Terminal Evaluation Report

Government of Mauritius
United Nations Development Program

PIMS 3092: Capacity Building and Knowledge Management for Sustainable Land Management in Mauritius Including Rodrigues

International TE Evaluator

I. OPENING PAGE

Project Title: Capacity Building for Sustainable Land Management in Mauritius (including Rodrigues) GEF Project ID# 3092

Evaluation Time Frame and Date of Report: December 19, 2013 - March 31, 2013

Region and Countries in the project: Mauritius

GEF Operational Programme/Strategic Programme: "Operational Program 15 and Strategic Priority 1 relating to Targeted Capacity Building for sustainable land management

Executing Agency: UNDP

Implementing Partner: Forestry Services, Ministry of Agro Industry & Food Security

Government Coordinating Agency: Ministry of Finance and Economic Development

Other Partners:
Ministry of Housing and Lands
Ministry of Environment and National Development Unit
Ministry of Local Government
FAO
Selected NGOs
Private Sector
University of Mauritius

Management Arrangement: National Execution

Programme Period: 2004–2007 extended to 2012

Evaluation Team Members: Stephanie Hodge with support by Saeko Kajima

Acknowledgements: The evaluator would like to recognize and congratulate UNDP/Mauritius and the SLM project staff for the efficient and professional organizational support they provided during this evaluation. Their efforts reflect the skilled approach taken towards overall project implementation.

Project Title:	**Capacity Building for Sustainable Land Management in Mauritius including Rodrigues**			
GEF Project ID:	2403		*at endorsement (Million US$)*	*at completion (Million US$)*
UNDP Project ID:	3092	GEF financing:	US$ 574,073,00	574,073,00
Country:	Mauritius	IA/EA own:		
Region:	SIDS	Government:	US$ 600,000	600,000
Focal Area:	Land Degradation	Other:	US$164,000 (FAO)	0
FA Objectives, (OP/SP):	Sustainable Land Management	Total co-financing:	US$ 764,000	600,000
Executing Agency:	Ministry of Agro Industry and Food Security	Total Project Cost:	US$ 1,338,073	1,338,073 plus amount from MOE for one activity.

Other Partners involved:		ProDoc Signature (date project began):		2006
		(Operational) Closing Date:	Proposed: 2009	Actual: 2012

II. EXECUTIVE SUMMARY

Project Description

This medium-sized UNDP/GEF project officially commenced in September 2006 and was scheduled to conclude in October 2009. The project is funded under GEF's OP 15 and clearly follows this OP's guidance, particularly Strategic Priority One,"targeted capacity building for sustainable land management." This project is part of the UNDP/GEF LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management. The Project is executed nationally. The executing agency is the Ministry of Agro Industry and Food Security (MoAF). The PMU is situated within the MoAF.

GEF's investment is approximately US $570,000. Other significant co-funders include UNDP, FAO ($164,000-committed at design) and the Government of Mauritius ($600,000 committed at design).
The project's immediate objective is "capacities for sustainable land management are built in appropriate government and civil society institutions/user groups in Mauritius and Rodrigues and mainstreamed into government planning and strategy development."

The capacity building project focuses upon four Outcomes:

Outcome 1: SLM is mainstreamed into national policies, plans and legislation
Outcome 2: Human resource capacities needed for SLM are developed
Outcome 3: Capacities for knowledge management for SLM are developed
Outcome 4: The National Action Program for the UNCCD is completed.

Evaluation Ratings Table

Evaluation Ratings:			
1. Monitoring and Evaluation	rating	2. IA& EA Execution	Rating
M&E design at entry	S	Quality of UNDP Implementation	S
M&E Plan Implementation	S	Quality of Execution–Executing Agency	S
Overall quality of M&E	S	Overall quality of Implementation/Execution	S
3. Assessment of Outcomes	rating	4. Sustainability	Rating
Relevance	R	Financial resources:	L
Effectiveness	R	Socio-political:	L
Efficiency	R	Institutional framework and governance:	L
Overall Project Outcome Rating	S	Environmental:	L
		Overall likelihood of sustainability:	ML[i]

Summary of the Conclusions

Land Degradation in Mauritius has been caused by three main factors: deforestation, unsustainable agriculture and recurring wildfires on grass-covered mountain slopes, as well as paucity of monitoring and enforcement issues in the normal evolution process, including urbanization. In Rodrigues, this is caused primarily by overgrazing and unsustainable agriculture, overgrazing being in greatest evidence at the end of the dry season in December (ProDoc 2006, Mid-term 2008 and IFS 2011).

The project was designed to strengthen capacity and impact on the national enabling environment supported by necessary human resource capacities to facilitate long-term investments in the promotion of sustainable land management. This was to be built upon a series of training programs, the development of extension materials, the provision of information management technical equipment and expertise for informed decision-making and the deliberation of at least three broad policy instruments: NAP, SLM Policy and SLM investment plan. Capacities were also expected to be developed through the generation of baseline land degradation assessments and associated monitoring activity.

Based on the project experience, the evaluator found it could have been designed to deal directly with the root causes and to impart capacity to changing destructive practices as well as empower end users (through multi-stakeholder and participatory approaches and principles). Such a restriction in the original project design was identified during the mid-term evaluation, but by then it was too late, and there were no resources to allow undertaking a major shift to demonstration and downstream work directly empowering resource users (with support and capacity strengthening) on the actual root causes/problems.

The project is a relatively small investment in Mauritius and Rodrigues–US $570,000. As such, it has had remarkable success and has accomplished important aspects of SLM mainstreaming, including influencing the broader enabling environment towards a longer-term SLM perspective.

The following results have been accomplished: research and capacities strengthened on environmental impact and policy landscape; broad sensitization of government and private sector; training of NGOs on SLM concepts; the development of important tools, including the introduction of a forestry information management system compatible with the broader LAVIMS at MOHL and the development of the investment financing programme for SLM, linked to NAP policy and implementation.

Through the project, the Forestry Service demonstrated the ability to convene collaborative cross-sector engagement on environmental protection and sustainable development through which stakeholders have learned about important concepts and tools for SLM. These include valuation techniques (results discussed during the SLM TE workshop). The project also demonstrated an innovative and effective inter-sectoral platform for multi-stakeholder involvement in SLM, including Government, Non-Government Agencies, Private Sector and Civil Society.

Although the project was successful in delivering process- related results (project status review in annex), the impact on environmental outcomes and sustainability is at risk. Towards the overall programme outcome, it was important that the project contribute to and institute an SLM mentality within all government sectors, programmes and services and promote effective facilitation of knowledge and learning. Regular coordination of knowledge and learning facilitates integrated service and technical cooperation across Ministries. Key elements include establishing a working mechanism for cross-sector collaboration and monitoring of SLM more demonstration and capacities strengthening work with resource users, initiating a multi-use information management system for SLM, (building upon existing LAVIMS) and instituting cost benefits analysis as a methodology for all NRM issues across sectors..

For sustainable land management (SLM) to be sufficiently mainstreamed into policies, regulations, strategies, plans and educational systems, a general recognition on the part of politicians and decision makers is required. This is still a barrier. Environment/natural resource economics is a tool for land use planning and policy development, including requisite cost/benefit analyses of present land use systems (the cost of doing nothing) in comparison with similar analyses of SLM options.

The Project Management Unit was strategically based at the Forestry Service (FS) within the Ministry of Agro Industry and Food Security. The FS is the suitable institutional arrangement as it has been

grappling historically with the SLM barriers in relation to the policy, institutional and legal frameworks posed by a cross-cutting services agenda on SLM.

The UNDP environment programme team supports SLM as an overarching programme with the potential to bring many of the existing environment programmes, including the PAN, AAP and MID fund (also see linkages section below), together under one inter-sectoral planning committee for coherence and impact.

The financial utilization of the project at this stage with stands at 100%.

Recommendations

Formulation, strategy and design

→ UNDP, MOE and MOAF: Reinforce SLM project strategy and results to date through advocating the institutional arrangement for a knowledge management approach across sector within the context of the NAP-IFS programme implementation framework. Essential next steps include instituting a multi-stakeholder monitoring and evaluation committee.
→ UNDP, MOAF: Learning from the project suggests that project-related activities in Rodrigues can be reinforced and scaled up. More regional planning work for SLM planning and capacity strengthening and synergies with work on national protected areas, demonstration of alternative livelihoods, i.e. eco-villages and specific work on overgrazing and invasive species control should be explored.
→ MOAF, MOU, NGOs and private sector actors: The activities that touched on direct farmer, forest or fisher field schools through trainings were successful, especially in Rodrigues. The recommendation is to augment alternative SLM livelihood activities for resource users in the environmentally sensitive and highly vulnerable areas and find ways to expand the development of incentive schemes for deer ranchers and national and regional planning, including SLM.
→ UNDP MOAF MOE MOT MOHL MOLG, Water Utilities: Undertake SLM 2 project conceptualization work on SLM linked to planning. This needs immediate follow-up to deal with the institutional gaps exposed during project implementation. In consideration of the institutional arrangements demonstrated by the project and in relation to the key stakeholders and partners identified along the Ministerial lines and in the public domain within the private sector and NGO, all parties must continue to mobilize the SLM network around the MID action planning process.

Immediate actions for sustainability

→ MOAF, MOE: Finalize the NAP and endorse IFS as an NAP action plan. Update IFS as two years have passed.
→ UNDP, MOE, MOHL and MOAF: Follow up project work on SLM planning regarding institutional development. Develop KM and focus on formalizing institutional monitoring mechanism piloted under the project as a multi-sectoral and stakeholder platform. Involve private sector and NGOs.
→ UNDP-MOAF: UNDP should share terminal evaluation with government officials in appropriate forums to advocate for continuing the SLM project, taking into consideration the learning based on SLM project.
→ UNDP, MOE, MOHL and MOAF: Undertake project concept design activity for GEF 5 or GEF 6.
→ UNDP, MOE, MOHL and MOAF: Develop a strategy to continue the project activity and its focus on a multi-stakeholder institutional mechanism piloted under the project as a planning platform.
→ UNDP, MOE, MOHL MOAF: Develop a short policy advocacy paper outlining the interlinkages and the role an SLM committee can have for creating synergy and supporting monitoring activities outlined in section 3.2. Distribute this paper through appropriate policy forums and to the public if appropriate.

→ UNDP-MOAF: Follow up the GM, IOC and GOM partnership for regional cooperation, possibly linked to a new project conceptualization process. Follow-up is needed ASAP.
→ MOAF, MOE and MOU: Hold a dialogue about integrating the training courses as a package for national and regional consumption. They might be integrated into the University of Mauritius formal programmes. The training work will need to be followed up and activities reinforced for integration into national learning programmes.
→ MOAF, MOE and MOHL: Develop an SLM webpage and knowledge portal. All of these materials need an institutional home base and knowledge management strategy.
→ MOAF, MOHL: Continue to develop protocol for harmonizing the data sharing and the work on synergies with National Spatial Data Infrastructure (NSDI) for implementation of data sharing, standards and a user groups protocol to minimize duplication. This is an important next step.

Lessons Learned

The primary lessons learned from this project are the importance of the following:

→ SLM is achieving multi-stakeholder collaboration in planning and implementation of services that traditionally came only from government, community or private sector. The broad platform for engagement of many stakeholders is what is unique and making a difference. The adoption of the action plan by government as a cross-sectoral and multi-stakeholder initiative and action planning is central to future success.

→ Project activities, particularly those to be financed by more than one source, should benefit from strategic implementation approaches to make certain each is aligned to avoid conflict, increase efficiency and enhance synergy.

→ The success of many SLM projects globally is the capacity to catalyze inter-institutional coordination based upon a shared interest in project implementation. Projects should recognize this success and capitalize upon it by making plans to assist Steering Committees and Technical Advisory Committees to evolve into SLM support units.

→ Capacity building projects, particularly those based primarily upon training, should be designed to make certain that tangible products are developed that may be used by practitioners as reference materials and are built upon as replication and upscaling tools.

→ Predicating project success upon the timely adoption of laws and policies is inherently risky. Contingency plans should be in place to deal with likely delays.

→ PIR formats should be strengthened. PIRs should provide great information regarding the quality and impact of project activities. Project reporting should address not only achievement of outputs but, more importantly, achievement of objectives. Presuming that achieving originally conceived outputs will lead to achieving SLM objectives is not always an accurate method to monitor project results.

III. ACRONYMS

AgM Agriculture Service—Mauritius
AgR Agriculture Service—Rodrigues
APR Annual Project Review

AREU Agricultural Research and Extension Unit in MoAF
AS Agricultural Services (MoAF)
AWP Annual Work plan
BA Beach Authority
CO Country Office (UNDP)
CSO Central Statistical Office
CWA Central Water Authority (MPU)
EIA Environmental Impact Assessment
EPA Environmental Protection Act
ESA Environmentally Sensitive Area
FARC Food and Agricultural Research Council (MoAF)
FLIS Forest Land Information System
FoA of UoM Faculty of Agriculture of the University of Mauritius
FoLM of UoM Faculty of Law and Management/University of Mauritius
UoM University of Mauritius
Faculty of Social Studies and Humanities / University of Mauritius
FSC Farmers Service Centers (MoAF)
FS Forestry Service (MoAF
FS-M Forestry Service—Mauritius
Mauritius (MoAF)
FS-R Forestry Service—Rodrigues
GEF Global Environment Facility
GIS Geographic Information System
GoM Government of Mauritius
GPS Global Positioning System
ICZM Integrated Coastal Zone Management
IA Irrigation Authority
IW Inception Workshop
KM Knowledge Management
LIS Land Information System
LMIS Land Management Information System
LUD Land Use Division (MoAF)
M&E Monitoring and Evaluation
MAURIS Mauritius Resource Information System
MIE Mauritius Institute of Education
MoAF Ministry of Agro Industry and Food Security

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1. INTRODUCTION

A Terminal Evaluation (TE) was conducted on the Capacity Building and Knowledge Management for Sustainable Land Management in Mauritius and Rodrigues (PIMS 3092), according to the guidance,

rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects (2011).

1.1. Purpose of the evaluation

- Assess overall performance against the project objectives as set out in the Project Document and other related documents;
- Assess project relevance to national priorities, as well as UNDP and GEF strategic objectives;
- Assess the effectiveness and efficiency of the project;
- Critically analyze the implementation and management arrangements of the project, including financial management;
- Assess the sustainability of the project interventions and consider project impacts;
- Document lessons and best practices concerning project design, implementation and management, which may be of relevance to other projects in the country and elsewhere in the world.

1.2. Scope and Methodology

An international independent consultant with extensive experience in design, implementation and management of GEF projects globally and comparable evaluation experiences in many countries including several small island states led this evaluation.

From 18 December 2012-23 January 2013, a documentation review (desk study) was conducted, including review of the new UNDP and GEF TE evaluation policy, the project document, the mid-term evaluation report 2008, the SLM Strategic Integrated Financing Strategy 2011, the draft NAP, annual project reports (2009, -10, -11), project research reports, project steering committee minutes (three), Technical Advisory Group TAG meeting minutes and decisions (Annex), budgets, work plans, files, reports, PIRs, UNDP guidance documents, national legislation relevant to the project and any other material considered useful (see list provided in TE TOR). The Project Manager provided a written narrative (survey) and an oral report of the project's accomplishments and lessons (See list of document and persons interviewed in Annex).

Stakeholders consulted during the terminal evaluation included the UNDP Energy and Environment Program Manager, the National GEF focal point–Environment Department, Project Steering Committee, Project Management Unit, Members of the Project Technical Advisory Group (TAG), the project Steering Committee, representatives from the Forestry Department, the Ministry of Environment (MOE), the Ministry of Housing and Lands (MOHL), the Ministry of Local Government, National NGOs, Private Sector and other primary project beneficiaries. Semi-structured interviews were designed to ensure that all aspects were covered.

A Terminal Evaluation workshop, held on 30 January 2013, formed a critical part of the evaluation methodology (Annex). During the terminal evaluation mission (27 January-1 February), focus group discussions were also held with all relevant stakeholders, including the PMU, UNDP Environment Team, Technical Advisory Group TAG, Steering Committee SC, NGOs, Private Sector representatives, the Permanent Secretary of the Ministry of Agro Industry and Food Security and the Governor of Rodrigues, using guiding questions (Annex). Participatory evaluation techniques and approaches for the gathering and analysis of data were employed.

In general, the evaluation explored the following criteria:

1. Relevance: the extent to which the planned activities were suited to local and national development priorities and organizational policies, including changes over time;
2. Effectiveness: the extent to which an objective has been achieved or how likely it is to be achieved;
3. Efficiency: the extent to which results have been delivered with the least costly resources possible, also called cost effectiveness or efficacy;
4. Results: the positive/negative and foreseen/unforeseen changes to and effects produced by a development intervention to date. In GEF terms, results include direct project outputs, short-to-medium-term outcomes and longer term impact, including global environmental benefits, replication effects and other local effects;
5. Sustainability: the likelihood of an intervention to continue to deliver benefits for an extended period of time after completion. Projects need to be environmentally as well as financially and socially sustainable.

Box 3: relevance, effectiveness, efficiency, sustainability and results

Box 3. UNDP Evaluation Criteria
1. Relevance
▪ The extent to which the activity is suited to local and national development priorities and organizational policies, including changes over time. ▪ the extent to which the project is in line with the GEF Operational Programs or the strategic priorities under which the project was funded. ▪ Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.
2. Effectiveness
▪ The extent to which an obejctive has been achieved or how likely it is to be achieved.
3. Efficiency
▪ The extent to which results have been delivered with the least costly resources possible; also called cost effectiness or efficacy.
4. Results
▪ The positive and negative, foreseen and unforeseen changes to and effects produced by a development intervention. ▪ In GEF terms, results include direct project outputs, short to medium-term outcomes, and longer term impact including global environmental benefits, replication effects and other local effects.
5. Sustainability
▪ The likely ability of an intervention to continue to deliver benefits for an extended period of time after completion. ▪ Projects need to be environmentally, as well as financially and socially sustainble.

Project performance was measured based on the quantitative and qualitative indicators provided by the original project document and the uptake of the recommendations endorsed by the mid-term evaluation. The evaluation considered issues related to management and substantive/technical implementation, including project delivery, implementation and finances. Particular attention was given to the strategic approaches taken relevant to achievement of project objectives.

1.3. Structure of the Report

The report has five main sections including the 1. Introduction: 2. The Project Description and Development Context, 3. The Project Findings, including; *a. formulation, b implementation, and c. results,* 4. Conclusion and Recommendation, and 5. The Lessons Learned.

2. THE PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

2.1. Context

The Republic of Mauritius is a small island developing state with a population of 1.2 million inhabitants and a total land area of only 2000 $km^{2.}$ It is one of the most populated countries of the world with land as a very scarce resource and a high demand for it from all the land-based sectors for housing projects, infrastructural development, livestock, agricultural crops, hotel construction and eco-tourism. Mismanagement of land resources in the past has led to severe land degradation on almost every type of land use–forestlands, pasturelands, agricultural lands, coastal areas and even residential zones. The root causes of land degradation are related to human activities. Mauritius has signed and ratified the United Nations Convention to combat desertification (UNCCD) and has, inter-alia, the following obligations:

- To address issues of land degradation over its territories;
- To mainstream convention objectives on sustainable land management into national policies, legislations strategies, etc;
- To prepare a National Action Program;
- To submit progress reports to the Committee for the Review of the Implementation of the Convention (CRIC).

Many developing countries and small island developing states are facing financial constraints to meet their obligations under the convention. Since 2003, the Global Environment Facility (GEF) has been providing funds to developing countries under its Operational Program (OP) 15 to build capacity for sustainable land management.

As the GEF OP 15 funds were limited and involve lengthy procedures, the UNDP/GEF initiated the targeted portfolio approach, through which 48 LDCs and SIDS were offered financial assistance to meet some of their obligations under the UNCCD convention. In August 2003, Mauritius approached GEF through the UNDP to support its Sustainable Land Management Program. GEF provided funds for the formulation of a medium-size project (MSP) for a total project value of US 1.3 million, of which GEF financed on the principle of co-financing to the ratio of 1:1 ($560,000).

The project was formulated in September 2004 and approved by GEF in July 2005. The project document was signed by the Mauritian government, represented by the Ministry of Finance & Economic Development and the Ministry of Agro-Industry and Food Security. Implementation started in July 2006.

The project was originally developed under the LDC-SIDS Umbrella Project, the UNDP/GEF LDC and SIDS targeted portfolio approach for Capacity Development and Mainstreaming of Sustainable Land Management and was supported by the global support unit in Pretoria. The project intended to address outcomes under Immediate Objective 1 of the umbrella project[ii]:

1. Cost-effective and timely delivery of GEF resources to target countries. Mauritius will be one of the first countries to be funded under the Portfolio Approach;
2. Individual and institutional capacities for SLM will be enhanced; a large part of this project is directed towards these types of capacity building;
3. Systemic capacity building and mainstreaming of SLM principles; this project also addresses policy development and mainstreaming of SLM.

The objective of the project, as per the project document 2006, was "*to build capacities for sustainable land management (SLM) in appropriate government and civil society institutions/user groups in Mauritius and Rodrigues, and to have SLM mainstreamed into government planning and strategy development*."

The project was intended to benefit a land surface area estimated at 50,000 ha and contribute towards the achievement of the following long-term goal: agricultural, pasture, forest and other terrestrial land

management in Mauritius and Rodrigues are to be sustainable, productive systems that maintain ecosystem productivity and ecological functions while contributing directly to the environmental, economic and social well-being of the country.

The principal national benefits are the enhanced capacities for economic and financial sustainability of the agricultural, pasture and forest use systems of the country. Indirect national benefits include the following:

- Enhanced productivity and livestock production from improved pastures;
- Enhanced crop production through improved soil fertility maintenance;
- Identification of new commercial uses of forest plantations;
- SLM contribution to the health of lagoons and coral reefs that are in turn critical for the tourism industry, fishing and, in the mid- to long-term, for avoiding catastrophic beach erosion;
- Greater empowerment and self-sufficiency of resource users and stakeholders to participate directly in the conception, monitoring and adaptive management of lands and resources;
- Reduced risks of natural disasters.

2.2. Land Degradation in Mauritius and Rodrigues

The project documents (original Project Document 2006 and the Mid-Term Evaluation 2008 and the NAP-SLM Integrated Financing Strategy 2011, name several sectors responsible for land degradation in Mauritius and Rodrigues: (i) livestock, (ii) farming, (iii) forestry activities, (iv) fire management and (v) unsustainable development. Related threats are evinced by erosion, chemical pollution and disruption of ecosystem integrity and functions, such as impacts to/near coastal zone areas. With silt flowing offshore into Rodrigues' lagoons from on-shore soil erosion, the link between land degradation and the ecological integrity of important biodiversity, subsistence and economic (tourism, fishing) values is apparent.

The project document identifies overgrazing in Rodrigues as the most significant contributor to land degradation:

> "The most severe form of land degradation on the two islands is on State-owned lands on Rodrigues and is caused by overgrazing. The most important root cause is one of land tenure. Overgrazing by domestic livestock is not a problem on Mauritius, where economic conditions are no longer favorable for domestic livestock husbandry. Overgrazing does occur on fenced deer ranches, but there is no data on how widespread or severe the problem is." (ProDoc 2006)

The project document identifies unsustainable agriculture as the second contributor to land degradation.

> Unsustainable agriculture is the second most important direct cause of land degradation on Rodrigues. The root causes are found primarily in the land tenure system and the marginal financial viability of agriculture. Small farmers do all agriculture on Rodrigues, but nearly all the land is State-owned. There used to be a lease system for agricultural lands, but it is no longer functional. Lack of security of land tenure leaves little incentive to invest in sustainable practices, especially major investments such as terracing. (ProDoc 2006)

Agriculture on Mauritius is highly commercialized. Most problems of agricultural unsustainability are associated with commercial vegetable farming on moderate to steep slopes without the use of appropriate soil conservation measures. Soil erosion is the main problem. Both islands suffer from top-down approaches to smallholder agricultural extension and lack of appropriate policies and incentives and monitoring systems.

The project document identifies deforestation as the third leading contributor to land degradation:

> Deforestation is currently only a problem on Mauritius–most of Rodrigues was deforested in past centuries. What remain benefits from quite a high level of protection. Most deforestation on Mauritius is on privately owned forest lands, but the phenomenon needs to be quantified and documented for enhanced enforcement. GIS and employment of new technologies and systems for monitoring are important as tools to help. Clearing of forest for deer pastures is a major cause of deforestation on both private and State lands. On private lands, it is unregulated. On State forest lands leased for deer ranching, clearing is not supposed to exceed five percent of the area leased. Although some leases have cleared far more than five percent (easily detected on satellite imagery), there is no effective monitoring and enforcement of this regulation. (ProDoc 2006)

Rodrigues has made major progress in the past 30 years in reducing land degradation through reforestation of degraded lands by using exotic species and, very recently, native species. However, the economic potential of these plantations has not been developed, and they do not yield financial returns that could contribute to their maintenance/management/protection/eventual replacement.

The project document identifies poor fire management as the fourth leading contributor to land degradation:

> Fire-degraded mountain slopes occupy the western rain shadow side of the mountains of northwestern Mauritius. These grass-covered slopes were almost certainly once covered with natural forests. Fire has been a key factor in their conversion to grasslands. Frequent, recurring, dry season wildfire is clearly the key factor that prevents their reforestation. The main species occupying these slopes now are fire-adapted exotics, especially African species. The slopes used to be used for grazing lands. Grazing pressures almost certainly diminished the fire risk and the intensity of fires by diminishing the height and biomass of the dry season grass cover. However, grazing is no longer economically viable, and grass cover is undiminished throughout the dry season.
>
> Fires frequently burn in mid to late dry season when the negative impact is greatest on the woody cover, including the often-abundant natural regeneration of woody species. The causes of fires are largely unknown; there is no fire prevention program and no fire suppression capability. There are no proven methods for reforesting this hillside–a single test trial using fencing, firebreaks and hand planting of indigenous tree seedlings began two years ago and has been successful to date. The cost effectiveness of this approach needs to be analyzed. (ProDoc 2006)

The Threats/Root Causes table highlights unsustainable development as a significant land degradation issue. This is not discussed in the project document's text.

Development is identified in the project document as a driver harming wetlands and increasing erosion. Tourism development in particular was identified as an SLM challenge by many interviewees during the evaluation. The government has a stated goal of doubling the total tourist numbers from the current one-million per year. Land consolidation and leasing/sale initiatives will further accelerate infrastructure development.

According to the project document, impacts are evinced by loss of biodiversity, hydrological functions and "deposition of sediments in streams, lagoons and on reefs." The project document's table lists root causes, such as strong pressure for development of economically high value sites, condition/loss of wetlands not being monitored systematically, fragmented and unclear institutional responsibilities and regulations for wetlands conservation, careless construction techniques leaving bare soil exposed to

heavy rains and construction on steep slopes without adequate engineering and soil protective measures. (ProDoc 2006)

2.3. Immediate and Development Objectives of the Project

Project Objective

The project objective was "to build capacities for sustainable land management (SLM) in appropriate government and civil society institutions/user groups in Mauritius and Rodrigues and to have SLM mainstreamed into government planning and strategy development." It would benefit a land surface area estimated at 50,000 ha and contribute towards the achievement of the following long-term goal:

> …The agricultural, pasture, forest and other terrestrial land management in Mauritius and Rodrigues are to be sustainable, productive systems that maintain ecosystem productivity and ecological functions while contributing directly to the environmental, economic and social well-being of the country.

2.4. Main Stakeholders

→ Ministry of Agro Industry and Food Security (MoAF): Responsible for a host of land use management issues, including forestry, protected areas and land conversion. The MoAF is the lead executing agency and houses the Project Management Unit (PMU).

→ Ministry of Environment and National Development Unit (MoE & NDU): Focal point for UNCCD and other conventions. Responsible for preparing the UNCCD/NAP in close collaboration with FS of the MoA. Responsible for identifying Environmentally Sensitive Areas for inclusion in Protected Areas Network.

→ Ministry of Housing and Lands (MoHL): Responsible for land use planning and allocation. Will establish Land Information System (LIS) for land registration and title tracking.

→ Ministry of Finance and Economic Development (MoFED): GEF focal point. Will oversee budget allocations for long-term implementation of project outputs.

→ The Commission for Environment, Tourism, Forestry, Fisheries, and Marine Park (Rodrigues): Responsible for overseeing grazing, forestry and other land use issues in Rodrigues.

→ Various NGOs and Private Enterprises: MEF, sugar cane producers, deer ranchers, farmers.

2.5. Results Expected

Outcomes and Outputs: The project's results are summarized in four Outcomes and sixteen Outputs.

Expected Outcome(s): (i) Sustainable Land Management (SLM) is mainstreamed into national policies, plans and legislation; (ii) Human resource capacities needed for SLM are developed; (iii) Capacities for knowledge management for SLM are developed; (iv) The National Action Programme (NAP) for the UNCCD is completed.

Expected Output (s):

Outcome 1: SLM is mainstreamed into national policies, plans and legislation.

Output 1.1. Integration of SLM into the new National Forestry Policy and Forest Action Plan;
Output 1.2. Integration of SLM into macro-economic policies and regulatory and economic incentive frameworks regarding sustainable practices on non-forest land;
Output 1.3. SLM Investment Plan linked to priority actions defined in the NAP is developed.

Outcome 2: Human resource capacities needed for SLM are developed.

Output 2.1. Enhanced capacities for use of integrated land information systems/GIS/remote sensing;
Output 2.2. Enhanced capacities for sustainable pasture management and sustainable agriculture;
Output 2.3. Development of capacities for the use of LIS/LIMS and SLM guidelines for integrating SLM into planning at central and local authority level;
Output 2.4. Development of expertise in environmental/natural resource economics;
Output 2.5. Development of enhanced capacities for restoration and management of fire-degraded sub-humid mountain ecosystems.

Outcome 3: Capacities for knowledge management for SLM are developed.

Output 3.1. Participatory assessments of the sustainability of land use systems;
Output 3.2. Sharing of knowledge on SLM;
Output 3.3. Development of Land Information Systems;
Output 3.4. Development of monitoring and evaluation systems;
Output 3.5. Enhancement of SLM through improvements to the State lands leasing systems;
Output 3.6 Planning for SLM alternatives to sugar cane cultivation.

Outcome 4: The National Action Program for the UNCCD is completed.

Output 4.1. Preparation of the NAP;
Output 4.2. Adoption of the NAP by GoM.

Objective Level Indicators: The Objective has two impact indicators:

1. Objective Indicator One: NAP approved by Cabinet;

2. Objective Indicator Two: Best practices and guidelines for SLM are broadly disseminated and used for development planning, zoning and agricultural extension.

GEF Alternative/Global Benefit:

The stated GEF alternative for this project is "*the enhanced capacity for ecologically sustainable land management in Mauritius."*

Listed indirect global benefits include the following:

- Cross-sector integration of sustainable land management into plans, policies, strategies, programs, funding mechanisms and multi-sector stakeholder groups;
- Maintenance of the structure and functions of ecological systems;
- Enhanced biodiversity conservation due to reduced deforestation and reduced sedimentation in lagoons and improved health of coral reefs;

- Enhanced carbon sequestration through improved capacities for sustainable pasture management, sustainable agriculture and reduced deforestation.

3. FINDINGS

3.1. PROJECT DESIGN / FORMULATION

Analysis of LFA (Project logic /strategy; Indicators)

The SLM project was designed with log frame that outlined a plan to strengthen SLM capacities through four outcome areas: SLM mainstreaming and enabling environment including development of policy and integrated financing strategy; human resources development, institute a knowledge management SLM approach and development of tools, finalize the NAP - UNCCD.

The project was preceded by a baseline survey and root cause analysis which, according to the mid-term and confirmed by the terminal review did not reflect the indicators for impact on 50, 000 hectares of land area. In this sense, the mide term and the TE concur that the upstream focus on institutional capacity strengthening project was overly ambitious, particularly for a medium-sized project investment of $500,000. It might have been designed to deal directly with the root causes of land degradation and focus on strengthening capacities in the public domain and root causes , working more with communities and resources users employing a *'learning by doing' and 'demonstration' approach*. SLM stakeholder participation in changing destructive practices at the local and national level was not accounted in the original design.

In this regard and as a lesson for the future SLM activities, the project was not necessarily designed or resourced to deal with broader issues related to the enabling environment—institutional framework and or the downstream demonstration work to ensure convergence in extension services (land, water, and agriculture). For the project to actually change practices, for example, more demonstration and capacity building would be needed with the resource users.

In general, the project was designed to promote inter-sect oral approach for planning SLM based at the Forestry Service and to strengthen capacity of key institutions with a stake in SLM including government, private sector, NGOs and civil society through largely training. The trainings were to be conducted by University of Mauritius. This was achieved (see results section and annex with table of training activities) the project was designed to primarily strengthen capacity and promote inter-sectoral planning on SLM with the following stakeholders:

→ Ministry of Agro Industry and Food Security (MoAF): Responsible for a host of land use management issues, including forestry, protected areas and land conversion. The MoAF is the lead executing agency and houses the Project Management Unit (PMU)[iiiiv].

→ Ministry of Environment and National Development Unit (Moe & NDU): Focal point for UNCCD and other conventions. Responsible for preparing the UNCCD/NAP in close collaboration with FS of the MoA. Responsible for identifying 'Environmentally Sensitive Areas' for inclusion in Protected Areas Network[v].

→ Ministry of Housing and Lands (MoHL): Responsible for land use planning and allocation. Will establish Land Information System (LIS) for land registration and title tracking.

→ Ministry of Finance and Economic Development (MoFED): GEF focal point. Will oversee budget allocations for long-term implementation of project outputs.

→ The Commissioner for Environment, Tourism, Forestry, Fisheries, and Marine Park (Rodrigues): Responsible for overseeing grazing, forestry and other land use issues in Rodrigues.

→ Various NGOs and Private Enterprises: MEF, sugar cane producers, deer ranchers, farmers.

Assumptions and Risks

The project (2006-2009) was premised on a number of key assumptions underpinning the design:

→ The various institutions will be willing to collaborate on integrated approaches to sustainable land management and on sharing access to land information systems;
→ Government authorities will remain committed to reviewing and strengthening the various lease systems for State-owned land;
→ Government and the key institutions involved will commit the resources needed to maintaining beyond the life of the project the SLM monitoring and evaluation systems to be developed with project assistance;
→ Government commits the resources necessary for digitizing the land survey/ownership records needed to make the land information systems the most useful for SLM monitoring and planning. Linkages were made to implementing agency's activities and programs.

The assumptions were in large all part proved correct however the important finding arising from the project was the need for the commitment of government to develop the SLM monitoring and evaluation systems demonstrated by the project. The IFS developed as a major activity of the project largely sets out an action plan and this still requires a home and an institutional framework commitment by government. This is discussed in more depth the results section.

→ *Recommendation - To obtain a formal commitment to institute a monitoring system for the NAP / IFS strategy.*

Lesson from other relevant projects

The lessons emerging from other related projects in Mauritius have been documented throughout the process of developing the NAP and Integrated Financing Strategy (IFS) (IFS 2011). A number of related projects have been implemented within the framework of SLM (see table). The related project objectives vary from elaboration of the NAP to agricultural development, and social and economic support in rural communities. Each project targets a specific area related to SLM, but are not been sufficiently linked in terms of mandates and objectives. In other words, the selection of areas for project implementation has not been based on any rationally integrated approach. The activities implemented have therefore at times lacked follow-up, and outputs have often been restricted to end-of-project publications whose importance gradually declines. There have been a lot of programmes on SLM-related activities in Mauritius (IFS page 36).

→ *Recommendation - Develop a short policy advocacy paper outlining the inter linkages and the role a SLM committee would have for creating synergy and supporting monitoring these activities. Distribute through appropriate policy forums and broadly to public if appropriate.*

Planned Stakeholder Participation (as per project design)

The evaluation reviewed the planned stakeholder and partnerships against actual participation (see list in first section above). Information was gathered based on the terminal review interviews, the TE workshop feedback, meeting notes for TAG, SC, training activities. Planned stakeholder participation has been high across nearly all levels and within several pertinent Ministries and agencies as per the original project plan. The interest of government stakeholders from Rodrigues was also proven high. NGOs and Private sector were involved on a regular basis through the TAG and also the training activities. However, opportunities for broad stakeholder involvement with project activity were limited in Rodrigues even though (at mid-term) it was recognized as a primary gap and oversight of the project. Post mid-term—the project made adjustments in term of enhancing Rodrigues involvement and held many of the final training there.

> …The project would have greater results in Rodrigues with (a) more representation in the existing TAC and/or (b) the development of a small TAC or SLM working group in Rodrigues. Frequently, the formulation of the TACs and/or working groups during the implementation of an SLM project catalyzes inter-institutional coordination and forms the basis for long-term institutional framework improvements. It would be useful if such a group were formed during the project in Rodrigues (Mid- term report 2008).

Replication Approach

At mid-term, key recommendations for improving the replication approach include: ensuring capacities building activities are translated into action on three levels: (1) resource users should benefit from better SLM information provided by government sources, i.e. extension and public information officers; (2) policy reforms should result in on-going improvements in government management of SLM issues, i.e. institutional coordination, adaptive management and informed-decision making and (3) skill sets should be developed within the existing cadre of government officials benefiting from project activities that are continually improved and spread more widely throughout the system (Mid-Term Recommendations, 2008).

Post mid-term, a plan was developed and considered replication (scaling) and sustainability strategy for project activities, including methods to extract greater value from the project products, i.e. training programs would be compiled into an SLM handbook for practitioners which was completed.

Lessons learned and prescriptions emerging from the project including the NAP development and the Integrated Financing Strategy IFS development activities are that the project might be replicated and scaled with some adjustments -i.e. more focus on resource users - nationally and, possibly regionally. Examples of replication include the NAP - Investment Framework development process, the Forest Information System prototype, the handbook for extension officers - AREU and the training packages developed by the University of Mauritius, all of which can be rolled out in the country and region (see SLM project Mid-term report, p 28). The project supported Mauritius link to the regional SLM network to showcase SLM and support to cooperation. This should be strengthened. University of Mauritius is a good partner to support the regional cooperation (see section on this below).

→ *Recommendations -Finalize the NAP and gain an endorsement for the IFS linked to the NAP action plan. Update IFS as two years has passed.*

UNDP Comparative Advantage

UNDP is a close partner working with the government on national planning and sustainable human development. UNDP provides soft assistance and day-to-day services to SLM, including project monitoring and inputs to support the mainstreaming of issues pertaining to land management in Mauritius and Rodrigues.

In the results-oriented UNDP country programme on environment, focus is on strengthening institutional capacities and threats to environmental parameters, such as climate change, removal of persistent organic pollutants, expansion of marine and terrestrial protected areas and removing barriers to energy conservation. The SLM project is a strategic intervention for the UNDP sustainable human development goals and provides support for institutional collaboration/coherence and integrated planning.

Linkages between the Project and other Interventions' within the Sector

There is a generally recognized fragmentation of mechanism for implementation and enforcement of the existing legislation for SLM. Local authorities, as the enforcing agency for development control, lack capacity and resources. Outline Schemes do however set out the broad proposals for the physical development of a planning area and help to translate the national strategy to the local level which can also be linked to integrate planning around water and land management. National Planning Policy Guidelines (NPPGs) are written statements that guide on particular planning issues and assist developers, local authorities and the general public to comply with principles of good design, appropriate sites and location of activities.

Government have embarked simultaneously during this project's implementation on the broader Land Administration, Valuation and Information Management System (LAVIMS) project, which provide an instrument for the effective use and development of land resources to achieve economic prosperity and social equity and to preserve the natural beauty of the island. A national digital cadastre, integrating a valuation roll for all residential and commercial properties, will be created.

A central question concerned the appropriateness and effectiveness of the institutional linkages includes '*what did the project do in order to strengthen synergies between environment, development and SLM development related activities*?' A number of projects were implemented within the framework of SLM (IFS, 2011). Other similar outcome oriented projects identified varied from elaboration of the NAP to agricultural development, social and economic support in rural communities. Each project targets a specific area in relation to SLM but notably projects have not been sufficiently linked. As observed during the mid-term 2006, the selection of areas for project implementation has not been based on rational or integrated approach. The activities implemented lacked follow-up, and outputs have often been restricted to end-of-project publications whose importance gradually declines.

This table has been extracted from the IFS and verified during the terminal review which shows an extract of the important linked programmes.

Table 1: IFS 2011 - page 36-37

Programme	Sub-Programme	EIP Project
A. Overall Management and Coordination	A1. Strengthening the Environment Related Agencies	Reform of the Environmental Management Framework in Mauritius and Capacity Building of Environmental Agencies
		Strengthening the Capacity for Protection and Management of Beach Areas with Scientific and Technical Approaches
	A2. Environmental Quality	Introduction of Waste Audit and Environmental Management Planning Legislation with Awareness Building

Programme	Sub-Programme	EIP Project
		Facilitating Environmental Sustainability
		Mitigation of Climate Change Impacts through Promotion of CDM Projects
		Formulation of National Chemical Spill Contingency Plan
	A3. Environmental Information and Awareness	Activation of Environmental Indicators Framework
		Activation of Environmental Information System
		Environmental Education, Awareness and Empowerment
B. Resources Management	B1. Land Management	Updating of Outline Planning Schemes for Municipal Council Areas
	B2. Water Resources Management	Institutional Reform in the Water Resources Sector
		Water Demand Monitoring Programme
		Quality and Ecological Assessment of Fresh Water Bodies
	B3. Air Quality Management	Integrated Air Quality Management
	B4. Terrestrial Biodiversity	Assessment and Improvements to Private Forest Lands for Biodiversity Conservation
C. Sector Management	C1. Solid Waste Management	Institutional and Policy Review of Solid Waste Management
		Management Information System
	C2. Industrial Management	Plan Future Industrial Development
		Mauritius Industry Pollution Prevention
	C3. Tourism Management	Introduce Awareness Programmes in Environment Management among the Tourists and all Stakeholders in the tourism Industry
	C4. Agricultural Management	Promotion of Good Agricultural Practices (GAP)

Table below lists selected projects and their contributions to SLM, altogether weighing about USD 21 M. (IFS 2011, p 32- 36)

Related Project in Mauritius	Thematic area	Contribution to SLM/UNCCD
Capacity Building for Sustainable Land Management in Mauritius including Rodrigues	SLM	Capacity building, Mainstreaming legislation, FLIS, Forest Fire Management Plan, Elaboration of the NAP and IFS
Addressing Land-Based Activities in the Western Indian Ocean (WIO-Lab)	Land based activities	Land based activities
Partnerships for Marine Protected Areas in Mauritius and Rodrigues Project	Costal Management	Marine Protected Areas
Support for the implementation of the National Bio-safety Framework in Mauritius	Bio-safety	
Preparation of Second National Communication under the UNFCCC	Climate Change	
Removal of Barriers to Energy Efficiency and Energy Conservation in Buildings in Mauritius	Energy Efficiency and Energy Conservation in Buildings	

Sustainable Management of POPs in Mauritius	POPs	
Establishing a network of Private Protected Area	Private Protected Area	Private Protected Area
Strengthening Capacity to Implement Global Environment Conventions in Coastal Development in Mauritius (NCSA follow-up)	Coastal Management	Coastal Management
MID (Maurice l'île Durable)	Energy, natural resources, recycling, environment in general	SLM should take a bigger part

Related Project In Rodrigues,	**Thematic area**	**Contribution to SLM/UNCCD**
SIDPR- Sustainable Integrated Development Plan for Rodrigues	Climate Change, Integrated Water resources Management, Electricity self sufficiency, Economic sustainability Integrated agriculture, SLM	Strategies to SLM
SEMPA South East Marine Protected Area	preserve and enhance SEMPA marine biodiversity	marine biodiversity needs SLM upland and upstream
MID (Maurice l'île Durable)	Energy, natural resources, recycling, environment in general	SLM should take a bigger part

Strategic linkages for the way forward

During SLM project implementation a draft National Policy on SLM has been prepared, a National Action Plan to Combat Desertification and a synergetic Strategic Integrated Financing Strategy (process outlined in the results below) for SLM are articulated and available for implementation, are possible after intense consultation with all relevant stakeholders and documents related to Land Management. UNDP has several ongoing projects that contribute to SLM objectives, including PAN, AAP, and Energy Efficiency. Other synergistic and supporting activities, including the MID Fund, were set up by the Government in 2008 under the Finance and Audit Act in 2008, in the pursuance of sustainable development objectives.[vi]

Protected Area Network (PAN)

The Protected Area Network (PAN) project began in 2011; it aims to project the terrestrial protected area network. SLM links with the PAN through the capacity building and knowledge management of the Forest Land Information System and the Forest Fire Fighting Management plan as well as the Forest Action Plan etc. The Forestry service through its action under the SLM is now moving more towards conservation for Ecosystem service, biodiversity and water catchment, carbon sequestration instead of traditional forest management(felling /planting timber).The activities under SLM will enable monitoring and evaluation ,stocktaking of potential and existing biodiversity and forest resources to expand the protected areas. Though Mauritius has one of the oldest protected areas system | (started since 1777) in the world, ranging for state forest land, coastal belt forest, river reserve, mountain reserves and most recently nature reserves. Moreover, the SLM NGOS and private stakeholders, who have participated in the various training and knowledge management activities of the project, are now geared to embark and understand the significance of the PAN.

The National Forestry Action Program (NFAP) (5-year Plan) 2007-2011—was established in 2006. Watershed and forestlands of 400 ha were planned to be reforested, including the burned section of Signal Mountain in Port Louis. However, the sum spent represents only 0.003% of the GDP (as at 2010), which has been insignificant for impact.

Local and National Planning - Integrating the SLM approach

The National Development Strategy (NDS) provides a good basis for land use planning in the ROM, setting out broad objectives, strategies and principles to promote an orderly, organized development of the overall land resources. It lays down the criteria for an efficient allocation of land for different uses. The NAP-IFS process provided a process for project management to engage in important activities related to outcomes for mainstreaming SLM in planning and action planning and addressing in particular the SLM local area planning and environmental protection and development needs ((outcome one - mainstreaming is discussed in detail in section below on results).

→ *Recommendation; Prioritize the development of a cross sector and multi-stakeholder SLM monitoring framework for all SLM activities with a focus on implementation through multi-stakeholder environment and partnership strategy.*
→ *Recommendation -Project initiated work on SLM and planning needs immediate follow up for institutional and monitoring gaps exposed during project implementation*.

Management Arrangements

The SLM Project Management Unit (PMU) was based at Forestry Service and held consistent staff. It met on a resulted basis and involved UNDP when needed. The National Steering Committee set up by the project has met three times. The SC committee provides an important high level policy advocacy forum as it consisted of high level officials. The *technical advisory group (tag)* played the most important role demonstrating the operational group for SLM. it met 7 times (see annex -tag notes). this group was multi-stakeholder and inter-disciplinary. It worked very well and demonstrated the SLM planning approach at the national level. this group might be continued in one form and remain interdisciplinary and multi-stakeholder.

The project was nationally executed. Project management arrangement worked well. As a nationally executed project, the lead executing agency is the Forestry Service (FS) of MoAF, directly responsible for the timely delivery of inputs and outputs and coordination with other executing agencies. The project design stipulated a Steering Committee SC and Technical Advisory Committee TAC. Both forums have met appropriately and were consistently available to the project management unit PMU based at the FS. With the loss of the project manager at mid-term, the PMU required strengthening, and a new project manager was recruited in 2008. Both project managers had strong enthusiasm for the project and their effective management was recognized as outstanding (also see mid-term evaluation).

The UNDP's office was an important partner (Mid Term 2008 and Terminal Evaluation 2013 - Interviews and Observations) in implementation. The UNDP provided critical back office support to the PMU, i.e. procurement of international consultants and day to day support for soft policy dialogue and advocacy in support of SLM mainstreaming (see section on UNDP below).The office has close relations with the PMU and all other project stakeholders. However, since this project was implemented, the Mauritius government agreed to undertake all procurement directly and will only engaged UNDP on a fee for service basis. The management arrangements benefited from knowledgeable project managers, the first with long-term knowledge of the sector, stakeholders and the project's anticipated results and the second with excellent profile and network for local area planning and landscape design among other relevant areas.

Steering Committee SG

1	(Chairperson) Senior Chief Executive, Ministry of Agro-Industry and Food Security Fisheries
2	Permanent Secretary, Ministry of Finance and Economic Development
3	Permanent Secretary, Ministry of Local Government
4	Permanent Secretary, Ministry of Environment and National Development Unit
5	Permanent Secretary, Ministry of Housing and Lands
6	The Commissioner for Environment, Tourism, Forestry, Fisheries, and Marine Park Rodrigues Regional Assembly
7	Vice Chancellor, University of Mauritius
8	UNDP

Technical Advisory Group TAG

S.N	Name	Designation	Ministry / Organization
1.	Mr. Vishnu Tezoo	National Project Director	Forestry Service Headquarters, Forestry Service
2.	Mrs. R. Ramsurn	Economist	Ministry of Finance and Economic Development
3.	Mr. V. Bachraz	Senior Research and Development Officer	National Parks and Conservation Service, Ministry of Agro-Industry & Fisheries
4.	Mr. B.B.S Lutchmeea	Principal Agricultural Officer	Engineering Division, Ministry of Agro-Industry & Food Security
5.	Mr. R. Ng Cheong	Scientific Officer	Mauritius Sugar Industry Research Institute
6.	Mrs. Michèle Lionnet	The Secretary	Mauritius Meat Producers Association
7.	Mrs. B. Luckputtya	Ass. Secretary	Ministry of Housing and Lands
8.	Mr. R.V. Tatayah	Fauna Manager	Mauritius Wildlife Foundation
9.	Mrs. S. Facknath	Associate Professor	Faculty of Agriculture, University of Mauritius
10	Mr. S. Mooloo	Ag. Deputy Director	Department of Environment, Ministry of Environment & NDU

3.2. PROJECT IMPLEMENTATION

The project began to deliver results by mid-term (mid-term evaluation 2008) especially with regards to its institutional capacity strengthening objectives. At mid-term, the external evaluation also recommended corrective actions to extend the project strategy focus beyond upstream capacity strengthening and training to the drivers of land degradation and resource users directly. The remaining resources (interviews with the PMU and UNDP) was limited and so corrective action forced a strategic approach and a special targeting of trainings to the more vulnerable areas, the development of the forest information management tool/work with LAVIMS, the NAP and the Integrated Financing Strategy work.

The ongoing SLM project planning within the scope of the technical advisory group TAG and the steering committee SC enabled a demonstration to the government counterparts of the cross sector and multi-stakeholder institutional arrangements for SLM (interviews January 2013.

Timing of key programme implementation milestones

CEO endorsement/approval	Approved MSP formulated in 2004
Agency approval date	by GEF in 2005
Implementation start-	Project Manager recruited in October 2006
First TAC	- Officially constituted on December 21, 2007. The first meeting was held on January 17, 2007
Mid-term evaluation	October 2008
Project completion	December 2011
Terminal evaluation	Jan 2013
Completion Project closing-	April 2013

Adaptive Management

The project enacted the adaptive management approach through the way it engaged a broad group of stakeholders in planning and management of SLM including government and non-governmental and private sector actors. The management arrangements with based at FS was therefore, suited to the project strategy, implementation approach and for adaptive management. The project engaged key agencies with stake in mainstreaming SLM including ministries vested in environmental protection and enforcement - MOAF, Ministry of Environment MOE and the Ministry of Housing and Land MOHL and others (see list of ministries and agencies involved above). Project also involved the private sector and the NGOs through the TAG and the trainings which was ideal.

Forestry has a national leadership agenda and the extension field staff for work on the front lines of environmental protection and sustainable land management. Forestry is also situated in MOAF and has many of the key agencies involved in providing extension services work on SLM including National Parks, Fisheries and Agriculture. An important aim of the projects was to integrate MOAF decentralized services better.

Adaptive management had been expressed throughout project implementation by the decision making processes executed in consultation with members of the Technical Advisory Group TAG (7 meetings) and the Steering Committee SC (3 Meetings). Annual work plans decision making was conducted on the basis of available funds and other resources (Interview with PM January 2013). Post mid-term as per recommendation for increased involvement of the Rodrigues stakeholders, the PMU, through the TAG's decision-making process, designed activities and trainings on Rodrigues (interview with PMU, January 2013). The representative for Rodrigues suggested undertaking consultative meetings, discussions and workshops rather than creates a mini-TAG for Rodrigues and invites two people from Rodrigues training and meetings when possible. Adaptive management worked well, and the results included the greater sensitization of Rodrigues to SLM planning approaches and reasoning (interview and participation of the RC at the TE workshop).

***Partnership Arrangements' (including with relevant stakeholders involved in country/region*)**

During implementation the involvement and relationship strengthening that the project has facilitated between the private sector, the NGOs and the government ministries and departments was central strategy underpinning the project. The multi stakeholder cross sector mechanism demonstrated through which the various institutions and partners have been collaborating is an important result arising from this project. The project demonstrated and enacted the multi stakeholder and inter- sector planning and enforcement arrangements for SLM. As per design the correct stakeholder have been identified and begun to work together to plan through the NAP and SLM Investment development process. This should be reinforced and scaled. In terms of the various levels of engagement of each of the set of stakeholders an analysis follows:

Government Agencies (including University of Mauritius)

The lines of SLM responsibility in terms of the stake, legal and institutional responsibilities are outlined in the SLM investment financing framework. In general, the key government agencies with stake and mandate for SLM activities are involved including: the Ministry of Environment MOE - environmental regulation through the Environmental Impact EI process, the Ministry of Housing and Lands MOHL because they are responsible for land use and host the new cadastral information management system linking to all sectors, the Ministry of Agro Industry and Food Security MOAF is responsible for fisheries, forestry and national parks service, the Ministry of Tourism MOT involved in big foot print development activities on coastal zone, and the Ministry of Education MOE with the responsibility for education of the next generation of water and land stewards. The Ministry of Local Government MOLG has responsibility for the regional planning schemes and the Ministry of Finance MOF is responsible for budgeting programmes. To date all the relevant agencies have been engaged through either or both SC and TAG and actively engaged in the Integrated Financing Strategy IFS planning work. The involvement of the Tourism agencies and the Education Ministry perhaps might be strengthened during any continuation of project related activity.

United Nations Agencies

- *Food and Agricultural Organization (FAO)*

Co-financing was earmarked in the original project document (2006) from FAO US $160,000 to provide technical support to the SLM project to develop the Forestry Policy and support the NAP.
The FAO has given technical support to prepare the National Forest Policy. A draft National Forest Action Programme has been prepared by the Forestry Service with the collaboration of all major stakeholders and need updating. The Forest conservator said that updating the Forest policy is a priority for him and he will convene a small working group to develop it from within using inputs and products from the project including the gaps study and the IFS -NAP framework.

NGOs and the Private Sector Inputs (See description of these groups in SLM Integrated Financing Strategy Analysis, 2011)

NGOS and the private sector partner were involved in the project through the technical advisory group meetings and the trainings and workshops. Both groups are vested and eager to remain a part of the planning process for SLM. During the TE, the NGOs and private sector participated in the workshop and expressed interest to be involved in monitoring SLM and that the next step is to create a multi sector mechanism to continue the work of project. Such a multi-sector- multi-stakeholder approach enables an important forum for all stakeholders to jointly implement projects previously only in the government domain. This is ideal.

- *Mauritius Wildlife Foundation MWF*

At mid-term, (changed later - other NGOs became more involved in subsequent trainings) there was only one major NGO involved in the project, the Mauritius Wildlife Foundation MWF, which was connected to the conservation of biodiversity on Mauritius. MWF works in collaboration with the National Parks and Conservation Service in the running of the government aviary, where many rare endemic birds are bred in captivity for release into the wild. This did expand by terminal evaluation with the inclusion of NGOs working on youth and women's empowerment and livelihood issues.

MWF has leased the islet, Ile aux Aigrettes also for the in-situ and ex-situ propagation of rare plant species. Other NGOs, like The Friends of the Environment, BEI, are actively involved in Forestry and Conservations works. Civil Society Organizations like Nature Watch act as watchdogs to the management and conservation of rare native fauna and flora and their fragile habitats.

- *Young Farmers Club*

Participating NGO group the Young Farmers Club, deals primarily with local northern villages. Their aim is to create awareness of vulnerable groups, including a focus on women and young people. This group took training in sustainable agriculture practices and participated in two training statements for SLM capacity building. The process involved talks by a forest officer and delivery of a unit on organic agriculture and planting. . The Forestry Service would provide plants. The results achieved include more than 12 eco-villages

- *GEF Small Grants Program (SGP)*

The GEF Small Grants Programme (SGP) is historically active on both Mauritius and Rodrigues. Very clear and important synergies can be forged with the Small Grants Programme (SGP) for SLM at the community level, especially with regards to sustainable livelihoods, gender dimension and women's empowerment programme in line with SLM goals.

→ *Recommendations: Synergies on SLM programming with SGP must be strengthened.*

Feedback from Monitoring and Evaluation activities used for Adaptive Management

Post mid- term, the evaluation recommended project focus to include Rodrigues in planning and activates and knowledge management to produce more knowledge products for learning and visibility including booklets and advocacy materials based on training activities. The project did adjust its strategy and this was evident based on the production of more project related materials including a SLM guidebook. It did not however create a website and knowledge portal which is an important aspect of project overall sustainability. Sustainability issues are discussed in the later section.

In addition post Mid-term evaluation, the Project Management Unit (PMU) based on recommendations, PMU made efforts to involve Rodrigues more substantively in planning and capacity building activities. Such action was endorsed by the Steering Committee and the Technical Advisory Group. The project had originally budgeted for a technical assistant to be located in Rodrigues full-time; but this did not occur until after mid-term (Interview with the PM, January 2013). Interviews with the Commissioner for Environment, Tourism, Forestry, Fisheries, and Marine Park of Rodrigues Regional Assembly at TE confirmed plans to develop a model eco island. The governor— an ex Forester—expressed his wishes to create one unit responsible for the protection and for sustainable development through integrating services on forestry, environment and agriculture into one department...

Project Finance

The project finances were managed very well. The implementing agency UNDP provided financial monitoring support and also helped to procure the international consultants throughout.

Project Expenses as of December, 2012

Activity/Year	2006	2007	2008	2009	2010	2011	2012	Subtotals
Component One	$13,864	$54,929	$10,895	$27,788	$35,087	$12,172	$2,654	$157,389
Component Two	$0	$223,152	$26,996	$44,645	$6,899			$301,692
Component Three	$0	$7,979	$3,000	$12,765	$5,671	$48,071		$77,486
Component Four	$14,467	$1,808	$0			$4,867		$21,142
Other (management, travel, etc.)	$5,425	$27,626	$6,881	$3,484	$2,925		$99	$46,440
Subtotals	$33,756	$315,495	$47,774	$88,682	$50,394	$65,110	$2,753	$604,149
Total								$1,208,298

As of December 2012, the project expenditure is at 100%. The big investments of the project included the human resources component and the training with most of these expenses incurred in 2007, Component two. The FLIS and Investment Framework fall under Components 3 and 4, 2011. The big expenditures are consistent with the project strategy: FLIS, the NAP-IFS and the training packages.

Co-financing supported key project achievements:

Co-financing was earmarked in the original project document (2006) from the government $600.000 and the FAO US $160,000 to provide technical support to the SLM project to develop the Forestry Policy and support the NAP. The co-financing of government was significant in-kind contribution, including office space and staff seconded to the project. The government co-financing amount has in fact gone beyond the amount committed and this is also evident by the commitment of the MOE in addition to the FS to pay for some of the project related activities.

The Forestry Policy 2006 however, still needs updating. The Forest conservator said that updating the Forest policy is a priority and he will convene a small working group to develop it from within using products from the project including IFS -NAP work and the policy gaps study.

Contributor	Activity Funded	Amount	Comment by Evaluator
GoM	Project Management cost, Development of Land Information System in MoHL and Satellite imagery with the remote sensing unit in MoA, Completion of National Action Program for UNCCD	$600,000	Spent on project management fee for the time of staff and office costs
FAO (parallel funding)	Mainstreaming of SLM	$164,000	Did not happen; see section below.
	Total Expected	$764,000	
	Total	$600.000	Government confirmed this amount in kind and in monetary resources during TE and TE concur

Delays

Based on the review of the auditor's reports and the mid-term evaluation, the project however did suffer considerably delay when assessed relative to the initial work plan submitted along with the project document. Meanwhile, TE found that project work plans were always prepared by the PMU and approved by the Project Steering Committee and UNDP CO; partially achieved and unachieved outcomes were rescheduled when appropriate.

The original delays were due to the death of the Project Manager in 2008 and the delay in recruitment of a new Project Manager, according to the UNDP management response. Other delays mentioned are outside the scope of the management due to co-management of activities funded and managed by government, such as approval of policies by Cabinet decision. TE concur that it was risky to plan the project based on the approval of cabinet decisions. The final delays were attributed to project activities being finalized in November 2011, but the Terminal Evaluation began at the end of December 2012. This was attributed to the fact that UNDP has been without a project manager to close the project until now (discussion with UNDP, January 2013).

Financial Information Cumulative since project started to 30 March 2013

Co-financing (Type/Source)	GEF Financing (US$)		Government (US$)		Other Sources (US$)		Total Financing (US$)		Total Disbursement (US$)	
	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual
Grant	599,073	600,208		3,941	179,000	179,000	778,073	787,090	778,073	787,149
Credit										
Loans										
Equity										
In-kind			600,000	600,000			600,000	600,000	600,000	600,000
Non-grant instruments										
Other Types										
TOTAL	599,073	600,208	600,000	603,941	179,000	179,000	1,378,073	1,378,073	1,378,073	1,387,149

Summary of Project Budget

Monitoring and Evaluation: Design at Entry and Implementation

The project document states that monitoring would be conducted in accordance with established UNDP and GEF procedures and provided by the Project Management Unit (PMU) and the UNDP Country Office with support from the UNDP/GEF. The logical framework matrix provided in the project document Annex B provided the performance and impact indicators for project implementation and their means of verification. These have been assessed (also see section on results below).

Adherence to UNDP GEF GOM M and E Requirements

The project employed a sound M&E plan to monitor results and track progress towards project objectives. The M and E system included the original project document log frame and the yearly plans. Funding was budgeted and provided for M&E activities on a regular basis. The monitoring system included PMU and UNDP day to day oversight and GEF inputs through the PIR review processes. A mid-term review and terminal evaluation were conducted.

The project submitted quarterly reports (13 QR submitted- the last one dated March 2010), annual reports and has completed PIRs 2007, 2008, 2009, 2010, 2011. A final audit was conducted in January

2010 by Appavou Associates and found no problems. The TE represents the second external project evaluation. The project's quarterly reports were found well written.

Log frame as a management tool

The project document includes a monitoring and evaluation log frame to be used a guide for project implementation with indicators and benchmarks around four expected outcome areas toward the overarching capacity strengthening objective.

The project log frame was used by the PMU and the SLM monitoring system including TAG, SC and others involved in implementation. As described in the above section (project formulation), the indicators did not, however, reflect the root causes of land degradation directly but rather focused more on the advocacy arena and process level results largely through sensitization of the SLM enablers (discussed above). The project design thus did not accommodate the important local land use planning and governance issues per se. In that regard, the monitoring framework was a log frame removed from the overall project goal of mainstreaming and capacity strengthening of **all** stakeholders[vii]. The project's focus was upstream. Policy-level results came through a more formal capacity building approach, research and planning activities in order to influence policy and programmes and a secondary focus on the development of knowledge and information management; they mostly work on the Forestry Information System FIS in general.

Institutional arrangements for monitoring SLM

The Forestry Service monitored project activities to ensure all were carried out in a timely manner as per the annual work plans. The projects institutional arrangements provided a demonstration of SLM monitoring, management and coordination. In this regard, the PMU employed the SC and TAG for planning and monitoring SLM. UNDP provided back office support for monitoring including audit and procurement and gave strategic inputs for identifying synergies with soft development activities ongoing, including the MID planning.

Research and tools for monitoring SLM

Attesting to the awareness of the importance attached to monitoring, the SLM project included a list of outputs involving assistance to countries on the long-term SLM monitoring programme, including establishing baseline, undertaking research and developing inventories and developing indicators and building capacity for data gathering and analysis. In addition to the project focus on creating an enabling environment and sector mainstreaming, the project intended to pilot tools for SLM learning, i.e. Forest Information Management system, an important part of the SLM monitoring system. The FLIS is discussed in detail in the results section, but it is essential for the FLIS to become an important tool for the SLM monitoring system. More work on LAVIMS across sector is required to demonstrate the approach and engage others in a similar data collection approach linked to the central system.

Project implementation Reports (PIRs)

Consistent with the finding of the mid-term evaluation 2008, the PIRs reviewed remained weak, reinforcing the mid-term evaluator's view that PIR reporting need improvements. The PIRs should report on impacts of project activity. The project reports do a good job of stating what the project has done and will do to complete those tasks. At midterm, it was recommended that PIR reporting include more reflection upon the strategic alignment of the project to address SLM issues, including a brief update regarding progress Mauritius and Rodrigues have made in addressing SLM issues as a result of project activity, possible evolutions in challenges to SLM. This was to assist project stakeholders and evaluators in assessing the project's strategic impact. Because this did not happen, PIR remains a mix of cut and paste reporting.

→ *Recommendations: UNDP undertakes a small programme of assistance to help set up an SLM monitoring framework for the NAP-SLM implementation as a multi-stakeholder and inter-disciplinary committee building on the experiences of the TAG and committee members involved in developing the IFS. This is very important with regard to project sustainability.*

UNDP and Executing Agency implementation / execution (*) coordination, and operational

The NEX arrangements worked well with Forestry Service in MOAF. All major decisions of the project were taken in the context of the Technical Advisory Group TAG, the Steering Committees SC or at the Ministry level. Capacities for programme management were strengthened through NEX. Although NEX was perceived to be sometimes slow, the process according to the PM was 'about learning how to manage these external funds from within government processes'. UNDP helps with international recruitment on request and for a fee. Government provides a fee for UNDP support with international recruitment or any procurement: The costs are one thousand dollars for 10 weeks, - and over ten week the price goes up. Until quite recently (2011), UNDP managed all GEF funds on behalf of government, including procuring of all the services, i.e. requests for cash advances and all expenses which are now recorded within government accounting.

UNDP has provided excellent oversight, and no issues were found during the evaluation. All UNDP program managers involved had regularly monitored their project activity and offered synergistic technical and administrative support. The relationship between UNDP managers and the project has been collegial and productive. The project officer at UNDP responsible for SLM project left (2012), and a new champion at the UNDP office is needed to take SLM agenda forward with the GOM. It also became clear during the terminal evaluation that the UNDP environment programme manager and the UNDP team understand the importance of SLM as a programme with the potential for coherence and the possibility of being a bridge program for synergies between many of the existing environment and development programmes, including the Protected Area Network PAN, African Adaptation Programme AAP and Mauritius Ile Durable MID work.

Management support by the UNDP country office in Mauritius

Value added properties of UNDP/GEF support

According to interviews with the Project Management Unit PMU staff and relevant government officials involved in the project implementation, UNDP supported the PMU coordination of the various Ministries, the Non-Governmental Organizations and the Private Sector Stakeholders. UNDP also provided back office monitoring and procurement support and (according to the PMU) alleviated the sometimes heavy administrative work pressure from the PMU. UNDP provided substantive support in ensuring quality recruitment of internationals and technical assistance, seeing that the consultants identified were appropriate and added value in terms of the technical profiles invited into Mauritius.

The individuals invited to consult were not available on the island and could add value, in particular, on sharing comparative experiences and learning objectives. UNDP was actively involved in the entire SLM project Steering Committee meetings (3) and technical advisory groups (6).

Regional Knowledge Sharing and Learning UNDP/GEF

UNDP identified relevant training and technical training on SLM, i.e. they sent the PM to an SLM sharing workshop in Pretoria.

Global Mechanism GM and Indian Ocean Commission (IOC)

A regional workshop was held in order to develop the SLM Integrated Financing Strategy in Mauritius with the collaboration of the Global Mechanism GM for the UNCCD. It had the participation of officials from Seychelles and the Indian Ocean Commission IOC, along with EU, AFD and others. UNDP in effect supported the facilitation of regional cooperation, including the mobilization of potential funding and technical assistance from the two organizations. UNDP helped to mobilize the Global Mechanism (GM) and extended the project learning approach to the region by convening a regional workshop on SLM investment, thereby introducing Mauritius to the possibility of mobilizing funds from the Indian Ocean Commission (IOC) and showcasing Mauritius as potential leader for regional cooperation on SLM. The work with the GM has continued, and the IOC is currently working on mobilizing resources. This is in need of urgent follow-up.

The regional process supported Mauritius's leadership in facilitating cooperation with its neighbors, including two LDCs (Seychelles, Madagascar and Comoros) —a learning process for other countries. Thus the Regional Cooperation Mechanism for SLM developed as result of this workshop—a good result. The work has resulted in the first regional resource mobilization study for SLM. The Global Mechanism GM wants to continue to fund the regional sharing on SLM.

Storage and Dissemination of Project Knowledge Products and related KM outputs

The Project Management Unit (PMU) has generated a substantive amount of material and products that need to be stored and available for future advocacy and planning. A drop box is available with all the project documentation including the research, the policy reviews, the SLM IFS process related documents, the FLIS materials and others. This material is very important institutional memory and advocacy material and must be classified and stored and shared.

- Leaflet - SLM Project, 2006
- Leaflet - Ecological Functions of Forests -2011
- Poster on Poverty and Tree Cutting Link -2011
- Inception Report, November 2006
- Training Materials - Integrated Pasture Management course for Rodrigues, April 2007
- Training Materials – Sustainable Agricultural Practices course for Rodrigues, May – June 2007
- Training Materials – Sustainable Agricultural Practices course for Mauritius, June – August 2007
- Training Materials - Natural Resource Economics Course(Training for Trainers), August 2007
- Training Materials - LIS / GIS Course, August-September 2007
- Training Materials - Natural Resource Economics Course, February 2008
- Training Materials – Remote Sensing for SLM Course, February 2008
- Training Materials - Preparation Project Proposals course for Rodrigues, April 2008
- Training Materials - Preparation Project Proposals course for Mauritius, April - May 2008
- SLM Handbook
- Quarterly Reports
- Project Implementation Reports (PIR)
- National Action Programme on SLM(under progress)
- Draft National Forest Action Plan(under progress)

→ *Recommendation: UNDP share TE with government officials in appropriate forums to advocate for continuing SLM project in some format.*

→ *Recommendation(s): UNDP should follow up the GM, IOC and GOM partnership for regional cooperation and be followed up ASAP.*

→ *Recommendation - A SLM webpage and knowledge portal must be developed as a next phase of this project. All of these materials need an institutional home base and Knowledge management strategy.*

3.3. RESULTS - SUMMARY OF PROJECT OUTCOMES/ACHIEVEMENTS

Overall Project Results

Based on the assessment of outputs/activities, PIRs and discussion with stakeholders involved in implementation, the TE verified that 100% of the activities are completed. The project recently commenced NAP drafting work with the University of Mauritius. The NAP/Integrated Financing Strategy (IFS) development process was participatory and involved all stakeholder groups - Government, Para-Government, and Private and NGO representatives. The process of developing the IFS was linked to formal commitment of Government to develop a NAP, inform the SLM programme enabling environment and put forth a monitoring and action plan - This will need to be followed up for commitment to institute a monitoring framework and actually implement.

Ratings: The rating system follows UNDP's Handbook on Monitoring and Evaluating for Results
Rating system used Highly Satisfactory to Highly Unsatisfactory as per TOR

Project Objective

Project Objective: Capacities for sustainable land management are built in appropriate government and civil society institutions/user groups and mainstreamed into government planning and strategy development.

Outcome 1: SLM is mainstreamed into national policies, plans and legislation.

Baseline: Forest Land Information System completed and National Action Programme and National Forestry Action Plan initiated.

Target: SLM best practices and guidelines are broadly disseminated and used in development planning, zoning and agricultural extension.

Output 1.1. Integration of SLM into the new National Forestry Policy and Forest Action Plan;
Output 1.2. Integration of SLM into macro-economic policies and regulatory and economic incentive frameworks regarding sustainable practices on non-forest land;
Output 1.3. SLM Investment Plan linked to priority actions defined in the NAP is developed.

Outcome 1: Integration of SLM into macro-economic policies and regulatory and economic incentive frameworks regarding sustainable practices on non-forest land.	
Indicators	Rating
The National Forest Policy and National Forest Action Plans contain specific sections on land degradation and sustainable land management.	Satisfactory
The Ministry of Finance and Economic Development and other ministries concerned with land use planning use environmental economic analyses of land and use options (and of the cost of doing nothing) as a tool for economic development planning and/or the development of macro-economic policies.	
Outputs	

1.1 Integration of SLM into the new National Forestry Policy and Forest Action Plan	First Draft NFP completed. The Forestry service has already worked out a first draft and has requested for the assistance of FAO for a consultant under the TCP (Technical Cooperation Program): The NFP was developed in 2007-2008 and is current in need of updating. the plan is to revise this in-house, according to the conservator of Forest.
Specific sections in the National Forest Policy and Forest Action Plan integrate SLM lessons learned and best practices .	
1.2 Development of policy, regulatory and economic incentive frameworks regarding sustainable practices on non-forest land.	Assignment on Review of National and Sect oral Policies, Legislation and Regulations for Sustainable Land Management. Completed in Sept 2008
New policies, legislation and regulations adopted, including incentives for SLM and penalties for destructive practices.	
SLM is mainstreamed into Millennium Development Goals processes.	
1.3 An SLM Investment Plan is developed.	The integrated financing plan was developed. It involved a rigorous and participatory process with all relevant stakeholders. Buy in for the IFS have been at the operational and political level. However, with no home base established or overarching committee for monitoring, it will be difficult to take this forward as a programme. It will also be important to undertake a process for ensuring the activities are updated, marketed and shopped around to the various ministries and departments involved.
The UNCCD National Coordinating Body (NCB), UNCCD Focal Point and the Ministry of Finance use the SLM Investment Plan to mobilize, coordinate and direct investments needed for sustainable land management in Mauritius.	
The SLM investment plan integrates priorities identified in the NAP (Outcome 4), and investments are made in conformity with the investment plan.	

Comments/Recommendations:

All the outputs/activities were completed and finalized with the exception of mainstreaming SLM in local and national planning. The evaluator agreed with the RTA final PIR report for September 2011 that the failure to ensure that SLM principles are mainstreamed in central and local government planning poses the biggest threat to the sustainability and replication of SLM and project objectives. However, this activity has in fact been started with the *process o*f development of the Integrated Financing Strategy IFS. The IFS was developed as an SLM planning process which involved the process of developing regional /local NAP plans on SLM and through a multi-stakeholder and participatory approach. In essence, mainstreaming SLM in local planning has been conducted through the process of developing the investment framework, 2011 (see description of SLM IF below) and all activities have been finalized

The NAP is a priority activity and the IFS are the action planning for the NAP. However, NAP is not yet approved... This is a priority action post evaluation and forestry should complete this as an absolute priority with the materials generated from this project.

SLM Investment Framework

The preparation of the Integrated Financing Strategy (Investment Plan) for Sustainable Land Management was conducted from February 2011, with the following objectives:

(a) Review and comment on the draft National Action Plan
(b) Identify priority SLM investment needs and opportunities in consultation with the Ministry;
(c) Develop a costed SLM Investment Plan, including brief concept papers for priority investments;
(d) Identify sourcing of investments for SLM;
(e) Prepare a consolidated strategy for the SLM Investment Plan, including GEF project in PIF format, involving all stakeholders;

(f) Hold a two-day national validation workshop among all stakeholders in order to communicate results of findings and recommendations.

The purpose of the **Integrated Financing Strategy (SLM Investment Plan)** is stated thus;

> *'To develop a pragmatic and realistic mechanism of funding in order to incorporate the concept of SLM in Mauritius and Rodrigues. he SLM investment framework will build upon a number of initiatives that have been undertaken in Mauritius in the past years, including the NEAP (National Environmental Action Plan), the NDS (National Development Strategy) and the EIP (Environment Investment Programme)'.'*

The Integrated Financing Strategy (SLM Investment Plan) was developed through a participatory and multi-stakeholder process intended to develop a pragmatic and realistic mechanism of funding in order to incorporate the concept of SLM in Mauritius and Rodrigues. The NAP and Integrated Financing Strategy (IFS) thus build upon a number of initiatives undertaken in Mauritius in the recent years, including the NEAP (National Environmental Action Plan), the NDS (National Development Strategy) and the EIP (Environment Investment Program).

The process of developing the IFS involved a series of consultations (including financing identification) carried out during the two-week Field Phase (15-27 February 2011). A summary was presented of 52 interviewees (including 23 females) from 23 institutions (key stakeholders) who contributed to this series of consultation activity. Two inception workshops were carried out in Monvert, Mauritius, on 18 February 2011, and in Point Venus Hotel, Rodrigues, on 24 February 2011, from a wide range of institutions.

The IFS is a rolling SLM action plan, but before it can be properly implemented however coordination and monitoring mechanism must be agreed upon. The National Action Plan NAP is in draft and said to have priority for finalization (conservator of Forests). This is important for the momentum generated by the project regarding SLM.

The terminal evaluation workshop participants maintained that many of the SLM projects planned in the IFS are actually being undertaken, for example, the implementation of the Baird report for coastal protection work (erosion), islet beach protection walls and prevention of access (vehicular) on public beaches Flic and Flac, Bella Mare and Mon Choisi. The implementation of the recommendations by the integrated coastal zone management framework study is also ongoing, as is the implementation of recommendations of the environmentally sensitive areas study. The private sector is funding some of the NGO work as a result of the engagement facilitated by the project.

Outcome 2: Human resource capacities needed for SLM are developed. (Annex 11- List of activities)

Output 2.1. Enhanced capacities for use of integrated land information systems/GIS/remote sensing;
Output 2.2. Enhanced capacities for sustainable pasture management and sustainable agriculture;
Output 2.3. Development of capacities for the use of LIS/LIMS and SLM guidelines for integrating SLM into planning at central and local authority level;
Output 2.4. Development of expertise in environmental/natural resource economics;
Output 2.5. Enhanced capacities for restoration and management of fire-degraded, sub-humid mountain ecosystems.

Outcome 2: Human resource capacities needed for SLM are developed.		
Overall Indicator		Rating

The staffs of NRSC, FSM, FSR, Mol, AREU, UoM and MSIRI has the capacity to integrate new satellite imagery obtained by NRSC into their LISs and to use it for monitoring and or analyses related to SLM. Six CBOs and 3 NGOs have participated in tests/applications of range management principles and techniques that they have been trained in. 2 NGOs have participated in tests/application techniques for the restoration of fire-degraded sub-humid mountain slopes.	Satisfactory Yes (achieved) Members of these agencies have been trained in SLM. The national human resources capacity strengthening element focused on the forestry sector, although SML as a larger conceptual framework for change needs to be strengthened and reinforced with a monitoring system lined to outcome one and outcome three results in particular . .
Output Indicators	
2.1 Enhanced capacities for use of integrated land information systems/GIS/ remote sensing for SLM. 25 technicians are trained and know how to integrate GIS and satellite image data into an LIS for SLM applications.	Yes (achieved), in this case, through learning by doing approach. The development of the Forestry Information system is a case in point. The GIS trainings developed in connection with the development of the FILS had an impact on users through the upgrading of the quality of information collected concerning forests in the government information system based at MOHLÑ, LAVIMS. The information includes lease, title and deed. The pin number for each land users is established.
2.2 Enhanced capacities for sustainable pasture management and sustainable agriculture. Individuals (15) understand the fundamentals of how to manage pastures to minimize soil erosion, to favor the growth of preferred forage spp. and the fundamentals of participatory approaches to NRM. Agricultural extension agents (15) and 5 other individuals understand best practices for minimizing erosion on cultivated fields and for maintaining soil fertility and productivity. Farmers (20), herders, NGO/CBO staff were trained in the basics of project proposal preparation.	Yes (achieved)
2.3 Development of capacities for the use of LIS/LIMS and SLM guidelines for integrating SLM into planning/zoning and permit approval at central and local authorities level All municipalities have at least one staff member trained to make use of SLM guidelines and LIS databases for planning, zoning and processing of permit applications.	Yes (achieved)
2.4 Development of expertise in environmental/natural resource economics	Yes (achieved)
Five Environmental/NR economists have the capacity to conduct/oversee economic and financial cost-benefit and profitability analyses of land use systems. Ten staff of key institutions have capacity to conduct basic cost-benefit analyses under supervision of the first five	Yes, training was achieved. The question is how stakeholders use environmental economics for environmental protection, including the Ministry of Environment and Ministry of Finance in particular, as a result. The MID action plan is not as environmentally friendly as an indicator as the MID is not promoting the issue of energy efficiency through promoting the renewable. We can look at the shift since the

	national development strategy was adapted. Originally 7000 hectares were to be transformed for development. The new plan is for over 10, 000 hectares to be converted for integrated land uses, not necessarily sustainable agricultural production. How do the stakeholders make the business case to the cabinet for sustainable and cost effective environmental decisions concerning land use? This in general happens through planning. If so, are the IFS as good an interdisciplinary planning forum as the TAG?
2.5 Enhanced capacities for restoration and management of fire-degraded sub-humid mountain ecosystems.	Yes (Achieved). This was noted as highly successful training. It might be packaged for delivery to regional counterparts in the future.
Forestry Service in Mauritius uses its training and equipment to conduct early, light controlled burns as part of a set of monitored restoration trials on degraded mountain slopes.	

Comments/Recommendations:

The project made excellent progress implementing training programs involving over 180 total participants (ANNEX). The reporting and evaluation on these training programs is very good and the packages are available with the Forestry department. The activities varied in content and length depending on the objectives. Training was delivered to strengthen the capacities and human resources at three levels: individual, institutional and organizational. The impact of the training activity (annex) was also being assessed during the TE. A critical question was, *'How have these training activities contributed to the overall objective of mainstreaming and strengthening capacity of SLM across sectors and for results*?'

In general, the training packages were tailored by different consultants and partners, for different audiences and uses concerning issues of SLM (See annex). The partnership with the University of Mauritius was strategic as on one hand, it has enabled the delivery of capacity strengthening outputs through formal methods, and on the other, it went beyond for impact on the capacity of the University itself. In addition, to strengthening capacities of individual institutions, the process of development of training packages has a potential long-term utility in that it can be used in the future for support to the regional cooperation and build on the regional cooperation begun under this project.

Through formal training packages, the individual capacities of the government and non-public sector participants have been strengthened. The training approach also strengthened the capacities of the University of Mauritius to provide knowledge products and services and partnerships, for example, influencing the UOM programme on agriculture and environment, such as environmental engineering. In the long run, the capacities strengthening programme delivered by the University might also be available to serve the region.

→ *Recommendation: The training courses can be followed up and packaged for national and region consumption. They can be better integrated into the University of Mauritius formal programmes. The work will need to be followed up and activities reinforced.*

Training of the public: NGO and Public participation

The SLM project extended training on agricultural practicum and proposal writing to NGOs, which then imparted learning to facilitate the participation of local people and, ultimately, their demand for

more sustainable development through learning about sustainable land management practices and what is at stake to them and the environment in general. The programme demonstrated the importance of strengthening participation through multi-stakeholder SLM work and decision-making involving government, non-government user groups and private sector participants, as all are integral to the SLM process for sustainable development.

The NGO Young Farmers Club (YFC) is led by concerned women leaders (as per press clipping and interviews) and has a base in the northern part of the island. The YFC focuses its work on youth and women's empowerment through training and support for value-added agricultural production, i.e. making jams for market from locally produced sugar. The aim is to create awareness and strengthen capacities of vulnerable groups like women and young people through sustainable agricultural practices. The training has been imparted to at least 150 women and youths throughout Mauritius and is purportedly making a big difference in terms of women's and youth's empowerment and livelihoods for sustainable land management. There is a potential partnership that might be explored in the future with NGOs and youths for collecting data. NGOs reported their constituents are using technologies such as cell phones that might also be capitalized on for data collection and even market prices in the future.

Participating NGO group the Young Farmers Club, deals primarily with local northern villages. Their aim is to create awareness of vulnerable groups, including a focus on women and young people. This group took training in sustainable agriculture practices and participated in two training statements for SLM capacity building. The process involved talks by a forest officer and delivery of a unit on organic agriculture and planting. . The Forestry Service would provide plants. The results achieved include more than 12 eco-villages.

→ *Recommendations: The relationship with UOM be formalized on SLM regional work in the context of the GM and IOM work so that the training packages are not lost.*

→ *Recommendations: More income-generating activities targeting user group empowerment and good governance is recommended. The NGO was also creating farmer clubs.*

Outcome 3: Capacities for knowledge management for SLM are developed.

Output 3.1. Participatory assessments of the sustainability of land use systems;
Output 3.2. Sharing of knowledge on SLM;
Output 3.3. Development of Land Information Systems;
Output 3.4. Development of monitoring and evaluation systems;
Output 3.5. Enhanced SLM through improvements to the State lands leasing systems;
Output 3.6 Planning for SLM alternatives to sugar cane cultivation.

<table>
<tr><td colspan="2">Outcome 3: Capacities for knowledge management for SLM are developed.</td></tr>
<tr><td>Indicators</td><td>Rating</td></tr>
<tr><td></td><td rowspan="4">Satisfactory
Yes (achieved), - in this case, through learning-by-doing approach. The development of the Forestry Information system is a case in point. The boundaries have been documented and shared in connection with the development of the FILS and are impacting on users both through the upgrading of the quality of information collected concerning forests lands in the government information system based at MOHL/LAVIMS. The information includes lease, title and deed. The pin number for each land user is established.</td></tr>
<tr><td>The boundaries of all State-owned lands have been digitized and are integrated into land information systems of the Forest Service, MoHL, UoM, NRSC and any others that wish to integrate this information.</td></tr>
<tr><td>A clearly defined, transparent mechanism will be in place for other government and civil society institutions to gain access to information from the SLM-related land information systems.</td></tr>
<tr><td>SLM M&E systems are operational for agricultural, pasture, forest lands and wetlands, and operational costs are covered by non-project sources.</td></tr>
<tr><td></td><td>Satisfactory</td></tr>
</table>

3.1 Participatory assessments of the sustainability of land use systems.	Project was informed by a root cause analysis and several studies have been conducted. The studies were conducted by the UOM and other consultancies as per the operational work plans approved by the SC and TAG. These studies and also the relationship with the UOM for ongoing monitoring should be followed up.
The causes and the severity of soil and fertility loss have been identified for each major type of agriculture on the two islands, and best practices/lessons learned for each agricultural system have been summarized.	
The causes and the severity of soil and productivity loss (especially loss of preferred forage spp.) have been identified on grazing lands, and the lessons learned/best practices have been identified.	
The ability of all forest plantation species to retain soil/prevent erosion has been analyzed and ranked, and management practices for improving soil holding capacity of each species have been identified/proposed.	
The economic and financial viability/profitability of each of the main forms/systems of sustainable agriculture and sustainable pasture use and forest uses have been analyzed and summarized.	
Opportunities for improving financial returns for sustainable forest plantation management have been identified.	
3.2 Sharing of Knowledge on SLM	Satisfactory Actual activities included sharing of knowledge on SLM, Sensitization Campaign for SLM on the UNCCD day 17 June 2010, distribution of SLM booklet (French Version) in NGOs and private sector. The actual training provided on agricultural extension was very successful for engaging farmers and NGO participation and for hands-on learning. This type of activity has the potential for more direct environmental impacts but must be followed up and supported by extension. This type of activity needs to be built upon and scaled
Booklets on ecologically sound and financially profitable SLM practices are received by 90% of all farmers and herders on two islands.	
Agricultural extension materials are modified to enhance SLM techniques.	
All agricultural extension officers receive training in sustainable agricultural techniques.	
All members of national and regional assemblies receive SLM policy briefs.	
3.3 Development of Land Information Systems.	Satisfactory The development of the Forestry Information system is a case in point. The boundaries have been documented and shared in connection with the development of the FLIS and are impacting on users, both through the upgrading of the quality of information collected concerning forest lands in the government information system based at MOHL/LAVIMS. The information includes lease, title and deed. The pin number for each land users is established
An intensively ground-truthed forest cover-type map, based on an IFS classification scheme that takes into account FSM information needs and the capabilities of the imagery available is completed and integrated into the FLIS.	
All State forestlands survey boundaries are digitized and entered into the FLIS, and all available ownership information of private forestland ownership is integrated.	
A protocol for integrated standards, access conditions and data sharing is established and applied for the network of LIS, providing essential information required for SLM.	
3.4 Development of monitoring and evaluation systems.	GIS has been utilized, and a system for forest management is in place.
A system for monitoring the use of best practices that minimize soil loss and maintain soil fertility is operational on both islands.	
A system for monitoring the amount of soil cover at the end of the dry season and the abundance of quality forage grasses/spp. is operational for the pasture lands on Rodrigues.	
A system for monitoring forest encroachment, clearing of forest for deer pastures, clearing of forests on river and mountain reserves,	

encroachment on wetlands and monitoring the expansion of settlements is functional.	
3.5 Enhanced SLM through improvements to the State lands leasing systems.	Through the FIS, the department has been able to understand gaps with the leasing system for optimizing forest management. For example, the traditional practice of deer farming and leases for hunting and fishing are now being questioned. This is already beginning to shift as a result of the new information being collected and the process in which the development of better management practice questioned some of the destructive practices.
All new leases and renewals include incentives for SLM and/or penalties for land degradation.	
3.6 Planning for SLM alternatives to sugar cane cultivation.	Satisfactory This has been include in the IFS
Alternative land uses to sugar cane have been identified. The ecological sustainability and the profitability of each has been analyzed and ranked.	
Decision makers are informed of tradeoffs between land use alternatives.	

Comments/Recommendations:

According to the project document, the SLM knowledge management and monitoring system should include economic and financial analyses of the present land use systems and the use of these tools for identifying/developing new, viable systems as needed. It should continually synthesize and diffuse best practices and lessons learned. A status report of land degradation/SLM is to be developed for both islands so that land owners and natural resource users are aware of these results. Corollary to the use of the KM system, key policy options need to be identified and presented in a suitable form to authorities and decision-makers.

The expected result was reviewed in terms important components of knowledge management system strengthening, including the ability of the system to generate relevant knowledge products and services, such as information management tools required to support effective knowledge sharing and learning. These would ultimately influence SLM decision making and practices. In general, these outcome activities focused on the development of the FLIS, and the important work of KM more broadly is still in need of much work. All of the project and tools generated by the project need a home base aligned to the overall monitoring system for SLM. A webpage and a knowledge portal are part of this vision.

Knowledge products

The project was successful in engaging the University of Mauritius for research and new knowledge generation on SLM. In 2008, graduate students from the University of Mauritius conducted all activities under outcome 3.1. The studies have been used for the development of the FLIS and have been incorporated into SLM decision making within the scope of the project TAG and other activities, i.e. Integrated Financing Strategy and NAP. The question is how the relationship with the UOM might continue to strengthen capacities and flow of knowledge generation needed for SLM research and monitoring activities. This connection with the University of Mauritius is an important element of SLM strategy and should be continued; perhaps through formal relationship or MOU linked to SLM monitoring as the common objectives of the University and SLM project once again can merge. The project should develop more knowledge products from some of the research activities to build on and advocate for SLM/NAP-IFS financing and implementation.

Other Knowledge services

Forestry Information Management System FLIS

A significant output of the project has been the development of the ***Forestry Information Management System FLIS,*** a Forestry management decision-making tool and also as a good prototype for up scaling to other government departments with regard to collecting and using information concerning land and water use and degradation. The important part of the FLIS to the SLM system is LAVIMS, based at the MOHL, as it provides the overarching cadastre system with the base map. Individual ministries, such as Forestry, can collect the information, which can then be overlaid on the overarching system for optimal SLM decision-making and vice-versa. The principle for good information management is that good data collection is done closest to the source.
The FLIS survey system provides important data for information management and decision making concerning the land status and use. The FLIS system, using GPS and GIS techniques, provides the information and monitoring system for the forest and land cover. Moreover, SLM information generation can be shared and overlaid with other ministries responsible for monitoring other aspects of the land and water usage. LAVIMS is the MOHL system using aerial high-resolution imagery. This has been integrated into the Forest Land Information System as well as all State Forest Land Boundaries. With the Forest Cover Map, new forest boundaries are uploaded and regularly updated through use of GPS by the Survey Office of the Forestry Service.

Several training sessions have been held with Forest Officers and the Ministry of Housing and Lands on FLIS. The FLIS is an important part of the overall Monitoring and Evaluation System for SLM, which is being effectively linked to LAVIMS. The project had been working collaboratively to develop protocol for harmonizing the data sharing, having held several meetings with the LAVIMS consultant for the development of a National Spatial Data Infrastructure (NSDI) for implementation of data sharing, standards and a user groups' protocol to minimize duplication. This is a next step.

From FLIS to National Monitoring & Evaluation System on SLM

Apart from the data on forest, other *in-situ* data are needed in order to monitor SLM projects. These data include vegetation, forest, biodiversity, soil, hydrology and scientific information generated by experiments and observations related to land degradation. This type of information is necessary for land use planning and development of alert/response systems. It needs to be regularly collected, validated, harmonized, standardized and structured in accessible (NSDI) and interoperable databases (GIS). In order to monitor the upcoming SLM projects, the existing FLIS, after validating and harmonizing the current data, needs to be upgraded toward a national M & E system.

The current FLIS (Forest Land Information System) should be geared to put forward not only with Forest data but also all the national land cover/land use data (water, wetlands, agriculture, settlement) in order to accomplish the following:

- → Establish a national spatial database on national resources based on GIS technology
- → Establish a land use planning process in a pilot area based on a participatory approach;
- → Establish baseline mapping specifications and procedures;
- → Analyze and understand historical trends; identify drivers for land use changes and modeling for future scenarios;
- → Establish soil map at an appropriate scale to simulate soil loss together with other data, such as rainfall data and topographic data.

Other important components of the KM system include...

☐ Web platform for knowledge diffusion and effective knowledge sharing

While SLM conducted more than sufficient trainings and related activities, the challenge has been to identify qualified people in positions for cross-sector planning and collaboration roles. Management and decision makers are not necessarily coming to meetings. The project instituted training-the-trainers approach-which the team found commendable.

☐ Institutional arrangement for SLM monitoring system

The project has demonstrated a need for continuous inter-sector stakeholder participation in SLM planning and decision making. This has been shown through TAG and SG committees and has involved members of the public and private sector as well as the business, university and the NGO communities. The institutional arrangement can be formalized by a standing committee on SLM for the purposes of monitoring and planning. Several key ministries are vested on environmental protection and land use, including MOAF, MOE, MOHL and MOT.

A lesson arising from the project (aimed at instituting SLM as an approach, development of KM tools and capacity strengthening) is that information about cost benefits of NRM should be dynamically and continually shared upward with policy makers for the information to influence the budgeting process. Key learning highlights the need for cross-sector coordination and collaboration beyond ad hoc inputs for immediate capacity strengthening. SLM is a long-term process; moreover it is an 'approach.'

Outcome 4: The National Action Program for the UNCCD is completed.

Output 4.1. Preparation of the NAP;
Output 4.2. Adoption of the NAP by GoM.

Outcome 4: The National Action Program for the UNCCD	
Indicator	Rating
NAP approved by Cabinet of Ministers.	Satisfactory
4.1 Preparation of the NAP	The NAP is being finalized internally based on synergistic activities including the policy study and the SLM Investment Plan (IFS Integrated Finance Strategy for SLM). It has not been submitted to the cabinet but will be done in the near future. The NAP is intended to incorporate a national policy. NAP has not been presented to Cabinet. A small inter-sectoral committee is recommended. Evaluator learned that the University of Mauritius was commissioned to develop the draft, but this is still at large. Consultant has not been paid. MOE funded the NAP development process. This needs to be followed up and finalized as soon as possible.
Final draft of NAP completed.	
Baseline national report of land degradation submitted.	
4.2 Adoption of the NAP	
NAP adopted by Government and stakeholders.	
NAP published.	

Comments/Recommendations:

The NAP was delivered through the integration of several activities, including the refinement of the Forest policy, the SLM policy study and the NAP-Integrated Financing Strategy Development process. Finalizing the NAP is a priority as it unfinished. In general, the evaluation team rated this set of activities as a good contribution to the outcome and gives the outcome a satisfactory rating. However, the implementation of the NAP will depend on the institutional arrangement for cross-sector collaboration and multi-stakeholder participation in monitoring and implementing NAP- IFS. The results of the NAP implementation are dependent on the continued development, refinement and staffing for the cross-sector SLM information management/monitoring system already begun with the LAVIMS and FILS integration.

Results of the Terminal Evaluation workshop: NAP formulation

The NAP baseline work, including the policy for forestry, was also employed to develop the National SLM Integrated Financial Strategy.

What Worked?

- NAP was used to plan the financial strategy;
- Already integrated with the IFS, all projects have been costed, implementation agencies identified, sources of funding identified and timeframe established;
- The programme will be better targeted to meet SLM goals, not through a piecemeal approach;
- A pool of projects from various sectors was identified.

What did not work?

- There was delay in adaptation by the government before it became an implementable document to be included in the public based budgeting approach;
- Not enough funds were available to update the NAP to voice duplication, e.g. LAVIMS and SLM project. Objectives should be harmonized to avoid duplication as each project has different objectives. The degree of accuracy for data capture must be the same;
- Ministry of Housing and Lands under the LAVIMS project are in the process of updating the agricultural lands (forest, vegetables cultivation);
- There is a need to ensure the coordination with SLM activities with more or less the same objectives.

Relevance, Effectiveness and Efficiency

In considering the tri of relevance, effectiveness and efficiency, the evaluator reviewed the log frame and measured the expected goal against the enabling environment for SLM including institutional, organizational and individual capacities to mainstreaming SLM. In considering relevance, the evaluator considered environmental situation as per SLM contribution to SHD: National goals and ongoing sustainable development processes and finally in considering efficiencies, the evaluator looked at the cost effectiveness of project inputs against expected outcome and overall goal: Outputs and activities. In general, the he project objectives conform to agreed priorities in the UNDP project document. This was also corresponding with the country program document (CPD) and country program action plans (CPAP);

In terms of results the *training* packages have directly contributed to poverty alleviation and good governance through the training imparted to individuals and indirectly through activities involving members of the Steering Committee and the Technical Advisory Group in the public sector and directly with the public through NGOs in communities by means of the press/media and other strategic communications. An awards ceremony gained high visibility at the University of Mauritius and in the process influenced policies and programmers, i.e. MID programme, Forestry Policy, National Action Plan UNCCD, SLM Strategic Integrated Financing Strategy development, SLM policy study and, indirectly, through training NGOs and private sector participants who impacted through the work. They develop local livelihood programmes empowering women and youth with income-generating activities and provide more sustainable practices in relation to land and water management.

Country Ownership

The project benefited from good country ownership and support. It was embedded in a strong and willing Forestry Service at the Ministry of Agro Industry and Food Security but had excellent support and participation of Ministries and nongovernmental including private sector partners. The project concept reflects National development planning policies and is influencing other key processes

including the recent articulation of National Sustainable Development Goals (also see section 3.3. for more linkages to ongoing interventions in the sector below).

As illustrated by the list below, the government authorities have been increasingly concerned about the growing incidence of land degradation in both Mauritius and Rodrigues over the last few decades and identified the same in a series of reports and proposals. The concept of SLM in Mauritius clearly has been evolving with time (see SLM financing strategy 2011 p. 32):

- → The National Environmental Action Plan 1988 identified SLM as one of the main Environmental issues confronting Mauritius;
- → The National Environmental Strategy 1998;
- → The Environmental Protection Act 1992, then 2002;
- → The Environment Investment Program;
- → The National Physical Development Plan (1993), as a basis for integrating land use planning;
- → The Environment Investment Program II;
- → The National Development Strategy 2003, which has identified a number of gaps in the development framework that have a bearing on the processes underpinning land degradation;
- → The Baird Report on Coastal Erosion;
- → The National Environment Strategy 2008, of which a Draft Report is available at April 2008;
- → A National Forest Policy;
- → The Mauritius National Biodiversity Strategic and Action Plan (2006-2015);
- → A National Action Plan, under UNCCD, which has been produced in First Draft.
- → National Economic and social transformation plan

Important criteria for UNDP-supported, GEF-financed projects are that they address country priorities. Evidence that the project fits within inter-sector development priorities includes inclusion in the Forestry policy and the NAP, in the new environmental laws and in the new participatory MID strategies for sustainable development and livelihoods around protected areas. These have been developed with involvement from government officials and adopted into national strategies, policies and legal codes.

SLM drive and ownership are demonstrated in several fundamental ways: (1) The Steering Committee and Technical Advisory Committee member are diverse and expressed activity across institutional lines .Most have been sincerely vested in providing support for this project; (2) the Government has co-financed in hard currency many of the project activities including LAVIMS and NAP development; (3) the Government supported the development of a multi-stakeholder SLM investment plan based upon project results.

The Permanent Secretary (PS) of the Ministry of Agro Industry and Food Security expressed support for the project. He stated there is growing public awareness of issues in relation to SLM including, rapid tourism development, environmental health and pollution from destructive agricultural practices, need for watershed protection. The evaluator also noted and observed the intensifying public awareness of the increasing incidence of cancer on the island (radio broadcast), expressed need for win-win sustainable and cleaner energy solutions (a recent example of a alternative energy and compost example was provided by the PS), sustainable development involving agriculture and sustainable agriculture as part of the Mauritius sustainable development and economic growth model (MID strategy).

The PS of MOAF has been involved in all the SLM Steering Committee meetings. Many relevant government sectors are active in the technical advisory group meetings (see list of TAG members below- this is observed as per the review of these meeting notes). The Ministry of Environment (MOE) provided US $15,000 towards the NAP development process..

Mainstreaming

What did not work?

The project did not institute a plan for monitoring and follow-up due largely to the large scope. It was a medium-sized project with many activities, only $ 500,000 and an ambitious agenda. The fragmentation of different institutions and the lack of collaboration and sharing of data needs were highlighted. Technical staff is trained in specific areas but stated they are not able to apply the training in their daily work due to frequent transfer and changes in Post, Ministry and Division.

What could be done better?

The NAP must be finalized in order for it to be integrated in the political planning processes. The NAP action plan might be somehow linked or integrated with MID mechanism for Maurice Ile Durable or 'Smart Mauritius' participation in planning for a sustainable development campaign. Monitoring and follow-up by an inter-ministerial committee at the national level must be instituted.

Where do we go from here?

One option is to consider the restructuring /merging of different institutions which deal with SLM, such as Environment merging with IS and NPCS. SLM must be in a higher order coordination agency or ministry dealing with land and sustainable development issues in order to avoid fragmentation. There needs to be more public awareness and sensitization as well. In addition, more specific capacity building is required in line with global context, including Climate Change and Sustainable Resources Management.

Rodrigues

In order for there to be impact on SLM in Rodrigues, specificity should be considered (grazing areas and culture, honey and bee keeping). Rodrigues also has a report in the national program, but a regional Forest Policy and Action Plan should be prepared. Funding should be allocated in the budget for specific SLM projects, and SLM should be done at a regional level.

More policy advocacy work is needed to successfully mainstream SLM in national and local government. This will require leadership and facilitation that enable cross-sector learning, planning and initiatives to emerge. In addition, it will be important to follow-up SLM with the Protected Areas Net (PAN) work (Interview PAN PM manager, Oct 12) and reinforce a cross-sector learning mechanism in order to yield more understanding of payment for ecosystem services (PES) and the ecosystem and natural resources management approaches and strategies.

Sustainability

Although the project was successful in delivering process related results (project status review in annex), the evaluation team finds that project impact on environmental outcomes and overall project sustainability is an issue. The project demonstrtaed valuable institutionalized mechanism and also developed some tool and an action plan that should be rolling towards SLM. It must be instituted and a monitoring mechanism put in place - to this end this is not formalized at date. Towards the overall programme outcome, the project's goal was to contribute to and institute a SLM mentality within all government sectors, programmes and services and promote facilitation of knowledge and learning, regular coordination, of which facilitating integrated service and technical cooperation across ministry is a very important aspect. Establishing a working mechanism for cross-sector collaboration and monitoring on SLM, more demonstration and capacities strengthening work with resource users, initiating focus on a multi-use information management system for SLM, i.e. building upon existing

LAVIMS and instituting cost benefits analysis as a methodology for all NRM issues across sectors are key elements.

For the sustainable land management (SLM) beyond Forestry to be sufficiently mainstreamed into policies, regulations, strategies, plans, educational systems, a general recognition on the part of politicians and decision makers is required. This is still a barrier. Environment/natural resource economics needs to become a tool for land use planning and policy development, including requisite cost/benefit analyses of present land use systems (the cost of doing nothing) in comparison with similar analyses of SLM option.

Catalytic role and impact

A focus on national demonstration solves critical problems, promotes public environmental education and reduces immediate risks, while the global demonstration of ecosystem management as governance and management issue works towards a main project objective of sharing good practices and a national sustainable development of risk reduction systems and policies. Ecosystem management is cross-sectoral, sustainable development and risk reduction planning. Downstream demonstration solves critical problems, providing economic and social valuation and support for the data collection process for building the government-wide monitoring system for SLM. This project was meant by design to focus specifically and entirely on sustainable actions.

→ *Recommendations:-To support the replication and the sustainability of the project outputs*

- Consider an institutional home for a website and monitoring to serve the SLM information and planning needs and upload all the project materials for resource users, decision-makers and land managers;
- Continue to build on the project's work with the IOM and the GM to support Mauritius as a regional leader on regional capacity strengthening for SLM;
- Focus more activities in the future on capacity strengthening around the downstream aspects of integrated SLM services delivery.

Table 2 -Summary of Key Ratings

Key Findings	Rating	Comments
Project formulation	R and S	Relevant and Significant - Design is comprehensive but the stated activities (indicators) could be better linked to root causes.
Implementation approach	S	Project has been effective implementing many activities. For example, it has produced many trainings, research and tools for IM. Strategic approach around big investment items including the NAP-IFS, the FLIS and the training packages are now needed also linked to continued need for national no regional capacity strengthening. All these items however need follow up for project to be sustainable.
Country ownership/Driveness	HS	Support and appreciation for project activity is high.
Stakeholder participation	HS	Government involvement is high. Project follow up should include r more involvement of resource users, Private Sector and NGOs.
Replication approach	S	Stronger replication strategy needed, including project "exit strategy". Need for some bridge funding for developing a sustainability plan or a new project concept.
Cost-effectiveness	S	Financially responsible but need better f financial monitoring linked to project strategy.
UNDP comparative advantage	S	Project is in line with UNDP's strengths and cooperation framework
Linkages between project and other interventions within the sector	MS	Donor, NGOs and Government links need work. UNDP can continue to facilitate and support internal synergies and also regional cooperation linkages begun under project.
Management arrangements		Relevant and Significant - especially the demonstration of the cross sector institutional working arrangements including the TAG multi sector and multi stakeholder modality
Implementation	S	Implementation has been satisfactory with good government ownership of results
Financial planning	S	Good
Monitoring and evaluation	S	Quarterly reports are good. Monitoring and Evaluation has been in line with the adaptive management approach and the project has fulfilled all GEF/UNDP requirements including regular audit. PIRs might be better framed around the strategy.
Execution and implementation modalities	S	Government support is strong.
Management by the UNDP country office	S	Full support from country office. Capable, experienced program officer.
Coordination and operation issues	S	Coordination is facilitated by very supportive DOF, Steering Committee SC, and TAG. The follow up programme will need a monitoring framework for NPA IFS across sector and as a multi-stakeholder agenda.
Identification and management of risks (adaptive management)	S	The mapping of risks has been conducted and was useful during implementations. Risk going forward includes overall sustainability of effort for mainstreaming and cross sectoral approaches for mainstreaming SLM.
Results	R and S	Relevant and Significant - But need to maintain momentum and finalize and approve NAP IFS
Attainment of objective	S	Project can be on track if mid-term recommendation are enacted for sustainability and work processes enable d. Momentum is key and rapid action is required in this regard.
Prospects of sustainability	Moderately Likely (ML):	Project will deliver key outputs linked o sustainability outputs, NAP, IFS, and FLIS, etc. More and rapid action needed to turn these outputs into work processes and ensuring institutional arrangement for monitoring them. "On-the-ground" impact is depended on a good models and much remains outstanding as per evaluation. National Spatial Data Infrastructure (NSDI) is next step for FLIS work.

4. CONCLUSIONS AND RECOMMENDATIONS

The project has strengthened capacity and accomplished all and more than what it set out to do. For example, the project was intended to be a capacity building project but in the process has successfully demonstrated the cross-sector planning approach needed for SLM through the TAG and SC, undertook policy refinements and development at the Forestry Department, developed SLM policy framework, developed and delivered training packages, developed important KM prototypes and tools i.e. FLIS. For replication purposes, the project concept in Mauritius might be upgraded with these elements linking project action directly to the root cause of land degradation in Mauritius and Rodrigues (view shared by stakeholders - TE workshop (January 2013).

The project can be replicated and scaled with adjustments taking into account the critical learning, including linking indicators to root causes, resourcing new SLM projects appropriately, undertaking demonstration and employing a *learning by doing* approach directly with resource users and planners in order to complement the training and upstream focus. The project has notable good practices including success with the environmental economics training program and the forest fire management course conducted by trained trainers.

During the TE, the project manager reported frustration as follows, *'the underserved demand created by the trainings especially when involving community members and farmers. The team could not provide the resource users with the tools and longer term support to sectors with integrated extension to undertake SLM at source'.* The project could be upgraded for replication such that it also focuses on root causes and resource user's empowerment and services, i.e. water shed rehabilitation, area i.e. reef to ridge planning, conservation agriculture and changing destructive agricultural and other practices, poverty alleviation and income generating activities, i.e. Rodrigue's sustainable `development through eco-tourism and creation of a regional relevant national park as an alternative development pathway is a case in point. **This can be achieved with the finalization and approval of the NAP, the upgrading and endorsement of the IFS. The institionalization of the SLM monitoring framework and cross sector and multi-stakeholder committee for the NAP/IFS is part of this and is necessary prerequisite or careening SLM in Mauritius's**

The execution agencies and the project stakeholders should consider maximizing return on existing investments in training and capacity building. There was a great deal of enthusiasm expressed by participants of the Terminal Evaluation (TE) workshop (Jan 30, 2013) and expanded SLM training linked to national development planning linked to NAP -IFS development and implementation. The UNDP and the GOM should assist to capitalize upon this momentum. As noted during mid-term evaluation, the strategy was the process by which the SLM financing plan was developed and its implementation linked to the NAP and SLM policy.

Recommendations

Formulation, strategy and design

→ UNDP, MOE, and MOAF: Reinforce SLM project strategy and results to date through advocating the institutional arrangement for a knowledge management approach across sector within the context of the NAP -IFS programme implementation framework. Essential next steps include instituting a multi-stakeholder monitoring and evaluation committee.

→ UNDP, MOAF: Learning from the project suggests that project related activities in Rodrigues can be reinforced and scaled up. More regional planning work for SLM planning and capacity strengthening and synergies with work on national protected areas, demonstration of alternative livelihoods i.e. Eco-villages and specific work on overgrazing and invasive species control should be explored.

→ MOAF, MOU, NGOs, and Private sector actors: The activities that touched on direct farmer, forest or fisher field schools through trainings were successful, especially in Rodrigues. The recommendation is to augment alternative SLM livelihoods activities for resource users in the environmental sensitive and highly vulnerable areas, and find ways to expand the development of incentive schemes for deer ranchers and national and regional planning including SLM.

→ UNDP MOAF MOE MOT MOHL MOLG, Water Utilities: Undertake SLM 2 - project conceptualization work on SLM linked to planning. This needs immediate follow up to deal with the institutional gaps exposed during project implementation. In consideration of the institutional arrangements demonstrated by the project and in relation to the key stakeholders and partners identified along the Ministerial lines and in the public domain within the private sector and NGO, all parties must continue to mobilize SLM network around the MID action planning process.

Immediate actions for sustainability

→ MOAF, MOE: Finalize the NAP and endorse IFS as NAP action plan. Update IFS as two years have passed.
→ UNDP, MOE, MOHL, and MOAF: Follow up project work on SLM planning regarding institutional. Develop KM and focus on formalizing institutional monitoring mechanism piloted under the project as a multi-sector and stakeholder platform. Involve private sector and NGOs.. Involve private sector and NGOs.
→ UNDP- MOAF: UNDP share terminal evaluation with government officials in appropriate forums to advocate for continuing SLM project taking into consideration the learning based on SLM project.
→ UNDP, MOE, MOHL, and MOAF: Undertake project concept design activity for GEF 5 or GEF 6.
→ UNDP, MOE, MOHL, and MOAF: Develop strategy to continue the project activity and its focus on multi- stakeholder institutional mechanism piloted under the project as a planning platform.
→ UNDP, MOE, MOHL, MOAF: Develop a short policy advocacy paper outlining the interlink ages and the role an SLM committee can have for creating synergy and supporting monitoring activities outlined in section 3.2.. Distribute through appropriate policy forums and to public if appropriate.
→ UNDP - MOAF: Follow up the GM, IOC and GOM partnership for regional cooperation possibly linked to a new project conceptualitization process- follow-up needed ASAP.
→ MOAF, MOE, and MOU: Hold a dialogue about integrating the training courses as a package for national and regional consumption. They might be integrated into the University of Mauritius formal programmes. The training work will need to be followed up and activities reinforced for integration into national learning programmes.
→ MOAF, MOE, and MOHL: Develop a SLM webpage and knowledge portal. All of these materials need an institutional home base and knowledge management strategy.
→ MOAF, MOHL: Continue to develop protocol for harmonizing the data sharing, and the work on synergies with **National Spatial Data Infrastructure (NSDI) for implementation of data sharing**, standards and a user groups' protocol to minimize duplication. This is an important next step.

5. LESSONS LEARNED

The primary lessons learned from this project are the following:

Lessons Learned

The primary lessons learned from this project are the importance of the following:

→ SLM is achieving multi-stakeholder collaboration in planning and implementation of traditionally only government or community or private sector services. The broad platform for engagement of many stakeholders is what unique and making difference is. The adoption of the action plan by government as a cross sector and multi-stakeholder initiative and action planning is central to future success.

→ Project activities, particularly those to be financed by more than one source, should benefit from strategic implementation approaches to make certain each is aligned to avoid conflict, increase efficiency and enhance synergy.

→ The success of many SLM projects globally is the capacity to catalyze inter-institutional coordination based upon a shared interest in project implementation. Projects should recognize

this success and capitalize upon it by making plans to assist Steering Committees and Technical Advisory Committees to evolve into SLM support units.

→ Capacity building projects, particularly those based primarily upon training, should be designed to make certain that tangible products are developed that may be used by practitioners as reference materials and built upon as replication and up scaling tools.

→ Predicating project success upon the timely adoption of laws and policies is inherently risky. Contingency plans should be in place to deal with very likely delays.

→ PIR formats should be strengthened. PIRs should provide great information regarding the quality and impact of project activities. Project reporting should address not only achievement of 'outputs' but, more importantly, achievement of objectives. Presuming that achieving originally conceived outputs will lead to achieving SLM objectives is not always an accurate method to monitor project results.

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ATTACHED

ANNEX 2 - ITINERARY- UNDP ADD

ANNEX 3 - LIST OF PERSONS INTERVIEWED AND PRESENT AT THE TE EVALUATION WORKSHOP

Mr V.Tezoo	Conservator of Forests-National Project Director (chairman)
Mr. P. Khurun	Deputy Conservator of Forests
Mr. A.Dookhun	Project Manager SLM -UNDP/GEF/FAO/GoM Project
Mr. M.Puttoo	Director -National Parks and Conservation Service
Mr. R.Hemoo	Chief Technical Officer. Min. of Housing and Land (MoHL)
Mr. A.Ruggoo	Associate Professor-University of Mauritius
Mr. D.Prithipaul	Environment Officer-Min. of Environment and Sustainable Development
Ms. N.Lilldharry	National Remote Sensing Centre
Ms. J.Sauzier	Secretary-Mauritius Meat Producers Association
Mr. N.Joyram	Administrative Assistant, SLM - UNDP/GEF/FAO/GoM Project
Mr. P. Bundhoo	Forest Guard (Secretary)

UNDP Management Team at UNDP Mauritius

Minister of AOF-NAME ?

ANNEX 4 - SUMMARY OF FIELD VISITS (ALSO SEE ANNEX-11-TE WORKSHOP)

The field visit to Mauritius January 23 - February 2 involved work in Mauritius with the Evaluation Team - Forestry Services FS, UNDP and the Project Management Unit - Forestry Services FE and the thoughtful development of a Terminal Evaluation workshop Wednesday January 29, 2013 as integral aspect of the methodology to build capacity on the implementation and served to garner important reflection upon implementation and for further support for the project evaluation recommendations with regards to the result and need for ensuring project sustainability. The was an interactive event and indeed fulfill its objectives. The concept note for the TE workshop is attached.

ANNEX 5 - LIST OF DOCUMENTS REVIEWED

- Project Document
- Auditors Reports for 2010
- Mission Report Summary—Preparatory Field Assessment for SLM Project Implementation Review--May 2012
- PIR for 2009 and 2010, 2011
- Project Inception Workshop report—January 2006
- Mid-term Report 2008
- Project Steering Committee meetings reports (9)
- Project Implementation Review Exercise and Recommendations
- UNDP Evaluation Guidance for GEF-Financed Projects—version for External Evaluators March 2011
- All project outputs to date.

ANNEX 6 - QUESTIONNAIRES USED AND SUMMARY OF RESULTS

Please answer all questions

Program Formulation/Design

⇒ Conceptualization/Design (R): risks and assumptions
⇒ Provide a brief description of the program design process: when, who, what, where and how?
⇒ Are the outcomes realistic and relevant?
⇒ Provide a succinct diagram of the program management and implementation arrangements;
⇒ What were the inherent risks and assumptions in the original design?
⇒ Were they proved correct or incorrect?
⇒ How did the envisioned risks and assumptions play out during program implementation?
⇒ Individual GEF or other project scale up possibilities?
⇒ Sustainability: funding mechanisms. Absorption Capacities: Enough capacity to build capacity?
⇒ Enabling Environment: Policies, Legislations, Norms
⇒ Other issues: –Natural disasters, etc.
⇒ Elaborate on the original program conceptualization process. How did this collection of activities become a program?
⇒ Rate the design on a scale of 1-5? (with five being highest).

⇒ Country ownership/Drivenness
⇒ How does the government interact with the program?
⇒ Is the program a national priority? Why or Why not?
⇒ Where is the institutional home of this project? Is it appropriate?
⇒ Is there legislation in place that supports the program outcomes?
⇒ What are the enforcement mechanisms?
⇒ Could the environment program be housed in another institution?
⇒ Stakeholder participation in design (R):
⇒ Who are main/key program stakeholders and beneficiaries? Describe how stakeholder groups are involved in the design process.
⇒ Rate the stakeholder participation on a scale of 1-5 (with 5 being the highest).
⇒ Replication approach:
⇒ Can program design/approach be replicated regionally, nationally or globally? Why or Why not?
⇒ Other aspects:
⇒ Provide rating of project design on a scale of 1-5 (with five being the highest rating possible).

Implementation/management approach (R):
⇒ Describe the program management arrangements. Draw a schematic if possible.
⇒ Does the PMU use the resource and results framework as a management tool? Provide a concrete example.
⇒ Provide concrete examples of adaptive management, i.e. comprehensive and realistic work plans.
⇒ Describe the use and establishment of electronic information technologies to support implementation, participation and monitoring.
⇒ Describe the general operational relationships between the various institutions involved and others and how these relationships have contributed to effective implementation and achievement of program outcomes. Give examples, i.e. training, with name and place. How would you rate the implementation approach on a scale of 1-5? (Five is the highest rating possible.)

Monitoring and Evaluation (R):
⇒ Did program management staff undertake periodic oversight? Describe the system of ME.
⇒ What evaluations and or studies have been conducted on aspects of project?
⇒ Describe the systems and tools employed for MxE of program, i.e. baselines established.
⇒ Program indicators: Do they work? Are there results and progress indicators? Describe the data analysis process.
⇒ List the staff and designation of responsibilities with respect to MxE, i.e. capacities and resources for MxE.
⇒ Rate the MxE on a scale of 1-5. (Five is the highest rating possible).

Stakeholder Participation and Implementation (R):
⇒ How is information produced and disseminated by the project?
⇒ How are the local resource users and NGO participating in project and decision making? Provide examples.
⇒ Comment on the overall strengths and weaknesses of the approach adopted by the program with regards to stakeholder participation and implementation.
⇒ Please describe the process and result of the establishment of partnerships and collaborative relationships developed by the project with local, national and international entities. Describe the effect of these on project implementation.

- ⇒ Describe the involvement of government institutions in project implementation, the extent of government support of the project.
- ⇒ How would you rate the stakeholder participation and implementation on a scale of 1-5? (Five is the highest rating possible).
- ⇒ Financial planning and management:
- ⇒ Describe the financial management systems.
- ⇒ Has the program been audited? Provide the reports and a description of the major findings?
- ⇒ For each individual project, develop a table showing outcomes, outputs, activities, cost by activity status of activities and a description of what has worked, what can be done better and what needs adjustment;.
- ⇒ Describe the financial management (including and procurement and disbursement issues).
- ⇒ Describe the co-financing arrangements.
- ⇒ Fill in the co-financing and leveraged resources table: Annex 3.
- ⇒ Describe in details the UNDP and Forestry's execution and implementation modalities:
- ⇒ Do you think they have worked or not?
- ⇒ Describe the effectiveness of UNDP counterpart and project coordinators' unit in participation in selection, recruitment, assignment of experts and national counterpart staff and in the definition of tasks and responsibilities.
- ⇒ Provide names, levels and times when staff was hired and left, PMU and demonstration projects.
- ⇒ Are there any problems with the current implementation, i.e. partner relations with the current flow of staff in and out of the project?
- ⇒ Describe the hiring process for PMU staff, indicating who is responsible for this. Are the donors/GOL partners involved?
- ⇒ Is the work of the PMU sustainable? Is this a realistic assumption, given the existing PMU resources and staff responsibilities?
- ⇒ Describe the financial officer's roles? Do these roles work? Is there strategic and operational support toward project outcomes and for implementation?
- ⇒ Does the project receive external technical backstopping and support from the wider partner knowledge network? Why or why not?
- ⇒ Do you think the procurement process is streamlined and efficient? Describe it. How can we improve it? How does it affect overall implementation and expected results?
- ⇒ What are some suggested improvements in the human resources situation?

2. Include a matrix for status of the delivery of individual project outputs. Works with managers at project level should elaborate on channels and what they think is needed to move the program forward. Include matrix to help in ascertaining results against the planned outputs.

Key Evaluation Questions

The key issues reviewed include those pertaining to the relevance, performance and success of the SLM program and an analysis of the underlying factors beyond UNDP control that influence the process and impact outcomes (gaps and potentials) in particular.

Design

- ⇒ Whether the original design assumptions prove correct;
- ⇒ Was the design conducive to achieving expected outcomes?
- ⇒ Discussion about baselines and indicators;
- ⇒ Was there change during project implementation and particularly since the mid-term evaluation?
- ⇒ Has the project governance and implementation strategy proved conducive, i.e. expected process and impact outcomes as per design?

⇒ Are there significant lessons to be learned as per project design?
⇒ Describe the national ownership (embedded) and relevance in national and international context.

Implementation

⇒ Management arrangements;
⇒ Adaptive management;
⇒ Log frame used as a management tool;
⇒ PIRs and monitoring system;
⇒ UNDP risk management system including PIR risk analysis?
⇒ Political environmental, social, etc.
⇒ Whether the project design including governance and implementation strategy enabled flexibility for changes or not;
⇒ Review of the MTR recommendations; have they been adhered to?

Financial planning and sustainability
Timeliness and co-financing

⇒ Role of UNDP
⇒ What has been the role of any UNDP soft-assistance activities in helping achieve the outcome?
⇒ Describe UNDP implementation and monitoring support;
⇒ What is the status of the current and planned intervention(s) in partnership with other actors and stakeholders, i.e. FAO?
⇒ Will UNDP be able to achieve the outcome within the set time frame and inputs or are additional resources required and new or changed interventions needed?
⇒ How can the MDG's framework be suited to help achieving the outcome?
⇒ What is the prospect of the sustainability of UNDP interventions related to the outcome?

Outcome related Findings

Effectiveness
⇒ Log frame Outcomes, Overall expected goal
⇒ Enabling environment including institutional, organizational and individual capacities to mainstream m SLM:
⇒ Describe the 4 outcomes.

Relevance
⇒ Environmental situation as per SLM contribution to SHD: National goals and ongoing sustainable development processes

Efficiencies
⇒ Cost effectiveness of project inputs against expected outcome and overall goal: Outputs and activities.

Cross cutting issues

⇒ Poverty reduction: How has the project contributed to poverty reduction through SLM initiatives in the pilot sites and enhanced sustainable livelihoods?
⇒ Governance: How has the project facilitated the participation of the local communities in natural resources management and decision-making processes?

⇒ Promotion of gender equity: Has the project considered gender sensitivity or equal proportion of men and women and boys and girls in decision making process?

⇒ Capacity development: Did this occur for participants and target beneficiaries, and was there communication and due of technologies?

Sustainability

⇒ How project has been integrated into existing processes? Have local and national capacities been strengthened?

Lessons Learned

⇒ What are the key lessons learned /?

SUMMARY OF RESULTS

Outputs and Activities	Activities and Sub-Activities	TE Evaluation Comments
Outcome 1: Mainstreaming		
Outputs Integration of SLM into the new National Forestry Policy and Forest Action Plan	Integrate SLM concerns into the new National Forestry Policy.	Completed
	Integrate SLM concerns into the new Forest Action Plan.	
Development of policy, regulatory and economic incentive frameworks regarding sustainable practices on non-forest land	Prepare draft policies and legislation for integrated SLM as appropriate.	Completed
	Conduct workshops for stakeholder inputs and validation.	
	Guide the new policies and legislation through the approval process.	
An SLM Investment Plan is developed.	Identify priority SLM investment needs and opportunities.	An SLM Investment Plan: Ongoing Action: The international consultant has made several visits to Mauritius and participated in the SLM workshop in February 2011, at which she made a presentation on the Integrated Financing System and submitted and inception report in March 2011.
	Develop a costed SLM Investment Plan including brief concept papers for priority investments.	
	Source investments for SLM.	
Outcome 2: Training and Human Resource Capacity Building for SLM		
Outputs Enhanced capacities for use of integrated land information systems/GIS/remote sensing for SLM	Conduct training on the use of LIS/GIS to SLM. Conduct training on remote sensing applications to SLM.	Completed 2.1.1. Training in LIS, LMIS, GIS, and GPS Completed (Report available at PMU) 2.1.2 Training in remote sensing application for SLM Completed (Report available at PMU)
Enhanced capacities for sustainable pasture management and sustainable agriculture	Conduct training on participatory management of open pasture systems (rangelands-- Rodrigues.	
	Conduct training on sustainable agricultural practices. Develop and apply training modules for Mauritius. Develop and apply training modules for Rodrigues.	2.2 Enhanced capacities for stakeholders participation for SLM--Completed Training activities completed: Sustainable agricultural practices for Mauritius Sustainable agricultural Practices for Rodrigues Training course of participatory management of open pastures for Rodrigues Training course on Project Proposal Preparation for SLM for Mauritius Training course on Project Proposal Preparation for SLM for Rodrigues
	Provide training/assistance in Mauritius to resource users in the preparation of project proposals for integrated SLM. Provide training/assistance in Rodrigues to resource users in the preparation of project proposals for integrated SLM (EU decentralized participation Project, GEF Small Grants).	
	Develop training modules as needed.	

Outputs and Activities	Activities and Sub-Activities	TE Evaluation Comments
Development of capacities for the use of LIS/LIMS and SLM guidelines for integrating SLM into planning/ zoning and permit approval at central and local authorities level	Conduct training in Mauritius. Conduct training in Rodrigues.	Integrating SLM into planning at central/local levels. Further to local advertisement for a planning consultant, no application from qualified local consultants was received. The Town Planning Association of Mauritius has been contacted to provide list of qualified professional planners to undertake the training activity. Activity to start in January 2011 in connection with IFS process.
Development of expertise in environmental/natural resource economics	Conduct hands-on training of trainers and module development. Conduct basic NR economics training of staff in FSM, FSR, AgM, AgR, RRA, and MoHL.	Development environmental/NR economics expertise–Completed 2.4.1 Training for Trainers Course on Environmental Economics by International Expert Mr Lars Hein. 2.4.2 Training of Staff on Environmental Economics by Mrs. R. Ramsurn & Kevin Ruhomaun
Enhanced capacities for restoration and management of fire-degraded sub-humid mountain ecosystems	Develop cost-effective strategies for restoration/reforestation of grass-dominated, fire-degraded mountain slopes. Provide training in restoration tools, including early controlled burning and grazing for fire risk reduction and wildfire prevention and wildfire suppression. Procure basic equipment for controlled burning and fire suppression.	Capacities restoration fire-degraded mountain ecosystems- Completed Action: Final Report on an Integrated Strategy for Forest Fire Fighting has been submitted. Additional training has been undertaken with the Fire Services and Forest Officer at Bras D'Eau on Forest Fire Management and to implement fire breaks in August 2009. Additional Training is scheduled in the southern region of Mauritius in 2011.
Outcome 3: Knowledge Management for SLM		
Outputs Participatory assessments of the sustainability of land use systems	Conduct assessments of ecological sustainability of land use systems for agriculture, pasture use/management and forest use/management (identifying land degradation problems and their causes and identifying best practices, whether traditional or modern) strengths and weaknesses identified for each. Conduct analyses of the economic costs and benefits and the financial profitability of the main agriculture, pasture and forest management systems. Develop synthesis of lessons learned, best practices, knowledge gaps and research needs. Prepare status report on land degradation in Mauritius and Rodrigues.	University of Mauritius developed these research projects with students. This relationship should be continued post project.
Sharing of knowledge on SLM	Develop and implement an awareness raising program for farmers and herders (Mauritius). Develop and implement an awareness raising program for farmers and herders (Rodrigues). Develop policy briefs on SLM for decision makers.	Several SLM posters were presented, and SLM booklets were distributed in the SGP/UNDP project exhibition in June 2010. More SLM booklets, posters and flyers will be distributed on 1 and 2 December 2010 on the occasion of a National Workshop on Maurice Ile Durable organized by the Prime Minister's Office at Swami Vivekananda Conference Centre, Pailles.
Development of Land Information Systems	Develop Forestry Land Information System Mauritius (ownership, forest cover type, forest condition). Define the parameters of the system and procure hardware/software. Develop forest cover map for Mauritius. Digitize the boundaries of State Forest Lands (co-financing Govt). 3.3.1.4. Data entry and analysis of deforestation/land degradation Develop Land Information System for Mauritius (Govt co-financing).	Development of Forestry Management Information System: Completed Action: LAVIM's aerial high-resolution imagery has been integrated in the Forest Land Information System as well as all State Forest Land Boundaries. Forest Cover Map, DEM and new forest boundaries are uploaded and regularly updated using GPS by Survey Office of the Forestry Service. Several additional training sessions have been held with Forest Officers and the Ministry of

Outputs and Activities	Activities and Sub-Activities	TE Evaluation Comments
	Harmonize of LISs. Identify overlaps and gaps among existing LISs (Develop linkages & partnerships between MoHL LIS, MSIRI LIS, NRSC MAURIS, LIS Rodrigues and FMIS, UOM/FOAs GIS). Develop an interagency protocol on LIS information access and sharing and data standards.	Health and Quality of Life. The FLIS will be used to develop the Monitoring and Evaluation System for SLM. Develop LIS in MoHl and Satellite Imagery with Remote Sensing: Completed LAVIM's project is developing of interagency LIS protocol for harmonizing the data sharing. Several meetings held with LAVIM's consultant for the development of a National Spatial Data Infrastructure (NSDI) for implementation data sharing, standards and user group's protocol to minimize duplication.
Development of monitoring and evaluation systems	Develop a system for monitoring the sustainability of pasture lands use and management. Develop a system for monitoring of agricultural sustainability. Develop a system for monitoring forest and forest pasture lands Study forest encroachment using satellite imagery. Monitor clearing for deer pastures from satellite imagery. Monitor clearing of river and mountain reserves and conversion of wetlands from satellite imagery. Develop a system for monitoring the expansion of settlements and their encroachment on other land uses.	Development of Monitoring and Evaluation Systems: Ongoing Action: An international consultant has made several visits to Mauritius and participated in the SLM workshop in February 2011, during which she made a presentation on the Monitoring and Evaluation System. She submitted the report IFS in 2011.
Enhanced SLM through improvements to the State lands leasing systems	Conduct a participatory review of strengths and weaknesses of lease systems in regards to SLM. Facilitate a participatory process to develop improved, strengthened lease systems that provide incentives, regulations and monitoring/enforcement for SLM.	Improvements to the State Lands leasing systems: Combined with Activity 3.4 Action: This activity was combined with activity 3.4 as the same consultant will propose improvement to the state land leasing system based on the Monitoring and Evaluation Systems.
Planning for SLM alternatives to sugar cane cultivation	Identify land use alternatives to sugar cane and analyze the ecological sustainability and economic/financial viability of each. Develop policy briefs and strategies for the promotion of sustainable land use alternatives to sugar cane.	Planning for SLM alternatives to sugar cane cultivation: Completed Action: Several ongoing National Projects have been identified in NAP IFS process - alternatives to sugar cultivation.
Outcome 4: Completion of National Action Program for UNCCD		
Outputs 4.1. Preparation of the NAP	Develop a draft NAP including problem, root cause analysis and prioritization of actions. Complete the modification and validation of the NAP through stakeholder workshops.	This activity was conducted in connection with the IFS and supported by a drafter from University of Mauritius. The NAP document can be finalized internally and submitted for endorsement as soon as possible.
Adoption of the NAP	Government formally adopts NAP and implements negotiation of allocation of national budget for NAP. .	
	Formally publish and disseminate the NAP through awareness and media programs.	

ANNEX 7 - EVALUATION CONSULTANT AGREEMENT FORM

Attached - Signed TOR and Consultant agreement form

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ANNEX 8–SLM TRAINING PROGRAMMES COMPLETED

	Training Program	Location	Attendees	Dates	Trainers	Knowledge Product as a result?	Achievements
1	Participatory Pasture management	Rodrigues	28	2 – 28 April 2007	University of Mauritius	A certificate of proficiency in Participatory Management of Open Pastures awarded	Main expected outcome: Acquire understanding of participatory pasture management (principle, apply into practices) The feedback received from participants indicated that the participants were very enthusiastic, keen and participated actively. All participants had reached the pass level required by the UoM, with the mean mark with 82.5%viii.
2	Sustainable Agricultural Practices	Rodrigues	16	7 May – 7 June 2007	University of Mauritius	A certificate of proficiency in Sustainable Agriculture Practices (Rodrigues) awarded	Main expected outcome: Acquire understandings of environmental implication of conventional agriculture practices and various principles and practices of agriculture sustainable. Feedback received from all resource persons indicated that the participants were very enthusiastic, keen and participated actively. They were satisfied with the level of understanding and proficiency exhibited by the participants for their respective topics. All participants passed the assessment with the mean mark of 66.4%ix (p.6).
3	Sustainable Agricultural Practices	Mauritius	31	18 June – August 3 2007	University of Mauritius	A certificate of proficiency in Sustainable Agriculture Practices (Mauritius) awarded	Main expected outcome: Acquire understandings of environmental implication of conventional agriculture practices and various principles and practices of agriculture sustainable. Feedback received from all resource persons indicated that the participants were very enthusiastic, keen and participated actively. They were satisfied with the level of understanding and proficiency exhibited by the participants for their respective topics. All participants passed the assessment with the mean mark of 68.9%x (p.6).
4	GIS, GPS, and LIS	Mauritius	16	20 August – 19 September	University of Mauritius	A certificate of proficiency in Sustainable Agriculture Practices (Mauritius) awarded	Main expected outcome: Acquire understandings of GIS, GPS, and LIS as tools for a more scientific and sustainable management of natural resources Feedback received from all resource persons indicated that the participants were very enthusiastic, keen and

							participated actively. All participants passed the level required by the University with the mean mark of 44% (p.7)xi.
5	Remote Sensing	Mauritius	14	18 – 29 Feb 2008	University of Mauritius	A certificate of proficiency awarded.	Main expected outcome: Acquire understanding of the application of Remote Sensing for SLM and the concept of Ecosystems and Agro ecosystems. Feedback received from all resource persons indicated that the participants were very enthusiastic, keen and participated actively. The overall performance of the participants at the examination was 71.4%, but 28.6% did not pass. The mean mark was 51% (p.6)xii.
6	Project Proposal Preparation	Rodrigues	22	21 April – 26 April 2008	University of Mauritius	A certificate of attendance awarded.	Main expected outcome: Acquire understanding of preparation of a project proposal. Analysis of the feedback questionnaire filled in by participants showed that they found the training extremely informative, pertinent and useful and the sessions very interesting and interactive. Among other comments, one which was found to recur systematically was that the training course should have been of a longer duration. They also expressed a strong interest in following a more advanced course, along similar lines (P.7)xiii
7	Project Proposal Preparation	Mauritius	32	28 April – 7 May, 2008	University of Mauritius	A certificate of attendance awarded.	Main expected outcome: Acquire understanding of preparation of a project proposal. Analysis of the feedback questionnaire filled in by participants showed that they found the training extremely informative, pertinent and useful and the sessions very interesting and interactive. Among other comments, one which was found to recur systematically was that the training course should have been of a longer duration. They also expressed a strong interest in following a more advanced course, along similar lines (P.7)xiv
8	Resource Economics training of trainers	Mauritius	20	August 2007	International Consultant (Lars Hein)		*Modules and course materials available, but the assessment of the course is not available.
9	Resource Economics training by trainers	Mauritius	27	11 – 22 February 2008	Mr. Kevin Ruhomaun Mrs. R. Ramsum	Did not specify in the report, but the hard copy of	Main expected outcome: To understand how to assess ecosystem services

						the certificate of proficiency was awarded (a hard copy was available)	For final assessment, 26/27 trainees scored above 50%, one was ill. 20 trainees scored above 80%. The feedbackxv from the trainees were rated by scale of 1 (lowest) – 5 (highest). It shows that the objectives of the training were clear (highest: 75%) and relevant (highest: 65%). The contents of the training were perceived as "well arranged" (highest: 65%), "adequate" (medium: 40%), and easily understood (medium: 50%). The trainees found that the exchange of ideas were useful (highest: 80%) and relevant (highest: 75%), and enable them to learn many new things (highest: 85%).
10	Integrating SLM into planning on central and local levels	Mauritius			University of Mauritius		*This was not conducted because no qualified local consultants were found and not enough fund to hire an international consultant.
11	Fire management	Mauritius	15	25-29 February 2009	IC (South Africans)	A Working on Fire International Certificate in Basic Fire Suppression and Prescribed Burning awarded.	Main expected outcome: Acquire theoretical and practical skills of basic fire fighting and basic prescribed burning for the trainees to act as future trainers. All trainees passed the written test (p.9)xvi

ANNEX 9 - ENVIRONMENTAL LEGISLATION SLM RELATED (SLM INVESTMENT STRATEGY DOCUMENT 2011)

There exist a great number of legal texts relevant to environment and SLM-related issues. In particular, they were analysed comprehensively in Project report -, on a sector by sector basis.

Agro-Industry Sector

- Forests and Reserve Act
- Rivers and Canals Act 1863 Rivers Act 1940
- Wildlife and National Parks Act 1993
- Shooting and Fishing Leases Act 1966
- Irrigation Authority Act 1978
- The Wetland Bill
- The SIE Act
- The Government is in the process of reviewing and revising the existing Forests and Reserves Act of 1983 and the Shooting and Fishing Leases Act. The revised legislation on forests and reserves will provide a better enabled legal framework for the implementation of the new National Forestry Policy and the National Forestry Action Programme.

Environment Sector

- Environment Protection Act
- GN 34 of 1997
- GN 43 of 2003
- GN 44 of 2003
- GN 45 of 2003
- GN 46 of 2003
- Plastic Bag Regs 2004
- Disposal of Waste Oil Regs
- TCP Act 1954
- Planning and Development Act 2004
- Land Planning and Development Bill 2008
- Beach Authority Act 2002
- Public Health Act 1925
- The Local Government Act 2003 as amended in 2006 and 2007
- Environmental Protection Fee in EPA 2002
- Environmentally Sensitive Areas Act 2009

- Creation of MID Fund in 2008 under the Finance and Audit Act

Public Utilities and Energy Sector

- Ground Water Act 1969
- CWA Act1971
- Wastewater Management Authority Act 2000
- Electricity Act 2005 Utility Regulatory Act 2004

Tourism Sector

- Tourism Authority Act 2006
- GN 61 of 2007
- GN 62 of 2007
- GN 63 of 2007
- GN 64 of 2007
- GN 65 of 2007
- Tourism Authority Amendment Act 2008

In Rodrigues

- Constitution Amendment Act
- RRA Act 2002 Forests and Reserves Act
- Rivers and Canals Act
- Wildlife and National Parks Act

Environmental /Planning Services in Rodrigues

- Environment Protection Act
- Town and Country Planning Act
- Planning and Development Act

ANNEX 10- STATUS UPDATE SINCE MARCH 2011

Outcome 1--Mainstreaming of SLM

Integration of SLM into Forestry and Forest Action Plan: First Draft completed
The Forestry service has already worked out a first draft and has requested the assistance of FAO for a consultant under the TCP (Technical Cooperation Program).

1.2. Development of Policy, Regulatory Economic Framework: Final Report submitted: Completed

1.3. An SLM Investment Plan: Ongoing

Action: The international consultant has made several visits to Mauritius and participated in the SLM workshop in February 2011; whereby she made a presentation on the Integrated Financing System and submitted and inception report in March 2011.

Outcome 2--Training Human Resource Capacity Building

2.1 Enhanced capacities LIS/GIS/Remote sensing: Completed
2.1.1. Training in LIS, LMIS, GIS and GPS completed (Report available at PMU);
2.1.2 Training in remote sensing application for SLM completed (Report available at PMU).

2.2 Enhanced capacities for stakeholder participation for SLM: Completed
Training activities completed:
Sustainable agricultural Practices for Mauritius;
Sustainable agricultural Practices for Rodrigues;
Training course of participatory management of open pastures for Rodrigues;
Training course on Project Proposal Preparation for SLM for Mauritius;
Training course on Project Proposal Preparation for SLM for Rodrigues.

Integrating SLM into planning at central/local levels
Further to local advertisement for a planning consultant, no application from qualified local consultants was received. The Town Planning Association of Mauritius has been contacted to provide list of qualified Professional Planners to undertake the training activity. Activity to start in January 2011

2.4 Development environmental/NR economics expertise: Completed
2.4.1 Training for Trainers Course on Environmental Economics by International Expert Mr. Lars Hein;
2.4.2 Training of Staff on Environmental Economics by Mrs. R. Ramsurn & Kevin Ruhomaun.

2.5 Capacities restoration fire-degraded mountain ecosystems: Completed

Action: Final Report on an Integrated Strategy for Forest Fire Fighting has been submitted. Additional training has been undertaken with the Fire Services and Forest Officer at Bras D'Eau on Forest Fire Management and to implement Fire Breaks in August 2009. Additional training is scheduled in the southern region of Mauritius in 2011.

Outcome 3: Knowledge management for SLM

3.1. Assessment of sustainability of land use systems: Completed

Action: A first payment has been effected with signing of agreement between UoM and Forestry Service. Nine final reports were received from UoM in September 2010, and final payment has been effected.

3.2 Sharing of Knowledge on SLM: Sensitization ongoing

Action: Several SLM posters were presented, and SLM booklets were distributed in the SGP/UNDP project exhibition in June 2010. More SLM booklets, posters and flyers will be distributed on 1 and 2 December 2010 on the occasion of a National Workshop on Maurice Ile Durable organized by the Prime Minister's Office at Swami Vivekananda Conference Centre, Pailles.

3.3. Forest Land Information System:

3.3.1 Development of Forestry Management Information System: Completed
Action: LAVIM's aerial high-resolution imagery has been integrated in the Forest Land Information System as well as all State Forest Land Boundaries. Forest Cover Map, DEM and new forest boundaries are uploaded and regularly updated using GPS by Survey Office of the Forestry Service. Several additional training sessions have been held with Forest Officers and the Ministry of Health and Quality of Life. The FLIS will be used to develop the Monitoring and Evaluation System for SLM.

Develop LIS in MoHl and Satellite Imagery with Remote Sensing: Completed
LAVIM's project is developing of interagency LIS protocol for harmonizing the data sharing. Several meetings held with LAVIM's consultant for the development of a National Spatial Data Infrastructure (NSDI) for implementation data sharing, standards and user group's protocol to minimize duplication.

3.4 Development of Monitoring and Evaluation Systems: Ongoing
Action:
The international consultant has made several visits to Mauritius and participated in the SLM workshop in February 2011, during which she made a presentation on the Monitoring and Evaluation System. She submitted an inception report in March 2011.

3.5. Improvements to the State Lands leasing systems: Combined with Activity 3.4
Action: This activity has been combined with activity 3.4 as the same consultant will propose improvement to the state land leasing system based on the Monitoring and Evaluation Systems.

3.6 Planning for SLM alternatives to sugar cane cultivation: Completed
Action: Several ongoing National Projects have been identified on alternatives to sugar cultivation.

Outcome 4: Completion of the National Action Program (NAP)

4.1 Preparation of the NAP: Ongoing

Further to the comments of the last TAC, the consultant was requested to revise draft NAP report. The reassessment of the second revised draft NAP report was carried out as per the Terms of Reference after receiving the views of the Forestry Service Nationa1 Project Director and other stakeholders. A meeting was held with the consultant in September 2010 to discuss the achievements and deliverables. The consultant was made aware of the weak points and gaps of the report, and was requested to review the report. Assessment Report as per ToR is attached. A NAP validation workshop was organized in February 2011 in Mauritius and Rodrigues, and the consultant presented his report. Several comments were received

during the workshop, and the attendees requested the consultant to overhaul the report for it to be acceptable. The consultant has been requested to review his report by 13 April based on the feedback he received in the workshops.

ANNEX 11 - CONCEPT NOTE AND TERMINAL EVALUATION WORKSHOP PROGRAMME - 30 JANAURY 2013

Tentative Programme for a One Day Workshop
on the Terminal Evaluation of the Capacity Building for Sustainable Land Management project on 30 January 2013
at Clos St Louis – Domaine Les Pailles

8 45	***Registration***
9.15	***Opening by Mr V Tezoo, Conservator of Forests***
9. 35	***Presentation of the Assignment by Mrs Stephanie Hodge, TE Consultant***
9.55	***Tea Break***
10.10	***Presentation by Mr V Tezoo on the Integrated Financing Strategy***
10 25	***Questions***
10 35	***Presentation on the Forest Land Information System by Mr Arvind Dookhun***
10 50	***Questions***
11 00	***Working Groups***
12.00	***Lunch***
13.00	***Working Groups continued***
14.30	***Tea break***
14.45	***Debriefing by Working Group Rapporteurs***
15.30	***Closing Remarks and Vote of Thanks***

WORKSHEETS FOR COLLECTING INPUT FROM STAKEHOLDERS AT THE TERMINAL EVALUATION WORKSHOP

GROUP 1

OUTCOME 1: SLM IS MAINSTREAMED INTO NATIONAL POLICIES, PLANS AND LEGISLATION.

The main questions guiding the workgroups are: what worked? What did not work? How can we do it better? Where do we go from here?

Guiding Questions

- **Has SLM been successfully mainstreamed into national policies, plans and legislations as a result of these activities? Give concrete examples of evidence to substantiate this statement.**
- **What worked, what did not work? What could have been done better? Where do we go from here?**
  - Describe any changes in policy and practices for SLM?
  - What mechanisms are in place to promote future SLM cross-sector planning approach?
  - What has been the environmental, social and economic impact of the mainstreaming activities (both islands)? Has the project has sufficient scope and time frame to have an impact in this regard?

- What was the role of stakeholders including: other sectors, NGOs and CSOs in mainstreaming and scaling these SLM activities?
- Are they sufficient for SLM results-SLM impact and enabling environment?
- Are there special or indirect results for SLM stemming from these activities
- Are there any good practices or insights gained as a result of these activities?
- What have we learned?

Outcome/Output	**Indicator**	**Summary comments of Group Discussion / Rating (1-5- five highest mark)**
Outcome 1: Integration of SLM into macro-economic policies and regulatory and economic incentive frameworks regarding sustainable practices on non-forest land.		
	The National Forest Policy and National Forest Action Plans contain specific sections on land degradation and sustainable land management.	
	The Ministry of Finance and Economic Development and other ministries concerned with land use planning use environmental economic analyses of land use options (and of the cost of doing nothing) as a tool for economic development planning and/or the development of macro-economic policies.	
Outputs		
1.1 Integration of SLM into the new National Forestry Policy and Forest Action Plan		
	Specific sections in the National Forest Policy and Forest Action Plan integrate SLM lessons learned and best practices.	
1.2 Development of policy, regulatory and economic incentive frameworks regarding sustainable practices on non-forest land		
	New policies, legislation and regulations adopted including incentives for SLM and penalties for destructive practices.	
	SLM is mainstreamed into Millennium Development Goals processes.	

1.3 An SLM Investment Plan is developed		
	The UNCCD National Coordinating Body (NCB), UNCCD Focal Point and the Ministry of Finance use the SLM Investment Plan to mobilize, coordinate and direct investments needed for sustainable land management in Mauritius.	
	The SLM investment plan integrates priorities identified in the NAP (Outcome 4) and investments are made in conformity with the investment plan.	

GROUP 2

OUTCOME TWO: HUMAN RESOURCES DEVELOPMENT

The main questions guiding the workgroups: what worked? What did not work? How can we do it better? Where do we go from here?

Guiding Questions

- **Have human resources capacities been developed for SLM as a result of the project activities across sectors? Provide concrete examples.**
- **What worked, what could have been done better? Where do we go from here**?
  - Comment on how the trainings were executed? What was the 'Capacity strengthening' approach? For example, institutional /organizational capacity vs. individual and vice-versa? What sectors and stakeholders were involved? Were they the right sectors?
  - Describe the SLM CB approach with end users vs. policy makers -other SLM stakeholders?
  - Are there any good practices or insights gained as a result of these activities?
  - What are the primary lessons learned about the CB approach and the result?
  - Describe any changes in policy and practices for SLM since the CB activities have been implemented?
  - Are they sufficient for SLM results-SLM impact and enabling environment?
  - Are there special or indirect results for SLM stemming from these activities
  - What have we learned?

Outcome/Output	**Indicator**	**Summary comments of Group Discussion / Rating (1-5- five highest mark)**
Outcome 2: Human resource capacities needed for SLM are developed.		
	The staff of NRSC, FSM, FSR, MoHL, AREU, UoM and MSIRI has the capacity to integrate new satellite imagery obtained by NRSC into their LISs and to use it for monitoring and or analyses related to SLM.	

	Six CBOs and 3 NGOs have participated in tests/applications of range management principles and techniques that they have been trained in.	
	2 NGOs have participated in tests/applications techniques for the restoration of fire-degraded sub-humid mountain slopes.	
Outputs		
2.1 Enhanced capacities for use of integrated land information systems/GIS/ remote sensing for SLM		
	25 technicians are trained and know how to integrate GIS and satellite image data into an LIS for SLM applications.	
2.2 Enhanced capacities for sustainable pasture management and sustainable agriculture		
	Individuals (15) understand the fundamentals of how to manage pastures to minimize soil erosion, to favor the growth of preferred forage spp. and the fundamentals of participatory approaches to NRM.	
	Agricultural extension agents (15) and 5 other individuals understand best practices for minimizing erosion on cultivated fields and for maintaining soil fertility and productivity.	
	Farmers (20), herders, NGO/CBO staff were trained in the basics of project proposal preparation.	
2.3 Development of capacities for the use of LIS/LIMS and SLM guidelines for integrating SLM into planning/ zoning and permit approval at central and local authorities level		
	All municipalities have at least one staff member trained to make use of SLM guidelines and LIS databases for planning, zoning and processing of permit applications.	
2.4 Development of expertise in environmental/natural resource economics		
	Five Environmental/NR economists have the capacity to conduct/oversee economic and financial cost-benefit and profitability analyses of land use systems.	

	Ten staff of key institutions have capacity to conduct basic cost-benefit analyses under supervision of the first five	
2.5 Enhanced capacities for restoration and management of fire-degraded sub-humid mountain ecosystems		
	Forestry Service in Mauritius uses its training and equipment to conduct early, light controlled burns as part of a set of monitored restoration trials on degraded mountain slopes.	

GROUP 3

The main questions guiding the workgroups: what worked? What did not work? How can we do it better? Where do we go from here?

OUTCOME THREE: KNOWLEDGE AND INFORMATION SHARING ABOUT SLM

- **Have SLM knowledge management and learning about SLM been strengthened? How was Km approached by the project? Did the KM component make sense for SLM change?**
- **What worked? What did not work? what could have been done better? Where do we go from here**?
  - What institution (s) and levels of governments are natural home bases for disseminating knowledge, undertaking research and imparting learning about SLM across sector?
  - How do KM activities relate to the ongoing need for research, information and information management systems for informed decision making around SLM? Did this project adequately address these needs?
  - How are capacities being strengthened for KM on SLM? Give critical examples?
  - Has the monitoring and evaluation system for SLM been developed and integrated across sector for results -describe this?
  - What are the alternatives to destructive practices are being implemented as result of this project?
  - What can we do next for strengthening the KM component and learning approach for SLM?

Outcome/Output	**Indicator**	**Summary comments of Group Discussion / Rating (1-5- five highest mark)**
Outcome 3: Capacities for knowledge management for SLM are developed.		
	The boundaries of all State-owned lands have been digitized and are integrated into land information systems of the Forest Service, MoHL, UoM, NRSC and any others that wish to integrate this information.	
	A clearly defined, transparent mechanism will be in place for other government and civil society institutions to gain access to information from the SLM-related land information systems.	
	SLM M&E systems are operational for agricultural, pasture, forest lands and wetlands and operational costs are covered by non-project sources.	

3.1 Participatory assessments of the sustainability of land use systems		
	The causes and the severity of soil and fertility loss have been identified for each major type of agriculture on the two islands and best practices/lessons learned for each agricultural system have been summarized.	
	The causes and the severity of soil loss and of productivity loss (especially loss of preferred forage spp.) have been identified on grazing lands and the lessons learned/best practices have been identified.	
	The ability of all forest plantation species to retain soil/prevent erosion has been analyzed and ranked, and management practices for improving soil holding capacity of each species have been identified/proposed.	
	The economic and financial viability/profitability of each of the main forms/systems of sustainable agriculture and sustainable pasture use and forest uses have been analyzed and summarized.	
	Opportunities for improving financial returns for sustainable forest plantation management have been identified.	
3.2 Sharing of Knowledge on SLM		
	Booklets on ecologically sound and financially profitable SLM practices are received by 90% of all farmers and herders on two islands.	
	Agricultural extension materials are modified to enhance SLM techniques.	
	All agricultural extension officers receive training in sustainable agricultural techniques.	
	All members of national and regional assemblies receive SLM policy briefs.	
3.3 Development of Land Information Systems		

	An intensively ground-truthed forest cover type map, based on a classification scheme that takes into account FSM information needs and the capabilities of the imagery available, is completed and integrated into the FLIS.	
	All State forestlands survey boundaries are digitized and entered into the FLIS, and all available ownership information of private forestland ownership is integrated.	
	A protocol for integrated standards, access conditions and data sharing is established and applied for the network of LIS, providing essential information required for SLM.	
3.4 Development of monitoring and evaluation systems		
	A system for monitoring the use of best practices that minimize soil loss and maintain soil fertility is operational on both islands.	
	A system for monitoring the amount of soil cover at the end of the dry season and the abundance of quality forage grasses/spp. is operational for the pasture lands on Rodrigues.	
	A system for monitoring forest encroachment, clearing of forest for deer pastures, clearing of forests on river and mountain reserves, encroachment on wetlands and for monitoring the expansion of settlements is functional.	
3.5 Enhanced SLM through improvements to the State lands leasing systems		
	All new leases and renewals include incentives for SLM and/or penalties for land degradation.	
3.6 Planning for SLM alternatives to sugar cane cultivation		
	Alternative land uses to sugar cane have been identified. The ecological sustainability and the profitability of each has been analyzed and ranked.	
	Decision makers are informed of tradeoffs between land use alternatives.	

GROUP 4

The main questions guiding the workgroups: what worked? What did not work? How can we do it better? Where do we go from here?

OUTCOME FOUR: THE NATIONAL ACTION PROGRAM FOR THE UNCCD IS COMPLETED

Key Questions

- **Has the NAP been formulated, approved and used? Give concrete examples?**
- **What worked? What did not work? What could have been done better? Where do we go from here?**
  - Describe the NAP development process. Who was involved--representatives from other sectors and from Rodrigues?
  - Has the NAP being adopted? Is there a budget? How did NAP formation link to the SLM Integrated Financing Strategy and vice-versa?
  - Were there any good practices or insights gained as a result of developing the NAP?
  - How does NAP link to the MID planning and other planning and development action process i.e. MEA NAPs?
  - Where do we go from here?

Outcome/Output	**Indicator**	**Summary comments of Group Discussion / Rating (1-5- five highest mark)**
Outcome 4: The National Action Program for the UNCCD		
	NAP approved by Cabinet of Ministers.	
4.1 Preparation of the NAP		
	Final draft of NAP completed.	
	Baseline national report of land degradation submitted.	
4.2 Adoption of the NAP		
	NAP adopted by Government and stakeholders.	

	NAP published.	

i

A summary of the ratings is presented in Table 1 below

Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	Sustainability ratings:	Relevance ratings
Highly Satisfactory (HS): no shortcomings Satisfactory (S): minor shortcomings Moderately Satisfactory (MS) Moderately Unsatisfactory (MU): significant shortcomings Unsatisfactory (U): major problems Highly Unsatisfactory (HU): severe problems	Likely (L): negligible risks to sustainability Moderately Likely (ML):moderate risks Moderately Unlikely (MU): significant risks Unlikely (U): severe risks	Relevant (R) Not relevant (NR) Impact Ratings: Significant (S) Minimal (M) Negligible (N)
Additional ratings where relevant: Not Applicable (N/A) Unable to Assess (U/A		

iiThe Portfolio Project established a Global Coordination Unit (GCU), which was intended to provide services to countries like Mauritius from its global budget. The GCU will compile requests from the participating countries and develop a work plan/strategy based on available funding to provide services needed. The following types of services were viewed as especially appropriate in support of the Mauritius SLM MSP:
Sharing of SLM experiences, lessons learned, best practices and guidelines developed, in particular, guidance and support for the development of range management on Rodrigues;
Guidance and support 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;
Guidance and support for the development of a cost effective approach for the restoration of sub-humid ecosystems severely degraded by fire;

iii The Wildlife and National Parks Act No.13 of 1993 deals with the management of wildlife and national parks and the conservation of fauna and flora - The Act, inter alia, makes provision for the creation of National Parks, reserves and buffer zones where :such land is of natural, scenic, scientific, educational, and recreational or other importance or value to the state and the preservation of the land is necessary to properly protect, to permit access to or management of, or to allow public viewing or enjoyment of an area of such land

iv The Forests and Reserves Act No.41 of 1983 as amended by Act No.1 of 1986 deals mainly with management of the forest resources - It, inter alia, makes provision for the creation of National Forest. Any area declared to be a National Forest shall be inalienable and shall not be devoted to any use other than as forest land.

v The Environmental Protection Act 2002 is the main legislation dealing with protection of the environment. It encompasses all aspects of environmental degradation in the Republic.

vi The objectives of the MID fund are to finance the following: Why the type style changes?

1. Schemes for the preservation of local natural resources with a view to achieving sustainable development and adapting to climate change;
2. Projects to explore and harness all potential or local sources of renewable energy and to reduce dependency on imported fossil fuels;
3. Promotion of energy savings;
4. Programs to reduce consumption of fossil fuels and achieve greater efficiency in the use of engines, enterprises, offices, houses, public sector, transportation sector and hotels;
5. Schemes to encourage innovation by households as well as by businesses to produce the country's energy requirements for sale of any surpluses at a premium;
6. An outright grant of Rs. 10,000 for purchase of solar heaters, an initial grant of 20 million to CEB to provide CFCs, a grant for bus modernization program to enable all bus operators to renew their fleet with environmentally friendly engines, reduce emission, etc.;
7. Projects and programs to support efforts to protect the environment through recycling of wastes, to encourage more efficient use of energy and to increase reliance on renewable energy;
8. Energy management programs through collaboration with local and international partners;
9. Awareness campaigns on energy savings and the use of renewable energy sources.

vii The expected results and impact on the environment were also disjointed expectation at changes on 50,000 hectares. The project's stated objective was also to benefit 50,000 ha of land.

viii Lalljee, B., 2007. Report: UNDP/GEF/GoM Funded Training Course on Participatory Management of Open Pastures (Rodrigues). Reduit: University of Mauritius

ix Lalljee, B., 2007. Report: UNDP/GEF/GoM Funded Training Course on Sustainable Agriculture Practices (Rodrigues). Reduit: University of Mauritius

xLalljee, B., 2007. Report: UNDP/GEF/GoM Funded Training Course on Sustainable Agriculture Practices (Mauritius). Reduit: University of Mauritius

xiLalljee, B., 2007. Report: UNDP/GEF/GoM Funded Training Course on LIS/ LMIS/GIS/GPS for Sustainable Land Management. Reduit: University of Mauritius

xii Lalljee, B., 2008. Report: UNDP/GEF/GoM Funded Training Course on Remote Sensing for Sustainable Land Management. Reduit: University of Mauritius

xiii Facknath, S., 2008. Report: UNDP/GEF/GoM Funded Training Course on Project Proposal Preparation for Sustainable Land Management (Rodrigues). Reduit: University of Mauritius.

xiv Facknath, S., 2008. Report: UNDP/GEF/GoM Funded Training Course on Project Proposal Preparation for Sustainable Land Management (Mauritius). Reduit: University of Mauritius.

xvRamsurn, R., and Ruhomaun, K., 2008. UNDP/GEF/GoM Funded Training Course on Applied Environmental Economics. Reduit: University of Mauritius.
xvi Austin, C.C.D.B., 2009. Mauritius & Rodrigues Fire management Training Report. ?: Working on Fire International