutrients. It relies on nutrient application through organic inputs such as compost, manure, inorganic fertilizer and/ or the integration of nutrient fixing crops. The integrated use of organic and mineral inputs in crop production is the best method, due to positive interactions and complementarities.

- **Structural barriers** are measures on sloping lands in the form of earth or soil bunds, stone lines, etc. for reducing runoff velocity and soil erosion. This is achieved by reducing the steepness and/or length of slope. Structural barriers are well-known and are commonly prominent as traditional soil and water conservation measures. Structural barriers are often combined with soil fertility improvement e.g. soil cover, manure or fertilizer application.
- **Vegetative strips** may be composed of grass, shrubs and trees or a combination. Vegetative strips are often used along contours helping to hold back excessive runoff, but may also be perpendicular to wind to control wind erosion. Vegetative strips along the contour often lead to the formation of bunds and terraces due to 'tillage erosion' – the downslope movement of soil during cultivation. Compared to terraces and bunds they are much easier and cheaper to establish. Vegetative strips can also be utilized on flat land as shelterbelts, windbreaks or as barriers surrounding fields.
- **Conservation Agriculture (CA)** combines the three principles: minimum soil disturbance (no-till), permanent soil cover and crop rotation. Each of the principles can serve as an entry point to the technology. However, only the simultaneous application of all principles results in full benefits of the concept. CA is suited to small- as well as large-scale farming, but its adoption is perhaps most urgently required by small-scale land users, especially those facing acute labour shortages.
- **Integrated Watershed Management (IWM)** combines a range of technological and institutional interventions that improve interaction and co-benefits between land managers, upstream, and land and water users, downstream. Improved private and communal livelihood benefits are generated by managing the watershed as the key landscape unit. The concept of IWM includes institutional arrangements for collective action and market-related innovations.

The combination of technologies to be applied in each project location will be identified through the assessments under Component 1.

40. The project will also aim to develop a training program on SLM in order to support the transfer of technologies and to ensure the sustainability of the interventions. This program will include (i) the development of an SLM training manual, (ii) the development and implementation of a "train the trainers" program to be implemented for district training units and the Social Mobilizing Groups, (iii) the establishment of a coordination mechanism of training and extension agencies, and (iv) the training of the beneficiary farmer groups. In particular, the project will seek to strengthen the existing networks of training and extension service run by institutions such as Natural Resources Management Centre, Department of Agriculture, Department of Export Agriculture, Provincial Department of Agriculture, Hadabima Authority of Sri Lanka, Tea Research Institute, Tea Small Holding Development Authority, the Ministry of Environment, and the Ministry of Agriculture in order to make them better coordinated and to enable them to provide more consistent and reliable service to the rural communities and farmers both in the project districts and countrywide. In particular, a review of the present status of the training capacity will be carried out, identifying the gaps and the complementarities among the networks. Common training manuals will be developed on soil conservation and SLM, focusing on technologies and practices to be used in the training programs.

41. In order to increase the awareness and acceptance of the proposed new technologies by the communities, a groups of farmers/public servants and NGOs residing in the project areas will be selected, trained and deployed as Social Mobilizers to promote soil conservation measures through good practices and environment friendly technologies.

42. **Component 3: Support to the development and implementation of innovative funding systems to promote SLM.** Lack of funding capacity has been identified as one of the major barriers to the diffusion of SLM practices among the farmers of the project area. This component aims at creating the conditions for the establishment of new and innovative sources of financing that enables farmers to undertake innovations in their farming practices towards a more sustainable land management. Establishment of innovative funding mechanisms, including PES and carbon trade, will be supported based on a close involvement of the private sector in the planning and management of the mechanisms.

31. This activity will be built on the experience of existing funding schemes such as inclusion of set-aside funds in public and private work contracts to be used for environmental management. While those practices have not always been fully functional, the proposed project will reinforce them through both a participatory action aimed at involving the private sector in the decision making process, as well as through the establishment of a stronger regulatory framework for the assignment of public works and for the authorization of private initiatives.

43. **Component 4: Knowledge management, awareness raising, and dissemination of best practices.** Under this component, the proposed GEF project will support targeted education and awareness campaigns focused on different audiences (government agencies, local administrations, farmers, students and general public) to create awareness of sustainable land management. Information on specific assessment and pilot projects will feed into these campaigns, including information on the benefits of SLM technologies and best practices. The knowledge generated through the project will be systematically integrated in all relevant project activities to improve efficiency and sustainability and it will be widely disseminated and made available to stakeholders and public in general through public awareness campaigns, dissemination of guidelines and workshops. These interventions will be filling important knowledge and awareness gaps to support participatory land use development. A monitoring system will be put in place to ensure the

effectiveness of the project management process and the proper and timely completion of the planned activities through adaptive management.

A.1.4. Incremental cost reasoning and expected global benefits

44. As discussed before, the project will build on the existing institutional and regulatory frameworks, as well as on a series of activities currently under way. 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 to be put in place by the project	Global Benefits
<p>Unsustainable and erosion-prone agricultural practices usually applied by both smallholders and large estate farmers, e.g. vegetable and potato cultivation on steep lands without adopting soil conservation measures and marginal tea lands without proper soil and water conservation measures. These cultivations mainly include seedling tea cultivations, potato cultivations and vegetable cultivations (latter two are highly erosive in nature due to tillage)</p> <p>Unplanned and scattered interventions mostly left to the goodwill of individuals, leading to an inconsistent management of watersheds and landscapes.</p>	<p>Sustainable land management practices applied in agricultural landscapes over the project area.</p> <p>Adequate participatory planning methods developed, disseminated and applied in the project area. Local authorities and private stakeholders sharing the responsibility of the overall management of watersheds and agricultural landscapes.</p>	<p>Improved provision of agro-ecosystem goods and services through direct restoration and improved management of agricultural landscapes (SLM) over 10,000 ha in the project area during the project time. In addition, 40,000 ha will be better managed indirectly by providing knowledge and assistance for home garden development, forest and agro forest plantation, grassland development and restoration,</p> <p>Increased production of agricultural produce in the affected areas, particularly in the potato and vegetables domains.</p> <p>Reduced vulnerability to climatic variations, such as erratic behaviour of rainfall and rise in temperature, which are becoming common under climate change conditions.</p> <p>Reduction of N₂O and NO by reducing N fertilizer usage</p>

45. 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.
- **Reduced N₂O emissions from agriculture:** Emission of N₂O will be reduced by 5% by reducing the use of N fertilizers.
- **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 the farmers to climatic variability and change, by increasing the stability of the production in quantity and quality terms.

46. 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. Endemism in the country is highly concentrated (over 90%) in the humid southwest of the country. All of the 58 species of the plant family *Dipterocarpaceae* are endemic, and as many as 11 out of 26 species of the endemic genus *Stemonoporus* were found exclusively in the mountainous region. In the faunal groups, endemism among the amphibian species is 83% and a great many of them are restricted to the mountainous region.

A.1.5. Innovativeness, sustainability and potential for scaling up

47. The proposed GEF project will bring an innovation to the management of natural resources by combining science-based decision tools for land management with community-based participatory process for land use development. Information on land resources generated by the methods developed under the FAO/UNEP LADA project will be applied to land use planning at community level and knowledge will be made available to wide range of stakeholders including farmers. Sustainability of the project and up-scaling of its impacts are secured through mainstreaming of SLM into policy and institutional frameworks at national and local levels and through broad participation from public, private sectors and communities. Replication of the successful model land restoration activities will be facilitated through the strengthening of the networks of extension service, which will ensure sustained dissemination and adoption of SLM knowledge and practices to land users in the country. In particular, the socioeconomic benefits to be delivered by the proposed project will reinforce its sustainability by securing the support from project participants.

48. The proposed project will generate multiple benefits, (on site and off site, primary and secondary, tangible and intangible, socio economic and environmental arenas and in short term and long term time spans) both at local and global levels. Key socio-economic benefits are as follows:

- (a) **Enhance Land Productivity:** the project will address soil fertility loss, and thus it will lead to increase in land productivity.
- (b) **Reduction of nutrient replacement costs and application of fertilizers:** the adoption of SLM technologies and practices will reduce application of inorganic fertilizers in agricultural lands. The farmers will spend less money for fertilizer and in turn the government will save substantial sum of money spent on fertilizer subsidy.
- (c) **Water Quality improvement:** Excessive use of fertilizers leads to eutrofication in downstream water bodies affecting aquatic habitats and create anaerobic conditions. Less use of fertilizers will avoid such situations and reduce water contamination. The project will also reduce soil erosion at large scale and it will reduce water turbidity.
- (d) **Reduced siltation and sedimentation:** once the degraded lands are improved, siltation on river banks and reservoirs will be reduced thereby increasing water retention capacities of reservoirs and reduce downstream floods. Also reduced erosion will ensure good infiltration leading to ground water recharge and sediment-free runoff.

49. The project design is gender neutral but as women are an active part of the rural society, it is expected that the project will benefit women and female-headed households, both in economic as well as social terms, through their active participation in the decision making process in project activities.

A.2 **STAKEHOLDERS:** *Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and other as relevant) and describe how they will be engaged in project preparation.*

50. The executing partner of the proposed project will be the Ministry of Environment. The implementing partners will include the Ministry of Agriculture, the Ministry of Export and Agriculture Development, the Department of Agriculture of 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.

Table 7: Stakeholders

Name of the Agency	Respective role in the project
Ministry of Environment	The project will be executed through the MoE, which will play the coordinating role, in close coordination with other implementation partners.
Ministry of Agriculture, Ministry of Land and Land Development (LUPPD), Department of Agriculture (NRMC)	Implementation partners
Department of Export Agriculture, Hadabima Authority, Tea Research Institute, Tea Small Holding Authority, Provincial Department of Agriculture, Department of Animal Production and Health	Implementation partners
Farmer organizations,	Beneficiaries as well as collaborative partners

Non Governmental Organizations and village level Community Based Organizations	Beneficiaries as well as collaborative partners
Women's groups/organizations	Beneficiaries

A.3 RISKS: Indicate risks, including climate change risks, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (Table format acceptable).

51. The project's potential risks, the risk rating and the mitigation strategy can be seen in Table 8, below:

Table 8: Risks

Risk	Rating	Mitigation strategy
Stakeholders' interest and participation will remain insufficient to stimulate long-term actions to address land degradation	M	Efforts will be made to ensure broad stakeholder participation in the project, including high-level political involvement.
Conflicts and different priorities of stakeholders undermine project implementation activities	M	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.
Changing and variable conditions of climate may alter the threats and risks associated with land degradation	L	The project promotes an adaptive management approach, 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.
Changing trade patterns may introduce unforeseen demand for new crops thereby having impact on soil erosion	L	
Costs associated with measures to control land degradation restricts adoption, replication and scaling up	L	The project explicitly deals with this issue through identifying and piloting low cost measures and sustainable financing strategies for SLM actions.

A.4 COORDINATION: Outline the coordination with other relevant GEF financed and other initiatives.

52. 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 potential links to the proposed project.

53. 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 integrated natural resources management.

54. 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 LD project by providing the country with the opportunity to address drivers of deforestation by re-orienting the development of the forest sector.

55. 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. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER THE RELEVANT CONVENTIONS, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, Biennial Update Reports, etc.

Mahinda Chintana –Vision for the Future

56. 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.

57. 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 (NCSDD) which is chaired by HE the President.

The United Nations Convention to Combat Desertification (UNCCD).

58. Sri Lanka has 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:

Section

- 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.*

59. 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;*
- (e) *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;*

- (f) *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.*

60. Under these circumstances, it is evident that the proposed project will be directly implementing a main programme in the NAP and some of the actions recommended under the same programme.

Other international conventions

61. 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

62. 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.

63. 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.

64. 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.

65. Legislation related to land degradation could be categorized under two main groups; namely (i) Environmental Safe Guards and Mandates and (ii) Mitigation of adverse impacts. Pieces of legislation that play a crucial role in addressing problems and issues related to land degradation are the Land Development Ordinance (1935), the Soil Conservation Act (1951), the Land Development Ordinance (1947), The Mahaweli Authority of Sri Lanka Act (1979), The Agrarian Services Act (1979), the National Environmental Act (1980) and The Coast Conservation Act (1980).

B.2 GEF FOCAL AREA AND/OR FUND(S) STRATEGIES, eligibility criteria and priorities

66. 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 training network of the partner institutions and the reinforcement of the partner's capacity of producing and managing information relevant to land resource management.

67. 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. Also, 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.

B.3 THE GEF AGENCY'S COMPARATIVE ADVANTAGE FOR IMPLEMENTING THE PROJECT

68. 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. Consequently, FAO has gained a high degree of respect within the country and the government has displayed a considerable level of trust for the Organization. A new planning exercise is now underway between FAO and the government to prioritize needs within each mandated sector for the next 5 years.

69. 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.

70. 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 (WAICENT) 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.

71. 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.

72. 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 (PNTD/PLUD), already successfully applied in several countries, including island States like Philippines and Haiti.


73. 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.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):
 (Please attach the Operational Focal Points endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (Month, day, year)
B. M. U. D. Basnayake	Secretary	Ministry of Environment	23/8/2013

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Gustavo Merino Director, Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla (00153) Rome, Italy TCI-Director@fao.org		January 09, 2014	Niino Yuji Land Management Officer FAORAP	+662 697- 4213	Yuji.Niino@fao. org
Barbara Cooney FAO GEF Coordinator Email: Barbara.Cooney@fao.org Tel: +3906 5705 5478					