



REPUBLIC OF RWANDA

Ministry of Lands, Environment, Forestry, Water and Mining

BUILDING CAPACITY FOR SUSTAINABLE LAND USE AND MANAGEMENT IN RWANDA

UNDP/GEF-MSP PROJECT ON LAND DEGRADATION IN RWANDA

Project Summary

- A. Rwanda is a small mountainous country with the highest rural population density in Africa, largely on steep mountainous terrain on old leached infertile soils. This has led to declining agricultural yields and increasing levels of land degradation as rural farmers cultivate ever more marginal lands. An initial scoping exercise showed that the key issue within the land degradation scenario was poor cultivation practice leading to increasing and severe erosion of soil and consequent sedimentation of watercourses, loss of soil fertility and overall loss of ecosystem productivity and health.
- B. Rwanda is a focal country within the TerrAfrica Programme on Land Degradation. The World Bank and other agencies within the partnership address broader mainstreaming issues, and the Bank leads the national CSIF or Country Strategic Investment Process. This Medium Sized Project fills one specific gap in Rwandan SLM, and addresses the root-causes and barriers associated with land degradation from poor cultivation in four districts in the mountain agro-ecological zone. Government has invested heavily in rural reform since the genocide, with massive decentralisation which greatly empowers Secteurs within Districts. New laws provide for Sustainable Land Management. However, the breakdown in rural services post-genocide, coupled with re-structuring, has led to a loss of capacity in the extension services to provide Sustainable Land Management Models and to enforce new laws and directives. Small scale farmers with tiny parcels of land have not adopted past top-down terracing prescriptions – seeing no benefit compared to costs. The main barrier remains agriculture extension's inability to offer acceptable soil conservation models to rural people.
- C. This project proposes four outcomes linked to the LDC – SIDS Portfolio Sustainable Land Management Programme. The first outcome is the analysis and preparation of an acceptable set of intervention techniques, which are turned into field training modules, for new extension agents, within participatory demonstration training programmes. This is coupled with household socioeconomic assessments of costs and benefits.
- D. The second outcome addresses the institutional need for Government to monitor Land Degradation and device best practices from the set of SLM initiatives in country. Third and fourth outcomes address broader picture of the National Action Plan (NAP) via co-finance; and starting the Country Framework for TerrAfrica. These will be built into a database and allow government both to coordinate the SLM efforts and to integrate these activities into the developing CSIF and NAP process within the UNCCD and TerrAfrica frameworks.
- E. Overall project cost is 1,562,000US\$, with 600,000US\$ from GEF (including 12,500\$ PDF A), and 962,000\$ from co-finance: 300,000\$ from UNDP, 397,000\$ parallel co-finance from the ICRAF (World Agroforestry Centre), and 265,000\$ in-kind from the Government of Rwanda.

Expedited Medium Size Project proposal
Under the
LDC-SIDS Portfolio Project for Sustainable Land Management
REQUEST FOR GEF FUNDING

AGENCY'S PROJECT ID: 3388

GEFSEC PROJECT ID:

COUNTRY: Rwanda

PROJECT TITLE: Improving agricultural extension services for sustainable land use management in Rwanda

GEF AGENCY: UNDP

OTHER EXECUTING AGENCY (IES): RADA in GoR

DURATION: 3 years

GEF FOCAL AREA: Land Degradation

GEF OPERATIONAL PROGRAM: OP 15

GEF STRATEGIC PRIORITY: SP 1

ESTIMATED STARTING DATE: July 2007

FINANCING PLAN (US\$)	
GEF PROJECT/COMPONENT	
Project	587,500
PDF A	12,500
<i>Sub-Total GEF</i>	600,000
Co-financing	
GEF Agency	300,000
ICRAF (Parallel)	397,000
Government (In-Kind)	265,000
Bilateral	-
NGOs	-
Others	-
<i>Sub-Total Co-financing:</i>	962,000
<i>Total Project Financing:</i>	1,562,000
FINANCING FOR ASSOCIATED ACTIVITY IF ANY:	

Country Eligibility: Rwanda ratified the United Nations Convention to Combat Desertification on 22/10/1998 and is eligible for funding under paragraph 9 (b) of the GEF Instrument.

CONTRIBUTION TO KEY INDICATORS OF THE BUSINESS PLAN: Four Districts (out of 30 in Rwanda) with a set of demonstrations for Soil Conservation mechanisms to reduce land degradation in steep cultivated hillsides, leading to > 20,000 ha of land brought under sustainable land management within five years

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

Date:

Operational Focal Point Endorsement: Dr Rose 21st May, 2007
Mukankomeje; Director General - Rwanda
Environment Management Authority (REMA)
CCD national Focal Point and date of approval 21st May, 2007

This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for a Medium-sized Project under the LDC-SIDS Targeted Portfolio Project for Sustainable Land Management.

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LIST OF ACRONYMS

ADB	African Development Bank
APR	Annual Project Report
CAADP	Comprehensive African Agricultural Development Programme
CBO	Community Based Organisation
CEPEX	Central Projects and External Finance Bureau
CIDA	Canadian International Development Agency
CSIF	Country Specific Investment Framework (A TerrAfrica Initiative)
DEMP	Decentralisation and Environment Management Project
DfID	Department for International Development (UK)
DRC	Democratic Republic of Congo
EDU	Economic Development Unit
EICV	Survey on Integrated Household Conditions
FBOs	Faith Based Organisations
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographical information System
GOR	Government of Rwanda
GSU	Global Support Unit of the LDC – SIDS Umbrella Project for SLM
HIMO	Labour-Intensive Public Works (French)
IFAD	International Fund for Agricultural Development
ISAE	Higher Institute of Agriculture and Animal husbandry (French)
ISAR	Rwanda Scientific Institute for Agricultural Research Institute (French)
LD	Land Degradation
LDC	Least Developed Countries
LMU	Land use Management Unit
MDGs	Millennium Development Goals
M&E	Monitoring and Evaluation
MINAGRI	Ministry of Agriculture and Animal Resources
MINALOC	Ministry Local Government, Good Governance, Community Development and Social Affairs
MINECOFIN	Ministry of Finance and Economic Planning
MINITERE	Ministry of Lands, Environment, Forestry, Water and Mining
MIS	Management Information System
MSP	Medium-Sized Project
TIP	Medium-Term Investment Plan
NAP	National Action Programme
NAPA	National Adaptation Programme of Action
NCSA	National Capacity Self Assessment
NEX	National Execution
NGO	Non-Governmental Organisation
OP	Operational Programme
PAIGELAC	Internal Lakes Management and Fisheries Promotion Project (French)
PIR	Project Implementation Review
PMU	Project Management Unit
PRSP	Poverty Reduction Strategy Paper
PSTA	Strategic Plan for Agricultural Transformation (French)
RADA	Rwanda Agriculture Development Authority
RARDA	Rwanda Animal Resources Development Authority
RCU	Regional Coordination Unit
REMA	Rwanda Environment Management Authority
RWF	Rwandan Franc
SIDA	Swedish International Development Agency
SIDS	Small Islands Developing States
SLM	Sustainable Land Management
SP	Strategic Priority
SWC	Soil and Water Conservation
TERRAFRICA	A Programmatic Framework for Sustainable Land Management in Africa
TOR	Terms of Reference

TPR	Tripartite Review
U.A	Units of Account
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

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1 PART I. BACKGROUND AND CONTEXT

1.1 Introduction

1. Rwanda is a landlocked country situated in the central part of Eastern Africa with a total surface area of 26,338 km² and some 1,385,000 ha potentially arable land. Known as the country of a thousand hills due to its geographical location between two mountain ranges, Rwanda lies in the heart of the African continent. The terrain is mountainous and well irrigated by numerous rivers and lakes, supporting varied wild life. The lowlands have been eroded and their natural vegetation is disappearing as a result of excessive use.
2. Most of the cultivated land is under food crops grown twice a year with a total annual harvesting area of almost 1,500,000 ha. The area covered by lakes and rivers is estimated at about 135,000 ha, while marshlands occupy around 170,000 ha. Details are in Table 1 below. The landscape of the country is characterised by very steep hills and high mountains, with an average altitude of around 1,800m above sea level.

Table 1: Land Cover Classes in Rwanda

No.	Habitat Type	Area (ha)	% Area	NOTES
1	Forests and Protected Areas	400,000	16	Declined in last decade
2	Lakes	135,000	5	
3	Marsh and Major Wetlands	170,000	6.5	
4	Towns, Highways etc	100,000	4	Estimate
	Sub-Total	805,000	32	
	Balance	1,828,800	68	
5	POTENTIALLY Arable	1,385,000	52.6	These three rows show the level; of uncertainty as to amounts of potentially arable land in Rwanda.
6	ACTUALLY Cultivated	1,500,000	57	
7	Land-unsuited for Cultivation And pastures woodlots etc para 6	328,800	12.7	
	Total Area of Rwanda	2,633,800	100	.

(Note: this table demonstrates the high level of ambiguity in land statistics and data. A recent review of Land Degradation in Rwanda for the Nile Basin Programme says over 60 % is cultivated¹).

3. Due to its high altitude, Rwanda has a temperate tropical climate, with an average annual temperature of about 19°C. Annual rainfall varies with the altitude and ranges from 700 mm in the East to 2,500 mm in the West and between 1,000 mm and 1,500 mm in the central part of the country. The rainfall has a bi-modal pattern, with a short rainy season from September to November and a longer season between February and May. Between these seasons are two dry periods, a short one between December and January and a long one from June to September. There are four main vegetation types: closed evergreen montane forests on the higher mountains to the north and south (virtually all within National Parks), savanna woodland to the drier east, mainly within Akagera National Park, a variety of wetland types from shallow lakes to extensive papyrus swamps to ephemeral wetland patches

¹ Reference: UNDP – Nile Basin Secretariat - NTEAP: Rwanda Programme Consultancy Document 2005/6

Figure 1: Map of Rwanda showing land use

Figure 2: Map of Rwanda showing rainfall distribution

floodplains. The fourth type is the man-modified cultivation landscape, which has lost most natural vegetation but has a growing tree cover, mainly of exotics and fruit trees. This project addresses this latter cultivation zone.

4. The 3rd general census of August 2002 established the total population at 8,162,715 inhabitants and an annual growth rate estimated at 2.9%. The population density is one of the highest in Africa, with an average of 321 inhabitants/km². However, it differs from region to region and is highest in the former province of Ruhengeri in the North, with an average of 540 inhabitants/km² and lowest in the former Umutara province in the North-East, with an average of 100 inhabitants / Km². In some areas such as in the former Districts of Shyamba in the South and Mutobo in the North, the population per Km² reaches up to 1000 inhabitants²

1.2 Environmental context

5. The country can be divided into three distinct regions according to the altitude: (i) the lowlands of the east lying between 1000m and 1500m, with annual rainfalls between 700mm and 1000mm, (ii) the central plateau with the altitude between 1500m and 2000m and annual rainfalls between 1500mm and 2000mm and (iii) the Congo-Nile River divide in the west, at altitudes between 2000m and 3000m and annual rainfalls between 1,500mm and over 2000mm. Soils in Rwanda vary widely according to the parent materials from which they are derived; most are acidic and are derived from alterations from granites and schists. Richer soils, derived from volcanic ash, prevail in the North. Soils in the rainfall rich high mountains of the Congo-Nile divide and those in the hilly central plateau are particularly susceptible to erosion and are generally older, acidic and less fertile than the rest of the country. About 50% of all soils in Rwanda have a low aptitude for highly nutrient demanding crops mainly due to their advanced level of erosion and acidity³. These combinations of altitude, rainfall and soil type determine the “Agro-Ecological Zones” of Rwanda.
6. The high demographic pressure on limited land resources has resulted in land fragmentation, reduction of farm sizes and continued intensive cultivation of land, which in turn has led to rapid decline of land productivity with consequent decrease in yields. The size of farmland available for agricultural production ranges between 0,25 ha and 2 ha, with an average of 0,60 ha⁴ and the number of families with non-economical parcels of land continues to rise. Currently, almost 40% of all households own land less than 0,5ha, a significant increase from 25% in 1986⁵.
7. Scarcity of land results in cultivation encroaching on pastures, woodlots and marginal land, including land on very steep slopes, currently being utilised without appropriate soil protection measures. It has also led, over the decades, to large scale destruction of natural forests⁶. Land scarcity has increased the number of households who have to rent or borrow land for cultivation and who do not have any means and incentives for investments in soil protection and sustainable improvement of land productivity. Some 11.5% of all rural families did not possess own land according to the EICV survey of 2001⁷. The extremely high demographic pressure, the resulting increased number of the landless and the inappropriate land use results in land degradation, deterioration in soil fertility and declining yields. There is thus a vicious circle of degradation.
8. The decrease in soil productivity and yields as a consequence of continued land degradation in Rwanda is a serious threat to sustainable livelihoods for the rural population and is a major

² Management of Natural Resources & Environmental Protection, a Training Manual, MINITERE, March 2005.

³ Strategic Plan for Agricultural Transformation Support Project, IFAD/MINAGRI, March 2005.

⁴ PSTA, MINAGRI, Nov. 2004.

⁵ Ibid

⁶ Natural forest exists in Nyungwe National Park and Parc des Volcans, smaller patches in Gishwati forest.

⁷ Household Living Conditions Survey (EICV) 2001

factor of the high level of poverty in the countryside. Land degradation also contributes significantly to poor performance of the agricultural sector, which is a key pillar of the Rwandan economy. Environmental deterioration, and in particular land degradation caused by soil erosion has serious adverse implications for the entire region, especially for the Nile river basin, in which about 90% of the entire Rwandan territory lies. The River Nyabarongo, which is the actual source of the River Nile, is heavily polluted with siltation through soil erosion from upstream hillsides in the country. . Consequently, sustainable land use management and specifically soil protection has been clearly articulated in the PRSP as critical for the country's long-term development.

1.3 Socio-economic context

9. Rwanda is one of the poorest countries in the world, with an average per capita income of 220 USD and with about 60% of the entire population living under the poverty line⁸. Agriculture is still the backbone of the Rwandan economy, contributing around 45% to GDP, employing about 87% of the population and representing about 80% of total export revenues.
10. Agricultural production systems in Rwanda are characterised by small holder agriculture, with small family farmlands of an average of 0.6 ha, integrating poly-culture⁹ and animal production, representing around 90% of all households. Such agriculture uses a rudimentary level of technology and traditional agronomic practices, almost with no fertiliser application. Land shortage leads to widespread poverty for families who survive on the proceeds from these plots.
11. Rwanda has a mixed land tenure system comprising of individual titled land and state ownership. The government is in the process of reviewing land tenure system especially in the wake of the civil war. This is in recognition of the fact that the current land tenure is under great stress from the high population growth. A study undertaken in the north province¹⁰ demonstrated that acute competition for land in a context characterized by too slow expansion of non-agricultural income opportunities resulted in increasingly unequal land distribution and rapid processes of land dispossession through both operation of illegal land market and evolution of indigenous tenure arrangements. The study also showed that pervasive incidence of land disputes and the threat of landlessness led to high tensions in social relations and even within the core of family, thus paving the way for more and more overt expressions of disharmony and violence.

1.4 Policy and Legal Context

12. The role of improving land productivity and agricultural production through soil erosion control, increased soil fertility and environmental protection in general has been emphasized in the major national development frameworks, particularly in the documents Vision 2020 and PRSP (2001/2 and being updated). Recognising the fact that the high demographic pressure has increasingly led to the occupation of marginal areas and to the rapid and continuous soil degradation of the fragile ecosystems of the country, it is clearly stated in Vision 2020, that ***“in order to ensure sustainable development Rwanda will implement adequate land and water management techniques, coupled with a sound biodiversity policy”***.
13. The PRSP recognises the vital role of agriculture as the primary driving engine for the national development, and that it is hampered by the still declining soil fertility and

⁸ Household Living Conditions Survey (EICV) 2001

⁹ Major crops in Rwanda include banana, beans, maize, sweet potatoes, sorghum and round potatoes

¹⁰ Lorenzo Cotula; Editor, 2007: Changes in “customary” land tenure systems in Africa. IED/FAO publication.

- exceptionally low use of modern agricultural inputs. The PRSP stipulates that in order to achieve its objective in Rwanda of reducing the number of people living under the poverty line by half by 2015, an annual GDP growth rate of at least 8% is necessary. This is of course also the primary MDG Objective. The PRSP anticipated increased use of fertilisers which was to contribute 4 percentage points of growth to the agricultural sector, resulting in an overall growth of 5.3 percent for agriculture, accounting for some 75% of the national growth. This was based on the assumption that the use of fertilisers would increase from 8,000 tonnes by an extra 5,000 tonnes per year. The PRSP states further that “agricultural intensification must be accompanied by environmental actions to manage water flows, control soil erosion and improve the soil structure”.
14. Rwanda has ratified several international conventions and agreements relating to environmental protection and sustainable natural resources management, including: the MDGs, The United Nations Convention on Combating Desertification (UNCCD), the International Convention on Biological Diversity (CBD) the UN-Framework Convention on Climate Change, The Stockholm Convention on Persistent Organic, and others.
 15. The Government of Rwanda has put in place policies and legislation governing land use, to ensure rational utilisation and protection of land and environment in general, for sustainable development. The next planned steps move down to the ground and sensitise the population to create awareness and acceptance of the laws and modalities of their implementation and enforcement. Soil Protection is the first priority in 80% of Rwanda’s Districts. Sustainable management of natural resources, including soil and water conservation, is one of the 14 Sub-programmes (under 4 Programmes) of the Strategic plan for Agricultural Transformation (PSTA), currently under implementation by MINAGRI. The Law No. 11/82 of 30/03/1982 on soil utilisation and conservation stipulates the obligation of all farmers to practise soil protection and construction of necessary soil erosion control structures for agricultural production. The law was recently revised by MINAGRI, particularly the provisions on penalties, in order to strengthen its implementation and enforcement. Rwanda has created a Land Commission, with Vice-Presidents from all four Regions. The Vice Presidents and all District mayors signed “performance contracts” with the President, that they follow and implement national priorities.
 16. The new organic Law No. 08/2005 of 14/07/2005 determining the use and management of land has been promulgated and published in the Official Gazette of Rwanda on 15th September 2005. The law governs the use and management of land as well as its administration and institutes the principles on land rights. The law stipulates in Section 2, Art. 62 that: “Any person who owns land must use it in a productive way and in accordance with its nature and intended purpose. The use of land in a productive way is to **protect it from erosion, safeguard its fertility and ensuring its production in a sustainable way**”. The law also establishes Land Commissions at Central, Provincial and District levels. The first phase of implementation of the new land law and land policy started in January 2006 with the support of DFID, and seeks to achieve the goal of a transparent land reform process that supports economic development and poverty reduction.
 17. The organic Law No. 04/2005 of April 2005 determining the modalities of Protection, Conservation and Promotion of Environment in Rwanda, defines the natural environment as “being composed of soil and sub-soil; water; air; biodiversity; mountains and landscapes”. In section on “Soil and Subsoil”, in Articles 11 to 14, the law stipulates the rational use of soil; and states in Art. 11 that: “the soil and subsoil constitute the natural resources to be preserved from all kinds of degradation and they shall be used in a sustainable manner”.

1.5 Institutional Context

18. Several institutions play a role in sustainable land use management at both the central and decentralised levels. At the central level, the concerned Government Ministries include

MINITERE, responsible for lands and environment, MINAGRI, in charge of agriculture and livestock, MINALOC, responsible for decentralisation and community development activities and MINECOFIN, in charge of finance and economic planning. The relatively recent specialised semi-autonomous agencies Rwanda Agricultural Development Authority (RADA) and Rwanda Animal Resources Development Authority (RARDA), both under MINAGRI, play an important role in planning and implementation of SLM related activities. The Rwanda Environment Management Authority (REMA), a semi-autonomous agency under MINITERE, is a key-player in its regulatory and supervisory role in all matters related to land degradation and environmental protection in general. The Rwanda Agricultural Research Institute (ISAR), the Higher Institute of Agriculture and Livestock (ISAE) in Busogo, and the National University of Rwanda, through its Faculty of Agriculture, are important in the field of SLM related research and extension services.

19. The local authorities at the decentralised administrative levels are responsible for all activities of planning, implementing, coordination and monitoring of all SLM related activities on the ground. Since the territorial administrative reforms in January 2006¹¹, the Secteurs are the centres for service delivery, the Districts are in charge of planning and coordination of socio-economic development actions at Secteurs, and the Provinces are responsible for ensuring conformity of actions at decentralised levels with Government policies.
20. In the District structure there are seven technical units under the District Executive Secretary, including one unit for Land-Use Management and one unit for Economic Development. Four remunerated staff at the District are directly concerned with SLM related activities are: The Director of the Land-Use Management Unit (LMU); One professional in charge of Land Management, Environment and Natural Resources in the LMU; the Director of the Economic Development Unit (EDU) and the professional in charge of modernisation of Agriculture, and Livestock Development in the EDU. These four officers are in charge of planning, coordination, monitoring and facilitating of all activities in their domains, including sustainable agricultural activities. They are also responsible for the coordination of all SLM related extension services.
21. It is at the newly created Secteur level that Extension Services will take place, supervised by the District staff with support from RADA. At secteur level three remunerated employees will be responsible for SLM related activities: One professional in charge of Land use management, Housing, Infrastructure and Environment; One professional in charge of Agriculture and One professional in charge of Livestock development. The staff at the Secteur level are responsible for planning and ensuring implementation of all activities relevant to their fields. These will practically replace the former agricultural extension officers and have to make regular visits to farmers to provide advice and control the SLM related (and other) activities. These will need to have technical skills in SLM techniques as well as knowledge in participatory extension approaches, in order to effectively disseminate SLM related techniques to farmers. Past agricultural extension was at the old District level, with relatively few trained staff, with little resource or support for field visits. Most extension was through projects or linked to cash commodities (coffee, tea). Extension had not been successful in providing successful SWC interventions to overcome land degradation. Extension was under-funded, with little participatory process. Successes were linked to research processes (e.g. via ISAR, University, ICRAF – agro-forestry) tied to projects. Annex 1 provides an elaboration of the root-causes behind the constraints preventing successful extension.

¹¹ After the territorial administrative reforms of January 2006, the number of provinces was reduced from 12 to 4 rural provinces (Eastern, Western, Northern and Southern) and the City of Kigali, the Districts reduced from 106 to 30 and Secteurs from 1,545 to 416. After the reforms, the Secteurs are currently divided in a total of 2148 Cellules, reduced down from the former number of 9,165. Smaller administrative units called “*Umudugudu* – pl. *Imidugudu*”, comprising 50 Households, were established in every Cellule after the elections of March 2006.

22. Besides the centralised and decentralised Government institutions, a number of Inter-Governmental Organisations such as ICRAF, ICIPE) and NGOs, CBOs and FBOs are engaged in SLM activities. They are mostly active in the field of agricultural production, support to improvement of sustainable livelihoods, combined with construction of terraces, planting of grass species for stabilisation of terraces and as fodder for animals, planting of trees including Agro-forestry trees as well as development and utilisation of marshlands.

1.6 Land degradation in Rwanda

23. **Following the GEF criteria, three direct causes of land degradation** are: Deforestation and Unsustainable use of Forests, Overgrazing of Rangelands and Unsustainable Agriculture. All these causes lead to erosion and soil fertility decline, and so an overall loss of land potential.
24. **Deforestation** was a big problem in Rwanda, particularly soon after genocide in April 1994, where the total area covered by forests had been reduced to around 470,000 ha, from 700,000 ha in the pre-war situation. In 1999, the area under natural forests had been reduced to some 49% of the area in 1990. The significant decimation of forests was a result of the drastic increase in needs for wood for construction of makeshift shelters for the Displaced Persons and as a source of energy for cooking during the war. Meanwhile, the Government has put in place sound policies and laws governing the utilisation of trees which have proven relatively effective due to both law enforcement and acceptance of the need by local people through a high degree of awareness creation. A number of forest management mechanisms were put in place, including the Ministerial Order of 2000, prohibiting tree harvesting in all public forests, the Ministerial Decree of 2003, establishing procedures governing Public Forest Management contracts and the establishment of the Forest Protection Service, created through the Prime Minister's Order of 2002. To-date, deforestation and unsustainable use of forests no longer pose any significant threat to land degradation at national level, although maintaining woody cover on some catchments is still problematic.
25. **Overgrazing** was also a big problem in the drier Umutara region, in the North-western part of the country, soon after the Genocide of 1994. Most returning refugees who settled in the region had large herds of cattle¹² concentrated in this area, and overgrazing was a problem due to the limited carrying capacity of the dry region. Meanwhile, the Government has developed policies and great awareness creation campaigns for improved livestock keeping, including gradual substitution of the local breeds with less numbers but more performing improved breeds, improvement of pastures and the zero-grazing system. This system has been extended to other animals such as goats, which is expected to significantly reduce overgrazing and related environmental degradation problems.
26. **Unsustainable agriculture** remains the major problem resulting in a serious level of land degradation throughout the country. Unsustainable agriculture in Rwanda has two direct causes: (i) **Soil Erosion** and (ii) **Loss of Soil fertility**. Soil erosion in Rwanda is a result of a combination of several factors: extremely steep slopes, non-application of soil protection measures, application of inappropriate soil conservation techniques, unreliable heavy rains and the general low level of awareness of both the farmers and local leaders on the economic benefits of soil protection investments. Continued decline in soil fertility is mainly a result of "soil mining", ie continued cultivation without replenishing soil fertility with plant nutrients through application of organic manure or/and mineral fertilisers. The long-term consequences are a complete loss of ecosystem function and productivity.
27. Soil erosion in Rwanda causes a total soil loss of about 15 Million tonnes (almost certainly an under-estimate) per year, equivalent to loss of the capacity to feed 40,000 people annually¹³. The amount of plant nutrients lost annually according to the same source are estimated at

¹² The number of cattle in Umutara region in 1995 was estimated at about 800,000 heads

¹³ PSTA, MINAGRI 2004

about 945,000 tonnes of Organic Matter, 41,210 tonnes of Nitrogen, 3,055 tonnes of Potassium and 280 tonnes of Phosphorous. Soil erosion causes denudation of mountain and hill tops, decreases the soil depth, alters the soil structure and decreases the soil organic matter, thereby reducing the Water Holding Capacity with consequent leaching of nutrients and associated acidification of the soil. Heavy rains frequently occur in the mountainous regions of the country and cause serious erosion and subsequent soil sedimentation in the lower parts of the hillsides, often causing significant damage to crops and destruction of infrastructure such as roads etc.

28. The analysis in this project preparation process showed that the overriding problem with Land Degradation in Rwandan context was poor cultivation practices. Deforestation is a minor and localised issue, overall tree cover is increasing, and many initiatives address forest conservation. Overgrazing is localised in the drier lowland areas of eastern Rwanda; elsewhere, zero-grazing is increasingly the norm. Other GEF projects address the forestry and protected area sector (UNDP Protected Areas), the wetlands (WB Wetlands and catchments), and the cattle complex in the Kagera (FAO Lower Kagera Basin). This project therefore focuses on non-sustainable cultivation practices, realising that a small (<1 million US\$) project needs to focus thematically and geographically.

1.7 Threats and Causes of Land Degradation in Rwanda

29. A detailed matrix of the land degradation threats and root causes is provided as Annex 1. This matrix also includes biophysical impacts, land use management issues and the determination of key “*Barriers*” to sustainable land management. The key threats presented are **Soil Erosion** and **Loss of Soil Fertility**, which are the major direct causes of land degradation and resulting declining fertility and productivity of agricultural lands. The background to such land degradation and a discussion of soil conservation measures in mountainous landscapes is given in Annex 2.
30. The high population pressure averaging 540 inhabitants /Km² is associated with a number of root causes of land degradation. These include: increased conversion of less-productive and easily erosive marginal lands including land on very steep slopes. This conversion is aggravated by the lack of proper land use planning at Districts and Secteur levels, without demarcating areas for different uses and those for protection. Extreme fragmentation of farmland due to land scarcity and resulting increased distances between the parcels and the homestead also impacts negatively on maintenance of soil fertility. Farmers usually do not invest in soil protection structures in distant fields and apply less manure and mineral fertilisers on them. High densities results in the increased number of people without their own land, who live on borrowed and rented land, and who do not make any investments in soil protection and in maintaining or improving soil fertility. This loss of productivity stems from a breakdown in ecosystem functionality (soils lose capacity, steep slopes lose soil cover). This in turn reduces the array of goods and services (largely agricultural yields, grazing, fuel, and water) that rural populations obtain from this land.
31. The landscape characterised by high mountains and hills with very steep slopes is a major root cause for soil erosion in the country. Some 77% of all cultivated land in Rwanda have slopes between 13% and 55% and are classified under the category of “moderate to high erosion risk soils”. In some cases, land with a slope of over 80% is put under cultivation as a result of land scarcity. In fact, 39% of all cultivated land in Rwanda fall under the high erosion risk categories, 37,5% in the middle risk category and only 23% are classified under the “no or low erosion risk” category¹⁴, Table 2 below.

Table 2: Erosion Risk by Land Category in Rwanda

¹⁴ PSTA, MINAGRI, 2004

No	Parameter	% area	'000 ha	Slope Class
1	Very High Erosion Risk	17.6 %	358	Slopes class over 55%
2	High Erosion Risk	21.5	437	Slope classes 25-55%
3	Average Erosion Risk	37.5	763	Slope classes s 13-25%
4	Low Erosion Risk	16.7	340	Slope classes 6-13%
5	Very Low Erosion Risk	6.7	137	Slope classes less than 6%

32. The low level of awareness, and to some extent, reluctance of the farmers to establish new and maintain existing soil protection structures is a major cause of land degradation through soil erosion. This attitude has even led to the deliberate destruction of soil erosion protection investments made in earlier times, to the extent that only 36.6% of the total land carries some soil protection structures, as compared to 83% in 1998¹⁵. Whilst this is a statistic of considerable concern and a risk to project success (see below), this is in fact one of the key barriers preventing the successful uptake of soil conservation measures; it is also a widespread phenomena across Africa, Annex 6 documents cases from Morocco to Swaziland. The negative attitude of the farmers towards soil protection investments results partly from the coercive character of the introduction of different soil protection measures, particularly construction of terraces and anti-erosion ditches during the colonial era, which also continued during the post-colonial regimes until 1994. After 1973¹⁶, construction of radical terraces was also coercively introduced by the political authorities. Annex 6 gives a simple explanation of Radical and Progressive Terraces, and a literature review suggesting that such non-adoption of soil conservation measures has been a common phenomenon in Africa. The different soil protection structures generally are not well accepted by many small scale farmers due to the associated heavy burden in terms of the necessary labour as well as the required material and financial investments. In addition, construction of progressive and particularly the radical terraces takes away a considerable amount of land, which is lost from the scarce land available for cultivation. Lack of immediate economic returns compared to costs incurred discourages farmers from investments in soil protection activities.
33. Application of inappropriate and outdated soil erosion control measures makes investments ineffective and discourages farmers. For example, planting of tree lines and grass bands in the wrong combinations or at incorrect distances does not allow optimum protection of soil and does not lead to the desired progressive terraces, even after several decades. The main cause is lack of sufficient information on appropriate soil protection techniques from national research and inadequate knowledge on best practices gathered from elsewhere. Insufficient human resource and financial capacities in SLM related applied research constrains availability and adequacy of extension packages for disseminating to farmers. Also lack of effective information sharing on SLM practices and experiences among the different actors in the country is a major hindrance. Insufficient liaison with research institutions in the region and the consequent low levels of sharing of experiences equally adversely affects the quality of knowledge on appropriate soil protection techniques. A significant hindrance is the fact that soil erosion control measures are mostly carried out without any accompanying measures to improve soil fertility, such as lime, organic compost or fertiliser application, resulting in insufficient economic returns.
34. Soil mining and consequent depletion of essential plant nutrients, both Macro – and Micronutrients (Nitrogen, Phosphorus, Potassium, Magnesium, Copper, Zinc, Cobalt and

¹⁵ MINAGRI, June 2005: Assessment of Soil Conservation Status in Rwanda.

¹⁶ The first radical terraces were introduced in Rwanda in 1973 by a Catholic priest in Kisaro, in Byumba Province. These are until today the best and impressive terraces in the country and have been well adopted by the population around the Catholic Centre

Boron) without replenishing the soil with nutrients is the major root cause for loss of soil fertility. Continuous cropping of land and abandonment of fallowing is a consequence of land scarcity due to increased demographic pressure. The decline in crop yields also results in reduced production of biomass and less organic matter returned to soil. Lack of replenishment of soil with organic matter results in the low content of the soil organo-chemical complex, which in turn reduces the soil's Water Holding Capacity. It further reduces the Cation Exchange Capacity (CEC) of the soils and results in loss of plant nutrients through intensive leaching and causes acidification as well as Aluminium-toxicity and Phosphorus-fixation in some soils. About two thirds of all Rwandan soils are acidic¹⁷ and need measures to control the acidity and improve the soil productivity.

35. The low level of application of manure and mineral fertilizers is a key cause of increased loss of soil fertility. Insufficient manure is mainly caused by the reduction of per capita livestock as well as increased distances from fields to homesteads resulting from land fragmentation. According to a survey conducted in 2001, manure was applied to only 59% of all farmlands in the country, while the level was 70% in 1991¹⁸. Rwanda has one of the lowest levels of fertilizer application in the world, with an average of 2 – 3 Kg/ha, as compared to 9 Kg/ha for Sub-Saharan Africa and 83Kg/ha for all developing countries¹⁹. Application of lime and mineral fertilisers fell from 5% of all cultivated land in 1991 to only 3% in 2000. Further to low levels of fertiliser application, the effectiveness of applied fertilisers is often very low due to lack of adequate application recommendations and effective extension services.

1.8 Barriers

36. The threats, root causes and barriers of the total land degradation scenario in Rwanda have been detailed in Annex 1. A summary of a set of barriers that need to be overcome in order to achieve sustainable land management are briefly presented below. They address major factors causing unsustainable agriculture through soil erosion and soil fertility loss, and cover technical, institutional, policy as well as capacity issues. This is exacerbated by the new decentralised system, although this new system offers a real opportunity for positive change. New SLM related policy and legal frameworks have recently been put in place (see paragraphs 14-18) and no significant policy or legal barriers have been identified. However, the lack of measures to implement these policy frameworks does remain a significant barrier, along with popular awareness and acceptance. Barriers are in many cases inter-related and are shown in Table 3.

Table 3: Principal Barriers Preventing Sustainable Land Management to Overcome Land Degradation in the Agricultural Sector

No	Barrier
1	There Is no land-use planning, extension or enforcement capacity for soil conservation or SLM in general, due to insufficient skills, insufficient material resources , and lack of in-service incentives.
2	Rural farmers have not accepted past soil conservation measures as they are not convinced of cost-benefit returns, there are few conservation models that are acceptable to local populations.
3	The limited knowledge management system does not allow easy scale-up or technology adoption, or allow coordination between a growing number of programmes and projects. There are limited monitoring and evaluation (M&E) mechanisms to foster lessons learned or best practice analysis. The conclusion here is that despite a sizable investment in SLM from donor

¹⁷ Clay et al. 2000

¹⁸ Kelly, V. , Mpyisi, et al.: Agricultural Intensification in Rwanda: An elusive Goal: MINAGRI, 2001

¹⁹ Clay, D.C., Kelly, V., Mpyisi., Reardon, T.: Input use and conservation investments among farm households in Rwanda: Patterns and Determinants, Michigan State University, Inst. of International Agriculture, 2001

	and government resources, the lack of coordination and synergy greatly reduces potential impact.
4	There is no functional SLM framework at national / local level: the changes in decentralisation process, whilst good will require time and investment to realise sustainable land management.
5	Despite Rwanda having ratified the UNCDD, Rwanda has yet to develop the National Action Plan (NAP) for Land Degradation, The absence of the NAP exacerbates institutional uncertainty for SLM.
6	The lack of land and outdated tenure process have led to fragmentation of agricultural land: there is a need for tenure review linked to land-use planning. <i>(This is the DFID Project)</i>

37. **Limited capacity for land use planning and extension** at District and Secteur level is one of major barriers, which results in farmers cultivating on marginal lands and those on steep slopes, without adopting appropriate measures to protect the land against soil erosion. The responsible officers at these levels have major barriers which prevent them from carrying out their land use planning and management tasks satisfactorily. These barriers are:
- 1 insufficient technical skills in planning sustainable land management,
 - 2 a lack of material resources to deliver effective extension messages,
 - 3 and a lack of in-service and career incentives for successful extension
38. Consequently, the District plans do not demarcate clearly which areas are to be used for which purposes (e.g. agriculture, pastures, forests etc.) and which ones for protection. Secteurs do not have land use plans at all. The staff in charge of land use and agriculture in the recently created Districts and Secteurs will require capacity building measures in the fields of land use planning, in SLM techniques and participatory awareness creation approaches, in order to ensure effective and participatory land use management in the best appropriate manner. In addition, land tenure and legislation of land use in Rwanda has so far been detrimental to sustainable agriculture. It allowed increased land fragmentation, which discourages investments in soil protection and did not put in place mechanisms to ensure appropriate utilisation of land and its protection. This has resulted in land degradation and loss of ecosystem integrity, increasing scarcity of basic resources at local levels, including scarcity of ecosystems goods and services to communities. The recent land law of September 2005 contains provisions to ensure that land is properly used and soil protection is obligatory for land owners and users. But the lack of on-ground extension and enforcement capacity means these laws have little impact. There is need to implement the SLM laws.
39. **Low level of awareness** of the necessity for SLM, and the potential profits from investments in SLM techniques at both the local leadership levels and within the target population of farmers in high risk areas is a fundamental barrier to wide adoption of SLM measures in the country. The leaders and technicians at the decentralised levels lack the necessary skills and resources to implement SLM techniques, and do not have sufficient knowledge of or capacity for participatory extension techniques. The extension agents resort therefore to application of coercive approaches in enforcing Government laws and directives related to soil protection and soil productivity improvement measures, which become counter-productive. The farmers are generally reluctant to widely adopt soil protection investments due to the bad experience of the past through coercive approaches. Lack of studies on economic profitability of SLM investments to stimulate them is also an important constraint. Even where farmers carry out labour-intensive and costly soil protection investments, the absence of other complementary measures to increase soil fertility and yields, such as lime, organic compost and fertiliser application is a significant barrier for continued investments by farmers in SLM techniques. One task of this developing project will be to analyse such barriers in more detail.
40. **SLM models:** Application of inappropriate or simply non-application of any soil protection techniques results mainly from unavailability of SLM models. There is a need for information on appropriate SLM techniques, and production of user friendly packaging of the information

and its effective dissemination. Where SLM techniques are applied, it tends to be the same inputs everywhere, regardless of the Agro-Climatic Zone, soil type or crop pattern. The soil protection techniques applied everywhere include: radical and progressive terraces, erosion control ditches, hedgerows, and grass strips. Applied techniques are often not effective due to non-respect of required norms, e.g. distances between trees in hedgerows or those between grass plantings, lengths and heights of progressive terraces etc. Agro-forestry trees and shrubs used are not diversified and are the same throughout the country, namely *Grevillea*, *Calliandra* and *Leucaena*. There is a need for a move away from a “one-size fits all mentality” to a more site specific set of innovative practices.

41. **Inadequate Knowledge Management:** Efforts to improve sustainable agriculture are largely fragmented and uncoordinated. There are no effective mechanisms for networking, identifying and sharing lessons learned and best practices among different actors in the SLM area, including research, NGOs, CBOs, FBOs and the private sector economic operators. There is little documentation or scaling up or dissemination on the isolated cases of successful new and innovate SLM techniques from local research institutions or government. What information there is remains in the science domain with little farmer friendly packaging. There are also no effective communications strategies for sharing best practices and lessons learned with other institutions and organisations in the region, with similar physical and socio-economic situations, such as the East African Highlands region. ICRAF provides a mechanism to achieve this. Information sharing is haphazard and gaps in knowledge and awareness are numerous. Besides technical SLM practices, farmers are not provided with information on proven economic profitability of investments in soil protection and in improvement of soil fertility in their settings. In virtually all cases such livelihood household level income and expenditure information does not exist and remains a main barrier to uptake of innovation. Lack of user friendly SLM relevant extension packages and the dysfunctional agricultural extension system in Rwanda further aggravates the problem of knowledge dissemination to the end users, the farmers. The Government staff in charge of land use issues and those in charge of agriculture lack technical knowledge at District and Secteur levels lack technical skills on SLM techniques and are not sufficiently conversant with participatory extension approaches.
42. **Monitoring and Evaluation System:** There is no functioning M&E system for the agricultural sector in general and for SLM in particular. However, within the context of the preparation of PRSP-2, studies have recently been conducted with the objective of developing M&E systems in different social and economic sectors, including the Agriculture/Rural Development sector. A specific M&E system to assess the performance and experiences of application of SLM techniques is necessary, also to facilitate the process of adaptive management of sustainable land use.

2 PART II: PROJECT STRATEGY and PROJECT DESCRIPTION

2.1 Baseline course of action

43. Rwanda is signatory to the UN Convention to Combat Desertification. A system of national reporting on the implementation of the UNCCD is in place and National Reports on the Implementation of the UNCCD have been prepared for 1999, 2002 and 2004. The Implementation status reports are prepared by the Ministry in charge of Environment and Lands, under the general coordination of the GEF and UNCCD Focal points. The GOR, through MINITERE, has Focal Points for different Conventions on environmental issues. Recently the Ministry has appointed an officer, who will deal exclusively with matters related to implementation of the different conventions, in order to closely monitor, evaluate and report on the progress of the implementation status of the different conventions.
44. The National Action Programme (NAP) to Combat Desertification has not yet been elaborated. In 2004/5, following a request by the GOR, the Global Mechanism of the UNCCD

has recently approved funding with USD 80,000 for its elaboration. The preparation of the NAP was scheduled for 2007. However the GM withdrew its offer of funding and GoR will fund the NAP process directly, as co-finance to this GEF input.

45. Several projects (ongoing and planned) that target the issue of land degradation either directly or indirectly (e.g. through rural development) have been initiated. Many of them have a component of capacity building, either at the national or decentralised levels. Some of the projects deal with direct soil erosion protection activities and are classified in the Knowledge Management and Capacity Building category, as they transfer knowledge on the ground and reinforce capacities of the local technicians and farmer communities, through *in situ* training. These projects are described in paragraphs 46 – 52 and summarised in Table 4.
46. Many of these projects are conducted under the supervision of MINAGRI / RADA. The Government of Rwanda, through MINAGRI, has started, with its own resources, a 6-month Special Urgent Soil Conservation Programme beginning in 2007, costing around 613 Million RWF. The programme was initiated after a special soil conservation assessment mission, conducted in June 2005, found out that the total area covered by soil protection structures had fallen from 83% in 1998 to only 36.6% in 2005. Major activities of the urgent programme include awareness creation for local leaders and for the farmer communities and on implementation of policies and laws on land and environment. The programme will also finance construction of a total of 20 ha of radical terraces in each of the four new provinces and in the City of Kigali. The Rwanda Agricultural Development Authority (RADA) has earmarked a total of 46 million RWF for the Programme for Sustainable Management of Natural Resources and Water and Soil Conservation in its investment plan for 2006 – 2008. The programme will fund different SLM related activities, including establishment of pilot soil conservation model sites in at least one village in each province. This activity is allocated with around 20 Million RWF for the three year period. The Rural Sector Support Project (RSSP) is financed through a World Bank loan of around 144 million USD for a period of 14 years since 2001. The activities of marshland development and related watershed protection make the major component of the project, with about 60% of the total budget. Capacity building activities in watershed management, soil protection techniques and integrated livestock development are conducted targeting leaders and technicians at Districts, Secteurs and Cellules as well as the farmer organisations.
47. The 7-year project to operationalise the Strategic Plan for Agricultural Transformation (PSTA), for 20 million USD started in 2006. The project has two main components: (i) Pilot actions for integrated sustainable agriculture in different Agro-Climatic Zones in 6 former Provinces and covering all 4 Programmes of the Strategic Plan for Agricultural Transformation (PSTA) and (ii) Institutional support to the Agricultural Sector. In the pilot actions component, new integrated watershed management techniques will be tested with farmer communities, including different soil protection and soil improvement techniques combined with intensive livestock development. The Institutional Support component, costing around 6.55 million, USD comprises different capacity building actions at the central and decentralised levels as well as at farmer communities. The Institutional Support component will receive co-financing from DFID and the Netherlands.
48. Two projects under MINAGRI address specific land use management issues in the Bugesera area - one of the most vulnerable regions in the country in terms of land degradation, drought and famine. The 5 year Bugesera Economic Development Project, funded by the Luxemburg Development Cooperation with 8.4 Million euros, started in 2005. One of the major components is upland irrigation and related water and soil management techniques as well as training of farmers in these techniques. The Bugesera Rural Development Project is a 5-year project with a total cost of 14 Million Units of Accounts (U.A.), to be funded by the ADB and expected to start in early 2007. Some of the major activities include the irrigation of 800 ha and integrated watershed management techniques and accompanying training of farming communities. The project PAIGELAC is a 5-year ADB financed project under MINAGRI for

promotion of fisheries in Rwandan internal lakes, which became effective in 2005. Protection of the water catchment around the lakes to ensure environmental protection of the internal lakes, particularly against soil erosion is a major project component.

49. The Dutch Government has funded a project for Integrated Natural Resources Management applying labour-intensive public works approach (SIG-HIMO), for about 3.46 billion RWF, from to run from 2004 to 2007. The project is conducted under the supervision of the Ministry in charge of Local Government and Community Development (MINALOC) in four former Districts in the former Ruhengeri province and its major components include soil conservation measures as well as training of technicians at Districts, Secteurs and Cellule levels and farmers in soil conservation techniques for sustainable land use. The Dutch Government is financing a “Decentralisation and Environment Project” (DEMP) with a total of 3.296,000 USD and the project has a co-financing arrangement with UNDP (710,000 USD) and SIDA (50,000 USD) for the period to December 2007. The project operates under the overall supervision of MINITERE and is coordinated as a NEX project under UNDP. It operates in three former provinces along Lake Kivu: Cyangugu, Kibuye and Gisenyi, with major activities related to sustainable land use through soil protection techniques and capacity building at all decentralised levels and at farmer communities. Training modules include soil protection, water harvesting and waste management techniques.
50. A 3.1 Million £ project for the Support to Phase 1 of the Land Reform process in Rwanda started in December 2005 with funding from the UK Government through DFID. It is a Mainstreaming and Capacity Building Project, to facilitate MINITERE to lead all actors in the land reform process. The project will assist in developing a strategic roadmap for the land reform and provide support in capacity building at the central and decentralised levels in Land administration and Land use management. The project for production of the Land Use Master Plan for the Eastern Province, fully funded by the GOR with around 1.24 Billion RWF was scheduled to start in late 2006. The project will provide a good land use planning tool to ensure best land use with integration of sustainable agriculture and livestock development. A subsequent 3-year GOR funded National Land Use Master Plan Project, to start in 2007 with a total cost of 3.5 billion RWF, will produce regional land use plans to ensure sustainable land use.
51. A number of local and international NGOs are also involved in SLM related activities. The most important local NGOs are HELPAGE – Rwanda, which is currently carrying out the SIG-HIMO project in the North of the country under the financing of the Dutch Government. It has also conducted similar soil protection activities in the former Province of Kibuye in the Project for Resettlement and Social Reintegration of the Displaced from Gishwati forest, a NEX project under MINALOC, with the financing from the Norwegian Government. DUHAMIC – ADRI is another local NGO with SLM activities the former Provinces of Kigali and Butare. Major international NGOs in the SLM area include Christian Relief Service (CRS), CARE International, German Agro-Action and VI-LIFE. All the NGOs conduct field-based actions including marshlands development, soil protection, tree planting, multiplication of Agro-forestry plants and fodder grass as well as training of farmer communities in agronomic practices, including SLM.
52. A project to promote mainstreaming and capacity building in the environmental sector is implemented under the Rwanda Environment Management Authority (REMA). The Poverty and Environment Initiative (PEI) is a 624,000 USD project, for phase 1 (2005-2007), co-financed by the GOR, UNEP, UNDP and aims to enhance sound environmental management in poverty reduction, sustainable economic growth and the attainment of the MDGs. The

project is currently financing activities related to mainstreaming of environment in the second phase of the PRSP²⁰.

53. The Government has negotiated two large-scale regional projects within the Nile Basin Cooperation Framework. The Nile Trans-boundary Environmental Action Project (NTEAP) is a 43,6 Million USD project shared by all Nile Basin member countries, with 5 major components: (i) Institutional Strengthening to foster Regional Cooperation; (ii) Community level land, forest and water conservation; (iii) Environment Education and Public Awareness; (iv) Wetlands and Biodiversity Conservation and (v) Basin-wide water quality monitoring. It is a 5-year project (2004 – 2008), co-financed by the Nile Basin Member States, the World Bank, GEF, UNDP, the Royal Netherlands Government and CIDA.
54. The Kagera Trans-boundary Agro-ecosystem Management Programme (TAMP) is a 5-year regional programme, due to begin end 2006, covering the countries in the Kagera River Basin: Rwanda, Uganda, Tanzania and Burundi, with a total cost of 28 million USD for all 4 countries. GEF has committed a grant of 7 million USD, on condition that the four countries raise a total of 21 Million USD co-financing, in kind or cash or kind, from public funds and other development Partners²¹. The project will address all matters concerning sustainable management of the Kagera Basin ecosystem including, *inter alia*, issues of knowledge management and capacity building in the entire field of combating land degradation and promoting sustainable agriculture through mitigation of soil erosion and increasing soil fertility.
55. These ongoing programmes are summarised in terms of baseline co-finance in Table 4 below

Table 4: Baseline Financing For SLM in Rwanda

No	Project	Rw Frs	Total US\$	%	Relevant \$
1	NAP		80,000	100	80,000
2	Soil Cons Programme	613 mill	1,100,000	100	1,100,000
3	RADA PSM NR SWC	45 mill	80,000	100	80,000
4	RSSP (W Bank)		141,000,000	25	35,000,000
5	S Plan RSTA		20,000,000	100	20,000,000
6	Bugesera 1		9,000,000	100	9,000,000
7	Bugesera 2 Af Dev Bank		16,000,000	50	8,000,000
8	SIG HIMO	3000 mill	5,380,000	50	2,700,000
9	DEMP		3,200,000	20	640,000
10	DFID LRP		6,000,000	100	6,000,000
11	Land-use Master Plan	1200 mill	2,140,000	100	2,140,000
12	NGO inputs (lumped)		2,000,000	50	1,000,000
13	IMCE		4,700,000	10	470,000
14	PAIGER		1,400,000	50	700,000
15	Nile Basin		200,000	50	100,000
16	TAMP		1,500,000	33	500,000

²⁰ The first PRSP adopted in 2002 had not given adequate consideration to environment. The GOR is addressing environmental issues, including sustainable land use, more comprehensively in the second generation PRSP, called “The Economic Development and Poverty Reduction Strategy (EDPRS)”.

²¹ Development of the Full Project Proposal (PDF-B) was funded by GEF for a total cost of 700,000 USD and was conducted within 18 months in the 4 countries from October 2004 to March 2006.

To	TOTAL	-	-	87,510,000
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NOTES: “Para” refers to paragraph in last version of Proposal; Rwanda Francs converted by 560 = 1 US\$; “%” indicates what proportion of project is relevant baseline to GEF SLM Project. “Relevant” indicates the total amount that is relevant to our GEF SLM project.

56. This is a major investment in SLM in order to overcome Land Degradation, most of this is in the land-soil – agriculture sector, and it covers central and decentralised levels of government. Given this level of intervention the question must be asked as to where is the need for GEF investment at the half-million dollar level? What is the *incremental value* of GEF inputs? The answer lies in addressing the barriers which serve to reduce the impact of past, ongoing and probable future interventions in SLM. Unless these capacity constraints are addressed, then this suite of interventions will have a lowered impact. Previous paragraphs have stressed the lack of coordination, lack of M and E process, and the lack of information sharing or inadequate knowledge networks. The following paragraphs address these issues in more detail.

2.2 Capacity and mainstreaming needs for SLM

57. Most of the capacity building programmes are recent and address only part of the cadres at the central level. The recent changes in the administrative structures and related public service reforms have led to shifting of some Government staff with SLM knowledge to other areas and to consequent loss of SLM related capacities at central and decentralised levels. The new staff at Districts and particularly at Secteurs in charge of land use and agricultural issues will require intensive capacity building measures to enable them to acquire the necessary awareness and technical planning tools to integrate SLM practices into their respective development plans and agricultural extension activities.
58. Generally lack of appropriate SLM packages for knowledge dissemination on best practices in soil protection and soil fertility improvement techniques remains the most important barrier for efficient implementation of SLM. An effective Knowledge Management process has to be developed to improve and strengthen the capacities of leaders, technicians and farmer communities in SLM techniques. Knowledge and best practices generated locally and in the region must be systematically gathered and packaged for effective dissemination to all concerned users. Environment/natural resource economics need to be developed as tools for land use planning and policy development. This should include cost / benefit analyses of present land use systems – the cost of doing nothing – in comparison with similar analyses of SLM option.
59. The SLM related information generated by local research institutions, NGOs, CBOs, FBOs and private sector operators is not readily available as it is scattered or not documented. Also, the GIS units in MINAGRI and at the National University, which are currently not working at full capacity and operating in uncoordinated manner should develop coordinated actions and build synergies to produce accurate and user friendly data and information to be used for identification of sustainable land management systems, for planning SLM development and for monitoring the sustainability of land uses and application of SLM practices.
60. Capacity Building for SLM mainstreaming in development planning is particularly important at the decentralised levels. The recently recruited and elected leaders in charge of land use and agriculture at different levels at Districts, Secteurs and Cellules need capacity building in SLM knowledge and in effective participatory extension approaches. The capacity building measures are further necessary to improve awareness and SLM techniques at farmer communities. The agricultural extension system is still very weak and needs to be strengthened. Adequate training modules and documents on SLM best practices need to be prepared and be accessible to all actors involved in training and extension services in the SLM sector, including the civil society organisations as well as the private sector operators.

61. Further to the capacity building needs in knowledge management and extension services, there is need for a functioning Monitoring and Evaluation System to assess the performance of SLM related practices. An effective M&E system has to be participatory, involving all stakeholders, facilitate sharing of information among stakeholders and become a tool for adaptive management of SLM measures. A status report of land degradation and SLM practices should be regularly developed.

2.3 Project Rationale and Objective

62. This project is part of the UNDP/GEF LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management, within the SP-1 of OP-15 under the GEF's Land Degradation area of focus. The project addresses the four outcomes under the Immediate Objective of this umbrella project:

- Individual and institutional capacities for SLM will be enhanced and demonstrated within on-ground pilot sites. A large part of this project is directed towards capacity building and knowledge management, targeting SLM institutions and personnel in the project area;
- Systemic capacity building and mainstreaming of SLM principles: this project also addresses policy development and mainstreaming of SLM at central and at decentralised Government levels in the project area and builds oversight capacity.
- Support to the production of the National Action Plan (NAP) using co-finance.
- Support to the production of the MTIP (Medium Term Investment Plan of NAP), which complements the CSIF or Country Strategic Investment Framework of TerrAfrica.

63. The project expects to benefit from support services of the Global Coordination Unit (GCU) of the Umbrella Portfolio Project in the following areas:

- Sharing of SLM experiences, lessons learned, best practices and guidelines developed;
- Guidance on the development of natural resource/environmental economics for SLM;
- Guidance and support for the development of knowledge management systems for SLM;
- Guidance and support for the development of monitoring and evaluation systems for SLM;
- Guidance and support for the development of effective incentives for the integration of the private sector into SLM;

64. **Project Logic: The Problem:** Increasing levels of soil erosion and reducing soil fertility in the acid-soil mountainous areas of Rwanda have resulted in ecosystem degradation, lowered agricultural yields, and so severely impacted on rural livelihoods and the national economy. Ecosystem integrity has been compromised and siltation has caused nutrient loading in water bodies.

Root Causes behind this problem include (also see Annex 1 for detail):

- ✓ Increased cultivation on erosion prone steep slopes, reducing woody-cover and pasture.
- ✓ Increasing fragmentation and division of already small household land, due to population growth and little industrialisation. Land holdings are often below minimum levels for viable income, leaving little ability to have fallow-land, to purchase fertilizer, use mulch or manure or invest in major soil conservation infrastructure.
- ✓ A breakdown in agricultural extension services (exacerbated by change in decentralised governance), with an inability to transfer acceptable technical land management options to small land-owners.
- ✓ The lack of ability within decentralised governance to enforce bye-laws requiring soil and water conservation (SWC).
- ✓ A “*secondary set of root-causes*” include the fact that whilst there are many rural development, agricultural – land-use donor and government projects in Rwanda that address

SWC inputs, there is no central coordinating mechanism to ensure commonality of successful approaches. Secondly there is no overall monitoring and evaluation mechanism that can test the effectiveness and efficiency of soil and water conservation interventions.

65. **The Normative Solution** to this set of threats – root-causes would be: “Capacity developed for sustainable land management in central and local government, government agencies (RADA), and farmers; and sustainable land management principles mainstreamed into national policies, plans and processes”. This will ensure that Rwanda agricultural and land management agencies have the capacity and skills to deliver an effective and acceptable package of land management interventions to farmers with small land parcels in the mountain ecosystems of Rwanda; the small scale farmers see benefit in accepting and implementing these interventions, and, that agencies have put in place a demonstration set of pilot interventions, that show clear land-use benefits (reduced soil loss and increased crop-yields) that allow the replication and scaling-up of interventions. At national level, it will also ensure that SLM principles are mainstreamed into development processes, building on experiences from the project implementation and from similar mainstreaming in other countries in the region.
66. **The Basic Barrier**, that prevents this solution being implemented, is that: “Small scale land-owners have not accepted past packages of SWC interventions, which have largely focused on labour intensive “radical terraces”, which are believed to be high in costs but deliver insufficient benefit to persuade land-owners to change. Further, this non-acceptance has led landowners to not maintain, and in some cases to actually destroy past terrace inputs. Secondary barriers include the lack of capacity of extension agents at all levels to overcome this mistrust and the inability to provide acceptable models of SLM – Soil Conservation practice. This is compounded by the lack of SLM frameworks in the absence of a NAP or Country Framework for mainstreaming SLM.
67. The project will demonstrate ways to build capacity for sustainable land management in Rwanda. The project recognizes that it cannot cover all Agro-Climatic Zones, nor all Districts. The GEF role is to innovate and disseminate best practice. In this case the project will liaise with the large developing and ongoing baseline. The project will assist government to coordinate and monitor and to develop Knowledge Management Networks. The project adds a layer of best practice onto decades of business as usual, by adding technical innovation from trials in-country and in the region (i.e. the adjacent mountain states such as Uganda). Best practice will be ensured by bringing in relevant international technical expertise to work with Rwandan institutions.
68. The immediate on-ground activities will be implemented in an area covering four Districts in the Northern and Western Regions of the country, which are characterised by a high degree of land degradation. The project area covers a total of 70 of the 416 rural Secteurs²², representing almost 20% of the entire national territory. The project area is situated in the high altitude Agro Ecological Zone of the country, characterised by high mountains and hills with extremely steep slopes and a relatively high rainfall with annual averages above 1,600 mm. The area has a high crop production potential due to favourable climatic and soil conditions, however it is faced with constant decline in land productivity resulting from increased soil erosion, soil acidity (pH values below 5) and a high demographic pressure with a population density well above the national average. Lessons learnt from the project area will be scaled up to cover the whole country after project completion.
69. The project will contribute towards achievement of the following long-term goal:

Project Goal: Sustainable Land Management improved by increased levels of successful soil and water conservation interventions in mountain regions of Rwanda, this contributing to improved ecosystem health and rural economies.

²² From the 416 Secteurs in the country, 10 are in the District of Nyarugenge in the City of Kigali, the only District without agricultural areas

Project Objective: Capacity developed for sustainable land management in central and local government, government agencies (RADA), and farmers; and sustainable land management principles mainstreamed into national policies, plans and processes.

2.4 Project Outcomes:

70. There are 4 technical Outcomes, (following prescribed best practice of the LDC-SIDS Portfolio Project), plus an additional outcome on project management. The first outcome provides the capacity for improved SLM in the extension services. The second is linked to mainstreaming SLM processes within Government by providing longer term oversight of the SLM process. The third and fourth outcomes are linked to the NAP and TerrAfrica processes. Details are as follows:

Outcome 1: Individual and institutional capacity for SLM developed

There are 5 Outputs:

Output 1.1: An SLM training/awareness raising program for national and district technical officers and decision makers designed and implemented

Output 1.2 Successful soil and water conservation interventions are identified by expert groups in Rwanda; and lessons on success factors are disseminated.

Output 1.3 Agriculture and training expertise have developed a participatory field-based training course for extension staff based on regional best practice, and demonstrates cost-benefit analysis of interventions at household level.

Output 1.4 Extension services in pilot Districts and Secteurs (together with central, regional and civil society partners) undertake training courses.

Output 1.5 Extension services deliver integrated demonstration SWC interventions in project districts, which generate feedback lessons on cost and benefits at household - community levels.

Outcome 2: Government of Rwanda uses capacity to mainstream and manage the long-term Rwanda SLM programme within key sectors, to ensure coordination. There are 3 Outputs:

Output 2.1 The Partnership oversight committee for SLM at Central level both coordinates donor support and provides for monitoring and evaluation of SLM interventions.

Output 2.2, Government at all levels use the results of the best practice assessment and economic analyses to *mainstream* SLM process into secteur, district and regional Development Plans

Output 2.3 Central government, together with donor partners and decentralised government, have found means to scale-up and disseminate SLM “best practice”.

Outcome 3: (Totally Financed by UNDP – NOT GEF): Government of Rwanda has developed its National Action Plan (NAP) and uses this as a coordination tool. There are two Outputs:

Output 3.1: The National Action Plan is developed and approved through participatory process with expert and stakeholder groups.

Output 3.2: The NAP provides a framework for coordination of SLM activity in Rwanda.

Outcome 4: The NAP is supported by a credible MTIP and a broader CSIF process linked to TerrAfrica. There is 1 Output:

Output 4.1: (*And linked to SLM – TerraAfrica Process*). The SLM committee of government / partners starts the CSIF (Country Strategic Investment Framework) planning process for TerraAfrica SIP, which incorporates the MTIP to start implementation of the UNCCD National Action Plan.

Outcome 5.0: The Project managed efficiently and cost-effectively, with adaptive M and E process.

2.5 Detailed Project Outcomes, Outputs and Major Activities

71. The detailed project outcomes, outputs, activities and indicators are presented in the Logframe in Annex B. The project will have four technical outcomes and sixteen outputs, plus a management output as follows:

72. **Outcome 1: Individual and institutional capacity for SLM developed**

Output 1.1: An SLM training/awareness raising program for national and district technical officers and decision makers designed and implemented.

This will be achieved through 4 activities:

Activity 1.1.1: Undertake a capacity needs assessment and identify training/awareness gaps at national and district level

Activity 1.1.2: Design a communications strategy for SLM clearly identifying target groups and information to be disseminated to each target group

Activity 1.1.3: Implement the strategy; delivering training /awareness raising, etc.

Activity 1.1.4: Monitor dissemination and the effect of the programme on practice (the awareness-change in attitude-practice links)

Output 1.2 Successful soil and water conservation interventions are identified by expert groups in Rwanda; and lessons on success factors are disseminated.

There are 4 interacting activities, all leading to the identification and documentation of existing best practice – from within Rwanda and in adjacent countries. Activities are:

Activity 1.2.1 *Develop a system of Knowledge Management.* The KM system identifies appropriate SLM extension packages for mainstreaming into national and decentralised development plans.

Activity 1.2.2 *Establish a network of all SLM stakeholders.* A full inventory of all actors in the SLM related field in the country will be established. The network will facilitate collection and sharing of accurate and up-dated information in different SLM areas among all stakeholders in the country.

Activity 1.2.3: *Identify best practices, lessons learned and gaps in the sustainable agriculture knowledge base and use it in the Mountain Agro-Ecological-Zone.* Knowledge on SLM techniques and application experiences in the zone will be systematically collected. Study tours to neighbouring countries in the region will be organised for staff at the central Government Institutions and from decentralised authorities in charge of land use, to share experiences and gather knowledge on best practices from these countries, both on field experiences and in research.

Activity 1.2.4: *Integrate SLM best practice into an interactive database.* Key demonstration sites will be maintained and integrated into field training programmes (see below)

Output 1.3 Agriculture and training expertise have developed a participatory field-based training course for extension staff, including regional best practice, and demonstrates cost-benefit analysis of interventions at household level.

There are two activities, which will use training expertise (ToT) to develop participatory training packages that can be used by secteur level extension agents.

Activity 1.3.1 Develop new improved and economically and sociology viable SLM technologies for the montane Agro-Ecological Zone as user friendly participatory extension packages.

Best practice will be compiled into a suite of efficient SLM technologies that complement existing knowledge in the country and in the region. The new, quick and cost-effective soil testing technologies to establish soil and crop appropriate fertiliser use recommendations will be included. The project will facilitate the production and dissemination as user-friendly materials, (e.g.: guidelines brochures, leaflets containing information on SLM techniques, soil fertility improvement measures such as fertiliser, organic compost and lime application, and other useful agricultural extension messages. Dissemination of the SLM related information materials will target primarily the technicians at decentralised levels, particularly at the Secteurs as well as the farmer organisations.

Activity 1.3.2 Integrate selected Demonstration Sites into the training packages- so that such sites provide the basis for continual update of the technology manuals.

Output 1.4: Extension services in pilot Districts and Secteurs (together with central, regional and civil society partners) undertake training courses.

This is the main Output – “**the Training**”, with six activities, from curriculum development to continuous feedback and adaptive updates.

Activity 1.4.1 Assist training institutions to develop curricula for Extension agents at secteur and District levels, based on the compiled suite of intervention packages.

Activity 1.4.2 Develop field based participatory demonstration based training for extension; with key sites written up as case studies.

Activity 1.4.3. Undertake economic analyses of cost benefits of soil conservation modalities at household level (based on field demonstration sites) and integrate information into decision making tools.

Activity 1.4.4. Undertake training programme at secteur and district levels, using demonstration sites, and people (farmer) participation.

Activity 1.4.5 Monitor training process and use information to fine tune the training programme and field manual of techniques.

Activity 1.4.6 Conduct field based study tours to examine SLM process in adjacent Uganda (African Highlands Initiative of ICRAF, etc).

Output 1.5: Extension services implement integrated practice demonstration SWC interventions in project districts which generate lessons on cost and benefits at household - community levels.

Activity 1.5.1 Undertake a needs assessment to identify needed input packages for successful extension process, e.g. cycles, levels, measures, video brochures, fertiliser (e.g. “starter packages”)

Activity 1.5.2. Provide demonstration site secteur staff with field materials and maintenance costs to practice the new extension methodology.

Activity 1.5.3 Monitor and review use of the extension packages and process, use information to refine the extension and input packages (to farmer and extension agent).

73. **Outcome 2: Government of Rwanda uses capacity to develop and manage the long-term Rwanda SLM programme to ensure coordination and best practice.** There are 4 Outputs:

Output 2.1 The partnership oversight committee for SLM at Central level coordinates donor support, and undertakes monitoring and evaluation of SWC interventions.

Activity 2.1.1. Facilitate the Government to set up the “Oversight of SLM Committee” (based on Steering Committee), with clear TOR that spell out the responsibility, mandate, representative participation and funding for all parties involved.

Activity 2.1.2. Facilitate the Committee to work with all SLM donors and Civil Society, to develop coordination mechanisms, and databases of activity.

Activity 2.1.3. Undertake best practice and lessons learned analysis across ALL SLM interventions, and maintain this in a live “knowledge management” system.

Output 2.2, Government at all levels use the results of the best practice assessment and economic analyses to mainstream SLM process into secteur, district and regional Development Plans

Activity 2.2.1. Assist Central Government (Technical Ministries and Ministries of Finance and Local Government) to identify mainstreaming mechanisms and entry points for SLM process into development plans.

Activity 2.2.2: Facilitate review of relevant development plans and processes (identified in 2.2.1 above) to reflect SLM principles

Activity 2.2.3: Facilitate the mainstreaming of SLM into plans at secteur and district level has targets and responsibilities for implementation.

Output 2.3 Central Government together with donor partners and decentralised government have found means to scale-up and disseminate extension “best practice”.

Activity 2.3.1. Together with government, use demonstration sites in different regions to advocate for greater investment from partners.

Activity 2.3.2: Integrate advocacy into NAP and TerrAfrica Knowledge systems and so into the Rwanda CSIF (see Output 2.3).

Activity 2.3.3 Develop effective monitoring and evaluation system for monitoring effectiveness of SLM extension packages and approaches and facilitate their use in the project area with participation of decentralised field staff.

An M&E system will be developed in a participatory manner to involve all major stakeholders, including staff at Secteurs, Districts and the civil society. Clear performance indicators developed, guidelines for the application of the M&E system prepared stakeholders trained in use. Periodic reviews will be held at Secteur / Districts and one annual review will be held at the national level.

74. **Outcome 3: (Totally Financed by UNDP – NOT GEF): Government of Rwanda has developed its National Action Plan (NAP) and uses this as a coordination tool.** There are two Outputs:

Output 3.1: The National Action Plan is developed and approved through participatory process with expert and stakeholder groups.

Activity 3.1.1 Assist the GoR to convene SLM - NAP committee, and identifies key stakeholders and NAP best practice from elsewhere in Africa.

Activity 3.1.2 Conduct expert consultations in different agro-climatic zones and compile findings into draft NAP documentation.

Activity 3.1.3 Advocate for the approval of draft NAP by GOR, and disseminate documentation.

Output 3.2: The NAP provides a framework for coordination of SLM activity in Rwanda.

Activity 3.2.1 Facilitate the use of the approved NAP as a framework for SLM activity at Regional and District levels and mechanism for cross-sectoral coordination.

75. **Outcome 4: The NAP is supported by a credible MTIP and a broader CSIF process linked to TerrAfrica.** There is 1 Output:

Output 4.1 (*Linked to SLM – TerrAfrica Process*). The SLM committee of government / partners starts the CSIF (Country Strategic Investment Framework) planning process for TerrAfrica SIP, which incorporates the MTIP to start implementation of the UNCCD National Action Plan.

Activity 4.1.1 Finalise the National Action Plan incorporating best practice from this SLM GEF project.

Activity 4.1.2: Formulate and disseminate the CSIF / MTIP Document.

The document on Medium-Term Investment Plan and the Country Specific Investment Framework will be elaborated in close collaboration with relevant Departments and organizations and in accordance with the NAP/ TerrAfrica. The MTIP / CSIF will be integrated into the general national development plan, which is prepared under the overall coordination of the Ministry of Finance and Economic Planning.

Activity 4.1.3 Formulate priority strategic actions and mobilize financial resources.

A detailed plan of strategic interventions in the identified priority areas will be formulated, the financing mechanism elaborated and resource mobilisation involving major potential partners and other stakeholders organised.

76. **Outcome 5. Project managed efficiently and cost-effectively with adaptive M and E systems.**

There will be two outputs:

Output 5.1: Project management unit established.

Activity 5.1.1: Set up office space, recruit staff, mobilise co-finance and buy project equipment.

Activity 5.1.2: Establish Project Steering Committee and facilitate its operations

Activity 5.1.3: supervise implementation of office project activities and report on findings

Project management will be based in a small PMU within the government RADA offices.

Output 5.2: Project overall learning system developed and used to support adaptive management

Activity 5.2.1: Determine project learning strategy

Activity 5.2.2: Undertake a gender and socio-economic analysis and use the findings to develop a project gender strategy that ensures better targeting of project activities and equitable participation and benefit sharing

Activity 5.2.3: Establish a project monitoring and evaluation action plan (based on the M&E system outlined in the prodoc), collect and use information to adapt management (and project implementation.

2.6 Assumptions and Risks

Key assumptions underpinning the project design include the following:

- i. Continued Government political commitment for integrating SLM approach into the long-term national planning for sustainable development.
 - ii. Other Development Partners, NGOs and development/environmental organizations continue their support, willingness and commitment to integrate SLM into their field programs in the agricultural/rural development sector
 - iii. The various institutions and organisations sustain the current levels of willingness to collaborate under RADA / REMA on integrated approaches to sustainable land management and on sharing access to land information systems;
 - iv. There will be no significant turn-over in the recently recruited Government staff at District and Secteur levels to ensure long-term effectiveness of the SLM related capacity building measures to be conducted during the project period
 - v. Government and the key institutions involved will commit the resources needed to maintaining, beyond the life of the project, the SLM monitoring and evaluation system and the adaptive management approaches to be developed with the project assistance.
77. Whilst there are no issues hidden behind these straightforward assumptions, the relatively unsuccessful history of Soil Conservation in Rwanda does show that are many risks that could be faced. Principal amongst these is the risk that rural economic growth fails to provide adequate returns on sustainable land management in general and improved soil conservation measures specifically. If this happens, the population is likely to continue to avoid investment in SWC interventions, and indeed continue to refuse to maintain existing structures. Table 5 lists potential risks to the project.

Table 5: Risk and Mitigation Measures

	Risk description	Degree	Mitigation / Comment
1	The existing stable political situation breaks down due to the lack of available resources for the local population	Negligible	The level of government / donor investment into SLM suggests this is negligible
2	The new institutional structure at decentralized and national level fail to provide leadership and coordination to the project	Minimal	National policy at all levels is to encourage and promote real decentralization, Presidential contracts with e.g. Mayors, shows this to be minor

	intervention		
3	Present political commitment to sustainable land management in overall national development diminishes	Negligible	The President/Cabinet stated that overcoming land degradation must be the first priority for all districts
4	Sustainable land management partners have no coordination mechanism to attain meaningful sharing of good practices	Minimal	Government is increasing leadership of donor inputs. Donor themselves are increasing aid coordination mechanisms. The project itself invests in a knowledge sharing mechanism and network.
5	The local leaders at district level fail to mobilize and involve the beneficiaries through participative methodologies	Minimal	The population is very receptive to their official leaders in Rwanda (tradition). The project itself is investing in locals level capacity building which will include cultivating the support of local leaders
6	That expertise is unable to assemble training packages for SLM extension, that can be successful in Rwanda conditions	Minimal	There are success stories out there, the need is to assemble these and distil out best practice – technically and in socio-economic terms. The project is supporting this.
7	That local level economic growth fails to provide adequate return on investment in improved practices; thus small scale farmers refuse to accept the extension packages for SLM	Moderate	The history of SWC / SLM in Rwanda shows that farmers will only adopt what is proven to be beneficial. However there are many lessons coming into the new extension process – participatory, field demonstration, cost – benefit analysis. Besides, there is a large baseline investing on improving other aspects of local livelihoods such as infrastructure and markets.
8	That government and extension services are unable to integrate support packages into their extension process.	Moderate	This is a major change for extension, but has proven successful elsewhere. Project investing considerable resources to ensure integration.
9	That land tenure issues (ownership, fragmentation, absentee land-lords) are reduced sufficiently to allow meaningful participation in SWC.	Moderate	Major GoR / DFID project has started to address these issues in Rwanda. Government is committed to reform.

2.7 Global and local benefits

78. The overall direct global benefit is the enhanced capacity for ecologically sustainable land management in Rwanda. Indirect global benefits include:
- ✓ Cross-sectoral integration of sustainable land use management into plans, policies, strategies, programs, funding mechanisms and multi-sectoral stakeholder groups.

- ✓ Maintenance of the structure and functions of ecological systems; and
 - ✓ Enhanced environmental protection of international waters due to reduced soil erosion in the River Nile and River Congo basins and direct sedimentation in the River Nile System, and Lake Kivu and the Lake Tanganyika to Congo River system..
 - ✓ Improved Land use Management and resulting improved production of organic matter will largely contribute to the combat against desertification, climate change and significantly enhance bio-diversity.
79. The principal national benefits are enhanced capacities in the fields of planning; implementation; as well as Monitoring and Evaluation to achieve economic and financial sustainability of the agricultural, and other terrestrial use systems of the country's land resources. Improved capacities will lead to improved quality of different SLM related project proposals and will enhance the participatory governance of the national natural resources in general. Indirect national benefits include:
- ✓ Enhanced agricultural land productivity through improved soil protection measures
 - ✓ Enhanced crop yields through improved soil fertility practices
 - ✓ Improved regional cooperation in Research and Development in the SLM area
 - ✓ SLM contributes to the health of the country's forests, lakes and rivers that in turn will contribute to boosting the tourism industry.
 - ✓ Greater empowerment of users and stakeholders in the use of land resources, to participate directly in the conception, M&E and adaptive management of lands and related resources.
 - ✓ Reduced risks of natural disasters.
 - ✓ Increased national economic growth and poverty reduction level.

2.8 Linkages to Implementing Agency's activities and programs

80. The project will complement and build synergies with other several on-going initiatives carried out by the UNDP Rwanda Country office in collaboration with the GOR, to implement the Government's strategies for poverty reduction in the sustainable livelihood area, and particularly in the sustainable natural resource and environmental management sector. The project will further build synergies with a number of other projects and programmes, particularly with different GEF funded initiatives that are cross-cutting with land degradation issues as well as land degradation and capacity assessment and capacity building.
81. The **Poverty Environment Initiative – Phase I**, aims at mainstreaming environmental issues into the country's next Poverty Reduction Strategy Paper II, in order to enable policy makers and the government to address issues of poverty by improving environmental management. In addition, it includes promotion of alternative energy sources to replace the use of biomass energy, protection of the remaining natural forests as well as institutional capacity building for sustainable management of environmental resources. The **Decentralization and Environment Management Project (DEMP)** aims at building capacity for sustainable management of environmental and natural resources, using decentralization as a development tool. The programmatic thrusts include supporting capacity development at MINITERE to implement environmental policies and enable it to support the devolution of decision-making and planning for environmental management to the districts. It will also support mainstreaming of environment and natural resources issues into district development planning and budgeting.

2.9 Linkages to UNDP Activities and Programs

82. The project is in line with the major development challenges identified in the developing UNDP Common Country Assessment (CCA), which is being revised in Rwanda, to fit with the new "One UN Strategy" which is prioritised in Rwanda. The CCA identifies sound environmental management as one of several key development challenges to be confronted in

spearheading sustainable development. The SLM Project complements the main components of the past UNDAF (United Nations Development Framework), within the environment – food security sections.

83. The project is also in line with the Millennium Development Goals (MDGs) to which Rwanda has indicated strong agreement. MDG-7 on “Environmental Sustainability” is of especial relevance. However Goals on reducing poverty through improved agricultural production are of great importance. .
84. The project will complement and build synergies with other on-going initiatives carried out by the UNDP Rwanda Country office in collaboration with the GOR, to implement the Government’s strategies for poverty reduction in the sustainable livelihood area, and particularly in the sustainable natural resource and environmental management sector. The project will build synergies with other projects and programmes, particularly with different GEF funded initiatives that cross-cut with land degradation issues.
85. The Poverty Environment Initiative – Phase I, aims at mainstreaming environmental issues into the country’s next Poverty Reduction Strategy Paper II, in order to enable policy makers and the government to address issues of poverty by improving environmental management. In addition, it includes promotion of alternative energy sources to replace the use of biomass energy, protection of the remaining natural forests as well as institutional capacity building for sustainable management of environmental resources.
86. The Decentralization and Environment Management Project (DEMP) aims at building capacity for sustainable management of environmental and natural resources, using decentralization as a development tool. The programmatic thrusts include supporting capacity development at MINITERE to implement environmental policies and enable it to support the devolution of decision-making and planning for environmental management to the districts. It will also support mainstreaming of environment and natural resources issues into district development planning and budgeting.
87. The project complements a number of national and regional GEF projects. The links are elaborated in table 6.

Table 6: On-going/ Planned GEF projects in Rwanda with Relevance to SLM

Project Name	Focal Area	IA	National EA	Description and Linkages
Conservation of the Montane Forest Protected Area System in Rwanda	BD1	UNDP	REMA	Rwanda started implementation of a FSP (5.5mill\$ GEF) in early 2007, which supports a sustainable montane forest based Protected Area System. The project is planned for a period of 6 years. The development of the SLM project over-lapped with the final part of the PDF-B, involving considerable interaction. REMA is a main Government agency for both projects and it is anticipated that the Protected Areas Project’s focus around the Parc Des Volcans (in Ruhengeri) will give lessons on community AIG, resource valuation and use etc.
Transboundary Agro-Ecosystem Management Programme for the Kagera River Basin	SLM	UNEP/ FAO	REMA	This regional project (Rwanda, Uganda, Tanzania and Burundi) is about to start in the sub-region. Possible lessons learned in this Project will be taken on board the SLM project. This project looks at similar issues in the drier eastern areas of Rwanda – in different agro-ecological zones.

Project Name	Focal Area	IA	National EA	Description and Linkages
Capacity Development for improved inter-national and national environment management in Rwanda NCSA	Cross Cutting capacity Building NCSA	UNDP	REMA	Rwanda is about to embark on the NCSA project, to plan capacity to integrate and oversee the implementation of actions to address the provisions of the three main global environmental conventions. The SLM project will bring needed focus on the UNCCD via the NAP process and on M and E and reporting.
Integrated Management of Critical Ecosystems (Catchment and Wetland Management)	Biodiversity	WB	REMA Mingric	The WB project has interacted with the UNDP Protected Areas and SLM project in their development stages.
Nile Transboundary Environmental Action Project, Tranche 1	IW	UNDP/ WB	REMA	The Nile focuses on the eastern side of the country and has considerable overlap in district coverage (northern Region). The Nile project has an interest in catchment management and has commissioned studies on soil loss and sedimentation. It is possible to develop linkages through the Nile Micro-Grant scheme with target villages in this project.

2.10 Stakeholder Involvement Strategy

88. The project implementation will involve different stakeholders, including Government institutions, Development Partners, NGOs, the Private Sector, Civil Society and the Local Communities. It will be implemented as a National Execution (NEX) project under MINAGRI and UNDP will be the Implementing Agency. The Rwanda Agricultural Development Authority (RADA) will be the Institution under MINAGRI charged with direct oversight of the project implementation.
89. The ultimate stakeholder beneficiaries are the small holder farming households, struggling to make a living on small patches of steep arable land. This project seeks to change past traditions of extension by making extension demonstrations and extension training participatory in nature, with SWC trials on people's land-holdings, with a suite of necessary inputs. Project success will be assessed by the level of stakeholder adoption of SWC packages.
90. At national level, the principle beneficiaries are the people of Rwanda who will benefit from a more sustainable land management system resulting from mainstreaming SLM principles into national development programmes and processes and services from national institutions with greater knowledge of and capacity for SLM. A detailed stakeholder participation strategy is presented in table 7.

2.11 Sustainability (including financial sustainability)

91. Sustainability has been a major consideration throughout the development of this project. The design of the project centres on "capacity building" and "mainstreaming", hence institutionalizing sustainability. The project builds on the already existing "baseline", and will not introduce new organizations, systems or programmes. By strengthening the extension services, the project is building capacity at the local level

ensuring that land managers benefit from the project initiatives and therefore sustain them.

92. The project will assist in developing a Medium Term Investment Plan (MTIP), based on the National Action Plan (NAP) and further priorities identified. The MTIP will leverage funds and will therefore ensure financial sustainability of SLM activities for the medium term.
93. Linkages with other projects activities are also created to ensure further sustainability of project activities and to ensure synergies in sustainability e.g. with the DFID project on land tenure. RADA and other local partners will ensure integration of long term sustainability aspects in all projects.

2.12 Replicability

94. The project will pilot extension systems in four districts with strong linkages to national level processes (NAP and MTIP). It will actively incorporate lessons on SWC from the country and from the region. The knowledge management outcome will collate lessons from this project and share them widely, in a bid to promote replication of the initiatives in other areas; nationally and in the region. Sustainable Land Management best practices in the overpopulated highlands of east Africa will provide substantial lessons for the region or in other areas facing similar challenges. Literature shows that there's widespread resistance to adoption of SWC measures if the economic returns on the effort are inadequate. The project will seek to learn specific lessons on how to overcome this widespread difficulty and share them widely.
95. **Stakeholder Involvement Plan.** Project preparation (via PDF A Resources) has had a long and detailed stakeholder consultation. This involved cross-sectoral interaction (environment – agriculture, water, land, local government) and vertical interaction – from centre to the new decentralised units (regions districts and secteurs). Following agreement on main project thrust (cultivation and soil erosion), two project visits visited farmers within their secteurs and looked at linkages between farmers and extension agents. A final stakeholder's workshop brought together civil society, government research and training institutions, with donor partners and agreed broad project outcomes and outputs.
96. Several Government Ministries are concerned with project activities in different ways. As SLM requires cross-sectoral integration significant coordination will be necessary during project implementation, to cover issues related to sustainable land use, including: land use planning, agriculture, livestock, forestry, water and sanitation, mining, energy, local government and gender. Government Ministries involved in project implementation include MINAGRI, MINITERE, MINALOC and MINECOFIN. MINAGRI is the major Government institution responsible for the project implementation. MINAGRI delegates powers to RADA for day-to-day oversight of the project.
97. MINITERE, in charge of Lands and Environment will closely work with MINAGRI and RADA in the follow-up and facilitation in all project activities, especially in activities related to the SLM knowledge management tools, soil protection extension messages, M&E system and in replication and mainstreaming. The technical focal point of the UNCCD, from within MINITERE, will be the focal point in the Ministry responsible for liaison with REMA and RADA.
98. MINALOC, responsible for community development and local Government will be involved in all project activities to be conducted at decentralised levels. MINECOFIN, in charge of

finance and economic planning will be involved at all stages of the project implementation in its capacity of being responsible for the coordination of the financial execution of all projects and programmes in the national budget. CEPEX, the special unit under MINECOFIN, will be responsible for the monitoring and reporting on the project implementation status in the Ministry.

99. Other Government bodies will be closely involved in the project implementation. RADA will be responsible for the general oversight of the project implementation, in close collaboration with relevant Departments in MINAGRI. REMA will be involved in all project activities related to development of SLM extension packages, related to capacity building activities, development of the M&E system and on regular reviews and adaptive management process. RARDA, the semi-autonomous agency in charge of livestock development will be closely associated with the project activities in issues related to generation and dissemination of knowledge on soil fertility improvement through integration of agriculture and livestock. The Land Use Management Centre, soon to be established under MINITERE, will be associated with project activities. The Faculty of Agriculture of the National University of Rwanda, the National High Institute of Agriculture and Livestock (ISAE) and the Rwanda Agricultural Research Institute (ISAR) are key partners of project activities related to research/innovations and development and dissemination of SLM extension packages.
100. An international organisation with expertise in SLM will be contracted to provide technical support, through ISAR, for developing the portfolio of SLM interventions and training packages. Terms of reference for the international organisation are provided in the annex. Different bilateral and multilateral development partners, currently active in the SLM related activities and future ones, include IFAD, the World Bank, IFAD, FAO, the Netherlands and UK/DFID. The NGOs and the civil society involved in the sector will also continue to be important stakeholders in all project activities, particularly those concerning the development and application of the knowledge management system, extension approaches, and the M&E system. These organisations link to the coordination role of RADA REMA.
101. The local decentralised authorities at Districts, Secteurs and Cellules in the project zone are important partners of the project, both as beneficiaries and as actors in different project activities. They are the primary target group for the capacity building activities in SLM techniques and participatory extension approaches. They play an important role in identification of different barriers to sustainable land use and in development of appropriate strategies for awareness creation and effective agricultural extension approaches. The effectiveness and sustainability of the SLM related M&E system and adaptive management approach to be developed during the project implementation will greatly depend upon the level of active involvement of the decentralised local authorities.
102. The involvement of the private sector in the SLM sector has been so far not significant. The project will seek to strengthen their role as service providers, particularly in the supply of mineral fertilisers and lime for soil improvement to land productivity and to complement soil protection measures. Private sector entrepreneurs will be encouraged and facilitated to participate in different events including awareness creation and information dissemination activities. They will be provided with all produced information materials on appropriate SLM techniques, fertiliser application recommendations etc.
103. Many project activities and resources focus on capacity building, targeting different stakeholders at all levels. At the central level, relevant staff in MINAGRI/RADA and MINITERE/REMA will benefit from training events and study tours within and outside the country to gain experiences and to gather knowledge on best practices. Government institutions involved in SLM research activities will benefit from the project activities to facilitate generation of new knowledge and its appropriate packaging for effective dissemination. Capacity building will particularly target the technical staff in charge of land

use and agriculture in the decentralised Government authorities at Districts and Secteurs in the project zone. The project will provide trainings in SLM techniques, skills in planning, participatory extension approaches and participatory M&E. The level of capacity acquired by these staff will be decisive for the effectiveness of the project activities and the sustainability of the project objectives. The local farmer communities will receive continuous support and facilitation from the local technical staff and from different service providers during the project implementation and beyond. They are, *de facto*, the end beneficiaries of all capacity building measures carried out at the central and decentralised levels as well as those provided to the civil society and the private sector service providers. The performance of the decentralised authority staff responsible for land use and agriculture will depend on the level of effective application of SLM measures, as Government intends to introduce performance based contracts to all staff, at both central and decentralised levels.

104. A detailed stakeholder plan will be finalised at the Inception Workshop within three months of project start-up, in which project management will outline clear methodologies of rural community – household participation.

Table 7: Draft Stakeholder Involvement Plan

Stakeholder	Description (Relevant to SLM)	Involvement in SLM Project				Capacity development needs
		Imple- menta- tion	Benefi- t from project	Affect ed by outco me	Interes ted	
Government						
Ministry of Agriculture (MINAGRI)	Has overall responsibility for land, policies, legislation and general mandate to manage, protect and exploit the land sustainably to provide food security and drive economic growth	√	√	√	√	<ul style="list-style-type: none">• Set policies to provide an enabling environment for agricultural development (food security, economic growth)• Training of staff in SLM principles, concepts and methodologies.• Strengthen capacities to conduct research and data management• Provision of new equipment and tools to upgrade existing capacities• Strengthen capacity to implement national development plans.• Improve knowledge base about creepers and strengthen ability to control them• Monitor policy development and interaction of policy and practice
Ministry of environment and Tourism (MINITERE)	As above in relation to environment (therefore provides support to ministry of agriculture through sustainable practices through policy statements and financial resources)	√	√	√	√	<ul style="list-style-type: none">• Set policies to provide an enabling environment for the management of the environment and natural resources for sustainable development• Training of staff in SLM principles, concepts and methodologies.• Strengthen capacities to conduct research and data management• Provision of new equipment and tools to upgrade existing capacities

Stakeholder	Description (Relevant to SLM)	Involvement in SLM Project				Capacity development needs
		Imple- menta- tion	Benefi- t from project	Affect- ed by outco- me	Interes- ted	
						<ul style="list-style-type: none"> • Strengthen capacity to implement national development plans. • Improve knowledge base about creepers and strengthen ability to control them • Monitor policy development and interaction of policy and practice • Upscaling successful concepts throughout the country
Rwanda Agricultural Development (RADA)	Major agents involved in imparting knowledge on soil management and best practices Applied research on best extension practices as well as best SWC technologies	√	√	√	√	<ul style="list-style-type: none"> • Training on best practices in soil management • Extension on sustainable land management for agricultural development • Upscaling successful concepts throughout the country
District Administration/local government	Have a major say in land use and development activities in districts. Involved in implementing national level policies at district level and collating feedback on effectiveness of policies and their effects on local economic growth	√	√	√	√	<ul style="list-style-type: none"> • Awareness raising and training in SLM concepts and principles • Upgrade ability to conduct economic analysis of cost/benefits of SWC technologies and extension packages • Training in rehabilitation of degraded lands • Upscaling successful concepts throughout the district
Secteurs	Have a major say in land use and development activities at the local level. Involved in implementing national level policies at local level and collating feedback on effectiveness of policies and their effects on local economic growth; Provide extension services	√	√	√	√	<ul style="list-style-type: none"> • Awareness raising and training in SLM concepts and principles • Upgrade ability to conduct economic analysis of cost/benefits of SWC technologies and extension packages • Training in rehabilitation of degraded lands
NGO's						
International Centre for Agroforestry (ICRAF)	Applied research on all aspects of best SWC and agroforestry technologies including technical, socio, economics and extension practices of SWC technologies	√			√	<ul style="list-style-type: none"> • Training and awareness raising in SWC and SLM concepts, principles and technologies • Bringing best practices from other parts of the region and the world • Upscaling successful concepts throughout the region and the world
Rwanda Farmers' Association	Represents interests of their members.	√	√	√	√	<ul style="list-style-type: none"> • Learning of best practices to include the use of such infrastructure as terraces etc, • Disseminating information on

Stakeholder	Description (Relevant to SLM)	Involvement in SLM Project				Capacity development needs
		Imple- menta- tion	Benefi- t from project	Affect ed by outco me	Interes ted	
						best practices to other farmers <ul style="list-style-type: none"> • Replicating best practices from the project in other parts of the country
Private Sector						
Farmers	Major agents involved in soil manipulation and agricultural production	√	√	√	√	<ul style="list-style-type: none"> • Learning of best practices to include the use of such infrastructure as terraces etc, • Replicating best practices locally • Disseminating information on the project locally and to rest of the country • Training in rehabilitation of degraded lands • Develop incentives to engage them in SLM
Institution of higher learning (university)	Applied research on all aspects of best SWC and agroforestry technologies including technical, socio, economics and extension practices of SWC technologies	√			√	<ul style="list-style-type: none"> • Training and awareness raising in SWC and SLM concepts, principles and technologies • Bringing best practices from other parts of the country and the region • Disseminating information on best practices, lessons learnt to other academics in the country and the region
Local business people	Sustainable harvesting of resources to support local trade and economic growth		√	√	√	<ul style="list-style-type: none"> • Awareness raising on importance of SLM and SWC measures to stability and growth of local trade and economic growth • Disseminating information on best practices to the rest of the business community locally and nationally

3 FINANCIAL PLAN

3.1 Streamlined Incremental Costs Assessment

105. The project will complement other on-going projects and programmes and seeks to close some of the existing gaps in the SLM area. After the end of the project, it is expected that the increased knowledge generation and dissemination, the capacity building, particularly at the decentralised levels as well as an effective M&E and adaptive management system will ensure effectiveness and sustainability of all SLM activities in the project area, and subsequently throughout the country.
106. **Global Environmental Objectives:** The Global Environmental Objectives of the project are to strengthen the capacity for sustainable use of the country's land and resources. The project will secure GEF incremental funding to complement other financing sources from the GOR, UNDP, UNEP, FAO and other Development Partners to undertake a program for

mainstreaming SLM into national plans and strategies and for developing knowledge management capacities for integrated SLM.

107. **Systems Boundary:** The project will develop a comprehensive range of interventions designed to build capacity for developing sustainable land management systems that address the root causes of land degradation and that overcome barriers to SLM. The project will mainly address identified problems of unsustainable agriculture to mitigate land degradation caused by soil erosion and loss of soil fertility. It will not deal with land degradation associated with urban developments. The project focuses in four pilot districts but contains funding to synergise replication and scale-up.
108. The presented baseline takes into consideration projects and programmes that are currently on-going and those planned to start in 2006 and 2007. They include those having project components with SLM related activities in the areas of Capacity Building, Mainstreaming and Knowledge Management as well as field based activities.
109. In the area of **Capacity building**, the Government will, in collaboration with various Development Partners, invest in different projects. MINAGRI plans to utilise a total of about 30 Million RWF for the soil conservation programme in its Annual Plan of Action for 2006, from which 10,5 Million RWF will be spent on awareness creation on SLM techniques. In its three year investment plan for 2006 – 2008, RADA has earmarked a total of around 46 Billion RWF for the natural resources protection and water and soil conservation programme. For the year 2006, RADA has budgeted a total of 10,2 Million RWF for capacity building and training of trainers in SLM. Other Government projects with SLM capacity building components include: The Rural Sector Support Project, a 148 Million USD project. The Decentralisation and Environment Project (DEMP) for 3,296,000 USD, co-financed by the Netherlands, USAID and CIDA, has a component for capacity building in SLM techniques for decentralised local authorities and for farmer communities in Cyanguu, Kibuye and Gisenyi.
110. The 7-year Project for Support to the Strategic Plan for Agricultural Transformation (PSTA) for 90,125 Million USD, with components for the institutional support for the implementation of the agricultural policy, and capacity building for integrated watershed management, is due to become effective in March 2006. This project has an important component for **Knowledge Management** and support to development of an agricultural Monitoring and Evaluation system. A total of 6,547 Million USD is earmarked for Capacity building at decentralised levels while development of the Management Information System (MIS) will cost 1,056 Million USD. The DFID funded Project for the Support to Phase I of the Land Reform process in Rwanda for 3.1 M £ (for 2 years) supports MINITERE in the **Mainstreaming** land reform through a gradual and participatory process.
111. **Baseline activities that qualify as Co-financing:** The two projects under MINITERE, “Support to Phase I of the Land reform” and “DEMP” as well as the “Project for Support to the Strategic Plan for Agricultural transformation (PSTA)” under MINAGRI have activities contributing to those of the current project. However, they are not included as co-financing, as the exact amounts of funds allocated to these activities cannot be established. The cost of the NAPA, NCSA and other GEF funded strategic action plans are not considered baseline so to avoid double counting.

3.2 Project Budget

112. The total project cost is 1.549,500 USD (excluding the 12,500 PDF A). The amount requested from GEF is 600,000 USD, including USD 12,500 already provided by the GEF for PDF-A implementation. Co-financing will be provided by the Government of Rwanda with 265,000 USD (in kind) and the World Agroforestry Centre (ICRAF) at 397,000 (parallel). UNDP will provide 300,000 USD from the UNDP-CO TRAC funds. Total co-financing amounts to 962,000 USD, making a ratio to GEF funding of 1:1.5.

113. The GOR's contribution in kind will mainly cover the cost of staff participating in the project, cost of renting and maintenance of the project's facilities in four pilot districts and at national level, cost of logistics for conducting several different workshops and training sessions as well as review meetings. The detailed co-financing is presented in Table 8 while the project cost by outcomes and outputs is presented in Table 9.
114. ICRAF has a considerable soil and water conservation programme in Rwanda. Two projects in particular link very closely to the proposed SLM project. These are 1) The Progressive Terracing and Agro-forestry for Soil Conservation and Improved Livelihoods; and 2) Rainwater Harvesting for Agro-Forestry Enterprises, Soil Conservation, and Improved Incomes. The first project demonstrates progressive terracing and builds the capacity of the Ministry of Agriculture extension staff working at 11 sites throughout the drier parts of the country, two in the hill districts adjacent to the UNDP probable sites. In its final year, this project has a budget of \$US 97,000 for the 2007-2008 project year. The second project provides advisory services to the Ministry of Agriculture for building the capacity of extension staff throughout the country in rain water harvesting, agro-forestry, and soil conservation and scaling up the use of rainwater harvesting technologies. This project has a budget of \$US300,000 for the 2007-2009 period. This parallel finance will contribute to outcome 1 - Individual and institutional capacity for SLM developed, and will contribute to the development of the training materials as well as upscaling of training and best practices in neighboring districts.

Table 8: Detailed description of estimated co-financing sources

Co-financier (source)	Classification	Type	Amount (US\$)	Status
MINAGRI / RADA and Local Govts	GOR	In Kind	225,000	Confirmed
2. MINITERE	GOR	In Kind	40,000	Confirmed
ICRAF	CSO	Parallel	397,000	Confirmed
3. UNDP	IA	Cash	300,000	Confirmed
Total Co-financing			962,000	

Table 9: Project Cost Summary by Outcome and Output (USD)

Outcome/Output	GEF	Co-financing			Total
		GOR (in kind)	ICRAF	UNDP	
Outcome 1: Individual and institutional capacity for SLM developed.	390,000	3,000	397,000	76,000	866,000
Output 1.1. Successful soil and water conservation interventions are identified by expert groups in Rwanda; and lessons learned on the factors leading to success are identified, and disseminated.	95,000	3,000	95,000	20,000	213,000
Output 1.2: An SLM training/awareness raising program for national and district technical officers and decision makers designed and implemented	77,500	0	65,000	10,000	152,500
Output 1.3 Agriculture and training expertise develop a participatory field-based training course for extension staff, with regional best practice that demonstrates cost-benefit analysis of interventions at household level.	90,000	0	90,000	0	180,000
Output 1.4 Extension services in pilot Districts and Secteurs (together with central, regional and civil society partners) are trained (training	77,500	0	97,000	26,000	200,500

Outcome/Output	GEF	Co-financing			Total
		GOR (in kind)	ICRAF	UNDP	
program designed and implemented).					
Output 1.5 Extension services develop integrated demonstration SWC interventions in project districts that generate lessons on cost/benefits at household levels.	50,000	0	50,000	20,000	120,000
Outcome 2: Government of Rwanda uses capacity to develop and manage the long-term Rwanda SLM programme to ensure coordination and best practice.	100,000	100,000	0	84,000	284,000
Output 2.1 The Partnership oversight committee for SLM at Central level both coordinates donor support and provides for monitoring and evaluation of SWC interventions.	55,000	45,000	0	40,000	140,000
Output 2.2, Government at all levels use the results of the best practice assessment and economic analyses to mainstream SLM process into secteur, district and regional Development Plans	25,000	30,000	0	24,000	79,000
Output 2.3 Central government together with donor partners and decentralised government have found means to scale-up and disseminate extension “best practice”.	20,000	25,000	0	20,000	65,000
Outcome 3: (Totally Financed by UNDP – NOT GEF): Government of Rwanda has developed its National Action Plan (NAP) and uses this as a coordination tool.	0	50,000	0	90,000	140,000
Output 3.1: The National Action Plan is developed and approved through participatory process with expert and stakeholder groups.	0	25,000	0	50,000	75,000
Output 3.2: The NAP provides a framework for coordination of SLM activity in Rwanda	0	25,000	0	40,000	65,000
Outcome 4 The NAP is supported by a credible MTIP and a broader CSIF process linked to TerrAfrica.	40,000	47,000	0	20,000	107,000
Output 4.1 (<i>Linked to SLM – TerrAfrica Process</i>). The SLM committee of government / partners starts the CSIF (Country Strategic Investment Framework) process for TerrAfrica SIP and to implementation the UNCCD National Action Plan.	40,000	47,000	0	20,000	107,000
OUTCOME 5 <i>Project managed efficiently and cost effectively, with an adaptive M and E process.</i>	57,500	65,000	0	30,000	152,500
OVERALL TOTALS	587,500²³	265,000	397,000	300,000	1,549,500

Table 10: Summary of Funds by Outcome

Source of funds / Outcomes	GEF	GoR	ICRAF	UNDP	Total
Outcome 1	390,000	3,000	397,000	76,000	866,000
Outcome 2	100,000	100,000	0	84,000	284,000
Outcome 3	0	50,000	0	90,000	140,000

²³ This figure and that of project total in the last box excludes the PDF A value of 12,500.

Outcome 4	40,000	47,000	0	20,000	107,000
Outcome 5	57,500	65,000	0	30,000	152,500
Total	587,500	265,000	397,000	300,000	1,549,500

Table 11: Project Summary - Detailed description of co-financing sources – see details in the TBWP

Source of Funds	Yr1	Yr2	Yr3	Total	Status
GEF	222,000	185,000	180,500	587,500	Confirmed
Government of Rwanda	100,000	75,000	90,000	265,000	Confirmed
ICRAF	197,000	100,000	100,000	397,000	Confirmed
UNDP	123,000	159,000	17,000	300,000	Confirmed
Project Total	637,000	514,000	385,000	1,537,000	

115. **A Cost Effectiveness:** This is a Medium Sized Project under the Global LDC - SIDS Portfolio, and (without the PDF A resource) is only 575,000\$. Of necessity the project is tightly focused – focused in terms of theme, in terms of spatial demonstration, and in terms of expected impacts. Cost-effectiveness has been a key consideration in project design, especially given the severity of the SLM problem (erosion and loss of soil fertility and so ecosystem breakdown), and the considerable amount of money pledged in parallel financing from donor partnership. This project focuses on a synergistic and catalytic input: developing a long-term training programme on SLM for national and district staff and for extension officers, linked to proactive knowledge management and participatory field demonstration sites. The project innovates at four districts and a limited number of demonstrations at secteur level in these districts. The project then seeks to mainstream the lessons from these demonstration sites, with an acceptable extension programme that is of proven value. The project therefore addresses a key gap – strengthening government’s extension system by providing staff with a credible package in soil and water conservation that provides solutions actable to local people. This input therefore spreads beyond the initial 4 districts, and as such is an extremely cost-effective intervention.

Table 12: Total Budget and Work Plan

Award ID:		Proposal No.:00039330, Project No.:00044067								
Award Title:		PIMS 3388 RWANDA : Improving agricultural extension services for sustainable land use management in Rwanda								
Project Title:		PIMS 3388 RWANDA : Improving agricultural extension services for sustainable land use management in Rwanda								
Implementing Partner (Executing Agency)		Government of Rwanda – via NEX process. International Contracts via UNDP								
GEF Outcome/Atlas Activity	Agent	Fund ID	Source	Atlas Budget Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	See Budget Note
Outcome 1: Individual and institutional capacity developed.		62000	GEF	71200	International Consultant	0	0	0	0	1.1 (ICRAF)
				71300	Local Consultants	0	0	0	0	
				72100	Contract Services a)	100,000	75,000	55,000	230,000	
				72100	Contract Services b)	45,000	40,000	35,000	120,000	
				74500	Workshop	5,000	5,000	5,000	15000	
				74200	Publications	0	20,000	5,000	25000	
				sub-total GEF		150,000	140,000	100,000	390,000	
			UNDP CO	7100	International Consultants	0	0	0	0	1.1 (RADA)
				71600	Travel	8,000	5,000	0	13000	
				71300	Local Consultants	18,500	18,500	3,000	40000	
				74500	Workshop	10,000	10,000	3,000	23000	
				sub-total UNDP		36,500	33,500	6,000	76,000	
				Total Outcome 1		181,500	168,500	103,500	466,000	
Outcome 2: GoR uses capacity to develop and manage the long-term Rwanda SLM programme to ensure coordination and best practice.	UNDP / NEX	62000	UNDP CO	71200	International Consultant	0	0	0	0	1.2
				71300	Local Consultants	8,000	6,000	6,000	20000	
					Contract services	40000	20,000	20,000	80000	
				Sub-Total GEF		48,000	26,000	26,000	100,000	
				72500	Local Consultants	20,000	14,000	0	34,000	

				74500	Training	0	50,000	0	50,000	2.4	
				Sub-Total UNDP		20,000	64,000	0	84,000		
			TOTAL Outcome 2			68,000	90,000	26,000	184,000		
Outcome 3 GoR develops a NAP and uses it as a coordination tool	UNDP-NEX	6200	GEF			0	0	0	0	3.1 NAP	
			UNDP	72100	Contract Services	45,000	45,000	0	90000		
	Total Outcome 3					45,000	45,000	0	90,000		
Outcome 4: The NAP is supported by a credible MTIP and a broader CSIF process linked to TerrAfrica.	UNDP - NEX	6200	GEF	71300	Local Consultants	20,000	15,000	5,000	40,000	4.1	
			UNDP CO	72100	Contract Services	10,000	5,000	5,000	20,000	4.2	
			Total Outcome 4			30,000	20,000	10,000	60,000		
OUTCOME 5: Project Managed effectively and monitored	UNDP NEX	62000	GEF	71200	International Consultant	0	0	20,500	20,500	5.1	
				71300	Local Consultants	0	0	15,000	15,000	5.2	
				71600	Travel	4,000	4,000	14,000	22,000	5.3	
				Sub-Total GEF			4,000	4,000	49,500	57,500	
			UNDP CO	72500	Office Supplies	2,000	2,000	2,000	6,000	5.4	
				71300	Local Consultants	6,000	6,000	2,000	14,000	5.5	
				71600	Travel	0	0	0	0		
				72500	Office operations	3,000	3,000	2,000	8,000	5.6	
				74500	Workshops	0	0	0	0		
				74600	Miscellaneous	1,000	1,000	0	2,000	5.7	
				Sub-Total UNDP			12,000	12,000	6,000	30,000	
			Total Outcome 5			16,000	16,000	55,500	87,500		
				Project Totals					340,500	339,500	195,000

Table 13: Project management costs

Component	Estimated consultant Weeks	GEF	Other Sources	Project Total
Locally recruited consultants	30	15,000 ²⁴	14,000	29,000
Internationally recruited consultants	20	20,500 ²⁵	20,000	40,500
Office facilities, equipment and communication		0	68,000	68,000
Travel		22,000 ²⁶	20,000	42,000
Miscellaneous		0	2,000	2,000
Total		57,500	124,000	181,500²⁷

Table 14: Consultants working for technical assistance component

Project component/outcomes	Estimated consultant weeks	GEF	Other sources	Total
Local consultants	170	20,000	200,000	220,000 ²⁸
International consultants	25	33,000	50,000	83,000
Total	275	53,000	250,000	303,000

²⁴ As explained in budget note 5.2, national consultants will be hired to be part of the evaluation team for both mid-term and terminal evaluations. They will provide a national context, interpretation, etc.

²⁵ As explained in budget note 5.1, this is the cost of recruiting two international (regional) consultants as lead Evaluators in the mid-term and Terminal Evaluations.

²⁶ As explained in budget note 5.3, this budget will support travel for the mid-term and terminal evaluation missions. It includes recruitment and DSAs.

²⁷ This constitutes 10% of the total project cost (1,851,000)

²⁸ All the details of the tasks to be undertaken by local and international consultants are included in the various TBWP budget notes

TBWP BUDGET NOTES

Outcome No.	ATLAS Budget description	Budget Notes	
		No.	Details
Outcome 1: Extension services have skills, expertise and resources that provide support to rural communities that are acceptable and are based on demonstrated cost-benefits.			
1.GEF	Contractual service	1.1	Contractual Services will be awarded to: (i) two institutions, one international and one national with technical expertise and track record on SLM to; conduct training assessment and design a national and district level SLM training and awareness raising programme. They will also provide innovative leadership in the field of Integrated Soil and Water Conservation technologies, including leading the development of the analysis of successful extension models, curriculum design and preparation of training models. This is the incremental global value. The international organisation will lead the socio-economic cost-benefit analysis of the SWC interventions. (Outputs 1.2, 1.3, part 1.4), and will: <ul style="list-style-type: none">• Participate in strategy for awareness creation,• Participate in training process around pilot demonstrations. (ii) RADA – to sub-contract training institutions in the focal Districts
	Workshops	1.2	National and local costs of hosting technical discussions, training of trainers on economic analysis, mainstreaming awareness processes. – covers rental and per diems within target districts and fact finding trip to remote field sites where actual SWC activities taking place.
	Publications	1.3	Partners will produce interactive training manuals and an analysis of SLM and for Soil Water Conservation success/failure in Rwanda Mountain agro-ecosystem
	Travel	1.4	UNDP Co-Finance supports cross-border learning experiences in the Uganda mountain system
1 UNDP	Local Consultants	1.5	Local consultants will be engaged to participate in the publications and in the creation of databases based on learning experiences. Further consultancy will explore past extension success and failures.
	Workshop	1.6	UNDP co-finances workshops on field situations and provides links to learning situations from e.g. DEMP projects
	Workshop	1.6	UNDP co-finances workshops on field situations and provides links to learning situations from e.g. DEMP projects
Outcome 2: Government of Rwanda uses capacity to develop and manage the long-term Rwanda SLM programme to ensure coordination and best practice.			
	National Consultant	2.1	Local consultant will be hired to facilitate the Government to set up the “Oversight of SLM Committee” (based on Steering Committee), with clear TOR that spell out the responsibility, mandate, representative participation and funding for all parties involved. The consultant will also facilitate the Committee to work with all SLM donors and Civil Society, to develop coordination mechanisms, and databases of activity. In addition, the consultant will undertake best practice and lessons learned analysis across ALL SLM interventions, and maintain this in a live “knowledge management” system.
2 GEF	Service Contract	2.2	A local company will be identified and contracted to assist the government to use the information generated by the project to mainstream SLM process into secteur, district and regional Development Plans. They will assist the government to identify mainstreaming mechanisms and entry points for SLM process into development plans; facilitate review of relevant development plans and processes to reflect SLM principles and facilitate the mainstreaming of SLM into plans at secteur and district level has targets and responsibilities for implementation.
2 UNDP	Local consultant	2.3	UNDP co-finance be used to contract local consultants to assist the Central Government identify the most appropriate means to scale-up and disseminate extension “best practice”. The consultants will assist the government to use demonstration sites in different regions to advocate for greater investment from other development partners and the private sector and to integrate advocacy into NAP and TerrAfrica Knowledge systems and so into the Rwanda CSIF.

2 UNDP	Training	2.4	UNDP co-finance will also be used to support training required to build skills across the board – from farmers/land managers to technical officers in government departments as well as NGOs and CBOs operating in the pilot sites. Local consultants will be hired to deliver training and to develop methods for monitoring the effectiveness and adoption of training conducted.
OUTCOME 3: Government of Rwanda has developed its National Action Plan (NAP) and uses this as a coordination tool			
3 UNDP	Contractual Services	3.1	UNDP will contract RADA / REMA to conduct the NAP process leading to output of approved NAP. A local consultant will be engaged by REMA to facilitate the process. NO GEF funds will be used to support this Outcome.
OUTCOME 4: The NAP supported by a credible MTIP and a broader CSIF process linked to TerrAfrica.			
	Local Consultant	4.1.	Local consultants will be hired to work with the contracted company (budget note 4.2) to assist the government to develop a Medium-Term Investment Plan linked to the TerrAfrica Country Strategic Investment Framework. While the individual consultants will assist with the elaboration of the MTIP, the local company will assist the government to formulate priority strategic actions from the MTIP and mobilize financial resources for its implementation.
4 GEF	Contractual Services	4.2	See Budget note 4.1
PROJECT MANAGEMENT AND MONITORING EVALUATION			
	Intern Consultant	5.1	Two international (regional) consultants will be hired to be the lead Evaluators in the mid-term and Terminal Evaluation.
5 GEF	Local Consultant	5.2	National consultants will be hired to be part of the evaluation team for both mid-term and terminal evaluations. They will provide a national context, interpretation, etc.
	Travel	5.3	This budget item will support travel of the review and evaluation teams including PIRs etc.
5 UNDP	Office supplies	5.4	Rwanda has very low institutional capacity, especially in the Districts. This UNDP co-finance will be used to supply the offices provided by the government in the pilot districts with laptops, printers and other supplies. This is critical for the success of the project in the remote districts.
	Local Consultant	5.5	Local consultants will be hired (from the districts) to coordinate activities at the four pilot district levels. An Administrative Assistant will also be hired to support project implementation
	Office Operations	5.6	In addition to providing office minimal equipment in the four pilot districts, UNDP's co-finance will be used to support office operations at the national and local levels. This will include support to installing and running electronic communications facilities in the four districts and the cost of installing solar energy in one office. Without this much needed support, the rest of the investment cannot be used effectively.
	Miscellaneous	5.7	It is very difficult to anticipate all cost items or to estimate the costs of all services accurately for the project, especially for the pilot districts where up to date information is limited. UNDP co-finance will therefore support a limited miscellaneous budget line to allow the project some small level of flexibility.
	Project Total	5.8	This total excludes the PDF A value of USD 25,000.

4 PART III: PROJECT IMPLEMENTATION PROCESS

4.1 Institutional framework and project implementation arrangements

116. **General Framework:** The project will be implemented over a period of three years with a start-up and wind-down period at onset and near closure respectively. The GEF Implementation Agency for the project will be the UNDP Rwanda Country Office and the project will be executed under UNDP National Execution (NEX) procedures. The lead Government Institution with the overall responsibility for the project will be the Ministry in charge of Agriculture, MINAGRI. The Rwanda Agriculture Development Authority (RADA) will be the Government executing agency for the project, in charge of oversight for the project implementation.
117. A Project Management Unit (PMU) will be established under RADA and will be responsible for the day-to-day implementation of the project. Other concerned technical Ministries will be actively involved in different project activities in the phases of planning, execution and monitoring and evaluation. Other major Government Institutions involved include MINITERE, MINALOC, MININFRA and MINECOFIN. A Project Steering Committee comprised these and other relevant Institutions will be established to provide assistance to the PMU for smooth project implementation. A specialised technical sub-committee comprising of technical officers and the Project Manager will provide a linkage to the TerrAfrica CSIF process. This sub-committee will work closely with the GEF lead Agency under the Strategic Investment Program (SIP) to ensure that the project contributes to and benefits from the Country Level SMP discussions and processes.
118. The project will get technical assistance and back-stopping from the SLM Regional Coordination Office for Eastern and Southern Africa in Pretoria South Africa. Technical support will be provided by an international organisation in partnership with ISAR, via a project contracting process.
119. **The Project Steering Committee:** The project will receive high level guidance and oversight from the SLM Steering Committee (SC). The SC will be composed of the Director General of RADA (Chairperson), Officer in charge of land issues in RADA, Officer in charge of Lands in MINITERE, One Representative from the Ministry in charge of Local Administration, one from REMA and one from ISAR. The officer in charge of the project at UNDP will also be member of the SC, while the PMU Coordinator will be the Secretary to the SC.
120. **A Project Management Unit (PMU)** will play a key role in project execution. It will be attached to RADA and will be headed by a Project Manager (PM). He/she will be a national professional recruited for the three year duration of the project. The PM will work under direct supervision of the Director General of RADA. He/she will be responsible for the application of all UNDP administrative and financial procedures and for the use of UNDP/GEF funds. The PM will be assisted by an administrative assistant/accountant. The project will not have a permanent vehicle at its disposal, in conformity with Government policy, but will have resources in the budget for hiring vehicles as deemed necessary. Offices for the PMU will be provided and the cost covered by MINAGRI/RADA. The PMU will have overall responsibility for project management for all administrative and technical issues as well as financial reporting. The PMU will coordinate the selection process for all local contracts and recruitment of local consultants – this will be done in close consultation with the other concerned executing agencies. This will include preparation of TOR, call for bids and organization of and the selection process. This will be done in close coordination with UNDP, which will sign the contracts after approval by the PMU and RADA. The PMU will manage and coordinate the execution of all local contracts.
121. **Responsibilities for managing funds** GEF funds will be administered by UNDP. The PMU will manage all contracts with local service providers. The PM will manage the GOR funds

for the functioning of the PMU. UNDP will advance funds for a three-month period. At the end of the three-month period, the PMU will submit justification for expenses and the funds spent will be renewed by UNDP.

122. Criteria and procedures will be developed for performance-based contracts with service providers. Under performance-based contracts, the service provider will be paid only for work completed. Work partially completed will be paid on a *pro rata* basis.
123. The project will comply with UNDP's monitoring, evaluation and reporting requirements as spelled out in the UNDP Programming Manual and the LDC SIDS M&E Tool Kit. The PMU Coordinator will have lead responsibility for reporting to UNDP.

4.2 Audit Requirements

124. The project will be audited on a yearly basis for financial year January to December as per NEX procedures and Global Environment Facility requirements. The audit will be conducted by the National Auditor or any other local auditor recognised by both GOR and UNDP-CO.

4.3 Legal Context

125. This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement (SBAA) between the Government of Rwanda and the United Nations Development Program. The host country-implementing agency shall, for the purpose of the SBAA, refer to the government cooperating agency described in that Agreement.
126. UNDP acts in this project as Implementing Agency of the Global Environment Facility (GEF), and all rights and privileges pertaining to the UNDP as per the terms of the SBAA shall be executed '*mutatis mutandis*' to GEF.
127. The UNDP Resident Representative in Rwanda is authorized to effect in writing the following types of revisions to this project document, provided she/he has verified the agreement thereto by the UNDP-GEF unit and is assured that the other signatories of the project document have no objections to the proposed changes:
 - ✓ Revisions of, or addition to, any of the annexes to the Project Document;
 - ✓ Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of inputs already agreed to or by the cost increases due to inflation;
 - ✓ Mandatory annual revisions which re-phase the delivery of agreed project inputs, or reflect increased costs due to inflation, or take into account agency expenditure flexibility,
 - ✓ Inclusion of additional annexes and attachments relevant to the Project Document
128. **Intellectual property rights on data, study results, reports, etc.** All data, study results, information, reports, etc, generated with UNDP/GEF project funds are the property of GOR/UNDP.
129. In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear alongside the UNDP logo on all relevant GEF project publications, including among others, project hardware and vehicles purchased or hired with GEF funds. Any citation on publications regarding projects funded by GEF should accord proper acknowledgment to GEF.

4.4 PART IV: MONITORING AND EVALUATION (M&E) PLAN

130. M and E activities are an increasingly important part of GEF project implementation, with formal guidelines, protocols and toolkits coming from GEF, UNDP, Government and the Global Support Unit of the LDC-SIDS Portfolio Project. It is the M&E process which enables the adaptive feedback management strategy. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures for MSPs under the SLM Portfolio Project and will be provided by the Project Management Unit (PMU) and the UNDP Country Office (UNDP-CO) with support from UNDP/GEF and the GSU – LDC-SIDS Portfolio Project. The Logical Framework Matrix in Annex 2 provides performance and impact indicators for project implementation along with their corresponding means of verification. These will form the basis on which the project's Monitoring and Evaluation system and action plan will be built.
131. The LFA indicators have been derived from the Resource Kit for Monitoring, Evaluation, and Reporting on GEF/UNDP supported Sustainable Land Management Medium-Sized Projects in LDC and SIDS countries (annex 3), and in accordance with the timelines set for this submission (see the M&E Resource Kit produced by the Global Support Unit). The baseline situation presented in this document also utilizes these indicators. Additional baseline information on all the compulsory and some selected optional indicators will be documented by the project and submitted to the UNDP Country Office and Project Steering Committee using the National MSP Annual Project Review Form (annex 3). All the 'compulsory' and 'optional' questions and indicators will be completed during project inception period and updated each year. The Form provides a basis for the annual review of project progress, achievements and weaknesses. This information is intended to draw out lessons to be used in subsequent planning, in support of adaptive management processes. It also supports UNDP Rwanda's Country Office-wide reporting and planning. Once completed, the Review form will be forwarded to the UNDP CO which will then forward to the GSU in the first quarter of project implementation.

and in accordance with the timelines set for this submission (see the M&E Resource Kit produced by the Global Support Unit)

132. The PMU will monitor activities to ensure that they are carried out appropriately and in a timely manner as per the workplan and budget. The Annual Workplan, with a detailed M&E Strategy, will be presented at the Inception Workshop at project start-up, and the inception report prepared after the workshop but not later than 3 months after project start-up. In addition, The PMU will facilitate completion of annual surveys to update the LDC SIDS project reporting form especially for the compulsory indicators at the Objective and outcome levels. Special effort will be made to track the following compulsory indicators : levels of public awareness on the importance of sustainable land management and the satisfaction of farmers with project technical support; degree of use of awareness in decision making, levels of adoption of SLM practices, reduction in soil erosion and increase in agricultural productivity.

4.4.1 Other Monitoring and Reporting Events

Project Inception Phase

133. A Project Inception Workshop will be conducted with the full project team, relevant government counterparts, co-financing partners, the UNDP-CO and representation from the UNDP-GEF Regional Coordinating Unit as appropriate. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goals and objectives, as well as finalize preparation of the project's first annual work plan on the basis of the project's logframe matrix. This will include reviewing the logframe (indicators, means of verification, assumptions), providing the baseline in the LDC SIDS annual project monitoring

form, imparting additional detail as needed, and on the basis of this exercise finalize the Annual Work Plan with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

134. In addition, the Inception Workshop will: (i) introduce project staff with the UNDP-GEF *expanded team* which will support the project during its implementation, namely the CO and responsible Regional Coordinating Unit staff; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff vis à vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), Tripartite Review Meetings, as well as mid-term and final evaluations. (iv) provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget rephasings. There are separate M&E requirements for this Global; Portfolio SLM projects, which need to be submitted annually, see ANNEX III.
135. The Inception Workshop will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

Monitoring responsibilities and events

136. A detailed schedule of project reviews meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Tripartite Reviews, Steering Committee Meetings, (or relevant advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities.
137. *Day to day monitoring of implementation progress* will be the responsibility of the Project Manager based on the project's Annual Work Plan and its indicators. The Project Manager will inform the PMU and if necessary the UNDP CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.
138. *Periodic monitoring of implementation progress* will be undertaken by the UNDP-CO through quarterly meetings with RADA or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.
139. UNDP Country Offices and UNDP-GEF RCUs as appropriate, will conduct yearly field visits, or more often based on an agreed upon schedule to be detailed in the project's Inception Report / Annual Work Plan to assess first hand project progress. Any other member of the Steering Committee can also accompany, as decided by the Committee. A Field Visit Report will be prepared by the CO and circulated no less than one month after the visit to the project team, all SC members, and UNDP-GEF.

140. *Annual Monitoring* will occur through the *Tripartite Review (TPR)*. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to Tripartite Review at least once every year. The first such meeting will be held within the first twelve months of the start of full implementation. The Programme Coordinator will prepare an Annual Project Report (APR) and submit it to UNDP-CO and the UNDP-GEF regional office at least two weeks prior to the TPR for review and comments.
141. The APR will be used as one of the basic documents for discussions in the TPR meeting. The project proponent will present the APR to the TPR, highlighting policy issues and recommendations for the decision of the TPR participants. The project proponent also informs the participants of any agreement reached by stakeholders during the APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary.

Terminal Tripartite Review (TTR)

142. The terminal tripartite review is held in the last month of project operations. MENR is responsible for preparing the Terminal Report and submitting it to UNDP-CO and GEF's Regional Coordinating Unit. It shall be prepared in draft at least two months in advance of the TTR in order to allow review, and will serve as the basis for discussions in the TTR. The terminal tripartite review considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation or formulation.
143. The TPR has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks are provided in and will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

Project Monitoring Reporting

144. The Project Coordinator in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. Items (a) through (f) are mandatory and strictly related to monitoring, while (g) through (h) have a broader function and the frequency and nature is project specific to be defined throughout implementation.

➤ *Inception Report*

145. A Project Inception Report will be prepared immediately following the Inception Workshop, to be submitted within 3 months of the project start-up date. It will include a detailed First Year/ Annual Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan would include the dates of specific field visits, support missions from the UNDP-CO or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

146. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.
147. When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the Inception Report, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

Annual Project Report (APR)

148. The APR will be used as part of UNDP's Country Office central oversight, monitoring and project management tool. The project team will provide the CO with an annual self-assessment report reflecting the progress achieved in meeting the project's Annual Work Plan as well as performance of the project in contributing to intended outcomes through outputs and partnership work. The agreed APR will provide an input to the country office reporting process, as well as form a key input to the Tripartite Project Review.
149. The APR will include the following:
 - i. An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome
 - ii. The constraints experienced in the progress towards results and the reasons for these
 - iii. The three (at most) major constraints to achievement of results
 - iv. AWP, CAE and other expenditure reports (ERP generated)
 - v. Lessons learned
 - vi. Clear recommendations for future orientation in addressing key problems in lack of progress

Project Implementation Review (PIR)

150. The Project Implementation Review (PIR) is an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the project has been under implementation for a year, a Project Implementation Report will be completed by the CO together with the project partners. The PIR will be discussed in the TPR to ensure agreement by the project, the executing agency, UNDP CO and the RCU.

Quarterly Progress Reports

151. Short reports outlining main updates in project progress and key issues/constraints encountered will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team. See format attached.

Periodic Thematic Reports

152. As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific

oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

Project Terminal Report

153. During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

Technical Reports

154. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

Project Publications (project specific--optional)

155. Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

4.4.2 INDEPENDENT EVALUATION

156. The project will be subjected to at least two independent external evaluations as follows:-

Mid-term Evaluation

157. An independent Mid-Term Evaluation will be undertaken at the mid-point of implementation. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this

review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

Final Evaluation

158. An independent Final Evaluation will take place three months prior to the terminal tripartite review meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

4.4.3 AUDIT CLAUSE

159. The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Government.

4.4.4 Adaptive Management

160. Lessons learnt will be continuously extracted from the MSP Project and disseminated through the relevant channels. Information will be shared between projects, stakeholders and policy makers as an effective measure of mainstreaming.
161. The lessons learnt from the MSP through evaluations will be used in adapting further management of the project. In addition to the monitoring, evaluation and feedback mechanisms already identified, the Project Steering Committee will review progress on a quarterly basis, identifying lessons learnt and discuss project progress with the involvement of wider stakeholder audience as necessary. The ideas and lessons learnt will be incorporated into the management of the project and further implementation process by the Project Steering Committee with adjustments to the Work Plan as required.

Table 15: INDICATIVE MONITORING AND EVALUATION WORK PLAN AND CORRESPONDING BUDGET

Type of M&E activity	Responsible Parties	Budget USD	Time frame
Inception Workshop	Project Manager UNDP CO UNDP GEF	3,000	Within first two months of project start up
M and E action plan based on LDC SIDS Portfolio project	All team	None	Costed in PMU and IW (above), uses questionnaire and survey of GSU toolkit.

framework			
Inception Report	Project Team UNDP CO	None	Immediately following IW
APR and PIR	Project Team UNDP-CO UNDP-GEF	None	Annually
TPR and TPR report	Government UNDP CO Project team UNDP/GEF- RCU	None	Every year, upon receipt of APR
Steering Committee Meetings	Project Coordinator UNDP CO	None	Following Project IW and subsequently at least once a year
Periodic status reports /evaluation	Project team ONE at Mid-term timing	2,000	To be determined by Project team and UNDP-CO
Mid-term evaluation	Project team UNDP- CO UNDP-GEF RCU External Consultants	20,000	Half-way through the implementation
Final Evaluation	Project team UNDP- CO UNDP-GEF RCU External Consultants	30,000	During the last three months of the project.
Terminal Report	Project team UNDP-CO External Consultant	None	At least one month before the end of the project
Lessons learned	Project team UNDP-GEF- RCU	6,000	Yearly
Audit	UNDP-CO Project team	3,000	Yearly
TOTAL INDICATIVE COST		61,000 \$	

5 ANNEXES

- 1 Threat, Root Cause and Barrier Analysis for SLM in Rwanda
- 2 Logical Framework with Indicators and Targets
- 3 Terms of Reference for Project Manager, Steering Committee and the international organisation
- 4 Reporting and Monitoring: Detailed Guidelines
- 5 The Status of Soil Conservation Processes in Rwanda
- 6 Letters of Co-Finance
- 7 Letters of Endorsement/Support.

5.1 Annex 1: Root Cause Threat Barrier Analysis

Direct Threat	Bio-physical Impact	Root causes / Mgmt Issues	Key Barriers	Potential Corrective Measures
A Increasing rate and spatial area of Soil Erosion in the highland ecosystems of Rwanda, leading to breakdown in ecosystem functioning.	<p>Deterioration of soil structure and decline in fertility and so decline of land productivity and crop-yield</p> <p>Increased encroachment on pastures, woodlots and marginal land including land on very steep slopes</p> <p>Disappearance of fallows and consequent lack of time for the farmland to recuperate its soil fertility</p>	<p>The rural population consider agriculture and land as the main option for their livelihoods, and there is little alternative non-agricultural opportunity for income.</p> <p>Limited land resources due to high population density.</p> <p>Land tenure system and inheritance law encourage fragmentation of land, so resulting in minimal agricultural investment</p> <p>Rwandan soils have shallow topsoil layers on steep slopes, and so vulnerable to erosion; but agriculture is increasingly practiced on these steep slopes, without adequate soil conservation measures, despite clear Government directives.</p> <p>Increased number of landless households who rent or borrow land for cultivation.</p>	<p>Lack of capacity and awareness of the responsible staff and leaders to develop and implement properly designed land use plans, at District/Secteur levels</p> <p>Insufficient knowledge of SLM techniques at decentralised levels led to non-adherence to Govt land use directives & laws by farmers and local authorities</p> <p>Govt Policies of villagisation and land consolidation not fully implemented.</p> <p>Lack of incentives for investment in SWC by those farming on rented land.</p> <p>No system of knowledge management for extracting lessons</p>	<p>Promote awareness raising on proper land use and other income generating activities to reduce dependency on agricultural production alone</p> <p>Support decentralised authorities to implement land use plans stating which land should not be cultivated.</p> <p>Provide support to relevant Government and NGOs to raise awareness on new land laws, which promote land consolidation.</p> <p>Support awareness creation and measures to encourage farmers to conduct SLM practices, using economic benefits</p> <p>Development of a network of institutions active in the SLM sector to collate experiences for systematic collection on documentation of appropriate soil protection techniques.</p> <p>Support researchers and extension officials to develop harmonised extension packages, specific to soil type, slope and crops to be</p>

		<p>Application of ineffective soil protection techniques that are not specific to soil, slope and cropping patterns Insufficient information from research on appropriate soil protection techniques.</p> <p>Terraces are not technically well done, with the nutrients-rich top-soil buried, and so the existing Government directives on erosion control are not respected by the population, and past conservation input has been actively destroyed.</p> <p>Farmers not motivated to maintain soil protection investments due to lack of immediate real economic benefits, and big labour costs.</p>	<p>learned, best practices and adapting extension packages.</p> <p>Research on soil protection technologies is not integrated into the agriculture extension system for farmer adoption.</p> <p>Applied soil protection technologies are the same everywhere without differentiation; many are not appropriate and outmoded.</p> <p>Dysfunctional extension system due to shortage of skilled human resources and motivated staff working in relevant extension services at Districts and Secteurs.</p> <p>Insufficient information on costs/benefits of soil conservation measures, within top-down, coercive approaches to</p>	<p>grown.</p> <p>Support SLM research institutions to conduct participatory adaptive research on different types of soil protection and fertility improvement and agro-forestry practices on farmer's fields. Establish model sites in different zones of the country, demonstrating the impact of different SLM techniques.</p> <p>Reinforce the Agricultural Extension system and expedite completion and implementation of the proposed new agricultural extension system by MINAGRI</p> <p>Increase support to the private sector and civil society to increase supply and application of agricultural inputs such as lime and mineral fertilisers to increase the soil productivity.</p>
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			conservation.	
Low soil productivity resulting from a Decline in Soil Fertility, not associated with soil erosion.	<p>Loss or decline in soil organic matter with its nutrient and water holding capacities leading to degradation of soil structure</p> <p>Acidification of the soil and consequent rise of Al-toxicity levels as well as increased P-fixation</p> <p>Increasing decline in yields and poor response to other farm inputs</p> <p>Decline in biomass produced and that returned to the soil.</p>	<p>Nutrient mining from continuous cropping due to insufficient farm land and population pressure</p> <p>Over-exploitation of farmland without replenishment with organic matter and external chemical inputs.</p> <p>About two thirds of all Rwandan soils are acidic and would need some measures to control the acidity</p> <p>Extremely low level of application of mineral fertilisers.</p>	<p>Crop residues are not returned to fields as they are used for other purposes such as construction or as source of energy for cooking</p> <p>No fallowing is practiced</p> <p>Decrease in manure produced by livestock due to drastic decline in per capita livestock keeping.</p> <p>Low levels of manure application and mulching, and lack of information on best practices for agronomic measures to improve soil structure and water and nutrient retention capacities</p>	<p>Training and awareness creation for farmers towards different agronomic practices which maximise organic matter remaining in the fields after harvesting</p> <p>Encourage grazing on harvested fields and minimise use of crop residues for other purposes outside the fields, and promote the application of livestock manure, and compost and mulch.</p> <p>Identify and promote Agro-Forestry crop combinations and rotation patterns that maintain and improve soil fertility</p> <p>Promote agronomic practices that improve the soil structure, including minimum tillage and use of perennial crops or those which completely cover the soil (sweet potatoes).</p>

5.2 Annex 2: Strategic Results Framework

5.2.1 LOG-FRAME

Outcomes	Key Performance Impact Indicators	Means of Verification	Critical Assumptions/Risks
Long-Term Goal: Sustainable Land Management improved by increased levels of successful soil and water conservation interventions in mountain regions of Rwanda, this contributing to improved ecosystem health and rural economies.			
Project Objective: Capacity developed for sustainable land management in central and local government, government agencies (RADA), and farmers; and sustainable land management principles mainstreamed into national policies, plans and processes.	<p>National development plans incorporate sustainable management principles</p> <p>Decision makers at national and local levels and the public, especially rural farmers have high levels of awareness of the importance of SLM and are adopting SLM principles in decision making and land management respectively</p> <p>The national SLM Committee / Task Force embraces NAP Investment plan process and integrates this with developing CSIF planning framework for SLM.</p> <p>Decrease in soil erosion at pilot sites accompanied by an increase in agricultural productivity</p>	<p>Revised national plans</p> <p>Rapid assessment of levels of awareness on SLM amongst stakeholders establishing the linkage between awareness-change in attitude-change in behaviour chain of events.</p> <p>MINAGRI/RADA annual reports Annual District and Provincial Development Reports Documented M and E Framework SLM Committee Outputs including CSIF documentation following TerrAfrica guidelines that are compatible with NAP processes</p>	<p>That there will be continued political commitment for integrating SLM approach into the long-term national planning for sustainable development.</p> <p>That the economy will support increased returns on investment in sustainable land management practices providing an incentive for farmers to accept the extension packages for SLM, which is dependent on extension agents being able to offer packages that make economic sense to farmers</p>

Outcomes	Key Performance Impact Indicators	Means of Verification	Critical Assumptions/Risks
Outcome 1: Individual and institutional capacity for SLM developed	<p>EOP: One strong institution (RADA) acting as the national agency for SLM and has established an interministerial mechanism for SLM coordination in the country 75% of extension service staff have skills, expertise and resources to provide SLM technical support to rural communities; SLM extension packages formulated based on demonstrated cost-benefits and best practices, and are being piloted in four districts, reaching at least 85% of land managers/farmers in the 4 districts.</p> <p>Baseline: No agency is responsible for SLM; SLM best practices not yet fully defined. Agriculture extension process is dysfunctional, and no outreach strategy has been established; current extension package does not incorporate SLM principles</p> <p>Midterm: A comprehensive SLM package for montane zones is approved and used in training Extension agents and partners; and for awareness raising amongst the decision makers</p>	<p>TPR with annual report based on site visits Project Final Report Periodic newsletters and workshop reports Mid-Term and Final project evaluation Reports District Reports</p>	<p>Other Development Partners, NGOs and other development / environmental organizations are willing and committed to integrate SLM into their field programs in the agricultural/rural development sector</p>

Outcomes	Key Performance Impact Indicators	Means of Verification	Critical Assumptions/Risks
Outcome 2: Government of Rwanda uses capacity to develop and manage the long-term Rwanda SLM programme to ensure coordination and best practice and mainstreaming of SLM principles into national development.	<p>EOP: An effective collaborative framework among all stakeholders in the SLM incorporate 100% of relevant sectors and players A functional M and E system and an approved CSIF/ Investment Plan; Key ministries (finance and planning) are part of the collaborative framework and are aware of economic costs and benefits of SLM; political support for SLM at national level exists and pushes the SLM agenda forward</p> <p>Baseline: There is little collaboration and sharing of experiences among different stakeholders with regard to SLM related activities. There is no M and E process and no framework plan.</p> <p>MT: A network of SLM practitioners is functioning, with 1 review conducted at national level and 2 in project sites to share experiences. CSIF / NAP committee in place and functional</p>	<p>TPR with annual report based on site visits Project Final Report Periodic newsletters and workshop reports Mid-Term and Final project evaluation Reports District Reports</p>	<p>Other Stakeholders in the Rural Development Agriculture and Natural Resources Management sector are ready and willing to participate in an adaptive management program for sharing SLM experiences</p>
Outcome 3 (Financed by UNDP, not GEF): Government of Rwanda has developed its National Action Plan (NAP) and uses this as a coordination tool.	<p>EOP: An approved NAP is in place, sent to UNCCD, and is used as a mechanism for inter-sector coordination for SLM</p> <p>Baseline: <i>No NAP in place, and not started</i></p> <p>MidTerm: The Draft NAP is complete and awaiting approval</p>	<p>Documents Minutes of Meetings Acceptance by UNCCD</p>	<p>The timing of NAP process links with TerrAfrica process (see Outcome 4 below)</p>

Outcomes	Key Performance Impact Indicators	Means of Verification	Critical Assumptions/Risks
Outcome 4: The NAP is supported by a credible MTIP and a broader CSIF process linked to TerrAfrica.	<p>EOP: An MTIP that adapts all the principles of the TerrAfrica's Country Strategic Investment Framework (CSIF) is adopted by the TerrAfrica process with widespread support in government and amongst donors. Some projects identified through the MTIP process receive funding and are being implemented</p> <p>Baseline: There is no mechanism for financing SLM work currently; Rwanda is not on TerrAfrica work programme and CSIF process and TerrAfrica not yet accepted into government.</p> <p>Mid-Term: TerrAfrica process accepted and MTIP/CSIF planning underway</p>	<p>Documentation</p> <p>Meeting minutes</p> <p>Donor partners involved</p> <p>A TerrAfrica Agency in lead</p>	<p>GoR will accept TerrAfrica Provisions (extremely likely)</p> <p>The CSIF finds a way to include the NAP MTIP process</p>
Outcome 5: Project managed effectively and deliver results and impacts within time sand budget (This addresses Project Management issues – NOT Technical Issues	<p>Indicators will include:</p> <p>Positive MTE / Terminal Evaluation findings.</p> <p>Positive annual APR / PIR reports</p> <p>Positive delivery ratios and audits</p> <p>Co-Finance is available</p>	<p>Project reports</p>	<p>That the current political support for project implementation continues at all levels (donor, government, local communities).</p> <p>Government puts forward staff and co-finance</p>

Outputs	Targets and Indicators	Activities	Responsibility
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<p>Output 1.1: An SLM training/awareness raising program for national and district technical officers and decision makers designed and implemented</p>	<p>EOP: At least 90% of relevant technical officers and decision makers have been trained on principles of SLM and are using the skills acquired to facilitate land management and decision making respectively</p>	<p>1.1.1 Undertake a capacity needs assessment and identify training/awareness gaps at national and district level</p> <p>1.1.2 Design a communications strategy for SLM clearly identifying target groups and information to be disseminated to each target group</p> <p>1.1.3 Implement the strategy; delivering training /awareness raising, etc.</p> <p>1.1.4 Monitor dissemination and the effect of the programme on practice (the awareness-change in attitude-practice links)</p>	<p>PMU, with RADA</p>
<p>Output 1.2: Successful soils and water conservation interventions are identified by expert groups in Rwanda; and lessons learned on the factors leading to success are identified, and disseminated.</p>	<p>EOP: A dossier of successful SLM trials & interventions compiled into database, and agreed to by at least 95% of key stakeholders. Extension message dispatched to at least 85% of farmers/land managers</p> <p>Baseline: No agreement on successful interventions. Population dismissive of terracing options, there is no database on SLM inputs</p> <p>MT: Inventory and networking process that covers all successful SLM techniques is completed.</p>	<p>1.2.1 Develop a system of Knowledge Management</p> <p>1.2.2 Establish a <i>network of all SLM stakeholders</i></p> <p>1.2.3 <i>Identify best practices, lessons learned and gaps in the sustainable agriculture knowledge base especially for the Mountain Agro-Ecological-Zone.</i></p> <p>1.2.4 <i>Identify pilot sites for demonstration and establish an interactive knowledge data base for the pilot sites integrating into training programme</i></p>	<p>PMU, with RADA ICRAF and ISAR. with all stakeholders</p>

<p>Output 1.3: Agriculture and training expertise have developed a participatory field-based training course for extension staff, including identification of best practice (study tour) and demonstrates cost-benefit analysis of interventions at household level.</p>	<p>EOP: There is a detailed and updated training course which has been tested and revised, which provides for acceptable extension packages.</p> <p>At least 85% of extension staff receive training on the new package</p> <p>Baseline: There is no or limited extension capacity in secteurs. There are no field based training courses available for use.</p> <p>3 Mid-Term: There is a draft course outline which is undergoing review, and which includes best practice from Uganda and elsewhere.</p>	<p>1.3.1 Elaborate new improved and economically and sociology viable SLM technologies for the montane Agro-Ecological Zone in a user friendly participatory extension packages</p> <p>1.3.2 Test the package delivery and content and effectiveness at the demonstration sites</p> <p>1.3.3 Monitor performance of the packages and identify lessons and modify package as necessary</p>	<p>PMU, with RADA ICRAF and ISAR. with all stakeholders University</p>
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<p>Output 1.4: Extension services in pilot Districts and Secteurs (together with central, regional and civil society partners) with knowledge from training courses.</p>	<p>EOP: A) 90% of the Secteur extension agents have participated in field based participatory training courses, around demonstration sites; More than 75% of trained farmers /land managers adopt practices from the extension packages. B) Findings of the study on economic analyses at household levels demonstrate positive cost-benefits.</p> <p>Baseline: Secteur agents and District Regional supervisors with no training and without ability to provide acceptable support to households</p> <p>Mid-Term: Training underway in all districts using demonstration sites. Study tour complete</p>	<p>1.4.1 In collaboration with institutions of higher learning, use the material to develop curricula for Extension agents at secteur and District levels, based on the compiled suite of intervention package</p> <p>1.4.2 Develop Training of Trainers (ToT) programme, developing field based participatory demonstration based training; with key sites written up as case studies.</p> <p>1.4.3 Undertake economic analyses of cost benefits of soil conservation modalities at household level (based on field demonstration sites) and use information for training and awareness raising at local and national levels</p> <p>1.4.4 Complete training programme at secteur and district levels, with use of demonstration sites, and people (farmer) participation.</p> <p>1.4.5 Conduct field based study tours examine SLM process in adjacent Uganda (African Highlands Initiative of ICRAF, etc).</p> <p>1.4.6 Monitor effectiveness of the training and use information in adaptive feed-back mechanisms to fine tune the training programme and field manual of techniques.</p>	<p>PMU RADA REMA</p> <p>ISAR University Training Institutions, an international organisation with expertise on SLM, Civil Society</p>
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<p>Output 1.5: Extension services have support packages to put into practice demonstration SWC interventions in project districts, and these demonstrations are monitored to generate lessons on cost/benefits at household community levels.</p>	<p>EOP: At least 75% of farmers in cooperation with agriculture extension are using integrated input packages, e.g. fertiliser, manure, lime etc. At least 50% of the farmers/land managers participate in m&e and use information for adaptive management</p> <p>Baseline: Very low level of agricultural inputs such as fertiliser or manure or lime</p> <p>Mid Term: Extension agents have input packages for delivery</p>	<p>1.5.1 Undertake a needs assessment to identify needed input packages for successful extension process, e.g. cycles, levels, video brochures, fertiliser (e.g. “starter packages”)</p> <p>1.5.2 Design and implement a program to boost the capacity of the demonstration site secteur staff providing them with field materials plus maintenance costs to practice the new extension methodology.</p> <p>1.5.3 Monitor the effectiveness of the support to secteur staff in providing extension and modify package and process</p>	<p>PMU, RADA REMA District Govts. ICRAF University UNDP</p>
<p>Output 2.1 The Partnership oversight committee for SLM at Central level both co-ordinates donor support and provides for monitoring and evaluation of SWC interventions.</p>	<p>EOP B: Partnership Oversight Committee in place and functional, meetings include ALL SLM partners. Committee has a working M7E system and Knowledge Management System.</p> <p>Baseline: There is no committee, no database or knowledge system.</p> <p>Mid Term: The committee has been created by Government and is functional.</p>	<p>2.1.1 Facilitate the Government to set up the “Oversight of SLM Committee” (based on Steering Committee), with TOR, responsibility, mandate, representative participation and funding.</p> <p>2.1.2 The Committee works with all SLM donors and Civil Society, to develop coordination mechanisms, and databases of activity.</p> <p>2.1.3 Conduct best practice and lessons learned analysis across ALL SLM interventions, and maintain this in a live “knowledge management” system.</p>	<p>PMU, Minitere and Central Govt RADA REMA District Govts. UNDP</p>

<p>Output 2.2: Government at all levels use the results of the best practice assessment and economic analyses to mainstream SLM process into secteur, district and regional Development Plans</p>	<p>EOP: District development plans in 4 target districts and 6 others have incorporated SLM planning processes, with indicators and responsibilities</p> <p>Baseline: No such mainstreaming of SLM exists</p> <p>Mid-Term: Agreement within main Ministries and Regions as to the need for mainstreaming and the mechanism to be used.</p>	<p>2.2.1 Facilitate Central Government (Technical Ministries and Ministries of Finance and Local Government) to identify mainstreaming mechanisms and entry points for SLM process into development plans.</p> <p>2.2.2 Facilitate review of relevant development plans and processes (identified in 2.2.1 above) to reflect SLM principles</p> <p>2.2.3 Facilitate mainstreaming of SLM into plans at secteur and district levels; ensuring establishment of targets and responsibilities for implementation.</p>	<p>PMU, Minitere and Central Govt, RADA REMA, District Govts. UNDP</p>
<p>Output 2.3 Central Government together with donor partners and decentralised government have found means to scale-up and disseminate extension “best practice”.</p>	<p>EOP: At least 5 other Districts agree to replicate this extension system elsewhere in the mountain zone, and undertake similar analyses and training.</p> <p>Baseline: There is ad-hoc planning process in the different zones for extension, not based on full lessons learned</p> <p>Mid Term: This is a second half of project activity – AFTER the extension demonstrates success.</p>	<p>2.3.1 Facilitate the Government to use demonstration sites in different zones/regions to advocate for greater investment from partners.</p> <p>2.3.2 Integrate the result of 2.3.1 into NAP and TerrAfrica Knowledge systems and so into the Rwanda CSIF</p> <p>2.3.3 Develop a monitor and evaluation system for monitoring the effectiveness of SLM extension packages and approaches with participation of decentralised field staff.</p>	<p>PMU, Minitere and Central Govt RADA REMA District Govts. UNDP</p>

<p>Output 3.1: The National Action Plan is developed and approved through participatory process with expert and stakeholder groups.</p>	<p>EOP: The NAP in place and approved</p> <p>Baseline: No NAP process</p> <p>Mid Term: The Draft NAP in place awaiting approval</p>	<p>3.1.1 Convenes SLM - NAP committee, and identifies key stakeholders and NAP best practice from elsewhere in Africa (government to do).</p> <p>3.1.2 Facilitate the NAP Committee to undertake expert consultations in different agro-climatic zones and to compile findings into draft NAP documentation.</p> <p>3.1.3 Facilitate GoR approval of draft NAP, and dissemination of the document</p>	<p>UNDP (funding) and GOR (all concerned Ministries). PMU to assist</p>
<p>Output 3.2 The NAP provides a framework for coordination of SLM activity in Rwanda</p>	<p>EOP: The NAP documentation and process is in use by cross-sectoral planning in Rwanda</p> <p>Baseline: There is ad-hoc planning – with no guiding document.</p> <p>Mid Term: Agreement on NAP use.</p>	<p>3.2.1 Facilitate the use of the approved NAP as the framework for SLM activity at Regional and District levels and as a mechanism for cross-sectoral coordination</p>	<p>UNDP and GOR</p>
<p>Output 4.1 (Linked to SLM – TerrAfrica Process). The SLM committee starts the CSIF (Country Strategic Investment Framework) process for TerrAfrica SIP and develops an MTIP that incorporates the principles of CSIF to implement the SLM component of the UNCCD National Action Plan.</p>	<p>EOP: One NAP completed, with a viable investment Plan; and links to the TERRAFRICA CSIF process which is adopted in Govt. At least 3 follow up projects identified with financing strategies.</p> <p>Baseline: There is no NAP or CSIF and little awareness of TerrAfrica.</p> <p>Mid Term : The NAP is underway and builds linkages to CSIF process</p>	<p>4.1.1 Facilitate the formulation and Dissemination of the CSIF / MTIP Document.</p> <p>3.1.4 Identify priority strategic actions of the MTIP/CSIF and mobilise financial resources.</p>	<p>PMU, Minitere and Central Govt RADA REMA District Govts. UNDP</p>

Outcome 5.0: Project managed effectively and cost efficiently	As stated above	5.1.1.	Set up office space, recruit staff, mobilise co-finance and buy project equipment	PMU within the Government RADA
		5.1.2.	Establish Project Steering Committee and facilitate its operations	
		5.1.3.	supervise implementation of office project activities and report on findings	
		5.1.4.	Determine project learning strategy	
		5.1.5.	Undertake a gender and socio-economic analysis and use the findings to develop a project gender strategy that ensures better targeting of project activities and equitable participation and benefit sharing	
		5.1.6.	Establish a project monitoring and evaluation action plan (based on the M&E system outlined in the prodoc), collect and use information to adapt management (and project implementation	

5.2.2 Output / Activity Table

Outputs		Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Outcome 1 Outcome 1: Individual and institutional capacity for SLM developed													
Output 1 An SLM training/awareness raising program for	1.1.1 Undertake a capacity needs assessment and identify training/awareness gaps at national and district level												

Outputs		Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
national and district technical officers and decision makers designed an implemented	1.1.2 Design a communications strategy for SLM clearly identifying target groups and information to be disseminated to each target group												
	1.1.3 Implement the strategy; delivering training /awareness raising, etc												
	1.1.4 .Monitor dissemination and the effect of the programme on practice (the awareness-change in attitude-practice links)												
Successful soil and water conservation interventions are identified by expert groups in Rwanda; and lessons on success factors are disseminated.	1.2.1 Develop a system of Knowledge Management. The KM system identifies appropriate SLM extension packages for mainstreaming into national and decentralised development plans.												
	1.2.2 Establish a network of all SLM stakeholders												
	1.2.3 Identify best practices, lessons learned and gaps in the sustainable agriculture knowledge												
	1.2.4 Integrate SLM best practice into an interactive database												

Outputs		Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
1.3: Agriculture and training expertise have developed a participatory field-based training course for extension staff, including regional best practice, and demonstrate s cost-benefit analysis of interventions at household level	1.3.1 <i>Develop new improved and economically and sociology viable SLM technologies for the montane Agro-Ecological Zone as user friendly participatory extension packages.</i>												
	1.3.2 <i>Integrate selected Demonstration Sites into the training packages- so that such sites provide the basis for continual update of the technology manuals</i>												
1.4: Extension services in pilot Districts and Secteurs (together with central, regional and civil society	1.4.1 <i>Assist training institutions to develop curricula for Extension agents at secteur and District levels, based on the compiled suite of intervention packages</i>												
	1.4.2 <i>Develop field based participatory demonstration based training for extension; with key sites written up as case studies</i>												

Outputs		Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
partners) undertake training courses	1.4.3 Undertake economic analyses of cost benefits of soil conservation modalities at household level (based on field demonstration sites) and integrate information into decision making tools												
	1.4.4 Undertake training programme at secteur and district levels, using demonstration sites, and people (farmer) participation												
	1.4.5 Monitor training process and use information to fine tune the training programme and field manual of techniques												
	1.4.6 Conduct field based study tours to examine SLM process in adjacent Uganda (African Highlands Initiative of ICRAF, etc												
1.5 Extension services implement integrated practice demonstration SWC interventions in project districts	1.5.1 Undertake a needs assessment to identify needed input packages for successful extension process, e.g. cycles, levels, measures, video brochures, fertiliser (e.g. “starter packages”												
	1.5.2 Provide demonstration site secteur staff with field materials and maintenance costs to practice the new extension methodology												

Outputs		Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
which generate lessons on cost and benefits at household - community levels	<i>1.5.3 Monitor and review use of the extension packages and process, use information to refine the extension and input packages (to farmer and extension agent)</i>												
Outcome 2: Government of Rwanda uses capacity to develop and manage the long-term Rwanda SLM programme to ensure coordination and best practice and mainstreaming of SLM principles into national development													
2.1 The partnership oversight committee for SLM at Central level coordinates donor support, and undertakes monitoring and evaluation of SWC interventions	2.1.1. <i>Facilitate the Government to set up the “Oversight of SLM Committee” (based on Steering Committee), with clear TOR that spell out the responsibility, mandate, representative participation and funding for all parties involved</i>												
	2.1.2. <i>Facilitate the Committee to work with all SLM donors and Civil Society, to develop coordination mechanisms, and databases of activity</i>												
	2.1.3. <i>Undertake best practice and lessons learned analysis across ALL SLM interventions, and maintain this in a live “knowledge management” system</i>												
2.2 Govt at all levels use the results of the best practice assessment	2.2.1. <i>Assist Central Government (Technical Ministries and Ministries of Finance and Local Government) to identify mainstreaming mechanisms and entry points for SLM process into development plans</i>												

Outputs		Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
and economic analyses to mainstream SLM process into secteur, district and regional Development Plans	2.2.2. Facilitate review of relevant development plans and processes (identified in 2.2.1 above) to reflect SLM principles												
	2.2.3. <i>Facilitate the mainstreaming of SLM into plans at secteur and district level has targets and responsibilities for implementation</i>												
2.3 Central Government together with donor partners and decentralised government have found means to scale-up and disseminate extension “best practice”	2.3.1. <i>Together with government, use demonstration sites in different zones regions to advocate for greater investment from partners</i>												
	2.3.2. <i>Integrate advocacy into NAP and TerrAfrica Knowledge systems and so into the Rwanda CSIF (see Output 2.3</i>												
	2.3.3. <i>Develop effective monitoring and evaluation system for monitoring effectiveness of SLM extension packages and approaches and facilitate their use in the project area with participation of decentralised field staff</i>												
Outcome 3: Government of Rwanda has developed its National Action Plan (NAP) and uses this as a coordination tool.													
3.1 The National Action Plan is developed	3.1.1. <i>Assist the GoR to convene SLM - NAP committee, and identifies key stakeholders and NAP best practice from elsewhere in Africa</i>												

Outputs		Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
and approved through participatory process with expert and stakeholder groups	3.1.2. <i>Conduct expert consultations in different agro-climatic zones and compile findings into draft NAP documentation</i>												
	3.1.3. <i>Advocate for the approval of draft NAP by GOR, and disseminate documentation.</i>												
3.2 The NAP provides a framework for coordination of SLM activity in Rwanda	3.2.1. <i>Facilitate the use of the approved NAP as a framework for SLM activity at Regional and District levels and mechanism for cross-sectoral coordination</i>												
Outcome 4: The NAP is supported by a credible MTIP and a broader CSIF process linked to TerrAfrica													
4.1 The SLM committee of government / partners starts the CSIF	4.1.1. Finalise the National Action Plan incorporating best practice from this SLM GEF project												
	4.1.2. Formulate and disseminate the CSIF / MTIP Document												

Outputs		Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
(Country Strategic Investment Framework) planning process for TerrAfrica SIP, which incorporates the MTIP to start implementation of the UNCCD National Action Plan	4.1.3. <i>Formulate priority strategic actions and mobilize financial resources</i>												
Outcome 5. Project managed efficiently and cost-effectively with adaptive M and E systems													
5.1 Project management unit established	5.1.7. Set up office space, recruit staff, mobilise co-finance and buy project equipment												
	5.1.8. Establish Project Steering Committee and facilitate its operations												
	5.1.9. supervise implementation of office project activities and report on findings												
5.2	5.2.1. Determine project learning strategy												

Outputs		Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Develop a project overall learning system and use it for adaptive management	5.2.2. Undertake a gender and socio-economic analysis and use the findings to develop a project gender strategy that ensures better targeting of project activities and equitable participation and benefit sharing												
	5.2.3. Establish a project monitoring and evaluation action plan (based on the M&E system outlined in the prodoc), collect and use information to adapt management (and project implementation.												

5.3 Annex 3: NATIONAL MSP ANNUAL PROJECT REVIEW FORM

For all UNDP/GEF Projects approved under the Global SLM SIDS and LDC Portfolio Project

This Form is to be completed annually by each MSP Project Team by 1st July (starting 2006), and submitted through the UNDP CO to the Global Support Unit in Pretoria.

SECTION I – PROJECT IDENTIFIERS

Basic Project Identifiers

Country	Rwanda
Project Title	
GEF Number	
UNDP Number	
Date of Prodoc signature	
Project duration	
Estimated closing date	
Principal Sector (s)	Agriculture

Project Stakeholders

List of representatives of key stakeholders groups involved in the project (e.g. could be members of the National Coordinating Body)

Stakeholder Group	Representative (title)

UNDP Identifiers

SRF Goal	
SRF Sub-Goal	
Strategic Area of Support	

SECTION II – MONITORING IMPACT AND PERFORMANCE

The following sub-sections include both *scorecard* questions and *quantifiable indicators*.

For scorecard questions, five possible answers are given in a table, and the responder should choose the most appropriate to his/her in-country situation. These are rated 1(poor) to 5 (high).

For quantifiable indicators, the project team should determine the baseline situation before the project starts, and *measure* the status of the indicator each year.

1. Measuring Impact.

These questions relate to measuring how successful the project is in achieving the project objective.

The Project Objective of each MSP is **‘capacity developed for sustainable land management in concerned government agencies, non-governmental and civil service organisations, user groups, etc. and sustainable land management principles mainstreamed into national policies, plans and processes’**.

Compulsory Indicators

An SLM related national policy or law: **2**

1	Is not yet officially planned
2	Is officially planned
3	Has been drafted
4	Has been approved
5	Has been developed and approved in a fully participatory manner

National development plans (e.g. five year plans, PRSP, budget): **3**

1	Contain only plans that will have a negative impact on sustainable land management
2	Pay no attention to sustainable land management
3	Pay some, but inadequate, attention to sustainable land management
4	Pay adequate attention to sustainable land management
5	Place sustainable land management at the heart of the development process

NGOs and CSOs are: **2**

1	Not active in promoting sustainable land management
2	Active at some levels (local or national) in promoting sustainable land management
3	Active at all levels but not very effective in promoting sustainable land management
4	Active and effective in some levels in promoting sustainable land management
5	Active and effective at all levels.

The public has: **1**

1	Low awareness and no understanding of sustainable land management
2	Low/medium awareness/understanding
3	Medium/medium awareness/understanding
4	Medium/high awareness/understanding
5	High awareness and high understanding

The knowledge of senior decision-makers in all sectors of importance to land degradation: 2

1	Less than 20% are aware of the importance of Land degradation
2	20 – 40% are aware of the importance of Land degradation
3	40 – 60% are aware of the importance of Land degradation
4	60 – 80% are aware of the importance of Land degradation
5	All are aware of the importance of Land degradation

The role of the UNDP/GEF MSP in strengthening sustainable land management capacity and mechanisms has been: **3**

1	Negligible
2	Weak
3	Supportive of national and other efforts
4	Leading
5	Critical

Does the national budget make a specific allocation to sustainable land management? **No.**

For those countries answering yes, what is the percentage increase over Year 2006?

Attribution

What have been the major factors contributing to improvements in the above impact indicators over the past 5 years?

Place the following factors in declining order of level of contribution: Economic growth; increasing political stability; changes in overall governance framework; climatic conditions; international assistance; GEF/UNDP projects and programmes; Other

Optional Indicators

Each national MSP will be very specific in nature, and hence the monitoring framework and indicators will vary enormously from country to country. The optional indicators presented cannot cover all possibilities nor all eventualities. This section gives examples, suggestions and possibilities. Each national project team must select and/or modify from amongst the indicators and monitoring tools listed. Further, UNDP and UNDP/GEF have developed substantial material to assist the development of monitoring frameworks and choosing indicators. This material should also be consulted.

The no. of voluntary actions taken by private sector to incorporate SLM into production (e.g. banana plantation owners adopt low tillage operations, adopt low chemical inputs, adopt IPM; E.g. road construction company adopts minimal disruption or rehabilitation practices).

The percentage of sales of (agricultural, forestry or livestock) products that are *certified* sustainable.

2. Measuring Performance.

Outcome 1 Individual and institutional capacity for SLM developed;

Compulsory Indicators

An inter-ministerial or inter-sectoral institution or mechanism for SLM: 2

1	Does not exist
2	Exists on paper but meets irregularly
3	Meets regularly but is largely ineffective
4	Meets regularly, and is overall sustainable, but does not have full financial independence or full budget security
5	Meets regularly to discuss SLM related issues, has a clear workplan and financial independence, has a well-staffed secretariat and a secure budget and legislative status, follows-up on all decisions, and is able to enter into dialogue with all agencies represented

OR (GAC to decide)

The National Agency responsible for sustainable land management: 1

1	Has not been established
2	Has been established, but has no clear mandate, staff, equipment and authority.
3	Has reasonable mandate, staff, equipment and authority
4	Has strong mandate, staff, equipment and authority

5	Has strong mandate, staff, equipment and authority, and is actively promoting and mainstreaming SLM principles
---	--

Innovative tools for SLM, such as land functionality analysis, economic valuation techniques, integrated assessment, multi-criteria decision-making: 1

1	Are non-existent in the country
2	Exist, but have been borrowed from international experience, and have not been adapted to local and national needs
3	ⁱ
4	Exist, have been adapted, but are not fully functional
5	Exist and are fully functional

Indicator The percentage of land-users satisfied with available technical support (from either extension services or government technical agency or other service suppliers)ⁱⁱ.

Optional Indicators

Each national MSP will be very specific in nature, and hence the monitoring framework and indicators will vary enormously from country to country. The optional indicators presented cannot cover all possibilities nor all eventualities. This section gives examples, suggestions and possibilities. Each national project team must select and/or modify from amongst the indicators and monitoring tools listed. Further, UNDP and UNDP/GEF have developed substantial material to assist the development of monitoring frameworks and choosing indicators. This material should also be consulted.

(The following starts with indicators of individual capacity, and then deals with institutional and organisational capacity.)

The organisations responsible for capacity building for sustainable land management: 2

1	Have little idea of the capacity needs
2	Have some idea of capacity needs at either individual, institutional and systemic level
3	Have a good idea of capacity needs at most levels
4	Have a full understanding of capacity needs
5	Have a full idea of the individual, institutional and systemic capacity needs, and of the measures that should be taken to develop capacity

Research into indigenous knowledge related to sustainable land management is: 2

1	Not undertaken
2	Undertaken, but by a very small number of experts
3	Undertaken by many experts, in a random and arbitrary manner
4	Undertaken systematically
5	Undertaken by a formal, sustainably financed network of capable researchers

Training programmes and awareness raising programmes for local communities: 1

1	Are non-existent
2	Exist, but are of poor quality and are not affordable by most local communities
3	Exist but are of irregular quality
4	Are being implemented in a financially sustainable manner
5	Are being implemented in a financially sustainable manner and cover all technical requirements and alternative practices (e.g. reseedling, water point networks; IPM, drip irrigation, sustainable logging)

Training programmes and awareness raising programmes for marginalized communities: 1

1	Are non-existent
2	Exist, but are of poor quality and are not affordable by most local communities
3	Exist but are of irregular quality
4	Are being implemented in a financially sustainable manner
5	Are being implemented in a financially sustainable manner and cover all technical requirements and alternative practices (e.g. reseeded, water point networks; IPM, drip irrigation, sustainable logging)

The school curriculum: 1

1	Does not address land degradation or sustainable land management
2	
3	Addresses land degradation and sustainable land management for some age groups
4	
5	Addresses land degradation and sustainable land management appropriately for all age groups

Understanding of links between economy and land degradation: 1

1	The extent and economic costs of land degradation are poorly understood and unknown
2	The extent of land degradation is partly understood and known by a small number of scientists and a limited number of activists
3	The extent of land degradation is understood and known by a limited number of people in the environment and land sectors
4	The extent <i>and economic costs</i> of land degradation are understood and known by a limited number of people in the environment and land sectors
5	The extent <i>and economic costs</i> of land degradation are understood and known by decision-makers and the general public

The principal national agencies responsible for environment and land: 4

1	Do not have staff with required skills
2	Have some staff with required skills, but face regular shortages
3	
4	Do have staff with skills, but they are stretched and not always available
5	Have available staff with adequate skills

(Staff may be replaced with ‘equipment’ or ‘resources’)

NOTE: AS MANY PROJECTS WILL TARGETS NGOS, CBOS OR LAND-USER GROUPS, IN EACH CASE “PRINCIPAL NATIONAL AGENCY” CAN BE REPLACED BY “TARGETED NGO” OR “TARGETED CBO” OR “TARGETED LAND-USER GROUP”.

The principal national agencies, local agencies and extension services: 2

1	Are unaware of integrated land-use planning approaches
2	Are aware of integrated land-use planning but lack technical knowledge
3	Are committed to integrated land-use planning but lack tools
4	Are using integrated land-use planning to a limited extent
5	Are fully using integrated land-use planning

The principal national agencies, local agencies and extension services: 1

1	Have not heard of the landscape approach to sustainable land management
2	Are committed to the landscape approach but are not technically competent
3	
4	Are starting to use the landscape approach
5	Are successfully using the landscape approach

Human resources of the principal national agencies, local agencies and extension services: 2

1	Are poorly qualified and unmotivated
2	Are of mixed quality, with some qualified staff but generally lacking motivation
3	
4	Are in general well qualified, but many lack motivation and some lack qualifications
5	Are generally well qualified and well motivated

Individuals: 2

1	Do not have the skills matching their job description
2	Have some, poor skills related to their job description
3	
4	Are reasonably skilled but skills could be better matched to job requirements
5	Are appropriately skilled, in line with job description

Staff development: 3

1	There are no mechanisms in place for training, mentoring, and learning.
2	Some mechanisms exist, but they are insufficient to develop enough people and unable to provide the full range of skills needed
3	
4	Mechanisms generally exist to develop professional skills, but there is either a shortage, or they do not cover the full range of required skills
5	There are adequate mechanisms in place for training, mentoring, and learning in order to maintain a continuous flow of new staff

Knowledge and capacity to develop payment schemes and markets for ecosystem functions and services related to sustainable land management is: 1

1	Non-existent
2	available, but only through regional or international bodies
3	Exists with a small number of people in the country
4	Exists and is starting to be applied
5	Exists and is applied regularly.

The Staff of a *named* department/organisation have/have not the ability tostate a specific task of the organisation, e.g. obtain and use satellite data; organise fully participatory consultations; etc..)

((Note that some countries will have very specific individual capacity requirements: e.g. developing individual capacity related to trade, debt,))

Percentage of targeted land-users having access to appropriate credit schemes.

Percentage of targeted land-users having access to insurance schemes.

(Following indicators focus on 'institutional' level capacity)

Membership of the national coordinating body or inter-sectoral committee: 4

1	Is limited to environment and land agencies
2	Involves all concerned national government agencies
3	
4	Involves governmental (national and local) agencies and non-governmental agencies
5	Involves governmental (national and local) agencies and non-governmental agencies, in an appropriately equitable manner, with each representative having a clear role and responsibilities

The principal national agencies responsible for environment and land: 3

1	Have no plans or strategies
2	Have plans/strategies, but they are out of date or were prepared in a top-down fashion
3	Have a mechanism to prepare plans and strategies, but it is irregular or top down
4	Regularly prepare plans and strategies
5	Regularly prepare plans and strategies in a fully participatory manner

Indigenous knowledge: 1

1	Is largely ignored in national policy, programmes and policy
2	
3	Occasionally feeds into national policy, programmes and policy
4	
5	Is mainstreamed into national policy, programmes and policy via a sustainable, effective formal mechanism

SLM policy: 1

1	There is no policy or it is old and not reviewed regularly
2	Exists, but is only reviewed at irregular intervals
3	
4	Is reviewed regularly, but not annually
5	Is reviewed annually, and updated

The principal national agencies, local agencies and extension services: 4

1	Resist changes
2	Do accept change, but only very slowly
3	
4	Tend to adapt in response to change, but not always very effectively or with some delays
5	Are highly adaptive, responding effectively and immediately to change

The principal national agencies, local agencies and extension services have: 2

1	No mechanisms for monitoring, evaluating or reporting on their own performance
2	Some mechanisms for monitoring, evaluating, reporting, but they are limited and weak
3	
4	Have reasonable mechanisms for monitoring, evaluating and reporting, but they are not as strong or comprehensive as they could be
5	Have effective internal mechanisms for monitoring, evaluating and reporting

The principal national agencies, local agencies and extension services are well managed: 4

1	Have totally inadequate internal management
2	Have a management system that is largely ineffective and does not deploy resources effectively
3	
4	Are reasonably well managed, but resources are not always deployed effectively
5	Are well managed with effective, efficient deployment of resources

The principal national agencies, local agencies and extension services: 2

1	Operate in isolation
2	Have established some partnerships, but they are irregular and with many gaps
3	
4	Have many partnerships with a wide range of partners, but there are still some gaps and the partnerships are not always operational
5	Have effective and operational partnerships with all government, non-government and local stakeholders

The principal national agencies, local agencies and extension services have: 2

1	Virtually no information for monitoring land quality
2	Limited information for monitoring land quality and for monitoring strategies and action plans
3	
4	Easy access to most required information and it is mostly of good quality, but there remain some gaps in quality, coverage and availability
5	Access to all the information they need to develop and monitor strategies and action plans

Local governments have: 4

1	None of the following: expertise, information, budgetary control and financial resources
2	One of the following: expertise, information, budgetary control and financial resources
3	Two the following: expertise, information, budgetary control and financial resources
4	Three of the following: expertise, information, budgetary control and financial resources
5	Adequate expertise, information, budgetary control and financial resources

Society's role in monitoring the state of land: 2

1	There is no dialogue on the state of the land at all
2	There is some dialogue ongoing, but is restricted to specialized circles and not with the wider public
3	
4	There is a reasonably open public dialogue ongoing, but certain issues remain taboo
5	There is an open and transparent public dialogue about the state of the land

Self-organisations amongst farmers/herders/forest gatherers: 3

1	Are not allowed
2	Are allowed, but discouraged and do not exist
3	Exist, with low capacity and few resources
4	
5	Are active and involved in the national debates on sustainable land management

The no. of independent NGOs accredited to the National Coordinating Body.

The percentage of violations of land-use regulations that are processed.

The percentage of a surveyed (or targeted) population that adopt at least one SLM practice by the project end.

The number of functioning land management networks or platforms developed at the village or community level

Outcome 2 SLM mainstreamed into economic and sectoral development;

Compulsory Indicators

The Ministry of Economic Development and/or Finance and/or Planning: 1

1	Is unaware of land degradation issues
2	
3	Has a stated aim of halting and where possible reversing land degradation.
4	
5	Uses environmental economic analyses of land-use options as a tool in development planning and in preparing economic/development policies and/or budgets.

Political commitment to SLM is present: 4

1	There is no political will at all, or the existing political will is against sustainable land management
---	--

2	Some political will exists, but it is not strong enough to make a difference
3	
4	Reasonable political will exists, but it is not always strong enough
5	There are very high levels of political will

Sector	Agriculture	Forestry	Rangelands	Economic dev.	Energy	Other
Statement (answer 'Yes' or 'No')						
Impacts of sector policy/national plans on SLM are important but are not being assessed	Y	Y	N	Y	?	
Impacts of sector policy/national plans on SLM are being assessed in a participatory manner	Y	N	N	N	N	
Impacts of sector policy/national plans on SLM have been assessed	Y	N	N	N	N	
Impacts of sector policy/national plans on SLM have been <i>adequately</i> assessed and mitigation measures proposed	Y	N	N	N	N	
Impacts of sector policy/national plans on SLM have been <i>adequately</i> assessed and mitigation measures implemented	N	N	N	N	N	

Attribution

What have been the major factors contributing to improvements in the above indicators over the past 5 years?

Place the following factors in declining order of level of contribution: changes in overall government programme; international assistance; UNDP/GEF projects and programmes; Other.

Optional Indicators

Mainstreaming in General or integration into all Sectors

The SLM agenda: 1

1	There is no recognizable national SLM agenda
2	The agenda exists, some persons or institutions or actively pursuing the agenda but they have little influence
3	
4	A number of champions are promoting the agenda, but more is needed
5	There is an adequate number of leaders and champions effectively promoting the agenda

Public support for SLM: 1

1	The public has little knowledge or interest in SLM
2	There is limited support for promoting SLM amongst the public
3	
4	There is general public support and some lobby groups (e.g. NGOs) pushing strongly for SLM
5	There is tremendous public awareness and support

Sector	Agriculture	Forestry	Rangelands	Economic dev.	Energy	Other
Statement (answer 'Yes' or 'No')						
SLM considerations are <i>adequately</i> mentioned in sector policy/national plans	Y	N	N	N	N	

SLM considerations are <i>adequately</i> mentioned in sector policy through specific legislation	Y	N	N	N	N	
Regulations are in place to implement the legislation	Y	N	N	N	N	
The regulations are being <i>adequately</i> enforced	N	N	N	N	N	
Enforcement of regulations is monitored	N	N	N	N	N	

A *named* law (e.g. Forestry Law, Agricultural Code, Law on Water...) is developed/approved and fully addresses SLM concerns, with specific sections on land degradation and/or sustainable land management.

National land-use planning guidelines and legislation provide clear instructions related to SLM.

X projects affecting land in *named* (e.g. forestry, agriculture, rangelands, watershed management, transport or energy) sector have integrated SLM aspects.

The number of functioning tools/incentives established with SLM objectives (e.g. trust funds for land rehabilitation, payments for environmental services, certificates or labels for 'land friendly products' - includes organic labels).

Economic Development

The UNCCD Focal Point and the inter-sectoral committee: 2

1	Are not consulted on the preparation of NEAP and PRSP
2	Are consulted, but inadequately, on the preparation of NEAP and PRSP
3	
4	Are consulted and play a small role in the preparation/supervision of development plans, PRSP, NEAP, and other sector plans and strategies
5	Play a full role in the preparation/supervision of development plans, PRSP, NEAP, and other sector plans and strategies

National Sectoral and Provincial Governments have a department mandated to ensure land is sustainably managed.

The Ministry of Economic Development/Finance/Planning use environmental economic analyses of land-use options as a tool in development planning and in preparing economic/development policies.

The Five Year Plans have a chapter on sustainable land management and/or implementation of the National Action Plan.

Agriculture

A label for organic and sustainable products: 1

1	Is not envisaged
2	Is being developed
3	
4	Exists but is not fully functioning
5	Exists and is functioning nationally and internationally

The degraded agricultural areas: 1

1	Are of unknown extent
---	-----------------------

2	Are generally known
3	
4	Have been clearly identified and mapped
5	Have been identified and response plans have been prepared

Expertise and inputs related to (Integrated Pest Management/conservation farming/environmentally sustainable irrigation/crop diversification according to land functionality analysis): 2

1	Is unknown
2	Is not readily available
3	
4	Is available, but availability and/or quality is irregular
5	Is readily available and of adequate quality

The incentives for *inappropriate* practices (such as crop intensification, overuse of chemicals, over-extraction of water): 1

1	Have not been identified
2	Have been identified
3	Have been identified and response measures proposed
4	
5	Have been identified and removed

Named agricultural enterprises have revised regulations/practices incorporating SLM

The percentage of land-users using or intending to use Integrated Pest Management/conservation farming/environmentally sustainable irrigation/crop diversification according to land functionality analysis

Forestry

The degraded forestry areas: 2

1	Are of unknown extent
2	Are generally known
3	
4	Have been identified and mapped
5	Have been identified and response plans have been prepared

The incentives for inappropriate practices (e.g. land clearing, mono-plantations, burning): 1

1	Have not been identified
2	Have been identified
3	Have been identified and response measures proposed
4	
5	Have been identified and removed

Across the country, Y hectares of forestry land are managed with sustainable land management as the priority objective (and/or certified)

Named Forest enterprises have revised their regulations/practices incorporating SLM

Rangelands

The degraded rangeland areas: 1 / na

1	Are of unknown extent
2	Are generally known
3	
4	Have been identified and mapped

5	Have been identified and response plans have been prepared
---	--

The incentives for inappropriate practices (e.g. over-stocking of animals, conversion of rangelands to crops, blocking of transhumance corridors, mismanagement of fire, inappropriate supplemental feeds, unsustainable sylvo-pastoral systems): __

1	Have not been identified
2	Have been identified
3	Have been identified and response measures proposed
4	
5	Have been identified and removed

The root causes of over-grazing: __

1	Are not known
2	Are known for a small number of pilot areas
3	
4	Are generally known in many areas and largely understood
5	Are known and understood for all areas

Existence of new legislation targeting sustainable impact of rangeland management

Existence of new Guidelines to be implemented

Energy

Targets for the penetration of renewable energy in rural areas vulnerable to land degradation/desertification (do they exist? Are they being met?)

Rural energy agencies have full awareness of and commitment to SLM

Transport

Existence of new Guidelines

Local development

Local community decision-making processes and planning processes: 1

1	Do not acknowledge the issue of land degradation
2	Acknowledge land degradation
3	
4	Acknowledge land degradation and set out measures for mitigation
5	Take full account of the need for sustainable land management

The need to promote traditional/indigenous practices: 1

1	Has not been acknowledged at the local level
2	Has been acknowledged at the local level
3	
4	Has been acknowledged and measures tentatively identified
5	Has been acknowledged and is fully incorporated into local plans

Land tenure: 1

1	Does not account for land degradation
2	
3	
4	
5	Is designed to fully account for and protect the value of land

Resource pricing (e.g. water): 1

1	Does not account for land degradation
2	
3	
4	
5	Is designed to fully account for and protect the value of land

There is a national process underway to develop land management plans for each community, driven by the communities.

Outcome 3 National Action Programme completed

Compulsory Indicators

NAP monitoring and review: 1 / na

1	There is no mechanism for monitoring NAP implementation or for NAP reviews
2	There is a stated aim of regular monitoring of NAP implementation, and reviews, but there is no formal mechanism for doing this
3	
4	There is a stated formal monitoring mechanisms, but it has no fixed funding source
5	There is an annual review process, covering state (of land, locally and nationally), pressure (level of threats), response resources allocated (nationally and site specific); capacity (individual, institutional and systemic), with adaptive management.

The National Budget or Medium-Term Development Plan or PRSP allocate funding to the NAP.

Optional Indicators

This will depend very much on the contents of the NAP - which should have its own indicators. For example, is the NAP an *orientation* framework or a *programming* framework? Contents, approval process and monitoring will vary for these two extremes.

The National Action Programme: **Not under preparation**

1	Is under preparation
2	Has been drafted
3	Has been finalized and approved by the lead agency
4	Has been approved and funds committed by all concerned agencies
5	Has been approved, funds have been committed by all concerned agencies, institutional measures have been taken, projects have commenced and are being monitored

The National Action Programme: NA

1	Does not identify roles and responsibilities and does not include measures to strengthen the institutional framework and local institutions
2	
3	Identifies measures to strengthen the institutional framework and local institutions, yet does not clearly set out roles and responsibilities.
4	
5	Clearly sets out roles and responsibilities, and identifies measures to strengthen the institutional framework and local institutions.

Information regarding land and land management: 1

1	Is difficult to access
2	Is available to the institutions responsible for collecting the information
3	Is partly available to some stakeholders

4	Is readily accessible to all stakeholders
5	Is readily accessible in systemised format to all stakeholders and the general public

Grade the following stakeholder groups in terms of their involvement in the National Action Programme on a scale of 1 (low involvement) to 5 (very high involvement): N/A

Group	Stage	Role in NAP Preparation	Envisaged role in NAP Implementation Mechanism
National Government			
Local Governments			
NGOs			
Communities			
Scientific Community			
International development partners			
Small scale private sector			
Large scale private sector			
Holders of indigenous knowledge			
Other			

The number/volume of internationally funded projects in direct support of the National Action Programme.

Outcome 4 Medium Term investment Plan being financed and implemented:

Compulsory Indicators

International partners: N/A

1	Show no interest in the Investment Plan
2	Some partners finance some projects through the Investment Plan, most prefer to finance projects separately
3	
4	Most partners finance most related projects through the Investment Plan
5	Partners finance all related programmes and projects through the Investment Plan

Financing for the Investment Plan has been secured (e.g. trust fund fully capitalized; fixed commitment from Ministry of Finance from annual budget; innovative one-off (e.g. debt swap, donor) and sustainable (e.g. service payments) financial mechanisms secured):

1	No financing secured
2	Initial financing secured
3	
4	Considerable financing secured
5	Fully financed

Optional Indicators

The medium term investment plan: __

1	Is under preparation with limited involvement of stakeholders
2	Is under preparation with full involvement of stakeholders

3	Has been prepared and submitted for approval
4	Has been prepared and approved by government agencies, and secured some government funding
5	Has been prepared in a fully participatory manner, has been approved, and initial funding from government and development partners has been committed

Implementation mechanism: __

1	None of the following have been established: body responsible for Plan implementation with authority and budget; independent monitoring mechanism; <i>chef de file</i> from amongst development partners; permanent consultative mechanism involving most donors and national stakeholders
2	One of the above is established and functioning
3	Two of the above are established and functioning
4	Three of the above are established and functioning
5	All of the above are established and functioning

To what extent are donors coordinated and harmonised in their approach to financing SLM initiatives:

1	No coordination or harmonisation
2	Limited, but increasing, coordination and harmonisation
3	
4	Donors are coordinated and harmonised.
5	All donors are fully coordinated within the framework of the Medium Term Investment Plan

Percentage of surveyed/targeted land-users, NGOs, private sector with information on and access to the financial mechanisms associated with the Plan

3. Monitoring the GEF requirements

Participatory nature of the project.

Compulsory Indicator

How successful has the project been in forging the involvement of representatives of all concerned stakeholder groups? __

		NGOs	Land-users	Women	Marginalised communities	Indigenous people
1	Not at all					
2	Success with some stakeholders					
3	Success with many stakeholders, some of the time					
4	Success with most stakeholders					
5	Full					

For those respondents indicating '4' or '5', examples should be provided.

Optional Indicators

Does the project have specific mechanisms for involving the stakeholders in project decision-making or monitoring?: **N/A**

1	No mechanisms
2	Mechanisms were envisaged in the project design documents, but were never established
3	
4	Mechanisms envisaged in project design documents were established, but do not function fully
5	Mechanisms established and functioning

The number and level of participation by sectoral agencies, provincial governments, local communities in the project has been: __

1	Almost inexistent
2	
3	Acceptable
4	
5	Very satisfactory

What is the project budget for activities that directly target participation (e.g. by developing co-management mechanisms, or by addressing decentralization)?

Has the project directly led to the finalization of one (or more) MoU between stakeholders?

Contribution to achieving the MDGs?

Compulsory Indicator

The project: **3 (during PDF-A stage)**

1	Makes no linkages with either MDG goals or bodies responsible for MDG in the country
2	
3	Is clearly linked to MDG, but no operational linkages have been established
4	
5	Clearly articulates the linkages with MDG and operationalises these linkages

Optional Indicators

The project management has established mechanisms for monitoring and reporting on the MDGs. State the specific MDG and national target.

The project promotes a land management policy that will have a direct impact on poverty alleviation or other MDGs

Integration with other in-country UNCCD implementation mechanisms.

Compulsory Indicator

The UNCCD National Focal Point and Inter-Sectoral Committee: **4 (during PDF-A stage)**

1	Played no role in project design or implementation
2	Played an active role in project design, but are not involved in

	implementation;
3	
4	Play a role in project design and implementation
5	Play a strong and active role in both project design and implementation

Optional Indicator

The Project has operational linkages to projects supported by the Global Mechanism and/or other GEF projects in the Sustainable Land Management portfolio.

Linkages with key SLM related capacity development processes in country (including GEF and internationally funded projects)

Optional Indicator

Co-management arrangements (for example, joint project office or joint project steering committee) have been established with UNDP GEF projects in other focal areas, or with other UNDP natural resource management projects.

Does the project create or promote linkages with the implementation of UNFCCC and UNCBD?

Compulsory Indicator

Has the project implemented joint activities with projects implemented within the framework of UNFCCC and/or UNCBD?

Optional Indicator

Does the project have activities and/or budget to specifically promote coordination amongst Focal Points and/or national teams/committees of the global environmental conventions?

Contribution to the in-country gender situation, as it relates to SLM.

Compulsory Indicator

Do the project outputs (e.g. NAP, Investment Plan, Guides, Training programmes) make specific allowance for the gender dimension? **N/A**

1	Almost inexistent
2	
3	Sometimes
4	
5	Always

Optional Indicators

Is the gender dimension a specific component of any project activity?

Is the gender dimension of the project budgeted separately?

Promote the use and value of indigenous knowledge related to SLM.

Compulsory Indicator

Are custodians of indigenous knowledge related to sustainable land management formally included in the project implementation or technical support mechanisms?

Optional Indicators

The project outputs (e.g. NAP, Investment Plan) target the use and valorization of indigenous knowledge __

1	Almost never
2	
3	Sometimes
4	
5	Always

Do any project activities focus on indigenous knowledge related to sustainable land management (e.g. creating a database, capacity building)?

Sustainability

This is covered under Section III, Question 3

Replicability

Compulsory Indicators

Does the project specify activities to replicate project successes and allocate budget to these activities?

Optional Indicators

What is the budget for replication?

Is there a clear replication strategy for promoting incentive measures and instruments (e.g. certificates, payments) within and beyond the project boundaries?

5.4 Annex 4: Terms of Reference (TOR) for the Project Manager, Steering Committee, and an International committee with expertise on SLM Institutional Contract

5.4.1 Project Manager

162. **Background:** The Project Manager will head the Project Management Unit. The PM will be fully accountable to the Director General of RADA and to the Steering Committee for satisfactory implementation of the entire project. He/She will be responsible for meeting government obligations, under the National Execution (NEX) modality. He/She will be responsible for the implementation of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The PMU will have operational and financial autonomy. The PM shall perform a liaison role with government, UNDP, and all stakeholders involved in the project.

Duties and Responsibilities

- Overall management of the project, including the supervision and coordination of project outputs as per the project document;
- Mobilize all project inputs in accordance with UNDP procedures for nationally executed projects; including finalising the TOR for consultants and subcontractors;
- Coordinate the recruitment and selection of project personnel;
- Work closely with project partners to closely coordinate all the actors involved with achieving Project Outcomes, Outputs and implementation of Activities ;
- Prepare and revise project work and financial plans, as required by Government and UNDP;
- Manage procurement of goods and services under UNDP guidelines on oversight of contracts;
- Ensure proper management of funds consistent with UNDP requirements, and budget planning and control; and arrange for Audit inputs.
- Establish project monitoring and reporting;
- Prepare and ensure timely submission of quarterly financial consolidated reports, quarterly progress reports, mid-term reports, and other reports as may be required by UNDP.
- Disseminate project reports to and respond to queries from concerned stakeholders;
- Report progress of project to the Steering Committee.
- Oversee the exchange and sharing of experiences and lessons learned with relevant conservation and development projects nationally and internationally.

Selection Criteria

- Degree in agriculture, soil conservation or other relevant academic and profession qualifications with at least 10 years professional experience;
- Proven extensive experience and technical ability to manage externally financed projects and a good technical knowledge in the fields related to SLM, participatory approaches and/or environmental economics;
- Effective interpersonal and negotiation skills proven through successful interactions with all levels of project stakeholder groups, including senior government officials, business executives, farmers and communities;
- Ability to effectively coordinate and plan a complex, multi-stakeholder project;
- Ability to lead, manage and motivate teams of consultants to achieve results;
- Excellent communication skills;
- Knowledge of UNDP project implementation procedures, including procurement, disbursements, and reporting and monitoring highly preferable;

163. **Duration of the assignment:** Project implementation is for a period of three years, planned to start in September 2006. Continuity of staff during this time will be crucial for effective implementation.

5.4.2 Steering Committee (SC)

164. The SC will be composed of the Director General of RADA and other senior Government officials and from UNDP, and will provide high level policy guidance and orientation to the project. The Director General of RADA will chair the SC while the PM will be the Secretary to the SC but not its member. The SC will be composed by the following members:
- The Director General, RADA (Chairperson),
 - Officer in charge of Land use in RADA,
 - Officer in charge of Lands in MINITERE,
 - Representative from the Ministry in charge of Local Government,
 - Director-General or Representative from REMA
 - Representative from ISAR and
 - UNDP
 - Representative from Civil Society
165. The principal tasks of the SC are the following:
- Provide high level orientation and guidance for the project implementation
 - Ensure that the project develops in accordance with national development objectives, goals and policies.
 - Pay special attention to the assumptions and risks identified in the logframe, and seek measures to minimize these threats to project success;
 - Ensure collaboration between institutions and free access on the part of project actors to key documents, land information systems, etc.
 - Pay special attention to the post-project sustainability of activities developed by the project.
 - Ensure the integration and coordination of project activities with other related government and donor-funded initiatives.
166. Note that Outcome 2 of the Log-Frame provides for the development of a permanent National Committee to address coordination and monitoring of SLM process in Rwanda, and to start the development of the CSIF or Country Strategic Framework for SLM (linked to TERRAFRICA). One task of this Steering Committee is to assist the evolution into permanent National Committee.

5.4.3 Outline TOR for an Institutional Contract for an international organisation with expertise on SLM - in association with ISAR/RADA

Introduction

167. The international or regional organisation will be one of those identified by the GEF LDC – SIDS Portfolio Project as a Centre of Excellence for SLM process for the East and Southern Africa Region, on account of its long tradition of both partnership and scientific expertise in the fields of Soil Water Conservation, Agro-Forestry and SLM in general. It will also have a long history of working in Rwanda.
168. The project PMU will draw up an institutional contract for the selected international organisation to work in partnership with ISAR on this project process. The Contract will cover Outputs 1.1 and 1.2, and some of 1.3 (Activities 1.3.1, 1.3.2 and 1.3.3). In addition the organization will participate in the broader discussion on Knowledge Management and Data-

Bases, and mainstreaming in terms of policy and awareness.

169. The Contract will be from UNDP on behalf of Government and will cover the first two years of the project. The organisation / ISAR performance will be reviewed by UNDP and the Steering Committee. The partnership will build linkages to its broader network programmes (e.g. to the African Highlands Initiative, to The Tropical Soil Biology and Fertility Partnership etc).

5.5 Annex 5: Planning Soil Conservation Measures in Rwanda: A Review of Africa Literature

5.5.1 INTRODUCTION

170. The preparation of the Project proposal raised considerable amounts of discussion on the optimum practices of Soil and Water Conservation (SWC) in mountainous areas of eastern and Central Africa. Such debate is timely and has enriched this proposal content. It is necessary, however, to capture the elements of this debate (from within Rwanda and from the literature) in an Annex to this proposal, which allows the project description to refer to the technical details.
171. The starting point for this discussion came from the statement in the first project drafts that "... over the last decade or so the extent of soil conservation structures in Rwanda has declined as people in many cases did not maintain structures or purposefully destroyed them". Reasons were suggested that people saw relatively little benefit as compared to cost. This led to a literature search; and in fact such loss of structures (especially the larger terraces) is common-place across Africa (and in South Asia).
172. The literature review led to a single basic statement on SWC: **"Putting people first: essential participatory approaches to Soil and Water Conservation SWC"**. The one important difference between the advocacy of Soil and Water Conservation and Land Husbandry today and their colonial precursors is the current emphasis on people's participation. The lessons from 1960s onwards taught project planners and policy-makers alike that imposed projects just do not work, certainly in the longer term. Advocates of more participatory approach top development argued forcefully for "putting people first" (eg Robert Chambers). Wider trends of democratization and decentralization have meant that participation has become both politically appropriate and practically necessary.
173. A second finding reflects the colonial history of big technical solutions displacing traditional practice: **"Designing standard technical solutions for standard problems; the past approach to soil and water conservation was large government led mechanical intervention"**.
174. Alarm about the potentially damaging consequences of soil erosion promoted a long history of external intervention in SWC measures in Africa, as elsewhere. The experience of the dust-bowl in the United States proved influential in policy thinking from the 1930s onwards. This alarm was compounded in parts of north-eastern and southern Africa by the experience of drought.
175. This alarm led to emergency interventions focused on the mechanical conservation of soils; soil-bunds, ridging, contour ploughing, terracing, etc. In many areas the land husbandry package was rejected by local people. Farmers felt that the imposition of a particular model of land used practice undermined their existing agricultural management practices. In southern Rhodesia, colonial policies banned traditional wetland and river-bank cultivation, thus limiting peoples coping strategies in dry years; they enforced reduction in cattle numbers, undermining people's ability to survive during drought; and they forced people to build a standard design of contour ridge to conserve soil and drain away water from the field, often with detrimental effect on productivity. Not surprisingly, in such cases colonial soil conservation measures were resisted, and in many countries they became the focus for nationalist opposition in the rural areas, leading to the wide spread destruction of conservation structures, as a form of political protest.
176. The conservation, use and sustainable management of watershed resources in order to meet the demands of growing populations were high priorities for countries over the past several

decades. However during the 1990s, integrated watershed management through people's participation has become widely accepted as a promising approach for conserving water, land and biodiversity, enhancing local livelihoods improving the economy of upland inhabitants and people living in downstream areas, and ensuring sound sustainable natural resources management overall.

177. **Requirements for technology:** Although the broad technology for controlling soil erosion is relatively well understood, we now know that this technology must satisfy a number of social requirements as well as being scientifically sound; these requirements include:
 - A high and quick financial return
 - A reduction in risk;
 - No loss of existing benefits
 - Accessibility to the farmer in terms of extra inputs of labour and capital;
 - Social acceptability, particularly in terms of gender issues;
 - Being an extension or modification of an existing practice not something new.

5.5.2 *Planning Soil Conservation Measures Today*

178. **The Soil Conservation Assessment Sequence** Soil conservation design most logically follows a sequence of events which should begin with a thorough assessment of erosion risk. This is followed by designing a sound land-use plan based on what the land is best suited for under present or proposed economic and social conditions, including land tenure arrangements and production technology, and what is necessary to ensure the maintenance of environment stability.
179. **Defining Conservation needs** The ultimate success of soil conservation schemes depends on how well the erosion problem has been identified, the suitability of the conservation measures selected to deal with the problem, *and the willingness of farmers and others to implement them.*
180. **Perceptions of erosion** The relevance of conservation measures within a farming system depends, in part, on how the farmers and other stakeholders perceive the erosion problem and its consequences. Most farmers are aware of the problem and its effects, and the notion of the peasant farmer “damaging the land through ignorance” is severely mistaken. The small-scale farmer is as much an experienced and efficient practitioner of land husbandry as the large-scale commercial farmer, but with a different objective, namely that of “survival” rather than “profit”.
181. Most farmers are concerned with the effects of erosion on potential productivity and on the possible increased costs of, for example, seeds for replacing a crop destroyed by erosion, as well as fertilizers to maintain soil fertility, and water storage to provide additional water for crop growth. Most farmer decisions, however, tend to reflect a compromise between preventing long-term soil damage by erosion, and maximizing long-term income. Generally, the farmer is willing to change practices, but will do so only if sustainable benefits arise, and the investment costs can be recovered. Where a land user does not perceive such benefits, then soil conservation measures are unlikely to be adopted.
182. Where farmers own the land, they are more likely to consider the long-term consequences of their actions and adopt soil-protection measures; unless the need for short-term survival dictates otherwise. Tenure systems based on short-term cultivation rights, share-cropping and collectives generally lead to poor land management because of uncertainty about whether any conservation work carried out on the land will be rewarded. This is the case in several parts of Eastern Africa, including Rwanda.

183. The overall size of a farm does not necessarily influence the frequency or the type of soil conservation measures employed. For example data from the Nyassa Rift Valley and Western Province of Kenya show that 51 per cent of the farmers with holdings of less than 1 ha use fertilizers to maintain productivity; whereas on farms of over 10 ha use the figure is still only 68%. Equivalent figures for the use of terracing are 24% and 21 % respectively. More important than farm size is the degree of fragmentation. This is important as many conservation measures, such as terraces, become impractical when the land is held as a series of extremely small and scattered parcels. Again, fragmentation is not uncommon in the Rwandan situation.
184. **Labour** All soil conservation work implies extra labour. It is needed for the building and maintenance of terraces, and the growing of additional soil-protective crops either in rotation or by intercropping.
185. **Access to soil conservation technologies** The ability of farmers to adopt soil conservation measures will depend on their access to all appropriate resources, not just labour. These may vary from access to knowledge of new systems, to an ability to afford the necessary inputs of capital and labour to take them up. The numbers of extension workers with experience of soil conservation, the access of the farmers to extension staff and the perceived relevance of their recommendations will influence whether an extension service is successful or ineffective. Whether or not farmers have the cash to purchase the additional seeds, fertilizer or machinery required to support a more conservation-oriented farming system will clearly affect its uptake; many poor farmers have insufficient security to support loans and would consider the risk of borrowing money too high.
186. Clearly it is pointless designing a soil conservation programme which requires levels of input to which the targeted farmers have no access. However, it should be recognized that many farmers use their own initiative, technical skill and labour to develop soil conservation measures where they benefit from so doing. Between 1948 and 1978, farmers in the Machakos District of Kenya made large investments in terracing, tree planting and hedging, as well as improving cultivation techniques in order to grow coffee, cotton, oranges and papaya (Tiffen et al 1994).

5.5.3 *The Mechanics of Soil Conservation*

187. Mechanical field practices are used to control the movement of water and wind over the soil surface. A range of techniques is available and the decision as to which to adopt depends on whether the objective is to reduce the velocity or run-off the wind, increase the surface water storage capacity or safely dispose off excess water. Mechanical methods are normally employed in conjunction with agronomic measures. Control of surface and seepage water is often needed on steep slopes to minimize land slides and slumps. This can be achieved by drainage which will help to prevent the build-up of soil water.

Contouring: Carrying out ploughing, planting and cultivation on the contour can reduce soil loss from slopping land compared with cultivation up-and down the slope.

Contour bunds: Contour bunds are earth banks 1.5 to 2 meter wide thrown across the slope to act as a barrier to run off, to form a water storage area on their up slopes sides and to break – up a slope into segments shorter in length than is required to generate over land flow.

Terraces: Terraces are earth embankments constructed across the slope to intercept surface run-off and convey this rain run-off into a stable outlet at non-erosive velocity, and to shorten slope length. Thus terraces perform similar functions to contour bunds. They differ from bunds in that they are much larger and designed to more stringent specifications, decisions are required on the spacing and length of the terraces, the location of terrace

outlets, the gradient and dimensions of the terrace channel and the layout of the terrace system.

188. Bench terraces consist of a series of alternating shelves and risers are employed. Where steep slopes, up to 30 degrees, need to be cultivated, the riser is more vulnerable to erosion, and is protected by more vegetation cover and sometimes faced with stones and concretes. There is no channel as such, but a water storage area is created by sloping the shelves into the hill side. Bench terraces can to be reasonably satisfactory as a conservation measure over a wide range of conditions, provided sufficient labour is available for construction and maintenance. But their construction can expose the relatively in-fertile sub-soil, and they require a high a labour input for construction and maintenance, and they can hold back so much water on the hill side that the soils became saturated and land sliding can be induced. As an alternative conservation measure, “fanya-juu” terraces were recommended.
189. **Fanya-juu terraces** consists of narrow shelves constructed by digging a ditch on the contour and throwing the soil up slope to form embankments which is later stabilized by planting grass. During cultivation, vegetation and crops residues are spreads over the shelves. Over time, redistribution of soil within the inner inter-terraces causes the inter-terrace slope to decline in angel and bench like features to develop.
190. **Retention Terraces:** These are level terraces; used where water must be conserved
- by storage on the hill side.
191. **Bench Terraces:** Alternating series of shelves and risers used to cultivate steep slopes. Raiser often faced with stones or concrete. Various modifications to permit inward-slopping shelves for grater water storage or protection of very steep slopes or to allow cultivation of tree crops and market garden crops are used.
192. Fanya juu Terraces: Terraces are formed by digging a ditch on the contour and throwing the soil on the up slope side to form a bank or bund..
193. In many parts of colonial Africa, soil conservation measures were seen as too labour-intensive for the expected economic return, took too much scarce land out of cultivation, were not supported by the same system of subsidies and loans that were made available to the settlers, and were regarded as an illustration of what was increasingly seen as the unfairness, of colonial rule (eg Temple in the Uluguru Mountains of Tanzania). Today, there are many examples throughout Africa where channel and bench terraces implemented by governments, both pre-and post-independence, have not worked; whereas indigenious, often highly labour-intensive systems, have been successful (e.g. Machakos as reported by Tiffen, Mortimore and Gichuki in 1994).
194. Unfortunately, knowledge of this unsuitability due to socio-economic factors came only from experience. Today, we are seeing further causes of erosion due to the lack of maintenance of soil conservation works in areas of rural depopulation. Although most pronounced in Mediterranean Europe, it is a trend which will become increasingly important world-wide.
195. In summary therefore, soil conservation measures to be successful must reduce erosion to an acceptable level. They must be appropriate to the local farming system in terms of their level of technology, and have compatibility with existing farming practices. They must be economically justifiable and be capable of implementation.
196. Information available in Eastern and Central Africa 6 suggests that farmers will adopt soil conservation practices IF they have necessary labour, capital and technological inputs to do so and IF they perceive an immediate economic benefit. Unfortunately, the overall take of soil conservation remains poor. After six decades of voluntary soil conservation programmes in

the USA for example, erosion is still at an unacceptably high level. Farmers are unlikely to adopt conservation measures if there is no immediate threat to the productivity of their land or if the main justification for their use is to prevent pollution and other off-site damage.

5.5.4 *New Approaches*

197. The last two decades have seen considerable changes in the approaches used to promote and implement soil conservation. Perhaps the most fundamental has been the move from a top-down approach towards a bottom-up approach involving the participation of the farmers. Once it became recognized that sending in technical experts to identify the erosion problem and design an erosion-control system was inadequate, erosion began to be regarded as a social as well as a technical problem. Although this led to recognizing that a sociologist might have a role to play; that role was initially limited to obtaining the consent of the farmers to the technical solution. The technical solutions being proposed still took no account of the social structure and economic condition of the society on which they were being imposed.
198. The new approach also depends on recognizing that many traditional agricultural systems relied on soundly-based soil protection practices and that more acceptable conservation schemes can be developed by building on these accepted practices. Although the results of this new approach are promising, it is too early to know whether they can be sustained in the long term.
199. The bottom line remains that farmers must be convinced that the technology will work in their circumstances. **Ideally therefore**, the technology should be shown to work on farms as well as on research stations. Again the ideal is for farmers to adopt soil conservation voluntarily. The low extent of farmer uptake, however, suggests that this does not always work very well. This is particularly so where, as in the USA and Europe, the benefits of conservation are acquired by the community or even the public-at-large, rather than the individual farmer.
200. **Advisory Work** An effective advisory service is the vital element behind the participatory approaches to soil conservation and arousing the interest of farmers and their families and building on their existing farming systems.

5.5.5 *Experiences From Across Africa*

201. **Morocco: Soil and Water Conservation Issues:** The principles underpinning SWC is still poorly understood by the farmer's even though they use these techniques. For example, farmers build terraces and retaining walls on the lower part of the slope while destroying the vegetation cover further up, increasing run-off and causing water to overflow and destroy the structures. There is need to think beyond the level of individual plots and to take the whole landscape into account.
202. The main constraints on the maintenance and expansion of conservation structures include fragmented land, ownership and the distance between plots. These problems affect all farmers without exception. Land worked collectively, even by the members of the relatively large households is often poorly maintained, and it is only after such land is divided up into private holdings that individual owners pay more attention to their land.
203. **Swaziland: USAID in 1970** described the soil conservation situation on cultivated lands in dramatic terms: "...much of the surface soil has been lost, and the remaining root zone of much of the crop land is less than 45 cm in depth. A major terracing programme was developed to address the apparent problem of soil erosion. Heavy earth-moving equipment for terrace construction was bought by the Government of Swaziland, USAID provided a grant for technical services, training and other aid assistance. From 1971 to 1977, over 7,200 ha were terraced, and in the process the original traditional grass-strip anti-erosion measures were

removed. At the end of this initial period strong criticism of terracing emerged. In the past few years, the standard of soil conservation measures, viz terracing and grassed water-ways, have proved to be expensive, land consuming and sometimes even erosion inducing. Critics recommended the use of properly designed, maintained and propagated grass strips; and these recommendations were adopted to a large extent by USAID's feasibility study team which in 1977 examined the cost effectiveness of soil conservation practices.

204. ***The period 1977-1983.*** Despite the fact that terracing was severely criticized in 1977, this was not reflected in the targets for the second phase of the RDA programme. The work plans for the 18 RDAs indicated the following targets; terracing of 16, 500 ha, removal of grass strips totaling 17, 950ha; and removal or realignment of grass strips on another 5,500 ha. USAID provided another loan for equipment as well as a grant for technical assistance. However in reality, the terracing fell far short of its target, and few grass strips were removed.
205. ***The importance of grass strips*** Present soil conservation wisdom asserts the need to move away from massive conservation structures to more low-cost vegetation barriers. In this respect, the Swazi farmers did 40 years ago what is now recommended by soil conservationists. Grass strips laid out in the 1950's remain a common feature, in particular in the Highveld and middle veld, on small Swazi farms, although not on large scale commercial farms. The grass strips were introduced systematically because King Sobhuza II issued an Order of the King in 1954 obliging all Swazi citizens to install grass strips on their land. Although king Sobhuza II died 15 years ago, the Swazi farmers generally continued to maintain the grass strips on their fields. They may not always follow the contour, and the plough may have reduced their width, but the accumulation of sediments behind the strips has led to the formation of terraces in many places.
206. ***Ethiopia.*** In many parts of Ethiopian highlands, land degradation owing to soil erosion has become a serious problem for more than a decade. The Government of Ethiopia has undertaken a massive programme of soil and water conservation works, particularly the construction of terraces. However, in most highlands parts of Ethiopia particularly in Northern Shewa, it has been observed that some of these terraces have been destroyed by the local farmers, while certain indigenous soil and water conservation methods eg stone terraces cut-off drains, etc, continue to be use. Among these indigenous soils and water conservation techniques, traditional ditches have been used widely by farmers for different purposes in many parts of the highlands. Without addressing such issues, there was little chance that the soil conservation measures would be widely adopted without significant subsidy and in some instances, coercion (Dessaleegn 1994).

5.5.6 *A Summary of Soil Conservation Measures in Rwanda*

207. Soil (and water) Conservation measures have long been designed to reduce the loss of soil through erosion, and increase the retention in the soil, and so reduce surface run-off, the main erosive factor over most of Rwanda.
208. There are a wide variety of such soil conservation measures that have been tried, and tried successfully in a variety of sites over the past 50 years. These measures include:
 - 1 Physical Measures (terracing, bunds, ditches)
 - 2 Land-use practices (preventing cultivation on steep slopes)
 - 3 Cropping Strategies (agro-forestry, use of perennials not annuals)

Further details are given below.

209. ***Physical Measures*** Rwandan agriculture and land sectors refer to TWO types of terracing. These are first the “**Radical Terrace**” equivalent to the Bench Terrace of East Africa, and secondly the Progressive Terrace. The greater the slope the greater the need for radical

terracing inputs, even though they are much more labour intensive. Radical terraces require considerable technical advisory input (site, width and height of terraces) and much cooperative labour (such terraces require about 1000 man-days of labour per hectare); and they create major changes in soil structure and fertility unless properly done.

210. **Progressive Terraces** require less physical and less disruption. A combination of bunds and ditches stop down-slope water and soil flow, soil builds up against the bunds and so slowly and “progressively” builds a terrace. Bunds are usually strengthened with perennial planting – fodder grasses or trees. There is evidence that terracing inputs need to reflect soil type and steepness of slope.
211. Poor design of Terraces can expose sub-soil and bury top-soil, and too much water retention can create soil slump and terrace collapse. Such terraces cannot work in isolation (ie 1 / 2 farmers on a few hectares, several adjacent forces need to cooperate together so a complete micro-catchment is covered. The cost of time and labour for creation and maintenance is a major disincentive for terracing – UNLESS revenues increase significantly.
212. *Land-Use Practices.* Soil Conservation Measures should not be seen as separate isolated activities, but should be incorporated into landscape level treatment. Unfortunately, with very high population densities and virtually no spare land, there is not a great deal of scope for major change in land-uses. Over the past 20 years there has been much conversion of forest, wood-land and pastureland into cultivation – even on very steep marginal land. New laws may influence this, but implementation of legislation remains problematical.
213. *Cropping Strategies* Rwandan agriculture has for decades been advocating for a much greater proportion of woody cover, especially on steep and marginal land. This has been supported by research and innovation through ISAR and ICRAF. Agro-forestry is a key part of such cropping strategies.

5.5.7 Discussion

214. These strategies are NOT mutually exclusive, but require integration into the landscape, with for example greater agro-forestry input onto terraces. One of the most critical elements is to develop mixed farming with forage crops grown on the terrace headwalls and animal manures/waste put back into the soil itself. Terracing is a necessary part of RESTORATION of badly eroded slopes, where soil loss is so bad that it will not support a full grass cover.
215. Terracing requires cooperative processes. Rwanda’s decentralised governance structures (down to 50 household units) can empower such cooperation. Farmers, however, need to balance costs (labour, changed soil structures) with potential returns (improved yields). Note that returns are likely in the longer-term not more immediate short-term benefits. The Catholic mission terracing in Byumba illustrates a fully integrated mixed farming operation - and the first crops of potatoes were luxuriant. The problem is that farmers with small (< 1 ha) farms have little ability to wait for longer-term gains! Improved yields require more than just physical structures, but need significant inputs of fertiliser, lime and manure. Improved yields only lead to improved incomes if market access is improved and marketable crops produced.
216. There is a wealth of SWC & Agro-forestry experience in Rwanda – some of the most intensive work on the continent. What is needed now is a review of the socio-economic factors that affect farmer acceptance of all these technologies. Why do farmers accept or reject this broad range of techniques? Under what conditions do they work? How can we use this knowledge to increase acceptance and uptake?

5.6 Annex 6: ICRAF-ISAR Collaboration in Sustainable Land Management in Rwanda

Introduction

217. ICRAF has had a long history of work within Uganda, and has been a major partner with ISAR – and through ISAR to other partners at national level for over two decades. Recently ICRAF changed its modus –operandi within many African countries – including Rwanda and has moved out of a single lead agency into a separate role from where it can work with a wide variety of projects, donors and partners. Partnership remains the core philosophy of ICRAF, but this is with a wide variety of partners, rather than a single one.
218. ICRAF has a lead scientist for Rwanda based partly in Rwanda and partly in ICRAF HQ and partly in USA (this is Dr Steve Franzel)²⁹. There is a full time ICRAF Country Manager, Dr David Kaggoro, with a team of three specialists and more ICRAF staff on specific projects.

Major Programmes

219. ICRAF have two Major Programmes underway in Rwanda and a number of smaller initiatives. These include firstly Shade Coffee Project – seeking to improve husbandry and marketing of coffee; and secondly inputs to the larger RSSP. The RSSP (World Bank support) inputs were increased when present PS in Ministry of Agriculture, Dr Agnes Kalibata, who was Head of RSSP, asked ICRAF to collate and support the scattered low impact inputs from a number of NGOs in Sustainable Land Management. A recent evaluation of this was quite positive.
220. Another World Bank Project component is the Development and Market Place activity which evaluates and supports Progressive Terracing in eleven sites (including the mountainous north and west). ICRAF has partnerships to other programmes such as “Heifer International” and “Send a Cow”. ICRAF provides support to sustainable forage process, linking forage to terraces and land management. ICRAF has socio-economic information about fodder and about dairy cattle.
221. ICRAF brings skills from a wider set of experiences than just Rwanda, for example the African Highlands Initiative in Uganda, with sites in Kabaale - adjacent to Rwanda, has much to offer. Past ICRAF Soils Scientist in ISAR Rwanda (Jeremias Muyo, a Tanzanian) is leading that programme. AHI has a considerable literature set (to which Rodgers will facilitate access). The ISAR - ICRAF programme has considerable training experience – in field sites in Rwanda with a strong emphasis on participatory processes.
222. Smaller Initiatives Include:
 - 2006: Partnership on the DFID-financed project, “Scaling up the Use of Fodder Shrubs”. Leonidas Dusengemungu, ISAR Sociologist, conducted a survey and wrote a major report, “Assessing the impact of fodder shrub extension in Rwanda”. This included considerable focus on household level socio-economic assessment, with a view to looking at farmer incentives for inputs. NOTE that one of the issues that the GEF project wishes to address is *the socio-economic costs and benefits associated with SLM process*.

²⁹ Steve Franzel interacted closely with Jonathan Duwyn and Roy Hagen of UNDP Rwanda in the early stages of the project development.

- 2006: Within the World Bank financed Rural Sector Support Project, Leonidas Dusengemungu, ISAR Sociologist, conducted a participatory mapping exercise at two ore lowland sites: (Mareba Sector, Bugesira District, Eastern Province and Kiziguro Sector, Gatsibo District, Eastern Province) but they again have a focus on socio-economic assessment, here with emphasis on livestock integration.
- 2006-07. Mr. Athanase Mukurarinda, ISAR Soil Scientist, is conducting his PhD research at ICRAF HQ on Nitrogen Fixation under Dr. Lou Verchot.
- 2007: Within the World Bank financed Rural Sector Support Project, Mr. Jean Gapusi, Forester, has organized an **Agro-forestry training course for secteur extension staff** in the project that he will implement in April 2007. This has of course direct linkage to the GEF project. This training is site based and includes two separate training programmes each with 30 Secteur Extension Agents.
- 2007. The following working paper is being published by ICRAF: Dusengemungu, L. and Zaongo, C. In press. Etat de la Recherche Agro-forestiere au Rwanda. Période: 1987-2003. ISAR/ICRAF.

5.7 Letters of Co-finance:

See attached file

5.8 Letters of Endorsement OFP

See attached file

5.9 References

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Reid, C., Scoones, I., and Toulmin, Camilla. 1996. Sustaining the Soil: Indigenous Soil and Water Conservation in Africa. Earth-Scan Books, London UK.

ICRAF documents, Africa Highlands Initiative (see web-site).

5.10 SIGNATURE PAGE

Country: RWANDA

Expected Outcome(s)/: 1) Individual and institutional capacity for SLM developed 2) Government uses capacity to mainstream and manage the long-term Rwanda SLM programme within key sectors, to ensure coordination. 3) Government of Rwanda has developed its National Action Plan (NAP) and uses this as a coordination tool 4) The NAP is supported by a credible MTIP and a broader CSIF process linked to TerrAfrica 5) The Project managed efficiently and cost-effectively, with adaptive M and E process.

Expected Output(s)/: Design and implement an SLM training/awareness raising program for national and district technical officers and decision makers; Successful soil and water conservation interventions are identified by expert groups in Rwanda; and lessons on success factors are disseminated; Agriculture and training expertise have developed a participatory field-based training course for extension staff based on regional best practice, and demonstrates cost-benefit analysis of interventions at household level; Extension services in pilot Districts and Secteurs (together with central, regional and civil society partners) undertake training courses; Extension services deliver integrated demonstration SWC interventions in project districts, which generate feedback lessons on cost and benefits at household - community levels; The Partnership oversight committee for SLM at Central level both co-ordinates donor support and provides for monitoring and evaluation of SLM interventions; Government at all levels use the results of the best practice assessment and economic analyses to mainstream SLM process into secteur, district and regional Development Plans; Central government, together with donor partners and decentralised government, have found means to scale-up and disseminate SLM “best practice”; The National Action Plan is developed and approved through participatory process with expert and stakeholder groups; The NAP provides a framework for coordination of SLM activity in Rwanda; The SLM committee of government / partners starts the CSIF (Country Strategic Investment Framework) planning process for TerrAfrica SIP, which incorporates the MTIP to start implementation of the UNCCD National Action Plan.

Implementing partner: Ministry of Agriculture and Animal Resources MINAGRI

Other Partners: The Rwanda Agriculture Development Authority (RADA), Ministry Local Government, Good Governance, Community Development and Social Affairs, Ministry of Finance and Economic Planning, Ministry of Lands, Environment, Forestry, Water and Mining

Programme Period: 2008-2013
Programme Component: Energy and Environment for Sustainable Development
Project Title: Improving agricultural extension services for Sustainable Land use and management in Rwanda
Project ID: Award No:00039330, Project No: 00044067
Project Duration: 5 years
Management Arrangement: National Execution (NEX)

Total Budget

Regular (GEF): 600,000

- PDFA: 12,500.-
- MSP: 587,500.-

Allocated resources:

- Government (In-kind) 265,000
- UNDP regular 300,000

Agreed by

<u>On Behalf of:</u>	<u>Signature</u>	<u>Date</u>	<u>Name/Title</u>
Coordinating Agency			
Implementing partner:			
UNDP			

ⁱ In some cases it is not possible to provide five alternative responses. Three or four are provided in such cases.

ⁱⁱ A survey will be developed by GSU, implementation to be financed through MSP budget.