Terminal Evaluation of the Cook Islands

Sustainable Land Management (SLM) Project

Supported by the Global Environment Facility

Implemented by the United Nations Development Programme

and the

National Environment Service – Cook Islands
in partnership with the
Ministry of Infrastructure & Planning and the
Department of Agriculture

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Planning for Sustainable Development Pty Ltd
ABN: 76 071 918 888
P: +61 4080 72821 +61 7 5435 2377
W: www.planning4sd.com
E: admin@planning4sd.com
PO Box 465, Landsborough, Queensland, Australia, 4550

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UNDP supported GEF financed project	Capacity Building for Sustainable Land Management in the Cook Islands
UNDP and GEF project ID#s	UNDP: 00043651 GEFSEC: 3403
Evaluation time frame and date of evaluation report	May – June, 2013 Final Draft Report 27 June, 2013
Countries included in the project	Cook Islands
GEF Operational Program/Strategic Program	GEF Focal Area: Land Degradation GEF Operational Programme: OP15
Implementing Partner and other project partners	National Environment Service (NES) and the Ministry of Infrastructure and Planning (MOIP). Ministry of Agriculture was a collaborating partner
Evaluation team	Matt McIntyre of Planning 4 Sustainable Development

BACKGROUND & PROJECT DESCRIPTION

The Cook Islands has significant land degradation issues and has been an advocate for rational Sustainable Land Management initiatives since joining the UNCCD in 2003. Briefly all the islands suffer from extreme exposure with minimal land, large coastline to land mass ratios, limited fertile and accessible land and population pressures. Whether it is the larger volcanic islands (such as Rarotonga), or the remote atolls (such as Manihiki), there are concerns with the land resources for food security, land for habitation, water shortages, impacts from climate change and the need to protect the remaining bio-diverse habitats.

Land resource use and management are principal issues at the national planning level mainly due to the high level of competition to use the limited land resources to support the growing national economy. Significant changes have been seen over the last decade in the pattern of land areas being developed, the intensity of development and pressure upon the natural areas. Between 2002 and 2004, 34% of developments on Rarotonga were concentrated around the foreshore areas and 37% were on steep sloping lands.

Given the fragile and vulnerable state of the land resources, sustainable land management (SLM) is one of the government's key priorities. Over the past decade, substantial resources have been invested in environmental protection. While these have helped in part much more needs to be done to minimize the implications of human and environmental threats, especially as regards to population growth, development, land use change and incidents of land degradation. This work needs be comprehensive, integrated, plausible and rational in terms of encompassing all sectors of economic and social development.

This SLM Project aimed to improve the mainstreaming of Sustainable Land Management (SLM) in national and subnational programmes and projects; and to further the use of land use planning capacity at the national and Pa Enua levels.

The objective of the MSP is to: *'strengthen human, institutional and systemic capacity for Sustainable Land Management (SLM)'*. The aims were to assist with the mainstreaming of SLM in relevant policy and regulatory frameworks, to assist in developing a National Action Plan; and generate a medium-term Investment Plan.

The lead implementing agency was the National Environment Service, in conjunction with the Ministry of Infrastructure and Planning. The Ministry of Agriculture was a collaborating Agency. The Project was to be implemented over a four (4) year period, but due to delays and low production in early years was eventually extended for 12 months. A Project Management Unit was established

to execute the project. The total budget of the project was to be USD 1,046,249 of which USD 500,000 would be the GEF increment.

Purpose of the Evaluation

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives:

i) to monitor and evaluate results and impacts;
ii) to provide a basis for decision making on necessary amendments and improvements;
iii) to promote accountability for resource use; and
iv) to document, provide feedback on, and disseminate lessons learned.

UNDP-GEF policies and procedures require all regular and medium-sized projects supported by the GEF to have a terminal evaluation (TE) upon the completion of activities. A final evaluation is required prior to any proposal for additional funding (or subsequent phases are commenced. These terminal evaluations are intended to assess the relevance, performance and success of the project. They also report in good and negative impact and sustainability of the results, including the contribution to capacity development and the achievement of global environmental goals. The guides also canvas the documentation of lessons learned with final recommendations as to what changes might improve the design and implementation of UNDP-GEF projects.

Key Findings

The following key findings were drawn from the Terminal Evaluation:-

1) That despite a slow start the Cook Islands SLM project had gathered momentum and with the benefit of a one year extension, has completed a high proportion of the Outputs and Activities planned;

2) The SLM project has succeeded in raising awareness, building capacity and improving the baseline understanding of SLM at the individual, institutional and systemic levels;

3) The SLM project assisted with the understanding across community and government of the benefits of a land use planning system to assist with SLM mainstreaming and implementation;

4) That relatively minor gains in terms of mainstreaming SLM into the Cook Islands development processes were achieved mainly due to:

a. the relative short time frame to achieve the ambitious Objectives and Outcomes;

b. The early embryonic stages of political momentum to pursue land use planning;

c. The delays in producing the NAP and inability to comprehensively incorporate SLM needs into the corporate planning process.

5) Some exceptional outcomes were achieved in community awareness and communications, GIS development, land degradation assessment, determining models for land use planning analysis, instrumental training through the Soil School and pragmatic trials in sustainable farming practices at the demonstration sites in Rarotonga and Mauke;

6) There is a good prospect for sustainability of the momentum built with many of the initiatives and a high prospect of replication with the above outputs – subject to the securing of adequate funding;

7) As the project became more productive in the final two years stakeholders had become more familiar with concepts, gaps, and needs for SLM. Many had gone from requesting land use policy to accepting that a systems approach would be beneficial;

8) That the SLM project succeeded in establishing and/or strengthening stakeholder partnerships and engagements across Government and community. NGOs and community representative groups were used for critical project implementation components;

9) That with regard to mainstreaming some further attention will be needed, but the situation will now be assisted by the making of the NAP, the melding of this with the NESAF and incorporation of priority actions in the annual budgets;

10) That the SLM Project succeeded in creating the appropriate level of groundswell for the initial capacity building and community awareness needed to institute long term nurtured capacity development for SLM as recognized in the explanatory material of the GEF OP 15. The challenge is to ensure this momentum is maintained through follow-up actions and mainstreaming of SLM considerations in decision-making.

Lessons Learned

With all projects there are often lessons learned by all parties involved that are not always picked up in reporting on findings and recommendations. The following lists a number of lessons learned from the perspective of the stakeholders, the implementing agencies and the TE consultant.

1) The servicing of all Pa Enua in capacity development projects will not be cost effective given the present high costs of travel, the limited human resource capacity of communities (in terms of their absorptive capacity) and the high transaction costs. A better approach would be to aim for nascent actions in areas where activities can be delivered efficiently and effectively, with the aim to replicate the outputs to other individual or groups of islands. The revised scoping of the project and refining of activities with composting and eco-farming in Rarotonga and Mauke demonstrated the benefit of this approach. These activities were back by the very successful Soil School classes – to which various Pa Enua representatives were invited. This last point is important – the success of replicating nascent activities is correlated to the success of awareness and communications.

2) The slow start up and progress of the project in the first two years, was from multifarious pressures. A key one was the limited technical knowledge and knowhow (and therefore confidence) of PMU staff to a relatively new body of knowledge – i.e. SLM and land degradation. There were a number of regional and international training options availed for SLM for some years before and after the MSPs were designed. The Global Support Unit (GSU) also continued to offer advice over a number of years. However upon reflection much of this 'training' and knowledge flow was directed at defining land degradation, the need for it to be addressed and confirming issues surrounding impacts. Little was directed on how land degradation is best addressed under various circumstances. Additionally of what technical information existed – little had relevance to Pacific SIDS. .

3) The disbursement of funds from Asia-Pacific or from the Pacific sub-region to the national level still receives criticism. While slow progress in this case warrants circumspect action, the Cook Islands is not the first to raise concerns between the timing of expenditure of one tranche of funds and the arrival of the next. It would seem that the 80% expenditure rule was used for the SLM project. It obviously did not work in all circumstances. Where projects require large technical item expenditures such as the purchase of satellite imagery, purchase of high cost software and hardware or where expensive travel to remote islands is needed – some flexible trigger is needed. While the ability to monitor, budget and plan expenditure may change in time with the development of the Public Finance Management (PFM) within MFEM, there may still be a need for an intermediate address of the issue.

4) In small countries with small economies, human resource rotation and other external human resource issues (e.g. health of staff) can dramatically affect the progress of projects. Effective implementation will require the application of adaptive management practices. Flexibility needs to be built into project design and Monitoring and Evaluation (M&E) systems. In this case there needed to be active involvement of the UNDP MCO at senior level and redefining

of the scope of the project – a high cost approach that was effective but would have come also with additional time delays. Separately the placement of the UNDP Support Officer at MFEM was a significant change for the project progress. This too was a commendable action, but it may be reflective of some broader management issues with projects delivered from the regional level.

5) While key stakeholders were involved and engagement in the project preparation, design and inception stages there is always room for improvement. Travel to some of the key Pa Enua may have assisted with broader momentum building that would in the end run, assist with replication of outputs and outcomes.

6) The level of technical knowledge and know-how of land degradation, soil and water management as well as alternative measures able to be implemented through SLM approaches is still limited in the Pacific at the regional and national levels. The Stakeholder meetings for the NAP generation (November and December, 2012) still nominated land degradation and SLM as significant issues for the country. Follow up actions are expected by the communities. However this comes there should be an attempt to ensure the regional level technical expertise is improved and that mechanisms are availed so that SIDS can draw down on this knowledge as they require. Even within the life of early UNCCD action in the Pacific, the PDFA period, the MSP design phases, then project inception – there have been large personnel changes about the Pacific. Ongoing knowledge transfer needs to be instigated to cater for the younger managers who are appearing at the national levels.

7) Of subsidiary interest to UNCCD matters, but of relevance to many MSPs about the Pacific where the enhancement of land use planning was intended – there still seems to be much confusion or lack of comprehension of the role and purpose of land use planning systems, versus economic planning needs at the national level. While there is growing interest among Pacific SIDS to pursue land use planning, to date it is not a technical realm that is supported at the regional level. At this level there is also a lack of comprehension or understanding.

8) There may well be a need for project management training of new and younger managers appearing in key roles about the Pacific. One of the first arenas of training support should target the sequencing of project delivery. The GEF Outcome model Strategic Results Framework (SRF) is not a good project sequencing tool, but often Project Managers, their Coordinators and even those in regional agencies use SRFs for project sequencing. This may be the cause of a lot of delays in project delivery and mismatch of expenditures and delivery of the next tranches of funds.

9) Among SLM stakeholders and Project Managers (national and regional) there does not seem to be strong comprehension of the link between the MSP Projects and the SLM Portfolio approach to the GEF Operation Program 15 (OP15). OP15 was cognizant that the initial capacity building for SLM would take time and that concrete actions on the ground and targeted research should follow the initial phases of institutional, technological and human resource capacity building. This lack of understanding may have something to do with very high expectations that were conveyed through variation of Objective and Outcome level indicators and targets.

Conclusions and Recommendations

The following conclusions and recommendations are offered for consideration by the UNDP MCO and the Government of the Cook Islands:

Recommendation 1: Given that Stakeholders have confirmed their continued interest in addressing land degradation through Sustainable Land Management (SLM), the Government of Cook Islands

should pursue follow-up actions to build on the momentum that has been generated by the SLM project, with specific attention to:

- Replicating the land degradation assessment and land use analysis work on Mauke to Rarotonga and to other Pa Enua groups through a step-wise programme;
- Continuing the worthy GIS system development that has been commenced to cover other Pa Enua, and to pursue the capture of LiDAR sources of data for multi-NRM purposes;
- Maintaining the communication and awareness outputs and programme to ensure the recognition of SLM through-out the community is not lost. To this end providing resources for NES to continue support to Lagoon Day would be most construction for SLM and other related initiatives. The further development of the NES website as the learning knowledge centre for SLM should also be pursued;
- Extending the Soil School classes to complete Master Classes to enable students to become the deliverers to the Pa Enua, over time. With this continued support seek continued participation of Pa Enua in classes delivered in Rarotonga, with the medium term view for delivery in key Pa Enua as student numbers grow;
- Further investing in the compositing sub-project in Rarotonga as a key input for alternative fertilizer and eco-farming activities (this directly links to the delivery of the Soil School classes as the activities are used a live demonstrations). The operation needs to be up-scaled as the machinery is not capable to treat the current volumes of green waste;
- Continue the support to the demonstration farm (using alternative farming techniques) on Mauke, and replicating this to other Pa Enua, as funds enable, and align this progression to the extension of GIS mapping and Soil School participation.

Recommendation 2: That the National Action Programme (NAP) be used as the key policy platform to mainstream SLM and land degradation activities through firstly linking to the NESAF and the 'Annual Plans' for NES, MOIP and MOA. The Implementation Matrix to the NAP is fully costed as nested Outputs and activities. This needs to be progressed to an Investment Strategy which should prioritize key action areas and determine priorities for funding to match midterm predictions under the public finance management system (PFM system). The NAP also includes 'project profiles' which have been designed to assist follow-on activities to the SLM Project – based on priorities discussed at Stakeholder Meetings (for the NAP).

Recommendation 3: That a parallel project (to follow up SLM activities) be pursued to assist with the development of institutional capacity for integrated Land Use Planning at the local level. In general, individual land users are not always aware of the consequences of their actions with the land, groundwater and coastal resources. This is in part due to lack of information, knowledge and access to 'best practice' in planning for development and undertaking activities. Government commitment to fair and equitable land use planning needs to respond to the calls for such systems by community stakeholders in various fora. Past political influence has heightened conflict over poor planning decisions. Without long-term planning and government intervention at various levels 'market forces' dominate, often resulting in conflicting land use and activities that lead to environmental degradation. Under current socio-economic pressures many land users are 'forced' into practices and actions that may satisfy their short-term needs – but have deleterious medium and long-term consequences. With the decentralization policies there is the prospect for land use and development decisions being fully devolved to the Island Councils. There is very little experience, skills and resources to content with major development. To institute land use planning and the extension of the Environment Act, 2003 – assistance and guidance will be required from the national level.

Recommendation 4: That consistent with Recommendation 1 above, a parallel project be pursued to assist with extending the integrated land resource and GIS database to cover additional Pa Enua. This is recommended as a parallel activity as the outputs can be used for multi-sector work (as has been experienced since enhancement through the SLM Project). The work will enhance the National GIS (NGIS) to assist with integrated land use planning and sustainable land management initiatives and decision-making. It will provide additional thematic layers & associated databases covering agro-climatic factors, soils, topography, vegetation and present land use. The project

could apply capacity building to assist with use of NGIS in decision-making through use of multi-criteria analysis in support of rational land use policy, planning and land utilisation. There is limited thematic land resource information available in a form that is useful for integrated land use planning and SLM. Coverage is best over Rarotonga; however access to such data in the Pa Enua is minimal or available only with difficulty. NGIS is in a very embryonic stage and needs nurtured capacity and continued support over the medium to longer term. Some spatial data is held among different agencies and in various formats and not based on uniform standards of data or procedures. Mapping to support Land use planning and integrated NRM requires accurate and integrated information on land & coastal resources (e.g. spatial extent of the kinds of land use, land production capacity, a system for rural land use 'zoning' that protects the natural resources etc.). The focus needs to change from GIS resources primarily for 'map making' to the applying the inputs/outputs to a variety of decision-making arenas where the GIS data is useful in considering various scenarios of development or alternative kinds of land use and allocation.

Recommendation 5: Consistent with Recommendation 1 that there be follow-up project funding to develop a well-resourced and integrated research and extension program comprising suitably qualified MOA/NES/MOIP and NGO staff & sub-national (Pa Enua) staff. This capacity will be borne out of extension to the Soil School approach, to conduct adaptive sustainable land management (SLM) and 'best practice' research to disseminate ecologically sound and socially acceptable land management technologies to land users through targeted and innovative techniques. Aligned with the research and training shall be the setup of trial/pilot/demonstration farms using biological farming approaches. The almost complete utilisation of finite land resources means that the expansion of agriculture into marginal areas or sensitive environs will continue. Additionally the land management practices including slash & burn as well as over-reliance on fertilizer and other chemicals are not sustainable. There is dramatic impact on remaining vegetation and potential for high levels of contamination of groundwater lens and the surrounding lagoons. Poorly located and worked agricultural areas in close proximity to shorelines can increase erosion rates, which are sometimes already high, leads to productive land being degraded and increases the vulnerability of foreshores, lagoons and reefs. Greater awareness and understanding of alternative farming and SLM practices is needed at the national and local levels.

Recommendation 6: Consistent with Recommendation 1 there should be additional resources sought for a National Sustainable Land Management, Education and Awareness Program. This should aim to create a high level of government and community understanding about SLM, land use policy and legislation, in particular specified land management 'best practices' with the purpose of reducing land degradation and increasing productivity from the land through sustainable land management (SLM). Future economic activity will lead to increasing competition for the use of limited land resources and increases in population can be expected to dramatically accelerate land degradation. There is a very poor understanding about legislation, policy and 'best practice' pertaining to land use and sustainable land management. MoA and MOIP research and extension advice to land users, landowners and farmers is in serious need for advancement.

Recommendation 7: Consistent with Recommendation 1 there should be a concerted effort to Improve the capacity and quality of human resources within Government for land management and land use planning. The mid to longer term aim should be to strengthen the Government capacity for policy making, administrating and facilitating the delivery of quality natural resource information, land management advice and land use planning services. This will be best stimulated by improved quality of basic land information for land use planning through improved skills in the collection, mapping and interpretation of natural resource information. The work should promote the understanding about the importance of 'zoning' (or alternatives) and land use planning for the conservation of land resources and sustainable growth or urban and village centres. Establishing confirming a SLM and or spatial land use planning team within NES, MOA or MOIP would be the first challenge. This team would need to work closely with the planning offices in OPM and MFEM, as well as with the Island Councils to develop and implement a national land use planning system and policy. This requires skilled staff in responsible parts of Government to be fully conversant about how the information for the policy/plan is derived, the land use planning process, how plans are to be used and responsibilities. Also those entities involved need to be competent in managing their Unit's responsibilities for all steps in the land use planning process. For land use planning to be effective and have positive impacts, end-users and other stakeholders need to be appreciative of

the long term benefits and purpose of a planning process. Needless to say Departmental staff need to also be skilled in transferring knowledge and best practice which in turn helps with extending awareness and willingness to change practice.

Recommendation 8: The working model of the Soil School linking with the compost and alternate farming demonstrations should be extended to focus on soil erosion and sediment management for development on sloping lands. While interest is in limiting development of marginal lands, often family members are allocation only land that is very steep. In this event there is much knowledge transfer that is needed to enable both the community member as well as the government officer – to ensure development on marginal land is such that impacts are minimized. The outputs should be added to the tools that the Compliance Division of NES uses in its administration of EIA provisions.

Recommendation 9: That for all future initiatives and projects the costs of an efficient and functional Project Management Unit be satisfactorily catered for in budgets. For small governments with large responsibilities over islands where large transaction costs are typical – a budget of a least 10% but up to 19% represents a good level of funding based on the working practice of private enterprise in the region.

Acronyms

BTIB	Business Trade and Investment Board
CIANGO	Cook Islands Association of Non-Government Organisations
EIA	Environment Impact Assessment
EMCI	Emergency Management Cook Islands
GEF	Global Environment Facility
GHG	Greenhouse Gases
GIS	Geographical Information Systems
GMO	Genetically Modified Organism
HOM	Head of Ministry
IFRC	International Federation of Red Cross and Red Crescent Societies
INC	Initial National Communication
INTAFF	Ministry of Internal Affairs
IPCC	Inter-governmental Panel on Climate Change
JNAP DRM CCA	Joint National Action Plan for Disaster Risk Management and Climate Change Adaptation
JNAP PMC	JNAP Project Management Committee
MCDEM	Ministry for Civil Defence and Emergency Management
M &E	Monitoring and Evaluation
MEA	Multilateral Environment Agreements
MFAI	Ministry of Foreign Affairs and Immigration
MFEM	Ministry of Finance and Economic Management
MMR	Ministry of Marine Resources
MOA	Ministry of Agriculture
MOE	Ministry of Education
MOH	Ministry of Health
MOIP	Ministry of Infrastructure and Planning
MOT	Ministry of Transport
MOU	Memorandum of Understanding
NAP	National Action Plan for UNCCD
NAP	A National Adaptation Plan of Action for UNFCCC
NBSAP	National Biodiversity Strategy and Action Plan
NCAP	National Compliance Action Plan for ODS
NCCCT	National Climate Change Country Team
NCSA	National Capacity Self-Assessment
NES	National Environment Service
NESAF	National Environment Strategic Action Framework
NGOs	Non-Government Organisations
NHT	Natural Heritage Trust
NSDP	National Sustainable Development Plan
OMIA	Office of the Minister for Outer Islands Administration
PDD	Project Design Document (MSP for SLM)
PICCAP	Pacific Island Climate Change Assistance Program
PILN	Pacific Invasives Learning Network
PIREP	Pacific Island Renewable Energy Project
PopGIS	Population GIS – software programme
SGP	Small Grants Programme (under the GEF)
SIDS	Small Island Developing States
SLM	Sustainable Land Management
SPREP	South Pacific Regional Environment Programme
SOPAC	South Pacific Applied Geoscience Commission (now part of SPC)
TAU	Te Aponga Uira o Tumu-te-Varovaro
TCA	Takitumu Conservation Area
TIS	Te Ipukarea Society
TKP	Traditional Knowledge and Practises
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention for Combating Desertification
UNDP	United Nations Development Program

UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
V&A	Vulnerability and Adaptation Assessment (under Climate Change)
WSSD	World Summit for Sustainable Development
WWF	World Wide Fund for Nature

1. Introduction

1.1 PROJECT GOALS

The long-term goal of the project is to contribute to maintaining and improving ecosystem stability, integrity, functions and services while enhancing sustainable livelihoods by building the capacity to implement sustainable land management into all levels of decision making. It also aims to mainstream SLM in relevant policy and regulatory frameworks, and it will assist in developing a National Action Plan and Medium Term Investment Plan. The objective of the project is to strengthen human, institutional, and systemic capacity for Sustainable Land Management in the Cook Islands.

The Goal of the Medium Sized Project (MSP) under the UNDP-GEF Portfolio Approach has been established as follows:

'Contribute to maintaining and improving ecosystem stability, integrity, functions and services while enhancing sustainable livelihoods by building the capacity to implement sustainable land management into all levels of decision-making.'

The objective of the MSP is to: *'strengthen human, institutional and systemic capacity for Sustainable Land Management (SLM)'*. The aims were to assist with the mainstreaming of SLM in relevant policy and regulatory frameworks, to assist in developing a National Action Plan; and generate a medium-term Investment Plan.

The following project outcomes were established to address gaps in capacity for sustainable land management, recognizing the information forwarded and recommendations made by stakeholders during the project design.

i) Knowledge and awareness of land degradation and the importance of sustainable land management increased;
ii) Technical, individual and institutional capacities for SLM enhanced;
iii) Systemic capacity building and mainstreaming of SLM principles and objectives achieved and,
iv) Technical support at the local, Outer Island and national levels to assist with mainstreaming and integrated decision-making enhanced.

The Outcomes, Objectives, Outputs and activities were outlined in the log-frame matrix to the Project Design Document. This has been used at **Appendix 2** to assess the performance of the project delivery.

While the Outcomes and objectives may have been considered optimistic they were consistent with the guides produced by the Global Support Unit (GSU) for the Global SIDS SLM Project and advocated by UNDP-GEF.

The lead implementing agency was the National Environment Service, in conjunction with the Ministry of Infrastructure and Planning. The Ministry of Agriculture was a collaborating Agency. A Project Management Unit was established to execute the project. The total budget of the project was to be USD 1,046,249 of which USD 500,000 would be the GEF increment.

1.2 PURPOSE OF THE TERMINAL EVALUATION

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives:

v) to monitor and evaluate results and impacts;
vi) ii) to provide a basis for decision making on necessary amendments and improvements;
vii) to promote accountability for resource use; and
viii) to document, provide feedback on, and disseminate lessons learned.

Under the UNDP-GEF policies and procedures, all regular and medium-sized projects supported by the GEF need to have a terminal evaluation upon completion of activities. A final evaluation is required prior to any proposal for additional funding (or subsequent phases are commenced. These terminal evaluations are intended to assess the relevance, performance and success of the project. They also report in good and negative impact and sustainability of the results, including the contribution to capacity development and the achievement of global environmental goals. The guides also canvas the documentation of lessons learned with final recommendations as to what changes might improve the design and implementation of UNDP-GEF projects.

1.3 KEY ISSUES

There were delays in the implementation of the SLM Project in the Cook Islands in its first years, not assisted by externalities such as the delays in funding receipt after project design, delays in staff recruitment, staff turnarounds, misalignment with government priorities (changes to Government budgeting and programme management and lack in technical know-how of the eventual project managers. The combined effect was delays of up to 12 months in commencement. Lingering delays had a cumulative effect which promulgated a request for an extension of the project. This project extension was granted with the SLM eventually extended from a 2008 commencement to a completion date at the end of 2012. Some related actions were still being completed in early 2013 (e.g. the NAP preparations).

There was no mid-term evaluation completed for the Cook Islands MSP, however quarterly progress reports (QPR) and the institution of quarterly work plans (QWP), among other project management tools, assisted in redefining and scoping work to ensure project outcomes were better achieved.

This terminal evaluation (TE) will explore the root causes to delays, the implications for implementation and the nature and effects of the short term project management responses (i.e. QPR & QWP). From the review of some of these measures and digestion of the implementing partner's own reporting (NES, Cook Islands Terminal Review of SLM) – the following key issues are worthy of noting:-

- Technical know-how of the project management team at the commencement of the SLM project;
- Technical support from the sub-region and Global Support Unit (GSU);
- Overall absorption capacity of key agencies and partners;
- Linkages to other programmes, projects and government strategies (including the implications for co-financing);
- Coordination between implementation partners at the national and regional levels;
- Sustainability of SLM outcomes and activities;
- Financial/administrative management and public finance management capacity development;
- Monitoring and reporting implications;
- Project based activities to programmatic frameworks.

1.4 METHODOLOGY FOR THE EVALUATION

The TE commenced formally with the signing of contracts and exchange of same on 4 April 2013, however delays were experienced due to availability of NES staff, project managers and partners within country. Some early research, engagement of key stakeholders and evaluation of reporting/administration was able to be completed through parallel activities in-country by the consultant. The TE commenced in earnest in May 2012, continuing through to June 2013, due to some delays due to competing demands and technical break-downs with IT at NES.

The initial schedule for the completion of the TE was relatively tight, the delays and re-scheduling exacerbated time pressures. The following phases of activities for the TE were followed as far as practicable.

Task 1 – Situation Analysis
Initial background research involved getting an understanding of the status of all activities and outcomes.

Task 2 – Consultation
The review of the current situation was followed by Consultations through one-one interviews with Stakeholders. The stakeholders included:

- Government department representatives
- Outer Island representatives and Community Leaders
- NGOs and Community based groups
- Resource owning communities
- Non-government organizations
- Private sector
- Groups with a stake in SLM and rehabilitation strategies

Site inspections of pilot works and 'concrete actions' on the ground. These were limited to Rarotonga. Phone interviews of participants on Mauke took place due to the high costs and logistic issues with travel to the island.

Task 3 – Evaluation based on Reports and Stakeholder Consultations
UNDP GEF templates and the strategic results framework were used to evaluate the project.

Task 4 – Draft Evaluation Report Completed
The final draft Evaluation Report is generated based on the consultations, evaluation templates and narratives. The draft is referred to the SLM PM for circulation. The Draft report is submitted to the UNDP MCO.

Task 5 – Final Evaluation Report Submission
Final draft of the Evaluation report is submitted to the UNDP MCO after receipt and address of final comments from the UNDP MCO, NES and other key national Stakeholders.

1.5 STRUCTURE OF THE EVALUATION

The key components of the Evaluation include the analysis templates contained at **Appendix 2 and 3**, and this narrative.

Appendix 2 contains an evaluation of the Strategic Results Framework in regard to the achievement of Objectives, the Status of Outcomes and Outputs with an appraisal of the Effectiveness and Efficiency of the work. The Outputs table provides an evaluation of the Status and Rating of the standard of the Outputs and the Activities involved.

Appendix 3 contains an evaluation of the Overall Project Performance, with a rating and comments provided consistent with the UNDP GEF Template for Terminal Evaluations.

2. Project Development Context

2.1 Project Commencement & Duration

The SLM project was jointly implemented by the National Environment Service (NES) and the Ministry of Infrastructure and Planning (MOIP), in collaboration with the Ministry of Agriculture. The Ministry of Finance and Economic Management - Development Coordination Division (formerly the Aid Management Division) was responsible for processing and oversight of financial expenses.

The project officially commenced in April 2008 following endorsement of the PDF A by the Cook Islands GEF Operational Focal Point in June 2007. The National Environment Service (NES) office was designated as the Cook Islands Government executing agency.

[NB: The first tranche of funds were referred to MFEM in August 2008. In usual circumstances this would signal the 'start date' of the project. The inception meeting with UNDP MCO and Stakeholders was held in November 2008.]

Although the project document was signed in April 2008 the Cook Islands did not actually start implementation until 7 months later with the Inception Meeting. There was a need to wait till early 2009 due to the deferral of the appointment of the Head of NES and engagement of the Project Manager. Within this period some activities related to communications, awareness and project management did take place. This delay was one of the earlier catalysts for the seeking of an extension to the project in 2011 to the end of 2012. While this was the chief cause of delay there were a combination of matters that exacerbated issues with project inception and early delivery. More pragmatic approaches to the situation should have been instigated by the Government of the Cook Islands (GOCI) and the UNDP MCO in regard to the extended delays.
A decision was eventually made by the UNDP to limit the extension period to near 12 months to the end of 2012.

2.2 Constraints & Barriers that the Project Addressed

The stability, environmental health and integrity of land and coastal ecosystems of small island developing states (SIDS) such as those in the Cook Islands is fundamental to the economic, social and cultural sustainability of development. As urbanization and development pressures have grown in coastal floodplains, steep hillslopes and near shore areas – critical natural systems are threatened from deforestation, disturbance to forested areas, loss of landcover, erosion and sedimentation, overuse of fertilizer and chemicals, pollution of waterways, coastline destabilization and flow of polluted water into coastal lagoons and onto reefs.

Pressures and Causes the project aimed to address

- Conflict over land use. No means to address competing uses.
- Unsustainable farming practices – extension of subsistence to cash-cropping; bush clearance; burning of vegetation;
- Intensive Agricultural Development Pressures;
- Population Growth: coastal strip development and demand for land;
- Infrastructure: clearance; channeling of water flows; local flooding;
- Land Use pressures: lack of land use planning;
- Conflict over land tenure and resource access.

Detrimental effects:-

- Land Instability: coastal erosion, soil erosion;
- Worsens the impacts of Drought, water scarcity;
- Increases incidence of Flooding and Inundation;
- Reduced Food Production and Food Security;
- Poor health of the community;
- Limits future land use options;
- Permanently changes production-development capacity of land;

- Lowers resilience to Climate Change and limits options or Adaptation measures

Common Capacity Problems

- Lack of Information, awareness of problems;
- Lack of knowledge, or means to combine scientific, practical and traditional knowledge;
- Lack of skills and technologies;
- Competing policies & poor administrative coordination;
- Low institutional capacities: national and Pa Enua;
- Lack of, or poor laws and regulations;
- Unhealthy economic incentives (perverse subsidies);
- Economic circumstances and imperatives;
- Lack of Decision-making systems to reconcile competing land use, development and environment ambitions.

The following were identified as capacity needs for the SLM Project by stakeholders during the development of the MSP PDD:

- improving the information baseline on the state of land degradation and its impact;
- developing information systems for national and local monitoring and assessment of land-use change and options for SLM;
- improving means for local communities to convey their natural resource and development problems and needs to government and donor agencies;
- raising awareness of options for SLM and land use planning and decision-making at all levels;
- follow-up land use planning options with development of know-how on sustainable catchment and farming practices (e.g. techniques and systems)
- use enhanced information and know-how at all levels to enable better enforcement of legal requirements for forestry, agricultural development and natural resource management;
- enhance participation methods to ensure village/local community views on long term land investment scenarios are incorporated early in decision-making processes;
- improving individual knowledge and skills on information systems, land use planning, SLM techniques and rehabilitation methods;
- improving institutional structures and processes to maximize coordination and collaboration;
- ensuring tools and approaches respect the status of customary land tenure and systems;
- recognising and embracing local, community and traditional knowledge; and,
- mainstreaming SLM into national policies, plans and decisions.

The Cook Islands SLM Project was part of the **Global UNDP-GEF *'LDC and SIDS Targeted Portfolio Project for Sustainable Land Management':*** GEF Operational Programme 15 (SLM) nominated a number of potential eligible activities, as follows, with an emphasis on early capacity building achievements before the successful 'on the ground investments' components:-

Component 1

- Capacity building
    - Mainstreaming Land Degradation
    - Integrated Land Use Planning Systems

Component 2

- On the ground Investments
    - Sustainable Agriculture

- Sustainable Rangeland/Pasture Management
- Sustainable Forestry and woodland management

Component 3

- Targeted Research

The Goal of the overall GEF Global SIDS/LDC project was to:-

"Contribute to mitigation of land degradation, through capacity development and mainstreaming of sustainable land management."

The Objective of the Country MSP projects was to:-

"To strengthen the enabling environment for sustainable land management while ensuring broad-based political and participatory support for the process."

In consultative meetings for the MSP, a community and information led land use planning approach was mooted as a means to provide a capacity development framework for SLM, offering the following prospects:

- Promotion/awareness of the need for SLM through integrated land use planning approaches, preferably using pilot areas and actions at the community level;
- Improve information on land resource capabilities/suitability: balancing national GIS work with local community derived information;
- Targeting human resource development (HRD) for NES, the MoW and the Department of Agriculture - to pursue skills beyond 'extension work' toward areas such as information management, land use planning approaches, land capability-suitability analysis/mapping, integrated catch-ment approaches, GIS as well as cross-cutting skills development in ecosystem function analysis, sustainable agriculture and the tie with land use thresholds/limitations;
- Institutional development: both the capacity development of the NES, MoW and DoA, other agencies involved in sectors related to SLM; and the institutional linkages between national government, local government and Outer Island administrations.

2.3 OBJECTIVES OF THE PROJECT

The Goal of the Medium Sized Project (MSP) under the UNDP-GEF Portfolio Approach has been established as follows:

'Contribute to maintaining and improving ecosystem stability, integrity, functions and services while enhancing sustainable livelihoods by building the capacity to implement sustainable land management into all levels of decision-making.'

The objective of the Cook Islands MSP was to ***'strengthen human, institutional and systemic capacity for Sustainable Land Management (SLM).'***

To this end one of the add-on outputs was to assist with the mainstreaming of SLM in relevant policy and regulatory frameworks, through the development of National Action Plan and coinciding medium-term Investment Plan.

The following project outcomes were established to address gaps in capacity for sustainable land management, recognizing the information forwarded and recommendations made by stakeholders during the project design.

i) Knowledge and awareness of land degradation and the importance of sustainable land management increased;
ii) Technical, individual and institutional capacities for SLM enhanced;
iii) Systemic capacity building and mainstreaming of SLM principles and objectives achieved and,
iv) Technical support at the local, Outer Island and national levels to assist with mainstreaming and integrated decision-making enhanced.

These outcomes were to be achieved through 16 Outputs and 75 Activities described in the Strategic Results Framework. An additional particular Output covered the project management requirements for the project. **Appendix 2** portrays the main structure of the Strategic Results Framework with an assessment of completion and rating of achievements.

2.4 STAKEHOLDERS

The key stakeholders of this project were the communities of the Cook Islands who rely on the natural environment to support the resource base needed for social, economic and cultural development. Sustainable land use and management is a key focus of the National Sustainable Development Plan 2011-2015 and the link between the objective and outcomes stated above and those of the NSDP were fundamental to the achievements gained with stakeholders.

The focus of the project was on the initial capacity building and community awareness needed to institute long term nurtured capacity development as recognized in the explanatory material of the GEF OP 15 processes. Much effort was placed on identifying, liaising with and engaging the key stakeholder groups and individuals. Given the remoteness of the Pa Enua and logistic issues the stakeholder lists are Rarotonga centric, however Pa Enua representatives were included in key meetings and the community of Maueke was fully involved in implementation of components of the SLM project. It is evident that a mix of government, NGO, community representatives and private enterprise were involved. Cook Islands has a good history of engaging a broad cross-section of its communities.

Appendix 1 identifies the key Stakeholders involved in the implementation of the project.

2.5 RESULTS EXPECTED

While it could be perceived as a project with ambitious objectives the planned implementation was coached in the knowledge that the Component 1 (GEF) objectives targeted initial capacity building as espoused by GEF Operational Programme 15. The intent was to

"*to mitigate the causes and negative impacts of land degradation on the structure and functional integrity of ecosystems through sustainable land management practices as a contribution to improving people's livelihoods and economic well-being*"

Under the operational program, countries were expected to address land degradation issues, using integrated and cross-sectoral approaches, within the framework of sustainable development at the local, national, and/or transboundary levels.

In response to the OP 15 intentions, under the LDC -SIDS Portfolio Project for Sustainable Land Management the Goal of the Country Projects was to contribute to mitigation of land degradation, through capacity development and mainstreaming of sustainable land management.

The objectives of the Country projects was to strengthen the enabling environment for sustainable land management while ensuring broad-based political and participatory support for the process, in four key areas :

- domestic capacity development (national and local level);
- mainstreaming National Action Programmes for Sustainable Land Management into national development strategies and policies;
- Furthering integrated land use planning; and
- investment planning and resource mobilization for implementation of SLM

The UNDP GEF guides on the LDC-SIDS Portfolio Approach expected the following at the end of the SLM project in each participating country:

- Countries will have 'begun a process of capacity development and mainstreaming';
- Countries would have 'elaborated their National Action Programme in a timely manner'; and,

- Countries would have produced a Medium-Term National Investment Plan for Sustainable Land Management – (a Resource Mobilisation Plan for long term efforts)

The objectives of the Cook Islands Project, as stated in section 3.3 need to be understood in the context of the above framework.

The project implementation needed to be cognizant of the broader and longer term expected results of OP15 – that is the sustainable management of land resources to support healthy natural environments that support human needs.

The practical results expected included: the protection of critical ecosystems, management of waterways, protection of coastal systems and maintenance of soil fertility, structure and quality. Demonstrations of both traditional and contemporary approaches and techniques for managing, rehabilitating and improving soils were intended, particularly with regard to erosion and sediment control and reducing the disturbance of steep lands. The value of good soil and water management and the enhancement of traditional and organic approaches were to be conveyed as a means to improve food security and reduce pollutant loads onto lagoons and fringe reefs. The community engagement and improvement of SLM practices would also assist with community awareness and recognition of the effects of poor practices on valuable waterways and coastal resources and the detrimental influence on alien invasive species.

3. Findings and Conclusions

The following parts of the TE should be read in conjunction with the review and ratings of the outcomes and outputs relative to the SRF provided at **Appendix 2**, and the overall assessment and ratings of the project provided at **Appendix 3**.

3.1 Project Design / Formulation

Most of the targeted stakeholders interviewed and additional community members engaged while on duty travel expressed general appreciation of the SLM the project and felt the project design was adequate. There was general conclusion that given the knowledge base of various delivery partners the objectives and activities may have been a bit ambitious. There was recognition that there was slow start-up but a flurry of worthy activities in the last 2 years of the project.

Those who were involved in the original formulation process and project delivery were positive as regards the project formulation and progress. Stakeholder comments at the community meeting for the generation of the National Action Programme (NAP) held in late November 2012, confirmed the stakeholders view that the direction and focus of the SLM project activities, aligned with their needs.[1] Most expressed that the start-up was slow, but those directly involved could appreciate the reasoning behind this. These views included those of the engaged Technical Adviser from MOIP, who noted that the project components and expectations were consistent with the long term nominated gaps, but that the experienced logistic issues could not be assuaged given other competing demands of the project management unit. Some of the delays in progress were purely related to different logistic matters related to new approaches in land use planning, mapping and spatial analysis.

In reflection the extent of planned activities was ambitious in terms of applying the intended outputs and activities among all the remote Pa Enua. A wise decision was made once project implementation commenced in earnest to focus on Rarotonga and Mauke with demonstrations and land use mapping and spatial analysis concentrated on these islands. The intent was to plan for longer term replication if time and funds permitted.

Other than the realization that the spatial extent of the planned project activities was neither practical nor achievable within a tight timeframe (especially with the delays in project start-up) the

[1] NAP Stakeholder Workshop 27-28 November, 2012. The National Action Programme is still in draft form awaiting approval of Cabinet. It included at fully cost strategic results framework, which included activities to ensure that the momentum of the SLM project continued. This was generated with direct input from stakeholders at the forum and preceding one-on-one meetings prior to the Workshop. The draft NAP is separately available from the NES.

stakeholders from government, NGOs and community generally felt that the project formulation and direction satisfied their needs.

Logistic issues were not assisted by the poor mapping out of the range of other programmes and projects underway or commencing at the same time as the SLM Project. From one tangent this added to the work loads of various players in the TWG and NES, as well as other agencies and Ministries. Despite this situation there were good attempts to engage a range of government and community stakeholders in activities. As such many stakeholders felt the activities and outputs were of 'relevance' to their work and how their activities linked to SLM.

Generally the project formulation was planned and occurred in a good strategic fashion involving a range of stakeholders. The use of the Strategic Results Framework linked goals, objectives, outcomes, outputs and activities together very well. The indicators and targets were generated prior to GSU Indicator handbook. However it was noted in the TE that the targets and indicators that were originally validated through Stakeholder workshops for the MSP PDD in March 2007 were modified in the final version of the PDD dated October 2007. The amended Project Objective and Outcome indicators and targets were not consistent with that presented to the Stakeholders at engagement meetings. The changes effectively raised expectations beyond that envisaged for the first phase of OP15 projects, to overambitious targets, that would be very difficult to achieve within a 3-4 year timeframe, given the extant situation with institutional, systems, technology and HRD. This presented a weakness to the project design from the outset.

The amendments made to the high level indicators and targets also provided a divide between the nominated Outcomes and the Outputs, their indicators and associated activities. The latter, given the baseline as reported in the narrative of the MSP PDD - could never achieve the Outcome indicators and targets within a four (4) year timeframe. To satisfy the Outcomes as amended in October 2007, the Project would have needed to have a timeframe of at least 8 years, with a sensible timeframe in the order of 10 years.

3.1.1 Implementation Approach

The implementation of the Project was challenging. Significant delays were experienced with the Inception of the Project due to the non-commissioning of the National Environment Service Head. Without a formal Head, neither project staff nor the project management unit (PMU) could be formalized. The Project Manager role changed a number of times during the initial years of the Project due to illness and general staff turnaround (a legacy of many small SIDS in the Pacific). Combined with the initial delays this had a detrimental impact in the first 18 months. The replacement Project Managers were not well experienced in land management matters at the time of their engagement. The final Project Manager had a steep learning curve however after assistance from the Project partner (MOIP), collaborator (DOA), the Project Technical Adviser and members of the Titikaveka Growers Association (TGA) among others – she was able to achieve much in the final two years. Impetus and guidance from the UNDP Coordinator, Development Coordination Division, Ministry of Finance and Economic Management from mid 2011– was also instrumental in ensuring momentum was maintained.

It was made clear during the course of the TE discussions that the NES PM as well as a range of stakeholders were overwhelmed and frustrated with the complicated funding disbursement and reporting procedures. Without going into it too much, there has been acceptance and agreement by both ends of the spectrum as to the causes of delays and frustrations. Briefly the extended delays in project start-up did not lead to a trustful relationship between the Implementing and Executing agencies. However the response to delays through use of more intense reporting procedures was not a wise decision, It reflects a very old-style of project management – delays and barriers are met with more burdensome M&E and reporting. The root cause was more likely to be competing demands for time, overwhelming work-loads and extant high 'transaction costs' through development agencies use of multiple project management units, steering committees, TWGs etc.

Notwithstanding the initial delays there were periods where the PMU members were striving to gain technological advice and guidance. There were also delays in receipt of important hardware and software. A more adoptive management response could have provided with a focus on filling the

technical gaps and barriers. On the administrative side the use of the UNDP Coordinator in AMD (MFEM) was a worthy response and led to much better planning of activities as well as providing a liaison link between Government and the MCO.

It is obvious from reading communications that coordination between the Focal Points, the PMU, the PM and the MCO needed to be strengthened. Far more regular discussion of budget and activities guided by the Strategic Results Framework could have taken place. This could have ensured all parties had a clear understanding of the funding situation at any given time (moneys spent, remaining local funds, funding available in subsequent tranches and the time frame for future expenditure. This dialogue would have been extremely useful in early 2010 when measures started to halt the prolonged delays.

Interestingly with all the project management tools used by the MCO none involved a spreadsheet able to show expenditure to date, immediate past budgets, actual expenditures in immediate past periods, adjustments for the forward period and summary with regard to remaining total budgets. At no time was there sighted a comprehensive spreadsheet showing a total picture of budgets, expenditures by year, and adjustments by year and running balances by year. While the Atlas system could possibly output these summaries, it may well not be in a form for an in-country PM to understand. There would more likely be an affinity by the PM for the national governments public finance management system (PFMS), although this too may be pitched at a more macro level than would have been useful for day-to-day project management.

In summary the range of activities, the technical inputs required and the high transaction costs of associated project management inputs – combined to present a significant challenge to the PMU and the agencies involved, all of whom had limited HR capacity.

3.1.2 Country Ownership

There was a high sense of ownership among community and key stakeholders, possibly due to the inclusive project design process and the ability of the PDD to target land management issues that had often been espoused over more than a decade (see NEMS report, 1993). Good ownership is reflected in the broad spectrum of stakeholders that became directly involved in project activity delivery. There were particularly high levels of NGO commitment primarily through the TGA, very high levels of participation in community consultation, engagement and awareness events. The demonstration projects were met with high uptake rates and continued interest after project completion.

The SLM project has been met with high levels of appreciation by many members of the targeted communities and the key stakeholders involved in PDD and project activity delivery, Investments in participatory project design and high quality awareness and education materials has provided a strong foundation for continued ownership.

3.1.3 Stakeholder Participation

Stakeholder participation in the project design, inception and implementation has been strong despite the early delays. The education, awareness and training component of the project has been highly successful. The latter sections to this report highlight some particular activities and outputs which signal very good stakeholder participation through the more productive final 2 years of the project.

3.1.4 Replication Approach

The GEF is particularly interested in outcomes and outputs that can be replicated in work following project completion. Good capacity building projects will leave a residual benefit or impact that will assist with follow-up actions, extensions of initiatives, will assist with government business of the day or will assist with aligned activities or projects.

Often the design of the project, the scope of intended outcomes and outputs and the focus of activities are critical in setting the foundations for replication. Care needs to be taken to ensure that goals, objectives, indicators and targets do not drive the form of activities, outputs and outcomes away from replication objectives. The TE has formed the opinion that changes to the

high level indicators and targets, did raise the expectation (mainly of external stakeholders) of what could be practically achieved in a 3-4 year schedule.

Consistent with the practical guides to OP15 project activities were designed with replication in mind:

- Communications and awareness activities that were beneficial to the SLM project, but packaged in a manner to explore linkages to biodiversity, climate change, coastal management, waste management and water quality management initiatives etc.. This left a worthy legacy in community knowledge building about poor development decisions and impacts on the broader environment.
- Demonstration and pilot activities were designed or accomplished with longevity in mind. The Soil School had succeeded in attracting additional financial support and is a systems approach delivered from a 'basic' course entry, to advanced and planned master-classes. The intention of TGA managers is to extend the activity to the Pa Enua, once additional resources are secured. The master-class participants will eventually become the deliverers of future training. The composting and alternate fertilizer activity on Rarotonga continues with a growing number of farmers and community members dropping off 'green' waste, and sales increasing (although token prices are used to assist with buy-in). This activity suffers from the machinery purchased not being large enough to match the volume of materials being processed. Additional resources are needed on the technology side, however the know-how and appreciation of the benefits of the organic approach to soil management is still burgeoning.
- GIS development: while the preceding capability of the MOIP GIS unit was reasonable prior to the commencement of the SLM Project, the resources and HRD provided by the project has stimulated advancement of capacity within MOIP and across other agencies of Government. There has been training of experienced GIS people; training of new people in basic GIS mapping across other agencies of government; extension of skills of GIS practitioners to remote sensing techniques and use of GPS to record field data to enable better land capability analysis and land use mapping. Most importantly much of the GIS training has been delivered by local skilled staff, with reliance on external sources for the more advanced remote sensing training (SOPAC). The GIS capacity development activities have not only supplied hardware, software and training, but have extended knowledge, skills and experience in using characterized data for decision-making. The land use maps produced for Rarotonga and Mauke, were preceded by applying methods and approaches to distinguish areas of land degradation, characterize pressures and driving forces and linked related data of soils chemistry and physical parameters. This know-how will provide the foundation to replicate the approaches and methods to other Pa Enua, and enable refining of work to assist with future land use planning. Many entities in government and community use the inputs and outputs of the PMU partners (especially MOIP GIS unit) for their related activities (SRIC-CC, Health, MMR etc.) – often without the knowledge that the capabilities have been borne out of the SLM project activities.

3.1.5 Cost Effectiveness

The substantial delays in the project inception and implementation over most of the first two-years have severely affected the cost-effectiveness of the project, when objectively viewing it as a 4 year project. This delay essentially caused the non-expenditure of approximately $100,000 available under the MSP. However the massive turnaround in effort, activities and outputs over the last two years, having in mind a $385,000 project (before co-financing) in lieu of the full $485,000 made available – paints a more positive picture of the cost effectiveness in terms of intended outputs and what was achieved. It is obvious from prior reporting that some of the activities planned were overly ambitious, given the logistic issues, absorption capacity and costs of working in the Pa Enua.

The general view of the stakeholders consulted and consensus at the NAP meeting in December 2012 was that the outputs had been extremely useful and cost effective. Specific comments were drawn to the difficulty in valuing the advancement in GIS and associated analytical ability – that would benefit not only SLM capabilities, but the capabilities on many other activities across a range of government mainstream programmes and other future capacity building programmes and projects.

3.1.6 UNDP Comparative Advantage

The comparative advantage brought to the Project by the UNDP was obvious in the areas of administrative support especially with regard to PDFA finalization, setting up administration processes, meshing the output for the NAP and knowledge support for the Investment planning activity. Collegiate support with logistics and maintaining momentum at critical times was achieved by the UNDP Coordinator from mid to late 2011. There was less support evident with technical assistance in the areas of SLM methods, techniques and approaches.

It is difficult to assess the long-term benefit of the Global Support Unit (GSU) established as part of the delivery of the Global Approach. There was limited guidance on land degradation assessment, mapping, classification and evaluation from the regional level. In terms of the background to the Global Portfolio Approach, prior to the final submission to the GEF Council, agreement had been struck for one of the CROP agencies to be used to provide the technical back-up. This arrangement was dropped in the final submission to the GEF Council in favour of the UNDP supported Global Support Unit, which eventually was located in South Africa. The GSU was instrumental in terms of administrative support for MSP project design, PDFA support, broad training workshops and developing a knowledge management network. The model however was deficient in providing the range of technical knowledge and knowhow at the local and national levels. At one stage the PMU needed to liaise with parties outside of the region to source and access expertise on LADA approaches. Given that many outputs targeted the enhancement of land use planning, there were no examples sighted of guidance on practical choices with land use planning approaches in terms of policy, institutional needs, systems approaches (versus product based systems), data needs and characterization, as well as community approaches to enhancing land use decision-making.

3.1.7 Project linkages between initiatives

Providing linkages with other initiatives in biodiversity and climate change was a key advocacy of OP15, as well as the Global SLM Portfolio Approach. Establishing relationships and causing joint interventions was a significantly successful element of the project design and implementation of the SLM Project. The knowledge management products developed by the GSU also canvassed the vital need to develop partnerships and to link efforts. It was noted that addressing land degradation consistent with the UNCCD would also assist with progressing biodiversity, climate change, waste management and coastal management needs.

The MSP PDD did canvas the links to other extant and impending projects and initiatives. There was evidence of relationships between government business units managing other related initiatives. In some areas this came with ease. For instance the biodiversity unit of NES shares the same office as the SLM PM. The involvement of the DOA as a collaborating partner, enabled meshing of same activities related to organic farming and traditional agricultural practices.

The SLM Project targeted the enhancement of EIA practices. However there are some insurmountable barriers in this arena in terms of institutional, process and systems gaps. Most significant is the shortcoming of having a stand-alone EIA system. Most project based EIA systems are tied to land use planning processes – a shortcoming in the Cook Islands. The work did however cement the concept that SLM work should also focus on guidelines for development on hillslopes and the need to require erosion and sediment controls for certain forms of development.

There were a number of related regional and international activities aimed at delivering capacity to assist with land degradation and the SLM projects:

- GSU and SPREP Workshop in Fiji: mainstreaming SLM in government policy and land use decision-making. This event included sessions on linking efforts with climate change and

biodiversity as well as ensuring linkages between NAP development (under the UNCCD) and MSP activities.

- SPREP and SPC: training workshops on mainstreaming SLM and enhancing EIA processes
- SPC/SOPAC: training assistance through the IWRM project.
- Assessment of the impact of climate change on agriculture and food security in the Pacific (Marshall Island, Cook Island and Vanuatu) in 2008.
- FAO: Crops and Ornamentals Plant Productions.
- FAO: Assistance with sustainable agriculture and organic farming.

These regional and international activities are not accounted as part of co-financing but under normal circumstances they could have been considered.

3.1.8 Analysis of the Strategic Results Framework - Indicators

The Outcome and Output level indicators have been reasonably nominated. Most satisfy the SMART form of indicators advocated by the GEF (specific, measurable, achievable, relevant and time-bound). These indicators and targets were originally validated through the Stakeholder workshops for the MSP PDD. However the Project Objective and Outcome indicators and targets were amended in the revised version of the PDD dated October, 2007. Not only are they inconsistent with that presented to the Stakeholders, but they have essentially raised the expectations of outcomes in a 3-4 year capacity building project beyond that expected in the first phase of OP15 projects. The targets were overambitious with some unachievable within the 3-4 year timeframe, given the baselines described in the Situation Analysis of the PDD. The Outcome based targets also became disparate with the Outputs, their indicators and associated activities.

There was no mid-term evaluation/review for the SLM project. While they are not mandatory for this form of MSP it may have provided the trigger for early re-scoping of the project activities and meshing of the indicators.

3.1.9 Management Arrangements

As mentioned there were significant delays over the first 2 years. The assigning of the Project Coordinator and Project Manager also took time, adversely affected by staff turnovers, among other things.

Team members and staff of the AMD mentioned the ongoing difficulties and delays with receipt of funds from UNDP MCO, financial disbursement and reporting procedures. PMU members mentioned instances where funds were expended and large time lags occurred before next tranches arrived. Vendors were often left unpaid and activities were often stalled. The reporting processes were also criticized. Given the delays in the project it can be accepted that the PMU was subject to more scrutiny through reporting to the MCO. However a better response may have been the increase in one-on-one discussions and assistance with technical delivery matters.

Funding for the PMU and project management functions was not sufficient. The 5% or 10% funding limit of GEF total funds is not consistent with commercial practice where the minimum for projects would be 10%. Where smaller funding and complex matters are involved project management functions can be up to 15-20% of total budgets. Where mid-term reports (MTR) and Terminal Evaluations (TE) are drawn from the GEF budgets – this can use up most of the 5% of funds set aside for project management functions. More realistic budgets for project management are required for future projects to adequately cater for:

- regular travel and liaison on-the-ground between the project managers and farmers and community organizations;
- more regular meetings with deliverers and communities where demonstration or pilot activities are being undertaken;
- more regular interaction and networking between project partners and other government entities and NGOS involved in the project activities;

- very high transaction costs in small governance situations.

It is understood that in many instances the project management arena is where it is thought government co-financings through in-kind contribution could take place. However in reality within small governments of the Pacific the core budgets for usual government operation are very tight and roles and responsibilities remain the same as for larger economies. Options for co-financing are therefore limited. The tendency for separate PMUs, Steering Committees, PCs and PMs for multiple projects, of the with the same people in attendance results in high transactions costs which impact on very slim core budgets, and limiting funds for implementation activities.

The management arrangements included the use of existing staff in NES and MOIP for the role of Project Manager and Technical Adviser, with part contribution of their wages from the GEF budget. This was agreed due to the limited human resources in the Cook Islands – and was seen as a good means to ensure consolidation of knowledge of existing staff to assist with follow-on from the project. It is noted that it did cause some issues with regard to the commitment levels of the two staff that were partly supported by GEF funds. It would seem that the UNDP MCO considered that the part funding of the positions, should have resulted in 100% commitment of those staff to SLM activities. There were concerns with the amount of travel of the original PM to non SLM related events. Small governments with limited human resources invariably have staff positions that fulfil multiple responsibilities. The PM was a senior person within NES and multi-tasking in such a position is not unusual.

In terms of management frameworks the implementation entities were the National Environment Service (NES) and the Ministry of Infrastructure and Planning (MOIP), in collaboration with the Ministry of Agriculture. The Ministry of Finance - Development Coordination Division (formerly known as the Aid Management Division) was responsible for processing and oversight of financial expenses. The Project Coordinator located in NES was responsible for financial reporting through the Project Coordinator who was also responsible for day-to-day management of the project and the delivery of inputs, outputs and activities. She was also responsible for coordination and collaboration with other stakeholders.

A SLM Project Steering Committee (SC) was appointed by Cabinet. The committee consisted of key government and non-government stakeholder groups (government, private sector and civil society) with NES acting as the Secretariat. The composition of the SC was subject to much change over the life of the project mainly as a result of staff turnarounds at various agencies.

The SLM Steering Committee (SC) met regularly. While it may be considered to be too large in a small government situation, the nomination of multiple members from different agencies aimed to ensure at least one representative from each entity. With a proliferation of projects there were times when attendance was low. During the latter part of the project there was evidence it met as part of the National Climate Change Country Team (NCCCT) meetings.

The conclusion of the TE is that the management arrangements were a working model. Improved representation of Pa Enua on the SC is desired by all, however the tyranny of distance and high travel costs often rules this out.

The UNDP MCO missions to the Cook Islands including senior level representation mid-term assisted with re-defining the scope and ensuring better momentum of the project activities. More regular visits at a high level with technical persons, from the outset of the project may well have assisted with the early slow progress. The making of the UNDP Support Person position within AMD, was the defining moment of turnaround in the production level of the project. Close and continued contact between this person and the PC was invaluable.

Table 1: SLM Project Steering Committee

SLM National Steering Committee	
Entity	**Name**
National Environment Service (Co –Chair)	Vaitoti Tupa, Tania Temata
Ministry of Infrastructure and Planning (Co-Chair)	Atatoa Herman, Taukea Raui, Otheniel Numa, Mac Mokoroa, Tangianau, Donye
Ministry of Agriculture	Nga Mataio, William Wigmore, Anthony Brown, Matairangi Purea
Ministry of Marine Resources	Nooroa Roi, Dorothy Solomona
Office of the Prime Minister	Mac Mokoroa, Maria Tuoro, Liz Koteka, Celine Dyer
Ministry of Finance AMD/DCD	Garth Henderson, Steve Barrett, Vanessa Jenner
Te Ipukarea Society (NGO)	Jacqui Evans
House of Ariki	Travel Tou Ariki, Motu Kora
Cook Islands Investment Cooperation	Lloyd Miles, Tamarii Tutangata
Koutu Nui	Te Tika Mataiapo Dorice Reid, Imogen Ingram,
Invitees	
Titikaveka Growers Association (NGO)	Teava Iro
Cook Islands Red Cross (IGO)	Charlie Numanga, Reboama Samuel
SLM Project Coordinator	Louisa Karika
SLM Technical Adviser	Timoti Tangiruaine
SLM GIS Assistant (2011/12)	Olaf Rasmussen

There was much mention of serious time delays in the availing of funds from the UNDP MCO. As reported earlier the slow production rates may have been a catalyst to this. However despite these concerns, it would seem that delays were evident. The affect was that often prior tranches of funds were expended and delays in follow-up tranches occurred. Critical activities were sometimes put on hold. This threatens the momentum often built up with the community. Delays in funding often result in exacerbated delays in flow-on actions. As intimated earlier the active role of one or more of the CROP agencies to deliver technical backup to the SLM projects should have been instigated from the outset of the SLM projects in the Pacific. Their role too in the distribution of funding tranches may well assist with delays. The likes of SPREP and SPC are well experienced in this service back up. They have the human resources geared for such back-up.

3.2 PROJECT IMPLEMENTATION

3.2.1 Financial Planning

The original financial planning for the SLM Project Design was substantial and assisted by the Portfolio approach – which enabled comparison with other LDC-SIDS projects. The Project work plan and budget process was transparent and accountable.

However based on the evidence provided for this TE (both from the UNDP MCO and country sources) there was not availed a consistent project finance template for project management. The Table 2 below presents the best overall picture on budgeting and possibly expenditure – but was derived from multiple sources including a summary report produced by the PM contained at **Appendix 4**.

Table 3 then provides a short summary of total funds dispersed by year, as best that can be determined. There is a very big discrepancy between the budgeting figures and the total disbursements. The PM had advised that after 2011 the funds were availed in NZD, however it is unclear whether the CDRs for 2012 and 2013 are based on NZD or USD. For this TE we have assumed they are in USD. This will need to be confirmed.

A PM needs at hand a consistent budgeting and project management template – that quickly pictures planned budgets (by quarter and yearly), against actual expenditures, with running tallies so a complete picture of the financial situation can be viewed. Such a template would also assist with project reviews. It may well be that the Public Finance Management (PFM) systems being developed by MFEM can produce such a template, however there needs to be a marrying with the ATLAS system used by the UNDP MCO.

The most common complaint during the TE was the delays in funding from UNDP MCO to the national level, as well as from the national government agency to the implementing agencies. The need to double account for expenditure was also often referred (e.g. copy of all receipts to both MFEM and to the UNDP-MCO using different processes). As reported, above, delays caused by financial planning and management can exponentially delay activities and momentum built up in earlier activities. The progress of the countries Public Finance Management (PFM) systems, may in time provide the tool for better coordination.

The co-financing component to the project budget was good with approximately USD504,000 being accounted as co-financing (See **Appendix 5**). This was slightly lower than that which was nominated in the PDD, however given that there was approximately USD100,000 unexpended funds from the GEF funds, the calculated co-financing portion was satisfactory. It is noted that the co-financing analysis table does not incorporate potential co-financing amounts from the collegiate work of the ADB, especially as regards the Institutional and Legal Reviews.

The Project was audited by Ernst & Young in early 2012 under a contract organised and paid from the UNDP MCO. The Project PMU and Steering Committee noted and actioned the audit opinion and addressed some of the minor discrepancies that were identified. A review of the expenditure patterns based on the CDRs and other information supplied by the UNDP MCO did not reveal any worrying expenditure items. There was said to be some wrongful expenditure on a meeting attendance by NES staff, however there seems to have been also a similar discrepancy with wrong allocation of debit at the UNDP MCO level, for a very similar amount. The TGA did advise they thought the costs for the follow-up Soil School Training units were high (approx. NZ$25,000 to $30,000). This may need consideration when the Soil School training continues (subject to funding).

The overall likelihood of sustainable actions is going to be dictated by finance. A Financial/Investment Plan was not generated, however the pervasive passion behind stakeholders in calling for continued actions and investments in SLM, will attract attention in due course. The NAP contains a fully costed SRF, which in itself arms the Government with sufficient and plausible reasoning to seek additional and longer term funding as envisaged by the OP15 advisory notes. It is strongly suggested that any follow-up work on SLM be supported by the expansion of the costed NAP into a plausible Investment Strategy.

Table 2: Summary of Budgets by Year

Budget Description	Output	Activity	Total Amount US$	SLM Budget USD	2008	2009	2010	2011	2012
International Consultant			**10000**						
	1.3	National assessment of LD		10000		2500	6000	1500	
Local Consultants			**15000**						
	1.3	National assessment of LD		10000		2000	7000	1000	
	1.2	Awareness events, demonstrations & consultations		5000		2000	2000	1000	2500
Contractual Services			**50000**						
	1.1	Communications Strategy and Awareness raising materials		15000		5000	5000	5000	
	1.2	Awareness events, demonstrations (incl. Inception activities)		25000	447	4571.5	10000	9981.5	
	1.3	National assessment of LD		10000		2500	6000	1500	37469.46
International Consultant			**30000**						
	2.1	GIS, base mapping and information sharing		10000		2500	5000	2500	
	2.2	Community mapping		10000		3000	3500	3500	
	2.5	Training, Workshops & Demonstrations		10000		2500	3750	3750	
Local Consultants			**20000**						
	2.1	GIS, base mapping and information sharing		10000		1500	5000	3500	
	2.2	Community mapping		10000		-	5000	5000	
Contractual Services			**142680**						
	2.1	GIS, base mapping and information sharing		20000		7000	8000	5000	58,631.98
	2.2	Community mapping		25000		2000	11500	11500	
	2.3	Community & OI Governance Structure Enhancement		20000			10000	10000	
	2.4	Institutional Review & Strengthening		10000			5000	5000	
	2.5	Training, Workshops & Demonstrations		40000		2500	18750	18750	
		Equipment		12680	5694	1000	3000	2986	
	PM	Project Steering Committee & TWGs		15000		2000	6500	6500	
Contractual Services			**35000**						
	3.1	Elaborate and Implement the NAP		10000		5000	5000		800

	3.2	Mainstreaming of SLM and NAP		5000		1000	2000	2000	
	3.3	Medium Term Investment Plan		10000			6000	4000	
	3.4	Integrated land use planning		10000			5000	5000	
Contractual Services			**93000**						
	4.1	Tools, guidelines, information dissemination and technical equipment		43000		2000	21000	20000	590.2
	4.2	Web based knowledge management & community mentoring networks		30000		10000	10000	10000	
	4.4	Community led integrated land use systems		20000			15000	5000	
Professional Services			**35000**						
	4.3	M&E for LD and SLM using GIS		15000			7500	7500	
		Project Audit and Evaluation		20000			10000	10000	
Local Consultants	**4.5**	Project Management Unit and Coordination	**50000**	50000		16667	16667	16666	
		TOTAL FUNDS	**$480,680**	**480,680**	**6,141**	**77,239**	**219,167**	**178,134**	**99,992**
SLM Project funds	$475,000	Remaining PDF A funds $5,68075,000				TOTAL BUDGETTED FUNDS			580,671

Table 3: Total Disbursements from CDRs

Year	**US $**
2006	5,625.00
2007	8,694.75
2008	8,906.88
2009	4,326.42
2010	33,872.70
NZ Funds?	US$
2011	91,915.77
2012	87,267.89 [2]
2013	5,150.00
Total Disbursement	**245,759.41**

[2] The 2012 & 2013 CDR were made available to the Consultant direct from UNDP MCO.

3.2.2 Monitoring and Evaluation

The overall monitoring and evaluation system for the project was deficient.

While the PDD including a general Monitoring and Evaluation (M&E) Plan, and the GSU proffered a Portfolio wide M&E tool-kit, both are not considered appropriate for good project management.

The M&E contained with the Strategic Results Framework (SRF) contained targets and indicators which were originally validated via Stakeholder workshops for the MSP PDD. These were generated prior to the GSU Indicator handbook. The amended Project Objective and Outcome indicators and targets in the Oct 2007 version of the PDD were not consistent with that presented to the Stakeholders. It effectively raised expectations beyond that envisaged for the first phase of OP15 projects, to overambitious targets, beyond a 3-4 year timeframe, given the extant situation with institutional, systems, technology and HRD. This presented a weakness to the project design from the outset in terms of expectations. It also provided a divide between the nominated Outcomes and the Outputs, their indicators and associated activities. The latter, given the baseline as reported in the narrative of the MSP PDD -could never achieve the Outcome indicators and targets within a four (4) year timeframe.

To satisfy the Outcomes as amended in the October 2007 version would have required an investment period of at least 8 years, with a sensible timeframe in the order of 10 years. Despite the above threats a 'mostly satisfactory' score was achieved as the SRF did contain good indicators/targets at the Output level. If the original Outcome level indicators and targets were retained flexibility could have been in-built in an M&E system to accommodate the re-focus of activities to Rarotonga and Mauke - as demonstration areas. This was eventually achieved but through higher order intervention by the UNDP MCO and UNDP Support officer.

A separate M&E plan to the SRF was not evident. Support for such an important Project Management tool, may have assisted with reconciling the mis-match between Outcome level Indicators and Targets and those contained in the Table 4 SRF to the PDD. There was much frustration with the GSU Indicator Handbook. Most PICs saw this as an added administrative burden, not a tool that assisted logical sequential project management.

3.2.3 Execution and Implementation Modalities

Without a refined M&E Plan for project start up and implementation, and given the impacts of initial delays and periods of low production due to staff illness and turnarounds – substantial delays occurred. The UNDP in unison with the PM, used other adaptive management responses. This included down-scaling Annual Work Plans (AWP) and Annual Project Reporting (APR), to Quarterly Work Plans (QWP) and Quarterly Project Reporting (QPR). Annual Performance Reports (APR) as simplified Project Implementation Reviews (PIR) for progress monitoring were also used. In the latter period of Year 3 the project scope was revised to concentrate activities on national technological capacity development, demonstration pilots on two islands (Rarotonga and Mauke) and enhanced communication and awareness activities. This was sufficient support in terms of administrative project management back-up, with reliance on the UNDP Coordinator at the AMD of MFEM. The M&E measures used were not sufficient to identify the lack of regional support with technical knowhow in terms of land degradation assessment, mapping, analysis and evaluation. Overall with the active involvement of UNDP with administrative support on M&E there was a heightened level of activity and achievement in years 3 and 4. In April 2011 plans were put in place to require monthly reporting to UNDP by the PM. There is evidence that this caused unwanted stress on the delivery of tangible actions. Often with good intent to address PM problems and delays, managers instil administrative measures which add to the pressures for tangible delivery. It is often due to a misinterpretation of the driving forces that cause the problems and delays. A more strategic measure would have been more useful. This could have taken the form of technical back-up and knowhow, in addition to the administrative back-up that was provided. Simply more reporting does not lead to more output.

The co-use of NES and MOIP staff was commendable in making sure there is retention of staff with burgeoning SLM knowledge. Elsewhere in the Pacific the experience is that officers are either made

redundant, are moved to other positions, or are engaged to manage other projects. This does not cater for effective follow-up to SLM capacity development.

3.2.4 Management by the UNDP Country Office

Considerably more support could have been conveyed to the PMU members in regard to technical approaches, methods, techniques and demonstration of these. There was sufficient ground-swell and momentum in terms of organic farming and compost generation, with the assistance of NZAID, however there was limited available guidance on land degradation assessment, mapping, classification and evaluation from the regional level. In terms of the background to the Global Portfolio Approach, prior to the final submission to the GEF Council, agreement had been struck for one of the CROP agencies to be used to provide the technical back-up. This arrangement was dropped in the final submission to the GEF Council in favour of the UNDP supported Global Support Unit (GSU), which eventually was located in South Africa. The GSU was instrumental in terms of administrative support for MSP project design documents (PDD), PDFA support, broad training workshops and developing a knowledge management network. However the model was deficient in providing the range of technical knowledge and knowhow at the national and local levels. At one stage the PMU needed to liaise with parties outside of the region to source and access expertise on LADA approaches. Given that many outputs targeted the enhancement of land use planning, there were no examples sighted of guidance on practical choices with land use planning approaches in terms of: policy, institutional needs, systems approaches (versus product based systems), data needs and characterization, as well as community approaches to enhancing land use decision-making.

The administrative support from the MCO was good, however may have benefited from more in-country assistance with regard to project inception and early implementation. The placement of the UNDP Coordinator at AMD was a very worthy response to the slow start up. Once the final PM was appointed (after a number of changes in NES) there was a good working relationship commenced which assisted with the advanced level of outputs in year 3 and 4.

3.2.5 Coordination and Operational Issues

Considerable delays from a mix of institutional legacies of NES (i.e nomination of HOD before any contractual arrangements could be made; staff turnovers, key staff illness, staff associated project activity), lack of continued momentum on-the-ground as well as logistic issues with Pa Enua (remoteness, technological disadvantages, costs). With technological advancement toward the end of Year 2 and good health of the Technical Adviser - much advancement on the GIS front were achieved in Years 3 & 4. The present PM with assistance from the UNDP Coordinator at AMD, was also critical in turning around the production rate in Year 3 & 4, to the point where excellent outputs were achieved. There were excellent relationships built with the Titikaveka Growers Association, project managers of other projects across government and Pa Enua representatives.

3.3 PROJECT RESULTS

Appendix 3 contains the Overall Project Performance Rating Table. Reference should be made to that appraisal in terms of status and performance.

3.3.1 Attainment of Objectives and Rating

As mentioned, Appendix 2 contains an evaluation of the Strategic Results Framework including the status of achieving the Objectives.

Despite the earlier delays and the scope being refined downward in 2011 the results of the work were very good. The communication, awareness and training outputs were of a very high standard and delivery was effective. 'Sustainable Land Management' or 'SLM' was a recognizable phrase across the Rarotonga community, whether in the commercial centres or amongst farmers and tourism operators. The work with the Muri Lagoon Day was exceptional with many relating the success of the annual event with the SLM Project.

The SLM did succeed in its ambition to:"To strengthen human, institutional capacity, systemic capacity for Sustainable Land Management (SLM)". However while achievements were very high

with regard to increasing knowledge and awareness, and enhanced technical and individual capacity there was less success in systemic capacity building essential for mainstreaming SLM.

3.3.2 Sustainability

The project finished with some high caliber outputs and outcomes, especially in terms of technological capability and knowhow in GIS development, land degradation assessment and mapping, land use evaluation methods and application. Much of the embryonic work in this arena needs ongoing support for capacity building and it is likely that the outputs in mapping and land use assessment will continue to be demanded by other line Ministry and project needs. The demand is already growing. The SRIC-CC project, the Health project, the Muri lagoon work, the CI Red Cross and other formative climate change adaptation initiatives - all call on the GIS capabilities of MOIP (the project partner). While national level land degradation assessment was originally envisaged, the logistic issues and costs were prohibitive. By concentrating the work on Rarotonga and Mauke - capacity is now available to enable replication of the approaches and methods to other Pa Enua, as funds become available. The Soil School is a major achievement. There is a strong demand for continued enrolments. There is interest to replicate in other Pa Enua. This is the same with the composting activities and organic farming trials.

3.3.3 Contribution to upgrading skills of the national staff

The SLM project has facilitated retention of knowledge with mainstream agencies assisted by the cost sharing of the staff resources with the Technical Adviser, the GIS officer and the PM. All staff are envisaged to be retained within their host agencies, with expectations to continue the support to SLM principles – albeit with multi-roles to support other government agency initiatives.

Stakeholders involved in the work on the TGA with the composting pilot and eco-farming demonstration plots have expressed the confidence with their new knowledge and skills to maintain SLM related activities. The Soil School has trained the chief coordinator of the TGA activities to the point of his confidence in delivering future introductory course, with technical support for the more advance and masters class.

3.3.4 Assessment of Overall Rating

Appendix 3 shows an overall score of S for Satisfactory.

Given the delays the level of production over the last 2 years of the project was very good. The quality of outputs was of a very high level and the community engagement was excellent, resulting in a high exposure level and general awareness of SLM issues across the targeted communities and government.

4. Conclusions, Recommendations & Lessons

4.1 Key Findings

The following key findings were drawn from the Terminal Evaluation:-

1) That despite a slow start the Cook Islands SLM project had gathered momentum and with the benefit of a one year extension, has completed a high proportion of the Outputs and Activities planned;

2) The SLM project has succeeded in raising awareness, building capacity and improving the baseline understanding of SLM at the individual, institutional and systemic levels;

3) The SLM project assisted with the understanding across community and government of the benefits of a land use planning system to assist with SLM mainstreaming and implementation;

4) That relatively minor gains in terms of mainstreaming SLM into the Cook Islands development processes were achieved mainly due to:

i. the relative short time frame to achieve the ambitious Objectives and Outcomes;

ii. The early embryonic stages of political momentum to pursue land use planning;

iii. The delays in producing the NAP and inability to comprehensively incorporate SLM needs into the Corporate planning process.

5) Some exceptional outcomes were achieved in community awareness and communications, GIS development, land degradation assessment, determining models for land use planning analysis, instrumental training through the Soil School and pragmatic trials in sustainable farming practices at the demonstration sites in Rarotonga and Mauke;

6) There is a good prospect for sustainability of the momentum built with many of the initiatives and a high prospect of replication with the above outputs – subject to the securing of adequate funding;

7) As the project became more productive in the final two years stakeholders had become more familiar with concepts, gaps, and needs for SLM. Many had gone from requesting land use policy to accepting that a systems approach would be beneficial;

8) That the SLM project succeeded in establishing and/or strengthening stakeholder partnerships and engagements across Government and community. NGOs and community representative groups were used for critical project implementation components;

9) That with regard to mainstreaming some further attention will be needed, but the situation will now be assisted by the making of the NAP, the melding of this with the NESAF and incorporation of priority actions in the annual budgets;

10) That the SLM Project succeeded in creating the appropriate level of groundswell for the initial capacity building and community awareness needed to institute long term nurtured capacity development for SLM as recognized in the explanatory material of the GEF OP 15. The challenge is to ensure this momentum is maintained through follow-up actions and mainstreaming of SLM considerations in decision-making.

4.2 LESSONS LEARNED

With all projects there are often lessons learned by all parties involved, that are not always picked up in reporting on findings and recommendations. The following lists a number of lessons learned from the perspective of the stakeholders, the implementing agencies and the TE consultant.

1) The servicing of all Pa Enua in capacity development projects will not be cost effective given the present high costs of travel, the limited human resource capacity of communities (in terms of their absorptive capacity) and the high transaction costs. A better approach would be to aim for nascent actions in areas where activities can be delivered efficiently and effectively, with the aim to replicate the outputs to other individual or groups of islands. The revised scoping of the project and refining of activities with composting and eco-farming in Rarotonga and Mauke demonstrated the benefit of this approach. These activities were back by the very successful Soil School classes – to which various Pa Enua representatives were invited. This last point is important – the success of replicating nascent activities is correlated to the success of awareness and communications.

2) The slow start up and progress of the project in the first two years, was from multifarious pressures. A key one was the limited technical knowledge and knowhow (and therefore confidence) of PMU staff to a relatively new body of knowledge – i.e. SLM and land degradation. There were a number of regional and international training options availed for SLM for some years before and after the MSPs were designed. The Global Support Unit (GSU)

also continued to offer advice over a number of years. However upon reflection much of this 'training' and knowledge flow was directed at defining land degradation, the need for it to be addressed and confirming issues surrounding impacts. Little was directed on how land degradation is best addressed under various circumstances. Additionally of what technical information existed – little had relevance to Pacific SIDS. .

3) The disbursement of funds from Asia-Pacific or from the Pacific sub-region to the national level still receives criticism. While slow progress in this case warrants circumspect action, the Cook Islands is not the first to raise concerns between the timing of expenditure of one tranche of funds and the arrival of the next. It would seem that the 80% expenditure rule was used for the SLM project. It obviously did not work in all circumstances. Where projects require large technical item expenditures such as the purchase of satellite imagery, purchase of high cost software and hardware or where expensive travel to remote islands is needed – some flexible trigger is needed. While the ability to monitor, budget and plan expenditure may change in time with the development of the Public Finance Management (PFM) within MFEM, there may still be a need for an intermediate address of the issue.

4) In small countries with small economies, human resource rotation and other external human resource issues (e.g. health of staff) can dramatically affect the progress of projects. Effective implementation will require the application of adaptive management practices. Flexibility needs to be built into project design and Monitoring and Evaluation (M&E) systems. In this case there needed to be active involvement of the UNDP MCO at senior level and redefining of the scope of the project – a high cost approach that was effective but would have come also with additional time delays. Separately the placement of the UNDP Support Officer at MFEM was a significant change for the project progress. This too was a commendable action, but it may be reflective of some broader management issues with projects delivered from the regional level.

5) While key stakeholders were involved and engagement in the project preparation, design and inception stages there is always room for improvement. Travel to some of the key Pa Enua may have assisted with broader momentum building that would in the end run, assist with replication of outputs and outcomes.

6) The level of technical knowledge and know-how of land degradation, soil and water management as well as alternative measures able to be implemented through SLM approaches is still limited in the Pacific at the regional and national levels. The Stakeholder meetings for the NAP generation (November and December, 2012) still nominated land degradation and SLM as significant issues for the country. Follow up actions are expected by the communities. However this comes there should be an attempt to ensure the regional level technical expertise is improved and that mechanisms are availed so that SIDS can draw down on this knowledge as they require. Even within the life of early UNCCD action in the Pacific, the PDFA period, the MSP design phases, then project inception – there have been large personnel changes about the Pacific. Ongoing knowledge transfer needs to be instigated to cater for the younger managers who are appearing at the national levels.

7) Of subsidiary interest to UNCCD matters, but of relevance to many MSPs about the Pacific where the enhancement of land use planning was intended – there still seems to be much confusion or lack of comprehension of the role and purpose of land use planning systems, versus economic planning needs at the national level. While there is growing interest among Pacific SIDS to pursue land use planning, to date it is not a technical realm that is supported at the regional level. At this level there is also a lack of comprehension or understanding.

8) There may well be a need for project management training of new and younger managers appearing in key roles about the Pacific. One of the first arenas of training support should target the sequencing of project delivery. The GEF Outcome model Strategic Results

Framework (SRF) is not a good project sequencing tool, but often Project Managers, their Coordinators and even those in regional agencies use SRFs for project sequencing. This may be the cause of a lot of delays in project delivery and mismatch of expenditures and delivery of the next tranches of funds.

9) Among SLM stakeholders and Project Managers (national and regional) there does not seem to be strong comprehension of the link between the MSP Projects and the SLM Portfolio approach to the GEF Operation Program 15 (OP15). OP15 was cognizant that the initial capacity building for SLM would take time and that concrete actions on the ground and targeted research should follow the initial phases of institutional, technological and human resource capacity building. This lack of understanding may have something to do with very high expectations that were conveyed through variation of Objective and Outcome level indicators and targets.

4.3 Conclusions and Recommendations

The following conclusions and recommendations are offered for consideration by the UNDP MCO and the Government of the Cook Islands:

Recommendation 1: Given that Stakeholders have confirmed their continued interest in addressing land degradation through Sustainable Land Management (SLM), the Government of Cook Islands should pursue follow-up actions to build on the momentum that has been generated by the SLM project, with specific attention to:

- Replicating the land degradation assessment and land use analysis work on Mauke to Rarotonga and to other Pa Enua groups through a step-wise programme;
- Continuing the worthy GIS system development that has been commenced to cover other Pa Enua, and to pursue the capture of LiDAR sources of data for multi-NRM purposes;
- Maintaining the communication and awareness outputs and programme to ensure the recognition of SLM through-out the community is not lost. To this end providing resources for NES to continue support to Lagoon Day would be most construction for SLM and other related initiatives. The further development of the NES website as the learning knowledge centre for SLM should also be pursued;
- Extending the Soil School classes to complete Master Classes to enable students to become the deliverers to the Pa Enua, over time. With this continued support seek continued participation of Pa Enua in classes delivered in Rarotonga, with the medium term view for delivery in key Pa Enua as student numbers grow;
- Further investing in the compositing sub-project in Rarotonga as a key input for alternative fertilizer and eco-farming activities (this directly links to the delivery of the Soil School classes as the activities are used a live demonstrations). The operation needs to be up-scaled as the machinery is not capable to treat the current volumes of green waste;
- Continue the support to the demonstration farm (using alternative farming techniques) on Mauke, and replicating this to other Pa Enua, as funds enable, and align this progression to the extension of GIS mapping and Soil School participation.

Recommendation 2: That the National Action Programme (NAP) be used as the key policy platform to mainstream SLM and land degradation activities through firstly linking to the NESAF and the 'Annual Plans' for NES, MOIP and MOA. The Implementation Matrix to the NAP is fully costed as nested Outputs and activities. This needs to be progressed to an Investment Strategy which should prioritize key action areas and determine priorities for funding to match mid-term predictions under the public finance management system (PFM system). The NAP also includes 'project profiles' which have been designed to assist follow-on activities to the SLM Project – based on priorities discussed at Stakeholder Meetings (for the NAP).

Recommendation 3: That a parallel project (to follow up SLM activities) be pursued to assist with the development of institutional capacity for integrated Land Use Planning at the local level. In

general, individual land users are not always aware of the consequences of their actions with the land, groundwater and coastal resources. This is in part due to lack of information, knowledge and access to 'best practice' in planning for development and undertaking activities. Government commitment to fair and equitable land use planning needs to respond to the calls for such systems by community stakeholders in various fora. Past political influence has heightened conflict over poor planning decisions. Without long-term planning and government intervention at various levels 'market forces' dominate, often resulting in conflicting land use and activities that lead to environmental degradation. Under current socio-economic pressures many land users are 'forced' into practices and actions that may satisfy their short-term needs – but have deleterious medium and long-term consequences. With the decentralization policies there is the prospect for land use and development decisions being fully devolved to the Island Councils. There is very little experience, skills and resources to content with major development. To institute land use planning and the extension of the Environment Act, 2003 – assistance and guidance will be required from the national level.

Recommendation 4: That consistent with Recommendation 1 above, a parallel project be pursued to assist with extending the integrated land resource and GIS database to cover additional Pa Enua. This is recommended as a parallel activity as the outputs can be used for multi-sector work (as has been experienced since enhancement through the SLM Project). The work will enhance the National GIS (NGIS) to assist with integrated land use planning and sustainable land management initiatives and decision-making. It will provide additional thematic layers & associated databases covering agro-climatic factors, soils, topography, vegetation and present land use. The project could apply capacity building to assist with use of NGIS in decision-making through use of multi-criteria analysis in support of rational land use policy, planning and land utilisation. There is limited thematic land resource information available in a form that is useful for integrated land use planning and SLM. Coverage is best over Rarotonga, however access to such data in the Pa Enua is minimal or available only with difficulty. NGIS is in a very embryonic stage and needs nurtured capacity and continued support over the medium to longer term. Some spatial data is held among different agencies and in various formats and not based on uniform standards of data or procedures. Mapping to support Land use planning and integrated NRM requires accurate and integrated information on land & coastal resources (e.g. spatial extent of the kinds of land use, land production capacity, a system for rural land use 'zoning' that protects the natural resources etc). The focus needs to change from GIS resources primarily for 'map making' to the applying the inputs/outputs to a variety of decision-making arenas where the GIS data is useful in considering various scenarios of development or alternative kinds of land use and allocation.

Recommendation 5: Consistent with Recommendation 1 that there be follow-up project funding to develop a well-resourced and integrated research and extension program comprising suitably qualified MOA/NES/MOIP and NGO staff & sub-national (Pa Enua) staff. These capacities will be borne out of extension to the Soil School approach, to conduct adaptive sustainable land management (SLM) and 'best practice' research to disseminate ecologically sound and socially acceptable land management technologies to land users through targeted and innovative techniques. Aligned with the research and training shall be the set-up of trial/pilot/demonstration farms using biological farming approaches. The almost complete utilisation of finite land resources means that the expansion of agriculture into marginal areas or sensitive environs will continue. Additionally the land management practices including slash & burn as well as over-reliance on fertilizer and other chemicals are not sustainable. There is dramatic impact on remaining vegetation and potential for high levels of contamination of groundwater lens and the surrounding lagoons. Poorly located and worked agricultural areas in close proximity to shorelines can increase erosion rates, which are sometimes already high, leads to productive land being degraded and increases the vulnerability of foreshores, lagoons and reefs. Greater awareness and understanding of alternative farming and SLM practices is needed at the national and local levels.

Recommendation 6: Consistent with Recommendation 1 there should be additional resources sought for a National Sustainable Land Management, Education and Awareness Program. This should aim to create a high level of government and community understanding about SLM, land use policy and legislation, in particular specified land management 'best practices' with the purpose of reducing land degradation and increasing productivity from the land through sustainable land management (SLM). Future economic activity will lead to increasing competition

for the use of limited land resources and increases in population can be expected to dramatically accelerate land degradation. There is a very poor understanding about legislation, policy and 'best practice' pertaining to land use and sustainable land management. MoA and MOIP research and extension advice to land users, landowners and farmers is in serious need for advancement.

Recommendation 7: Consistent with Recommendation 1 there should be a concerted effort to Improve the capacity and quality of human resources within Government for land management and land use planning. The mid to longer term aim should be to strengthen the Government capacity for policy making, administrating and facilitating the delivery of quality natural resource information, land management advice and land use planning services. This will be best stimulated by improved quality of basic land information for land use planning through improved skills in the collection, mapping and interpretation of natural resource information. The work should promote the understanding about the importance of 'zoning' (or alternatives) and land use planning for the conservation of land resources and sustainable growth or urban and village centres. Establishing confirming a SLM and or spatial land use planning team within NES, MOA or MOIP would be the first challenge. This team would need to work closely with the planning offices in OPM and MFEM, as well as with the Island Councils to develop and implement a national land use planning system and policy. This requires skilled staff in responsible parts of Government to be fully conversant about how the information for the policy/plan is derived, the land use planning process, how plans are to be used and responsibilities. Also those entities involved need to be competent in managing their Unit's responsibilities for all steps in the land use planning process. For land use planning to be effective and have positive impacts, end-users and other stakeholders need to be appreciative of the long term benefits and purpose of a planning process. Needless to say Departmental staff need to also be skilled in transferring knowledge and best practice which in turn helps with extending awareness and willingness to change practice.

Recommendation 8: The working model of the Soil School linking with the compost and alternate farming demonstrations should be extended to focus on soil erosion and sediment management for development on sloping lands. While interest is in limiting development of marginal lands, often family members are allocation only land that is very steep. In this event there is much knowledge transfer that is needed to enable both the community member as well as the government officer – to ensure development on marginal land is such that impacts are minimized. The outputs should be added to the tools that the Compliance Division of NES uses in its administration of EIA provisions.

Recommendation 9: That for all future initiatives and projects the costs of an efficient and functional Project Management Unit be satisfactorily catered for in budgets. For small governments with large responsibilities over islands where large transaction costs are typical – a budget of a least 10% but up to 19% represents a good level of funding based on the working practice of private enterprise in the region.

APPENDIX 1: SLM Stakeholders

Institutions	Legal Status	Management Framework	Current Status
House of Ariki	House of Ariki Act 1966	The Act provides "for the rights, powers, functions and duties of the House and members thereof."	The House of Ariki acts as an advisory body to the government on matters relating to: (a) the welfare of the people and; (b) customs and traditions of the Cook Islands.
Koutu Nui	House of Ariki Act 1966	The Koutu Nui was established under the House of Ariki Act 1966	Representatives from the Koutu Nui have been appointed for issues such as the environment, education, preservation of Maori language, preservation of culture, liquor licensing, youth, religious advisory council, immigration (especially granting of permanent residence).
Local Government	The Outer Islands Local Government Act 1987 provide for the Island Councils to make by-laws to regulate wildlife, waste, and manage development	The Act provides the framework to make, alter or revoke By-laws.	The formulation of by-laws is considered bureaucratic. As a result only a few environmental by-laws have been passed in recent times. Furthermore, the island council members are not fully aware of their roles concerning environmental management.
National Environment Service	Set up under the Environment Act 2003	Issue project permit and EIA for projects and activities in sensitive areas (e.g. foreshore, wetlands, sloping lands) - Monitor implementation and confirm compliance.	Permitting authority under the Environment Act dealing with "Specific Areas of Concern" dealing protection of areas of special concern (foreshore, inland and Cook Island Waters, wetlands, sloping lands), and EIAs. The Permitting authority may require or take remedial action.
Ministry of Works	Set up as the Ministry of Supportive Services under an Act of Parliament in 1994 and Established under the Public Service (Identification of Departments) Order 2000 as well as the Rarotonga Island Council Empowering (Public Works and Services) Ordinance 1959 Also administers the Building Control and Standards Act 1991 and Building Control and Standards Regulations 1991. Custodian of the defunct Town and Country Planning Act, 1969	Implementing Agency to oversee engineering and construction of physical works including roads and landfills Building Controller administers the National Building Code. Manage the Land Survey work for the Govt.	Clearly established service and delivery role in the construction of infrastructure
		Department of Water Works manages water supply system	There is no single national comprehensive Water Supply

Ministry of Works – Water Works	Ministry of Supportive Services Act (36 of 1973-74) constitutes the Ministry of Supportive Services (re-named the Ministry of Works) whose principal functions, as provided in section 4, are to establish, provide and maintain and adequate water supply and reticulation service in all islands. Rarotonga Waterworks Ordinance (11 of 1960) - makes provision for the establishment, maintenance and control of waterworks on the Island of Rarotonga.	on Rarotonga	legislation in the Cook Islands, but there are scattered legal provisions that address the supply of water to the public. The responsibility for water supply and water quantity falls within the Ministry of Works, Water Division whilst water quality is left primarily to the Ministry of Health.
Ministry of Agriculture	Ministry of Agriculture Act 1978.	Principal aim of the Ministry of Agriculture is to maximize exploitation of the potential in agriculture	Absence of a land use policy and planning coupled with a complicated land ownership system and the inability of government to enforce existing land laws has led to progressive encroachment into agricultural land and increasing soil infertility.
Ministry of Marine Resources	Marine Resources Act of 2005.	The Act provides for the establishment of a management regime for marine resources. Part I of the Act Part provides for the management and development of fisheries and related matters. Part I empowers island councils together with local fisheries committees to manage and develop the fisheries resources, which includes all aquatic plants and animals. This can be done by recommending the promulgation of by-laws for a designated fishery, in accordance with the procedures set out under the Outer Islands Local Government Act 1987	The Act applies to all islands. An Institutional strengthening project is being initiated which has a strong integrated coastal zone management component.
CIIC	Cook Islands Investment Corporation Act (3 of 1998) - provides for the establishment of the Cook Islands Investment Corporation to control and manage statutory corporations and to manage and facilitate the disposal of Crown assets.	Cook Islands Investment Corporation manages several subsidiaries (Bank Cook Islands; Small Business Enterprises Centre; Ports Authority, Airport Authority/ Te Aponga Uira; and other government assets).	Manages crown land – including those in foreshore areas

Development Investment Board	Set up under the Development Investment Act 1995-96 – An Act to promote foreign investment in the Cook Islands and to encourage the participation of Cook Islanders in trade, investment and business.	Implementing Agency to provide a one stop shop for investment and trade and business training.	Monitor and Review development generally having regard to the Investment Code and Investment Policy approved by Cabinet. Approval, registration and monitoring of foreign enterprises
Disaster Management Office	Hurricane Safety Act (4 of 1973)	Chief Hurricane Safety Officer, Deputy Chief Hurricane Safety Officer and Hurricane Safety Committee comprising – • the Chief Hurricane Safety Officer; • the Superintendent of Police; • the Director of Works; • the Superintendent of Radio; • the Director of Health; • Chief Postmaster; • Secretary of Internal Affairs.	Institutional strengthening of disaster management framework being undertaken with assistance from the Aian Development Bank. National Plan for Disaster Preparedness is being developed to reduce risk to vulnerable infrastructure and services from climate change.
Crown Law	Crown Law Office Act 1980	The Act provides the mandate of the Crown Law Office.	The office advises Government on legal matters. Enforcement of regulations can be requested and acted upon through court to criminal proceedings.
Ministry of Finance	Ministry of Finance and Economic Management 1995-96	The Act provides for effective economic and financial management and responsibility by Government.	To ensure the mandate of the MFEM Act is carried out it requires government to produce statements of economic policy; confirmation of adherence to fiscal disciplines prescribed under the Act; budget policy statements; economic and fiscal forecasts and updates; financial management information and comprehensive annual reports.
Auditor General's Office	Public Expenditure Review Committee and Audit Act [PERCA] Act 1995-1996	The audit Act empowers the office of the Auditor General to undertake audits of public accounts and government agencies to ensure compliance with sound accounting practices.	The Office of the Auditor General is in the process of initiating a performance-based accounting and audit system, and supports the establishment of an environmental accounting and audit system to promote improved accountability by line ministries responsible for environmental and resource management.
Institutions	Legal Status	Management Framework	Current Status
Taporoporoanga Ipukarea Society.	Cook Islands environmental NGO established through a constitution under the Incorporated Societies Act	The operation of TIS is governed by a constitution. The executive committee is the decision making body.	TIS is active in the areas of advocacy, public education and awareness, campaigns, biodiversity, waste

	1994.		management, climate change and coastal management. Like other NGOs suufers from a lack of committed finances. Affects delivery of objectives. The voluntary nature of the organisation means that efforts are subject to fluctuations.
Takitumu Conservation Area [TCA]	No legal mandate	The Takitumu Conservation Area (TCA) is a community-based project to conserve flora and fauna, with a strong emphasis on participation by local people. The project was established in 1996	The project has scaled down its activities since core funding from the SPREP SPBCP ceased in 2001. Its main activities are currently the Kakerori Recovery Programme which operates from August to March of each year and ecotourism nature walks. Funds from ecotourism help in the management of the TCA and implementation of the KRP.
Island Sustainability Alliance Cook Islands [ISACI]	Cook Islands environmental NGO established through a constitution under the Incorporated Societies Act 1994.	The operation of ISACI is governed by a constitution. The executive committee is the decision making body.	Newly established in 2006 with a mandate to promote organic farming.
WWF	No legal mandate. However, there is an MOU between WWF and Government to enable the NGO to operate in the Cook Islands.	Provides technical and financial support for the following conservation and environmental initiatives and programs: ▪ Environmental Education: Integration of environmental education in the national curriculum framework in partnership with the Ministry of Education (Curriculum Advisory Unit); ▪ Research, Analysis and Information Sharing: on critical conservation issues in the Cook Islands; ▪ Building and increasing the conservation capacity of local communities through education and awareness workshops; ▪ Planning and supporting sustainable community based activities to improve marine and resources management with local organizations/groups and community leaders.	The WWF Project Office has two full time staff (a Project Coordinator and an Environmental Education Adviser), and a part time Administration Officer to assist the development of its programmes. The WWF is currently working with NES and the Ministry of education to develop an environmental education curriculum for schools. The fact that WWF is a regional NGO which has not been incorporated in the Cook Islands has limited its ability to effectively carry out its mandate.
Cook Islands Tourism Marketing Corporation	Set up under the Cook Islands Tourism Marketing Corporation Act 1998	A Board appointed by Minister of Tourism with the primary objective to encourage and promote the development of tourism in the Cook Islands which is economically viable, socially acceptable and	Mandate for Policy and Planning, Marketing and Promotion, Outer Islands and Administration. Other operations undertaken by the Corporation that it has

		environmentally sustainable	no mandate for include: Tourism Training Accreditation of Tourism accommodation facilities and activities which includes promotion of environmental best practices
Private Sector	Cook Islands Chamber of Commerce Incorporated under the Incorporated Society Act. Tourism Council	Environment Committee – Ad hoc Body and formed as part of the Tourism Council	Formulation of Environment Policy for the Tourism Industry

APPENDIX 2: Strategic Results Log-frame Review

Keys to ratings

* STATUS OF DELIVERY:		** RATINGS:	Highly Satisfactory = HS
GREEN / COMPLETED	= Indicators show successful achievement		Satisfactory = S Moderately Satisfactory = MS
YELLOW	= Indicators show expected completion in follow-up or partial completion		Moderately Unsatisfactory = MS Unsatisfactory = U
RED	= Indicators show poor achievement, deferral of work or unlikely to be completed by end of Project		Highly Unsatisfactory =HU

Project Strategy	**Objective Verifiable Indicators**			**Sources of Verification**	**Risks and Assumptions**	**Status**	**Effectiveness**	**Efficiency**
Goal *Contribute to maintaining and improving ecosystem stability, integrity, functions and services while enhancing sustainable livelihoods by building the capacity to implement sustainable land management into all levels of decision-making.*						**Scored at the Objective/ Outcome level**		
Objective of the Project	**Indicator**	**Baseline**	**Target**	**Sources of Verification**	**Risks and Assumptions**			
To strengthen human, institutional capacity, systemic capacity for Sustainable Land Management (SLM).	The percentage of land-users satisfied with available technical support (from either extension services or government technical agency and other service suppliers.	Nil	Effective Land Management Systems to support up-to-date information for public use. Achieved in Year 3 Human capacity and resources readily available on island to offer assistance pertaining to SLM practice and approaches. Achieved in Year 3	SLM Satisfaction Survey	Continued political support for integrating SLM into national development planning		S	MS
Outcome 1: Increased knowledge and awareness of land degradation and the importance of sustainable land management	Training Programmes and awareness raising programmes for local communities are being implemented in a financially sustainable manner and cover all technical requirements	Nil	Regular training programmes conducted among Government Ministries and NGOs in SLM application; Awareness materials on LD and SLM available at Nat govt, villages. and	Training Reports; Workshop evaluation surveys; NGO support for Government training on SLM; Successful	Lack of NGO and public support for training; Lack of Government resources for undertaking regular SLM training course		HS In target communities	MS

	and alternative practices. School curriculum includes SLM and causes of Land Degradation. Economic costs of land degradation are well understood by decision makers and general public.		Outer Island govt. levels; Information available on LD & SLM through GIS system that enables characterization of LD. Achieved in Year 1,2 and 3.	application of SLM practices.	and workshops including producing SLM publication materials for training and awareness raising purposes.			
Outcome 2: Enhanced technical, individual and institutional capacities for SLM.	An inter-ministerial or inter-sectoral institution or mechanism for SLM meets regularly to discuss SLM related issues, has a clear workplan. Innovative tools for SLM, such as land functionality analysis, economic valuation techniques, integrated assessment, multi-criteria decision making exist and fully functional. National Agency responsible for SLM has strong mandate, staff, equipment and authority, and is actively promoting and mainstreaming SLM principles and practice.	UNCCD Technical Working Group established. Nil National Environment Service as focal point for UNCCD and SLM. Nil mainstreaming of SLM in NESAF and NSDP.	A formal inter-Ministerial framework for managing SLM issues and approaches. Achieved in Year 3. National Steering Committee for SLM set up. Achieved in Year 1 SLM GIS tools produced and widely use for economic valuation, functionality analysis and integrated assessments. Achieved in Year 2	Cabinet approval of inter-Ministerial framework and membership of NSC; Minutes of NSC meeting and decisions taken; Workplan approved and followed through. ToR approved. Tool Produced and widely use by the public.	No Cabinet Support for formulation of Inter-Ministerial framework and NSC. Limited National budget allocation for SLM. Limited local expertise to maintain hardware and training on the use of GIS tools.		S	MS
Outcome 3: Systemic capacity building and mainstreaming of SLM principles and objectives	The Central Planning Units of Government uses environmental economic analyses of land use options as a tool in development planning and in preparing economic/development policies and/or budgets.	Nil	Central Planning Units such as the Prime Minister's Department planning unit, Treasury and the National Environment Service to use environmental economic analyses of land use option as a tool for reviewing the NESAF	Economic analysis papers produced and submitted for development planning;	Agencies and institutions willing to collaborate;		MS In terms of enhancing the political and community interest in land use planning systems	MS

			and the National Sustainable Development Plan. Achieved in Year 3.				development	
	Political Commitment to SLM is present among politicians and policy makers. The UNCCD focal point and the inter-sectoral committee play a full role in the preparation of development plans and strategies.	Nil Nil	Strong Political Will and Commitment among parliamentarians and Government policy makers in the Prime Minister's Department, Treasury, Ministry of Works, Ministry of Agriculture and the National Environment Service. Achieved in Year 1,2 and 3. UNCCD focal point involve in national planning for development. Achieved in Year 1 and 2	Cabinet decisions; Parliamentary speeches; Financial Policy Paper for national budgeting; MoU/MoA between agencies for partnership work on SLM.	No or limited political support		U	MS
Outcome 4: Enhanced technical support at the local, Outer Island and national levels to assist with mainstreaming and integrated decision-making	Financing for the Investment Plan has been secured. Investment Plan Implementation mechanism is established – Body responsible for Plan implementation with authority and budget; independent monitoring mechanism; chef de file from amongst development partners; and a permanent consultative mechanism involving most donors and national stakeholders	Nil	An Investment Plan is developed and submitted for approval by Cabinet. Achieve in Year 3. Establish an Investment Plan committee to be responsible for oversight and implementation of plan. Achieve in Year 3.	Cabinet Approval of Investment Plan and Committee set-up. ToR approved.	Development of Investment Plan is delayed; No Cabinet approval for Investment Plan.	In terms of advanced technical capacity through GIS and soil school outcomes. Not in terms of relying only on an Investment Plan, as suggested by these indicators and targets.	MS	MS Through costed NAP SRF
	Expertise and inputs related to integrated pest Management;	Nil	Local expertise on integrated pest Management;	List of local expertise produced. Reports	Limited or No expertise available on		HS for most of the indicator themes	MS

	Conservation farming; environmentally sustainably irrigation; crop diversification according to land functionality analysis is readily available in-country.		Conservation farming; environmentally sustainably irrigation; crop diversification according to land functionality analysis is readily available. Achieved in Year 2 and 3.	made available for public use.	island.			

Outcome 1: Increased knowledge and awareness of land degradation and the importance of sustainable land management.						
Outputs	**Output Indicators**	**Activities**	**End of Project Status**	**Comment**	**Status**	**Rating**
Output 1.1: Awareness raising materials and Social marketing plan.	1.3.1 Social Marketing plan 1.3.1 Communications package: 6 monthly newsletter; annual posters and 2 brochures (one general SLM, one project related) 1.3.1 Media package: broadcasts for radio, TV, print and web-based circulation	1.1.1 Social marketing plan for national awareness communications and knowledge management (the plan should engender cooperative responsibility; target use of church & women's groups; and be used to commence community profiling in selected catchments) 1.1.2 Production of 8 newsletters, 4 posters and marketing material canvassing SLM 1.1.3 Quarterly broadcasts on: Radio, TV, newspapers and internet based networks	SLM education and awareness has been taken onboard by NES. Promoted through Rakei Toa programs etc	• SLM was incorporated into the Communications strategy for NES as well as partly into the annual campaigns e.g. 2012 Yr of Action Against Waste (multiple stakeholder partners), 2011 Year of Wetlands etc. • Mediums for communications were revised from the original indicators to utilise other awareness tools • Brochures were considered an unnecessary expense and project awareness was carried via presentations from the project team or the dissemination of information briefs. • A logo and slogan in English and Maori were developed during the project and were used to brand all project productions • Email networks where used to circulate SLM updates rather than costly printing of newsletters. • Banners and pull ups were also produced to promote the project as well as tshirts which are a popular and successful medium for disseminating messages. Reusable shopping bags in support of the 2012 campaign were also produced. • 6 Posters were produced for the project. Radio and TV broadcasts were used, in some cases specifically supporting annual campaigns e.g. for waste • Not all products carry project branding/UNDP/GEF logos. Some of these because they were produced prior to the brand being designed or else if there were too many sponsors e.g. Waste campaigns, sometimes the decision was made to remove all branding/logos so they don't overpower the message.		HS

Output 1.2: Awareness raising activities organized for local communities, the public, government agencies and schools.	1.3.1 Four (4) National and eight (8) Village Awareness events involving outer Island representatives where practicable 1.3.1 Education materials aggregated & distributed to primary schools 1.3.1 Demonstration events: assembly & distribution of materials; equipment to assist demonstrations	1.2.1 Conduct SLM awareness workshops for resource use planners (national govt), subsistence farmers, landowners, village fono & Outer Island agencies; 1.2.2 Host awareness events at schools and educational institutions; 1.2.3 Host demonstration days and events at representative site/s and at national events during the project. 1.2.4 Ongoing consultations with communities and landowners to increase understanding of SLM and means to merge with traditional practices.		• Presentations for the project given at National Environment Forum, National Annual Meeting of the House of Ariki, training workshops for Land Degradation Assessment, all of which included participants from the Pa Enua. • The annual Lagoon Day was used as the medium for education and awareness for school students. SLM practises have been featured at every Lagoon Day through collaboration with the National Environment Service and in some years with the Ministry of Agriculture and Ministry of Infrastructure and Planning. Over 1000 students attend this event every year as well as members of our communities. Multiple booths feature SLM practises and demonstration sites have been set up to showcase different techniques depending on the theme for the year e.g. when highlighting development on sloping lands, a demonstration of different soil erosion mitigation measures was set up and presented. Posters produced by the project were also presented and explained at Lagoon Days and then disseminated to schools as a teaching resource. • The Kia Orana Soil School programme was aimed at the community level and growers in particular		HS
Output 1.3: Nationwide land degradation assessment	1.3.1 GIS mapping layers of land degradation elements included in the national mapping system. 1.3.1 Report on the extent of land degradation	1.3.1 Aggregate land resource information in national GIS: define the extent and characteristics of land degradation [associated with Output 2.1]; assist with community awareness & knowledge transfer; 1.3.2 Assess and evaluate information gleaned from Outputs 2.1 & 2.2 to complete a report on the extent and causes of land degradation	AusAID PASAP Project is purchasing remaining multi band satellite imagery for the Cook Islands to be used for their V&A work but will also allow NES staff to continue vegetation/LULC mapping following the project which will also benefit the UNEP Invasive Species Project and Integrated Island Biodiversity Project	• Land resource information in a GIS format has been greatly increased, particularly on Rarotonga and Mauke with land use/land cover maps, vulnerability to soil degradation maps produced. • At the international level, there is still no agreement on how to delineate areas affected by land degradation and even in 2013, a new methodology for this has been proposed but not agreed upon. The project decided to test whether the LADA-local method would be suitable for assessing land degradation on small islands such as in the Cooks. • Training workshop in this methodology was carried out in country and LD assessments were carried out on Mauke. • From carrying out the assessment of Mauke, invasive species are found to be a major issue and could possibly be an indicator of poor soils. Vegetation mapping and spectral analysis to separate out invasive plant species may be a ways to map degraded areas using satellite imagery.		HS with regard to the two Islands covered. S if considering that balance of Pa Enua beyond the deliverable scope of the project
Outcome 2: Enhanced technical, individual and institutional capacities for SLM						
Outputs	**Output Indicators**	**Activities**	**End of Project Status**	**Comment**	**Status**	**Rating**
Output 2.1: Training for an	▪ Integrated GIS incorporating land	2.1.1 Technical assistance with the harmonization of GIS systems and	GIS layer development harmonized with CI GIS	• GIS data at NES was harmonized with data held by MOIP as the GIS hub for the Cook Islands. MOA does not use a		HS

improved Geographic Information Systems (GIS) to characterize terrestrial resource systems, define the extent and causes of land degradation NB1: activities are with regard to the representative catchment/s selected for the project. The outputs will assist broader application and ramping up of efforts for a rural land resources atlas; NB2:The output will use a 'training for production' method used elsewhere in the Pacific. GIS trainees will be fully involved in the production of outputs – following the 'learn by doing' approach.	resources information. ▪ Base mapping of representative catchment/s for use by communities in project areas. ▪ Spatial information sharing, with access via a GIS user group, assisted by technology (Oyster, SOPAC Mapserver).	existing information layers (MoIP; NES, MoA and ors); 2.1.2 Confirm anomalies and gaps in, and duplication of information with regard to representative catchment/s; 2.1.3 GIS layers enhanced to reflect land systems information (NZ DSIR – 1970s) using USDA, NSW Soil Conservation and/or NZ LandCare Research model. ; 2.1.4 Incorporate other geographic land resources information collected since the 1970s. Use DSIR work in Atiu (1980s) as a guide [NB: links with Output 1.3 – land degradation assessment] 2.1.5 Use the outputs of GIS capacity development to choose suitable indicators and provide a report on the status of land degradation (for the NAP). 2.1.6 Information sharing and access protocols established and hardware / software procured. 2.1.7 Base maps produced of representative catchment/s, including land systems information, contours, slope classifications, physical and bio-physical features. 2.1.8 Technical backup to village & Outer Island offices on GIS outputs and data collection by communities (GPS etc); 2.1.9 Review, enhancement and incorporation of community mapping in the GIS.	Framwork outputs. Enhancement of Land resource information only targeted Rarotonga and one Pa Enua, due to delays, high transaction costs and access issues. LADA approach tested and sound outcomes used by the communities achieved. However the advancement to indicator development too optimistic. Protocols for sharing of data yet to be developed.	GIS platform and rely on MOIP for this. • GIS layers for land ownership, soils, land protection zones, utilities, marine protected areas, satellite imagery of islands from various sources and years etc were compiled with those already in the hub. • 1970s Soil Maps digitized into GIS and used to produced Soil Degradation Vulnerabilities maps (based on 6 different variables) and in collaboration with the FAO/MOA Soils project (name?), production of Crop Suitability maps based on soils for 43 different cash crops on 5 different Southern Pa Enua = 215 Crop Suitability Maps. These maps were distributed through MOA who were responsible for working with growers in the Pa Enua to help them use these products. • A GIS Data Sharing Protocol was developed for the sharing of GIS data layers between users. It was well received when reviewed by GIS users in different organisations however it was recommended that the Protocol be converted into a Policy and then taken forward • Currently, GIS data is shared from the hub to Government ministries and local organisations (e.g. TIS, CI Red Cross etc) many of whom also share map layers back into the GIS hub at MOIP. • Base maps produced for Mauke islands overlaying cadastral info, soils, land use land cover, protected areas, vulnerability to degradation, crop suitability etc • Mauke Officers participated in GIS training courses and receive assistance with their mapping programmes from SLM PMU. They also have utilised the GPS purchased under the project many times to continue mapping features of Mauke and access technical assistance for GPS use from NES and MOIP. •		
Output 2.2: Local community mapping and appraisal of representative catchment/s.	▪ Report on Participatory technical development and community catchment appraisals ▪ Integrated catchment/s assessment maps by communities for the project area/s. ▪ Integrated land	2.2.1 Introduction of Landcare approaches and methodologies; 2.2.2 Confirm local landcare coordinating groups; 2.2.3 Undertake participatory mapping and appraisal exercises of land resource systems in representative catchment/s of Rarotonga; 2.2.4 Identify landscape features;	The concept similar to Landcare was introduced. The collegiate effort ethos was a driver behind the successful implementation of the Soil School and successful trials with farmers. Balance of expected activities too optimistic	Mapping on Mauke completed. Good model that used outputs to engage community with successful ongoing planting and SLM trials.		S

	use plans produced for the catchment/s: needs, risks, opportunity areas and land use options.	land use & activity areas; hunting & forage areas; transport routes; water systems, services, infrastructure, cultural aspects etc 2.2.5 Identify bio-physical features; forest types; soil landscapes; known degradation areas, poor fertility areas; areas of soil-moisture-nutrient problems; sensitive biodiversity; 2.2.6 Map old land use/activity areas; new land use and activity areas; distinguish lands where fallow periods differ. 2.2.7 Consider and map future needs: based on socio-economic trends, opportunity areas for alternative crops, land area requirements for alternative farming practices etc; 2.2.8 Consider and document traditional practices (graphically where they can be represented), relating these to patterns of customary useage, reconciling competing demands, protection and allocation of resources. 2.2.9 Documentation of complementary choices in farming practices, forestry management, environmental protection & land use planning (the fusion of traditional and 'western' approaches) 2.2.10 Consider and map threats, risks and opportunity areas for rehabilitation, mitigation or adaptive works (invasives, over-harvesting, pollution etc) 2.2.11 Combine community mapping with integrated land use plan (may take the form of a catchment plan, or resource management plan)				
Output 2.3: Local community and Outer Island governance structures and functions	▪ Institutional development report, focusing on local empowerment and TK. ▪ Options for Legislative changes	2.3.1 (Linked to output 3.4) Documentation of the effectiveness and shortcomings of traditional knowledge and management systems to deal with the driving forces behind land degradation	Local empowerment concentrated on knowledge building and grass-roots engagement. TKM acknowledged as useful in furthering	Given the need to focus on priority areas for action, this Output was one of the outputs that was not priority given that much of this was already captured by the ADBTA project. The legal and administrative framework for the Pa		S

enhanced to provide a framework for land and bio-physical information development and resource use planning.	provided and tested - to improve institutional functions and services of village level governance: respect, roles, linkages, administrative processes. ▪ Integrated land use plan/s adopted under strengthened and/or new institutional arrangements	(including tenure, resource access, values and aspirations, 'rules' for resource protection, dispute resolution) 2.3.2 Report on the critical components of customary systems and traditional management, capable of dealing with emerging pressures. Include a comparative analysis of local methods versus 'western' methods. 2.3.3 Review of existing legal & administrative frameworks to establish or clarify the roles of villages, chiefs, Council of chiefs (or similar where they exist) and Outer Island administrations. 2.3.4 Institute changes/additions needed to Outer Island and national legal frameworks and/or administrative processes to integrate/fuse traditional methods/information with 'western' land use/resource management approaches. 2.3.5 Amend/adapt community 'integrated land use' or natural resource management plan to suit findings.	change. Governance activities not able to be achieved within the timeframe	Enua in terms of Islands Administration was redefined in 2013 and comes into effect on 1st July. This changes/clarifies the role of the Mayor, Islands Administrator, Island Council etc which administer the Pa Enua. The role of Chiefs/Sub chiefs/ traditional leaders is already clear as part of Cook Islands culture and was not needed to clarify. The House of Ariki was established by legislation and administered by CI Parliament Services. Island specific bylaws such as Environment regulations were drafted for islands under the Environment Act 2003 as part of the ADBTA project. These regulations were developed with environment protection in mind while taking into account traditional concepts such as ra'ui (protected areas), areas of cultural significance, species specific management measures e.g. minimum catch sizes as well as particular issues of importance for each island (e.g. ban on importation of agricultural pesticides/herbicides).		
Output 2.4: National institutional structures and functions enhanced to better address SLM	▪ Report of institutional structures, functions and practice for resource use agencies. ▪ Institutional changes to strengthen roles, functions and services by NES, MoW & DoA - to outer islands and village level governance.	2.4.1 Review of existing charters, corporate plans, legislation and policies establishing the functions and administrative processes for relevant government agencies responsible for components of SLM 2.4.2 Report on duplication, gaps, and problems with vertical (inter-governmental) and horizontal (intra-governmental) coordination mechanisms 2.4.3 Review the institutional set-up and role of the 'Planning' unit of MoW and that of NES: address links with like planning demand areas (e.g. Lands and Survey, Forestry, Water Works and DoA) 2.4.4 Enhance the human resources, administration and policy direction of the Planning unit.	Completed in part through partner arrangements. Governance issues unable to be addressed within the timeframe	Institutional and Legislative Review was already carried out under ADB TA Institutional Strengthening Project. Institutional Strengthening work under this project focused on strengthening NES Permits and Consents Procedures to ensure that relevant data is captured and managed through the Permits and Consents Database developed by the project. The project also focussed on institutional strengthening of the Advisory and Compliance Division of NES that is responsible for the development consents process. Multiple sessions were held with NES staff to review processes and procedures in this process to be able to better evaluate, monitor and document development projects. The Environment Significance Declarations form (the main form used for development applications) was revamped with support of the project to more clearly capture necessary data as well as more information, is much more user friendly and in a format to allow databasing so that specific activities in areas of concern (e.g. all excavations on sloping lands) can be disaggregated		S

				if needed. Project staff also worked with ACD to develop a Complaints/Monitoring booklet to better document any complaints received from members of the public as well as monitoring of ongoing approved developments. This helps to ensure a paper trail should any breaches in the Act printed with support from the project. This forms as well as the new ESD forms were also supplied to Environment offices in the Pa Enua. The MOIP office has been under review for restructuring with each of the 5 different HOMs over the life of the project. MOIP were aware that there were funds available to support strengthening of their planning unit however this was never utilised. Further review of the development permit process was undertaken prior to the National Economic Summit with a proposal to combine the permits functions of MOIP, NES and MOH in one place however this proposal was never supported. The Survey Dept of MOIP was moved from MOIP to the Ministry of Justice in 2012.		
Output 2.5: Training workshops, demonstrations, seminars and exchanges between outer islands and for local and national stakeholders. Target an operational community-based mentoring network.	▪ Use of Village Council venues for participatory technical development of communities. ▪ Regular demonstration events (minimum of one (1) event every 6 months) at the community level ▪ 2 annual formal GIS training events per annum of resource use planning personnel (Govt & Community reps): focus on technical extension. ▪ One (1) National and two (2) province level training workshops annually to train resource use personnel in basic EIA/SEA, land use planning, & GIS: focusing on decision making.	2.5.1 Develop training materials and undertake specific training of local communities on SLM through Landcare approaches: including landscape analysis/planning; land suitability methods; sustainable farming practices; soil and water management; community monitoring. 2.5.2 Develop training modules and undertake specific training of village, Outer Island and national government stakeholders in GIS/Remote sensing; community land use planning; EIA & SEA for SLM; use of environmental economics in decision-making etc. 2.5.3 Undertake training and demonstration events. 2.5.4 Build up a community based mentoring network, with existing NGO, community based groups and govt technocrats, centering around the LandCare model	Success with the Soil School, with continued interest to maintain classes up to Master-class, then expansion into the Pa Enua.	• Land suitability/ land use planning workshops carried out by MOA under an FAO soils project so the SLM project participated in these rather than duplicated. • Sustainable farming practices promoted through the Kia Orana Soil School Programme which developed 2 training workbooks for the beginners workshop (2 rotations)and advanced training (1 rotation). • Soil and water management demonstrations have been run through Lagoon Day every year. All three rotations of soil school included visits to farms that practise SAP and fieldwork to show the difference in the soils of these areas. • Supported the SPREP/NES workshop on EIA & SEAs • 2 formal GIS workshops under the project with some others organized by other organizations e.g. SOPAC run training through MMR on GIS/GPS mapping. The view of some organizations is that they did not want to develop capacity of their staff in GIS but were willing to rely on MOIP for this function, even when we point out that this capacity is only 1-2 people and you will have to wait for their services. Other organizations and NGOs took the opportunity to train themselves including a secondary student who spent his school holidays doing the training and is now employed at		HS

	▪ Community based mentoring network			MOIP. The Soil School training approach saw the contracting Titikaveka Growers Association to run this training. This was done so those members of TGA that were already practicing biological agriculture would be available as mentors. The Organic Matters Foundation delivered the course. It catered for local capacity building for later delivery of the courses by the TGA members. It catered for sustainability beyond the end of the soil school given they are the local experts in this area. It also enabled better delivery as the growers speak the same 'language'.		
Outcome 3: Systemic capacity building and mainstreaming of SLM principles and objectives						
Outputs	**Output Indicators**	**Activities**	**End of Project Status**	**Comment**	**Rating**	**Status**
Output 3.1: Elaborate and implement the NAP (through co-financing) and identify specific on-the-ground investments required in the medium to long term to implement the NAP.	▪ NAP produced as part of or an addendum to the NESAF or NSDP ▪ NAP endorsed by GoCI ▪ On-the-ground investment needs identified and calculated.	3.1.1 Elaborate the Situation Analysis Report, through this MSP and work associated with the UNCCD & NCSA, to confirm the priorities for land degradation, including capacity building, on-the-ground investments and targeted research 3.1.2 Complete and validate the NAP, through stakeholder participation and merging efforts with the NSDP. Integrate SLM principles and the NAP priorities into the NSDP, as the national policy platform to assist mainstreaming of SLM. 3.1.3 Obtain formal government endorsement and adoption of the NAP and incorporate priorities into budgetary processes, as conveyed by the Investment strategy 3.1.4 Publication &	NAP awaiting Cabinet endorsement. Once endorsed, the NAP will be uploaded onto the NES website, disseminated to stakeholders and submitted to the UNCCD Secretariat.	NAP produced and incorporated into the revised draft NESAF 2013-2018. This will then be used to mainstream the NAP up into the NSDP when it is next revised.		S Some delays

		circulation of NAP and publicity of its recommendations				
Output 3.2: SLM principles and NAP priorities integrated with national development plans, sector/thematic action plans &/or national sustainable development strategies to achieve the Millennium Development Goals, and enhance synergies between MEAs.	▪ Report to Office of Prime Minister (OPM) recommending policy integration between NAP, NESAF and NSDP; ▪ SLM represented consistently in thematic/sector policy; ▪ MDG reporting to include agreed indicators and data on LD	3.2.1 Using NAP ensure consistencies between: the NESAF, NCSA; Forest Policy, the NBSAP, Bio-security, Food Security; ADB CEA; DSAP; UNFCCC 3NatCom & other natural resource policies; 3.2.2 Assist with the finalizing of the NSDP framework either as a stand alone strategy of component of the new National Development Plan – to adequately incorporate the NAP to cover LD and SLM; 3.2.3 Develop practical policy tools to assist with mainstreaming: e.g. strategic environmental assessment of resource use policies (including land use planning; investment, taxation and other economic incentives); 3.2.4 Link identification of indicators, status, trend observations of land degradation in the NAP (as updated) into SOE & MDG reporting.	Work and NAP, with support by the draft NESAF has enabled recognition of land degradation and the need for SLM and land use planning in cross-sectors and multi-sector analytical work e.g. JNAP review	NAP not developed until 2012 following UNCCD review of NAP, global discussion of need for NAP alignment with 10 year strategy and development of guidelines for NAP alignment. NAP developed and integrated into revised NESAF. Will be used to align upwards into NSDP when next reviewed SLM indicators are still being refined at the international level.		S Charter not within SLM partners
Output 3.3: Medium-Term Investment Plan developed to secure long-term support	▪ Investment plan developed and endorsed by GoCI ▪ Funding conduits confirmed for follow up action on SLM	3.3.1 Establish a technical working group, as subsidiary of the UNCCD TWG, to generate the investment plan; 3.3.2 Identify or confirm priority SLM investment needs and opportunities	Deferred due to time delays	This work deferred – see relevant section of SLM TE (sorry don't have a copy of the TE to be able to cut and paste!)		U But reasonable choice to delay given the status of other outputs

		3.3.3 Develop the plan, cost elements & generate project/action profiles for priority investments; 3.3.4 Promote the investment plan with potential donors & analyse international programme opportunities; 3.3.5 Finalize the resource mobilization strategy to accompany the investment plan 3.3.6 Secure funding for follow-up actions to the MSP work				
Output 3.4: Confirmed options for an integrated land use planning system -for medium-long term development & operationalization.	▪ Report on land and resource use planning and development decision-making laws and processes ▪ Options Report - for improving legislative linkages for policy cohesion and empowerment ▪ Rural Land use policy framework developed, incorporating means for village governance empowerment and use of TK.	3.4.1 Review legislative platforms that address land use planning, environmental management, land management, investment and development control (concentrating on community, outer island, national linkages); 3.4.2 Identify synergies, gaps, duplications or anomalies in legislation, regulations, statutory directions or administrative procedures; 3.4.3 Consider options for integrated land use planning, incorporating traditional management (Outcome 4) and Outer Island legislative options & linkages; 3.4.4 Produce a roadmap for integration of law, administrative processes and fiscal systems – for the	Assisting OPM review Land Use Policy. Stakeholder interest to extend vision to land use planning systems, rather than just 'policy'. Custodian swapped to OPM.	ADB TA legislative review undertook this work in part. SLM team involved in review of the 2008 LU Policy managed by OPM. The Draft Rarotonga Land Use Policy and map was supposed to be the basis of this work under the lead of the Office of the Prime Minister with the SLM Project was supposed to fund the community consultation process. Stakeholder consultations were held during the SLM Project until it was decided in 2011 by the committee that the current draft was not clear and needed to be revised/simplified. OPM was tasked to do this but I am unclear how far they got with this. To date, there have been no further meetings of the committee and so this funding was not utilised.		S

		nurtured development of an integrated land use planning system.				
Outcome 4: Enhanced technical support at the local, Outer Island and national levels to assist with mainstreaming and integrated decision-making			**End of Project Status**	**Comment**	**Status**	**Rating**
Inputs	**Output Indicators**	**Activities**				
Output 4.1: Tools, guidelines and manuals for different approaches to capacity development, mainstreaming with policy platforms and integrated land use planning options;	▪ At least 3 manuals and 5 guideline documents- covering methods, techniques and specific tools for SLM. ▪ Dissemination of technical information to remote communities using ICT (e.g. Oyster, SOPAC Mapserver)	4.1.1 Develop theme/technique specific tools, guidelines and manuals – as needed by stakeholders: e.g. community catchment mapping approaches; use of GPS for GIS; environmental economics for policy assessment; land use approaches; SLM techniques; Sustainable farming practices etc. Avail simple and/or advanced 4.1.2 technical equipment as necessary to assist with catchment and landscape appraisals; to pilot sustainable farming practices and record information (e.g A-frame contour banking; GPS recording etc.) 4.1.3 Generate best practice and information sheets, based on pilot work and outputs; and make available to communities.	GPS devices continue to be utilised by officers in the Pa Enua trained under the project, to map further features of their landscape, including water holes and bores, culturally significant areas	2 soil school manuals 2 GIS manuals 2 LADA guidelines 1 LUC guidelines Handheld GPS x 2 and soil assessment toolbox purchased and used for LDA and mapping.		HS
Output 4.2: Local and national knowledge management networks, linked to existing networks;	▪ Web-based knowledge management network, supported by e-databases incorporating SLM information ▪ Community based	4.2.1 Capitalize on existing network, information and clearing-house mechanisms to disseminate	Existing NES Website used	The NES website was used to host the SLM webpage. E-newsletters/email was used to disseminate SLM information. Found that most land information was scattered and not digitised. Used the project to help NES to create databases for information collected related to		S

	mentoring network of landholders and technocrats	information, knowledge and sharing of lessons/successes 4.2.2 Create web-based and database information on SLM 4.2.3 Use umbrella NGOs (e.g. CIANGO) and ICT groups (e.g.Oyster) as means to disseminate and avail information on SLM.		developments. Other Ministries had land resource information that they did not database or digitise (and in my opinion, did not seem interested in doing so dispite many discussions around this) so it was difficult to collate information outside of NES and MOIP. GIS data is collated into the GIS hub on a server with MOIP, maps are uploaded onto the MapServer site for access via internet.		
Output 4.3: Effective monitoring and evaluation systems in place using the GIS, and Outer Island reporting frameworks	▪ Spatial and thematic database system to assist with M&E of actions for SLM. ▪ Simple recording system developed for community participation in M&E processes ▪ MDG reports incorporating SLM indicators (also PRSPs). ▪ Report on baselines and targets for SLM	4.3.1 Reconcile and tailor international environment and sustainable development indicators to suit monitoring of SLM and land degradation (MDGs, JPOI, CSD, UNCCD etc); 4.3.2 Synthesize SLM environment and sustainable development indicators with MSP M&E system. 4.3.3 Ensure synergies between MDG indicators and NES, DoA & MoW databases and reporting systems, using the GIS as the key coordinating mechanism. 4.3.4 Develop systems for community monitoring of the status of their land resources, the extent of clearing & degradation. 4.3.5 Use GIS and M&E indicators and initial monitoring results to establish baselines and targets for SLM (meld with Investment plan work) 4.3.6 Maintain monitoring of the status	Work continues to finalise impact indicators (as a means to monitor SLM and LD) under the UNCCD continues. Difficulties in measuring existing indicators for the Cooks has limited	A preliminary set of impact indicators has been agreed upon and the project worked on measuring some of these, e.g. land cover, as well as trying to identify methodology suitable for small islands to determine affected areas so that extent of land degradation can be mapped. Mauke was used to test this methodology. In my opinion, the depth and accuracy to which we can map land degradation is dependent on the amount of money and time we are willing to invest in the process. If we are willing to spend the time to methodically survey the island then we could come up with a detailed map. I think a simpler methodology is needed to identify areas of concern or areas vulnerable to degradation which can be monitored to ensure that it is managed/mitigated. Visible land degradation is present but overall tends to be patchy and short term if properties are left to recover. Other areas such as existing and old landfills can of course be mapped. The POPs project found that areas on Rarotonga that the community identified as likely to be contaminated or degraded, when the soil was tested they were found to be acceptable so this method is not very reliable.		S Given charter and constraints

		of land degradation, and report to UNCCD, GEF and international stakeholders as may be required				
Output 4.4: Incorporation of local and traditional management approaches into community-led integrated land use planning systems.	▪ Report on model approach for incorporating local and traditional knowledge into an integrated land use planning system (links with Output 3.4) ▪ Report on human resources needs for providing on-going technical backstopping.	4.4.1 Provide technical and advisory back-up services to Outer Island offices and community project teams. 4.4.2 Assist province and village team members with options/ model approaches for integrated planning with village communities. 4.4.3 Aggregate and evaluate TK lessons from the pilot work in the representative catchments for reporting of best practices to pursue during and post-project.	Support provided to Mauke only. Work in balance of Pa Enua, not achievable due to delays, scope and scheduling costs	Not completed.		U
PART III Management Arrangements ***Output 4.5: Project Management Unit and Coordination and management mechanisms established*** ***NB: This part is maintained to ensure all project related actions/activities are incorporated in this Log-Frame Matrix for the Government of Cook Island purposes.***	▪ PMU and NPC established ▪ PC appointed and PMU staff assembled ▪ Links to PMU to the NCSA TWG confirmed. ▪ Management of national, outer island and village project components ▪ Timely production of M&E milestones	4.5.1 Establish the national based Project management unit and National Project Committee within the NES, with administrative links to the MoW and DoA. NES and MoW to co-chair the NPC. 4.5.2 Engage or appoint/second a Project Coordinator (NES); second a Resource Planning Officer (MoW); and engage an Administrative assistant; 4.5.3 Establish management links to include conduits to the Cook Islands	PM accorded. Slow take up of PM responsibilities. Severely affected by delays to the Project, NES PM capacity at the beginning and lack of technical support from the regional level.	See Section 2 of TE for details. NES Receptionist assisted the project administration as in-kind contribution from Govt The projects links to the National Sustainable Development Committee (NSDC)/Central Agencies Committee (CAC) through the representation of the Office of the Prime Minister (OPM) on the SLM committee Most of the members of the TWGs under the SLM Project are the same as those in the NCSA TWGS (in terms of position but not necessarily the same person due to staff changes/moving to new positions) but adjusted based on the focus of the TWG. OMIA (office of the Minister for OI Admin) was restructured and absorbed into the Ministry of Infrastructure and Planning and represented through them. Mauke was the focus of work in the Pa Enua and were represented on the TWG for Land Degradation Assessment by the Mauke Environment and Agriculture Officers (Basilio Kaokao and Taukea Raui) who assisted with the work.		S

		Sustainable Development Committee, the SLM Technical Working Committees (associated with the NCSA UNCCD Thematic Working Group), the links to the Office of the Minister for Outer Island Administration & local community planning committees (which may be made up of representatives of village committees involved in the local representative catchment areas.) 4.5.4 Convene inception meetings at national and Outer Island levels (broaden consultation for project refinements during inception processes) 4.5.5 Regular monitoring and reporting on the status of the project to NES, MoW, OPM, UNDP-GEF, and the Planning Office of the Office of Prime Minister; 4.5.6 Manage project reviews / audits as may be deemed necessary.		These two officers took the lead with the Mauke Demonstration Farm and held meetings with the landowners and Mauke island council to gain support for the farm as well to update them. (Talk to Taukea and Basilio for more details) Inception meeting held with UNDP in country (Meapelo was project officer) Steering Committee meetings and e-newsletters/emails were used to update and report to key stakeholders. The project received an unqualified audit.		

APPENDIX 3: Overall Project Performance Ratings

RATING PROJECT PERFORMANCE RATINGS Criteria	Rating	Comments
Monitoring and Evaluation: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall quality of M&E	MS	M&E contained with the SRF; targets & indicators were originally validated via Stakeholder workshops for the MSP PDD. These were generated prior to GSU Indicator handbook. The amended Project Objective and Outcome indicators and targets in the Oct 2007 version of the PDD were not consistent with that presented to the Stakeholders. It effectively raised expectations beyond that envisaged for the first phase of OP15 projects, to overambitious targets, beyond a 3-4 year timeframe, given the extant situation with institutional, systems, technology and HRD. This presented a weakness to the project design from the outset in terms of expectations. It also provide a divide between the nominated Outcomes and the Outputs, their indicators and associated activities. The latter, given the baseline as reported in the narrative of the MSP PDD -could never achieve the Outcome indicators and targets within a four (4) year timeframe. To satisfy the Outcomes as amended in October 2007, would have required at least 8 years to achieve, with a sensible timeframe in the order of 10 years. Despite the above threats a 'mostly satisfactory' score was achieved as the SRF did contain good indicators/targets at the Output level. If the original Outcome level indicators and targets were retained flexibility could have been in-built in a M&E system to accommodate the re-focus of activities to Rarotonga and Mauke - as demonstration areas.
M&E design at project start up	MS	A separate M&E plan to the SRF was not evident. Support for such an important Project Management tool, may have assisted with reconciling the mis-match between Outcome level Indicators and Targets and those contained in the Table 4 SRF to the PDD. There was much frustration with the GSU Indicator Handbook. Most PICs saw this as an added administrative burden, not a tool that assisted logical sequential project management.
M&E Plan Implementation	MS	Without a refined M&E Plan for project start up and implementation, and given the impacts of initial delays, and periods of low production due to staff illness and turnarounds - the UNDP in unison with the PM, used other adaptive management responses. This included down-scaling Annual Work Plans (AWP) and Annual Project Reporting (APR), to Quarterly Work Plans (QWP) and Quarterly Project Reporting (QPR). Annual Performance Reports (APR), as simplified Project Implementation Review (PIR) for progress monitoring were also used. In the latter period of Year 3 the project scope was revised to concentrate activities on national technological capacity development, demonstration pilots on two islands (Rarotonga and Mauke) and enhanced communication and awareness activities. This was sufficient support in terms of administrative project management back-up, with reliance on the UNDP Coordinator at the AMD of MFEM. The M&E measures used were not sufficient to identify the lack of regional support with technical knowhow in terms of land degradation assessment, mapping, analysis and evaluation. Overall with the active involvement of UNDP with administrative support on M&E there was a heightened level of activity and achievement in years 3 and 4. In April 2011 plans were put in place to require monthly reporting to UNDP by the PC. There is evidence that this caused unwanted stress on the delivery of tangible actions. Often with good intent to address PM problems and delays, managers instil administrative measures which add to the pressures for tangible delivery. It is often due to a misinterpretation of the driving forces that cause the problems and delays. A more strategic measure would have been more useful. This could have taken the form of technical back-up and knowhow, in addition to the administrative back-up that was provided. Simply more reporting does not lead to more output!

IA & EA Execution: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU) , Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall Quality of Project Implementation/Execution	S	Considerable delays from a mix of institutional legacies of NES (i.e. nomination of HOD before any contractual arrangements could be made; staff turnovers, key staff illness, staff associated project activity), lack of continued momentum on-the-ground as well as logistic issues with Pa Enua (remoteness, technological disadvantages, costs). With technological advancement toward the end of Year 2 and good health of the Technical Adviser - much advancement on the GIS front were achieved in Years 3 & 4. The present PM with assistance from the UNDP Coordinator at AMD, was also critical in turning around the production rate in Year 3 & 4, to the point where excellent outputs were achieved. There were excellent relationships built with the Titikaveka Growers Association, project managers of other projects across government and Pa Enua representatives.
Implementing Agency Execution	S	Considerably more support could have been conveyed to the PMU members in regard to technical approaches, methods, techniques and demonstration of these. There was sufficient ground-well and momentum in terms of organic farming and compost generation, with the assistance of NZAID, however there was limited available guidance on land degradation assessment, mapping, classification and evaluation from the regional level. In terms of the background to the Global Portfolio Approach, prior to the final submission to the GEF Council, agreement had been struck for one of the CROP agencies to be used to provide the technical back-up. This arrangement was dropped in the final submission to the GEF Council in favour of the UNDP supported Global Support Unit, which eventually was located in South Africa. The GSU was instrumental in terms of administrative support for MSP project design, PDFA support, broad training workshops and developing a knowledge management network - the model was deficient in providing the range of technical knowledge and knowhow at the local and national levels. At one stage the PMU needed to liaise with parties outside of the region to source and access expertise on LADA approaches. Given that many outputs targeted the enhancement of land use planning, there were no examples sighted of guidance on practical choices with land use planning approaches in terms of policy, institutional needs, systems approaches (versus product based systems), data needs and characterization, as well as community approaches to enhancing land use decision-making. The administrative support from the MCO was good, however may have benefited from more in-country assistance with regard to project inception and early implementation. The placement of the UNDP Coordinator at AMD was a very worthy response to slow start up. Once the final PM was appointed (after a number of changes in NES) there was a good working relationship commenced which assisted with the advanced level of outputs in year 3 and 4.
Executing Agency Execution	S	NES as the key agency were very slow in establishing the modalities to maintain the momentum after the MSP was approved. There was much referral to institutional issues (formalization appointment of the HOD NES) and sickness did affect two of the key players in the PMU team. With staff turnaround which is characteristic of Pacific SIDS, consistent follow-up was lacking. The appointment of the current PM was critical to the turnaround. She injected much momentum and drive into the project. Relationship building is important in small economies where multiple development assistance projects are often ongoing drawing human resources. The stress that often occurs in this situation leads to people working in silos. The PM was able to work through these barriers and both within NES, between the partner agencies (MOIP & DOA) and across government - there was a credible turnaround in buy-in, support and collegiate efforts.

Outcomes: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall Quality of Project Outcomes	HS	Despite the scope being refined downward in 2011 the results of the work were very good. The communication, awareness and training outputs were of a very high standard and delivery was effective. 'Sustainable Land Management' or 'SLM' was a recognizable phrase across the Rarotonga community, whether in the commercial centres or amongst farmers and tourism operators. The work with the Muri Lagoon Day was exceptional with many relating the success of the annual event with the SLM Project.
Relevance: relevant (R) or not relevant (NR)	R	The Outcomes, outputs and activities are still very relevant to the needs for SLM for sustainable development - as expressed at the Stakeholder workshop for the NAP generation held at the end of 2012. This sentiment was also expressed by many interviewed as part of the TE. Consistent with the frameworks of the OP15 of GEF, the original project design was based on stimulating the initial momentum for SLM and land use planning. It respected the need for longer term investment to fulfil this end. This longer term view of nurtured capacity building over a 5-10 year investment period, was weakened by the amended indicators and targets used at the higher Outcomes and Project Objective level. The former project design saw the MSP as a means to an end, which was a pragmatic and a realistic endeavour given the baseline, whereas the amended form tried to promote an 'end', with nominated targets that did not appreciate the baseline. For instance 'economic valuation' to assist with land use planning decision-making is superfluous when there is no extant land use planning system!
Effectiveness	HS	The outputs produced within the last 2 years of the project, after the refining of the scope in 2011 were highly satisfactory in terms of: community engagement and increase in awareness of land degradation and the need for SLM; the formative work in organizing spatial mapping and database development (through GIS and relational databases) - to suit ongoing advancement of land capability & land suitability assessment and land use planning; the training and education systems established through the Soil School, and the formulation of highly successful demonstration activities in Rarotonga and Mauke (composting and organic farming).
Efficiency	MS	The highly satisfactory score of the effectiveness of the work was weakened by the efficiency of the NES and partners to strive for good project inception and implementation over the first two years. The efficiency improved massively in the last 2 years of the project.
Sustainability: Likely (L); Moderately Likely (ML); Moderately Unlikely (MU); Unlikely (U).		
Overall likelihood of risks to Sustainability:	L	The project finished with some high calibre outputs and outcomes, especially in terms of technological capability and knowhow in GIS development, land degradation assessment and mapping, land use evaluation methods and application. Much embryonic work is needed in this arena of capacity building and it is likely that the outputs in mapping and land use assessment will continue to be demanded by other line Ministry and project needs. This is already occurring. The SRIC-CC project, the Health project, the Muri lagoon work, the CI Red Cross and other formative climate change adaptation initiatives - all call on the GIS capabilities of MOIP (the project partner). While national level land degradation assessment was originally envisaged, the logistic issues and costs were prohibitive. By concentrating the work on Rarotonga and Mauke - capacity is now available to enable replication of the approaches and methods to other Pa Enua, as funds become available. The Soil School is a major achievement. There is a strong demand for continued enrolments. There is interest to replicate in other Pa Enua. This is the same with the composting activities and organic farming trials.

Financial resources	ML	The overall likelihood of sustainable actions is going to be dictated by finance. A Financial/Investment Plan was not generated, however the pervasive passion behind stakeholders in calling for continued actions and investments in SLM, will attract attention in due course. The NAP contains a fully costed SRF, which in itself arms the Government with sufficient and plausible reasoning to seek additional and longer term funding as envisaged by the OP15 advisory notes.
Socio-economic	ML	The socio-economic benefits from the SLM Project will be felt only after a long term lag period. The aim of the Project was to cause the initial momentum to address institutional and systemic gaps. The socio-economic benefits of the change in policy over time, is not immediately measurable. With greater understanding of land degradation and the need for and means to pursue SLM, will come a reduction in conflict over competing land uses in time. With proper land use planning politically charged short term horizon decisions will have less an impact, and the negative impacts from over-consumption through poor land use and farming practices will reduce. From all this will come economic benefits through: improved soil condition, improved sustainable production, reduction in erosion and sedimentation and improved quality of waterways (in turn improving the condition of the near shore lagoons and reefs.
Institutional framework and governance	ML	There has been reinvigorated interest in furthering land use planning by the Government. Community stakeholders are now expressing that the institutional capacity building should look beyond development of 'policy' - to the development of systems for decision-making. As experience in Samoa has shown the establishment of a successful land use planning system in a customary use-hold system requires nurtured development over at least a 10 year time frame.
Environmental	ML	Like the socio-economic benefits the environmental benefits from the outputs and outcomes achieved may not be immediately measurable. The project focused on HRD, awareness and education and institutional development to stimulate long term investments. The high demand and attendance rate of the Soil School, as well as the growing interest among farmers to join the composting and soil fertilizer replacement initiative will eventuate in good environmental practice of the coming years. There is not yet in place any M&E system to monitor likely improvements.
Impact: Significant (S), Minimal (M), Negligible (N) , Not applicable (NA)		
Environmental Status Improvement	NA	As mentioned the project primarily focused on institutional and HRD development, to cater for longer term investment and community change. It did not result in long term targeted investments and pragmatic on-the-ground activities in a broad area - where improvements and stress reduction could be measured
Environmental Stress Reduction	NA	see above comments
Progress towards stress/status change	S	Institutional & Systemic change to cater for improved land use planning and practices takes time and there will be lag periods between initial formative investments and measurable outcomes on the ground. Approaches to land degradation assessment, land capability analysis and application of analysis to land use planning are now known by key stakeholders, and will enable replication of outputs to other Pa Enua in follow-up work. Much worthy work will be supported by the advancement of land use planning, developed through community approaches
Overall Project results	S	Given the delays early in the Project, the level of production over the last 2 years of the project were very good. The quality of outputs was of a very high level and the community engagement was excellent, resulting in a high exposure level and general awareness of SLM issues across the targeted communities.

APPENDIX 4: Overview of Project Finances

[This summary report was prepared by the Project Manager Ms Heimata Louisa Karika]

Total Project Expenditure

GEF funds for the development of the project document (MSP PDF-A funds) were combined with funds for the SLM MSP Project. This is why expenditure is shown to extend from 2006-2012. Below is the collated expenditure of the SLM Project based on in country disbursements through MFEM DCD (formerly AMD) with footnotes explaining differences between these figures and the CDRs.

Expenditure for 2006-2008 was prior to the commencement of the SLM PC and as such, obtaining records for these transactions is difficult due to staff turnover at NES. Figures below were obtained via MFEM DCD records of disbursements.

Expenditure figures up until 2011 are in US dollars, the currency of the project. Once UNDP converted to disbursing funds to the Cook Islands in New Zealand dollars, the project has recorded funds expenditure in New Zealand dollars.

The CDRs for 2012 and 2013 were availed directly to the TE Consultant.

	USD			
	2006	2007	2008	USD
International Consultants	5625	5694.04		$11,319.04
Contractual Services		3000.77	6140.88	$9,141.65
	$5,625	$8,694.81	$6,140.88[3]	

	USD								
	2009				2010				
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
Increased Knowledge of SLM									
International Consultants									
Local Consultants								386.15	$386.15
Contractual Services	71.05	86.8		182.59	339.71	553.4			$1,233.55
Enhance capacity for SLM									
International Consultants									
Local Consultants									
Contractual Services					905.05	2958.31	626.81	7668.38	$12,158.55
Mainstreaming of SLM									
Contractual Services			3985.98			8579.77	980.69		$13,546.44
Tech Support for Mainstreaming									
Contractual Services						223.56	2263.85	2433.44	$4,920.85
Professional Services									
Local Consultants					3355.44		1845.66	954.77	$6,155.87
	$71.05	$86.80	$3,985.98	$182.59	$4,600.20	$12,315.04	$5,717.01	$11,442.74	
		2009 Total		$4,326.42		2010 Total		$34,074.99[4]	

[3] The 2008 CDR includes disbursements directly from UNDP for $2766 – 2008 total disbursements are $8,906.88USD.

[4] The 2010 CDR included Unrealized Gains of $202.35 – 2010 total disbursements are $33,872.70 USD

	NZD								NZD
	2011				2012				$
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
Increased Knowledge of SLM									
International Consultants			6252.3						$6,252.30
Local Consultants		1100	3086			1010	200		$5,396.00
Contractual Services		4259.62	16838.44	3229.88	96.98	26950.2	9525.45	7719.11	$68,619.68
Enhance capacity for SLM									
International Consultants									
Local Consultants								17398.41	$17,398.41
Contractual Services	4009.96	1533.34	1385	28807	11529.83	60550.46	4106.6	3566.6	$115,488.85
Mainstreaming of SLM									
Contractual Services		296.5					8639	31401.79	$40,336.29
Tech Support for Mainstreaming									
Contractual Services	11037.62	5441.16		1183.24	1829.49	488.19	131.96	1304.37	$21,416.03
Professional Services									
Local Consultants	1006.69		3361.02	8574.13		6777.82	16913.5	2295.93	$38,929.09
	$16,054.27	$12,630.62	$30,922.76	$41,794.25	$13,456.30	$95,776.67	$39,516.51	$63,686.21	
		2011 Total		$101,401.90[5]		2012 Total		$212,435.69[6]	

Copies of CDRs are not included in this final Appendix. They are available upon request.

[5] UNDP disbursements were incorrectly allocated to the Cook Islands SLM Project (See UNDP note on 2011 CDR).

[6] Expenditure in NZD was converted to USD for the 2011 CDR

APPENDIX 5: Co-financing Analysis

Co-Financing Contributions	Government Contribution		
Personnel	**Cash USD**	**In kind USD**	**Total**
PC Salary (50%)	48000		
TA Salary (50%)	51200		
NES Staff time		100000	
Media officer - ads, media, documentation			
Education officer - planning, awareness, resources, media, advertising			
Receptionist - admin assistance to project			
Director's PA - logistics coordination for workshops/meetings			
CAO - financial reimbursements from utilising NES funds			
Compliance staff - organisationof SLM events, fieldwork and mapping, training, institutional strengthening			
education awareness presentations, preperation of resources			
Island Futures staff - organisation of SLM events, fieldwork and mapping, training, institutional strengthening			
education awareness presentations, preperation of resources			
MOIP Staff time		60000	
GIS mapping work			
GIS Server and Hub - storage of data			
Download of imagery from SOPAC			
Financial administration of TA Salary			
Lagoon Day organisation and hosting			
Fieldwork for LDA and wetlands inventory			
MFEM Staff time		40000	
Vetting of requisition forms, issue of cheques			
Reconciliation of accounts			
Monitoring of financial expenditure			
MOA Staff time		15000	
Land degradation assessment - 2 staff fulltime			
Lagoon Day booth organisation, materials, presentations			
Government staff (across Ministries)		20000	
Participation in SLM SC, TWG meetings, workshops			
5-15 participants per event			
	99200	**235000**	**334200**
Outputs from Operations Budget	**Cash USD**	**In kind USD**	**Total**
NES Operations budget			
Education and Awareness ($15000 x 4yrs)	45000		
Power (SLM 10% = $2500pa)	10000		
Communications (SLM 10% = $3000pa)	12000		
including with Pa Enua			
MOIP Operations Budget			
Education and Awareness ($10000 x 2yrs)	20000		
Power (SLM 5% = $5000pa, GIS hardware)	20000		
Communications (SLM 5% = $3000pa GIS server)	12000		
including with Pa Enua			
Difference in SLM % allocation is due to the $$ difference between operations budgets			
	119000	**0**	**119000**

Office Space and Vehicle Use	Cash USD	In kind USD	Total
NES x 4yrs			
Office Space (Rent $45,000 pa x 5%)	9000		
Vehicle use including fuel	4800	5000	
MOIP x 4yrs			
Office Space (2 project staff)		15000	
Vehicle use including fuel	2400	2000	
MOA			
Vehicle use (10 days Mauke @$50pday)		500	
Conference Rooms (excluding those paid by project funds)		5500	
Free use of rooms @ MOIP, NES, MMR, OPM, MOA			
$100 per day (based on hall hireage costs			
SC/TWG meetings, training, workshops,			
project team and stakeholder meetings			
	16200	**28000**	**44200**
Additional financing	**Cash USD**	**In kind USD**	**Total**
National Human Resources Dept (now Min of Education)			
Support to Pa Enua participation in Soil School			
Airfares and DSA (8 participants)	6400		
MOA			
Support to the FAO Soils Project	??	??	
	6400	**0**	**6400**
Total Government Contribution in support of the CI SLM Project			**$503,800.00**

APPENDIX 5: TE Terms of Reference

Title: Consultant for UNDP/GEF Project Terminal Evaluation
Project: Building Capacity and Mainstreaming Sustainable Land Management in the Cook Islands
Duration: 15 days to be completed by October 30th, 2012
Supervisor(s): UNDP Multi Country Office in Samoa, National Environmental Services, Cook Islands;
Duty Station: Rarotonga, Cook Islands

Project Background

Project Objectives and Expected Outputs

Objectives of the Evaluation

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives: i) to monitor and evaluate results and impacts; ii) to provide a basis for decision making on necessary amendments and improvements; iii) to promote accountability for resource use; and iv) to document, provide feedback on, and disseminate lessons learned. A mix of tools is used to ensure effective project M&E. These might be applied continuously throughout the lifetime of the project – e.g. periodic monitoring of indicators, or as specific time-bound exercises such as mid-term reviews, audit reports and independent evaluations.

In accordance with UNDP/GEF M&E policies and procedures, all projects with long implementation periods (e.g. over 5 or 6 years) are strongly encouraged to conduct mid-term evaluations. In addition to providing an independent in-depth review of implementation progress, this type of evaluation is responsive to GEF Council decisions on transparency and better access of information during implementation.

Final evaluations are intended to assess the relevance, performance and success of the project. It looks at early signs of potential impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. It will also identify/document lessons learned and make recommendations that might improve design and implementation of other UNDP/GEF projects.

The overall objective of this TE is to review progress towards the project's objectives and outcomes, assess the efficiency and cost-effectiveness of how the project has moved towards its objectives and outcomes, identify strengths and weaknesses in project design and implementation, and provide recommendations on design modifications that could have increased the likelihood of success, and on specific actions that might be taken into consideration in designing future projects of a related nature.

Scope of the Evaluation

Overall evaluation of the project
The evaluation will address the following specific issues:

Project design

The terminal evaluation will assess the extent to which the overall project design remains valid. The evaluation team will review the project's concept, strategy and approach within the context of effective capacity development and sustainability. Specifically, the team will:

- assess the soundness of the underlying assumptions;
- assess the approach used in design and whether the selected intervention strategy addressed the root causes and principal threats in the project area;
- assess the plans and potential for replicating or scaling up the site-based experiences;

The evaluation team will also attempt to ascertain the current level of comprehension of the project concept, focusing on three specific sets of actors: (i) project management team; (ii) field officers; and (iii) local communities.

Project implementation

The Evaluation will assess the extent to which project management and implementation has been effective, efficient and responsive. Specifically, it will:

- assess overall institutional arrangements for the execution, implementation, management, monitoring and review of the project. This covers a number of issues, including: the appropriateness of joint implementation and coordination; whether there has been adequate periodic oversight of activities; the effectiveness of government counterparts; and the effectiveness of relationships between key stakeholders;
- assess the use of logical framework as a management tool during implementation;
- assess indicators and demonstrated use of adaptive management;
- assess the quality and relevance of project reporting;

- assess the mechanisms for information dissemination (advocacy and awareness raising) in project implementation and the extent of stakeholder participation in management;
- analyze the project financing, specifically well and cost-effective financial management was (overview of spending vs budget; analysis of disbursement to determine effectiveness; process for allocation of budget and mechanism for changes etc.).
- review the effectiveness and the methodology of the overall Programme structure, how effectively the Programme addressed responsibilities especially towards capacity building and challenges, its main achievements and overall impact as well as the remaining gaps.
- assess the extent to which programme design, implementation and monitoring have taken the following cross cutting issues into consideration: Human rights, Equity, Institutional strengthening and Innovation or added value to national development

Results

The Evaluation will examine the relevance, efficiency, effectiveness and sustainability of operational activities and results achieved by the project to-date, by showing how the component(s) processes and outcomes have contributed (or have the potential to contribute) to the achievement of project and GEF environmental goals. The Evaluation will:

- Assess the extent to which the project achieved the global environmental objectives
- Assess the effectiveness with which the project addressed the root causes and imminent threats identified by the project
- assess, quantitatively and qualitatively, the achievements and impact in terms of outputs and its contribution to outcomes as defined in the project document;
- assess to what extent the project has made impacts on promoting local participatory decision-making and local governance;
- assess to what extent the project has or will contribute to the strengthened enabling environment for conservation;
- assess the sustainability of project results (describe the key factors that will require attention to improve prospects for sustainability of project outcomes).
-

The evaluation team will use a project logical framework to determine the overall contribution of project outcomes to development and global environmental goals. The evaluation team is also invited to highlight contributions which are strictly beyond the project scope.

Governance and capacity-building

The Project promotes participatory processes and behavior that affect the way land use management is done at the local and national levels. This is principally achieved through the wide participation of local communities, capacity-building, and the promotion of accountability and transparency at different levels of government. In this regard, the Evaluation will look at how the project contributed to improved governance at local and national levels, and examine how governance issues have impacted on the achievement of project goals and outputs.

One of the specific areas the evaluation team is asked to assess in this area is how and to what extent the project has built management, planning and operational capacity among the project's stakeholders, particularly at the community levels. This should include an overview of capacity-building techniques employed by the project as well as of the monitoring mechanisms involved.

Lessons learned

- The Evaluation will also highlight lessons learned and best and worst practices in addressing issues relating to relevance, performance and success. Describe the main lessons that have emerged in terms of:
  - Country ownership;
  - Stakeholder participation;
  - Adaptive management processes;
  - Efforts to secure sustainability; and
  - The role of M&E in project implementation.

In describing all lessons learned, an explicit distinction needs to be made between those lessons applicable only to this project, and lessons that may be of value more broadly to other similar projects

Methodology

The evaluation methodology will be determined by the evaluation team, guided by the requirements of GEF and UNDP as articulated in various guidelines, policies and manuals on the conduct of evaluations for GEF projects as well as key project documents such as the approved GEF project brief, the final UNDP project document, the inception workshop report, the project log-frame and annual budgets and work plans, the annual Project Implementation Review, Project Board, and PMT meeting minutes as available, and other technical reports and documents as relevant. The evaluation methodology should be clearly documented in the final evaluation report including comprehensive details of the following:

- documents reviewed

- interviews conducted
- consultations held with all stakeholders
- project sites visited
- techniques and approaches used for data gathering, verification and analysis

Conduct of the Evaluation

Under the leadership of the Team Leader, the Evaluation Team will work independently but will liaise closely with UNDP CO, and Executing Agency. The evaluation mission will also liaise periodically with the UNDP-GEF Regional Technical Advisor (RTA) at the UNDP Regional Centre in Bangkok to ensure that UNDP-GEF and GEF requirements are being met.

The team will visit the project site to ensure adequate consultation with all key stakeholders. Towards the end of the field evaluation, presentation will be made to all key stakeholders in country. After the presentation the team will take note of verbal and/or written responses to its presentation and consider these in preparing an interim draft evaluation report that will be provided to Executing Agency/UNDP before the team leaves for distribution to stakeholders. The executing agency and UNDP will circulate the draft report to all stakeholders requesting written feedback and finalized by the evaluators within the dates reflected in the evaluation schedule.

While the evaluation team is free to determine the actual layout of the evaluation report, this must include the minimum content requirements mentioned earlier. The Team Leader will forward the final report by e-mail to UNDP MCO and the UNDP-GEF RTA in Bangkok for onward distribution to all stakeholders. In addition the Team Leader will forward a hard copy and electronic copy saved on disk to UNDP MCO. The evaluators will be responsible for the contents, quality and veracity of the report.

Deliverables

The main products expected from the evaluation are:

- presentation(s) to key stakeholders;
- an interim draft report;
- a final comprehensive evaluation report

The final TE report will include: i) findings and conclusions in relation to the issues to be addressed identified under sections 2 and 3 of this TOR; ii) assessment of gaps and/or additional measures needed that might justify future GEF investment in the country, and iii) guidance for future investments (mechanisms, scale, themes, location, etc).

The report should also include the evaluators' independent final rating on the following:

- Sustainability;
- Achievement of objectives/outcomes (the extent to which the project's environmental and development objectives and outcomes were achieved);
- Implementation Approach;
- Stakeholder Participation/Public Involvement; and
- Monitoring & Evaluation.

The rating should be within a 6-point scale as follows: Highly Satisfactory (HS), Marginally Satisfactory (MS), Satisfactory (S), Marginally Unsatisfactory (MU), Unsatisfactory (U) and Highly Unsatisfactory (HU). The final report together with the annexes shall be written in English and shall be presented in electronic form in MS Word format as well as a hard copy

APPENDIX 6: Schedule of Consultations

Meeting Times - SLM Terminal Evaluation with Matt McIntyre				
DATE	**TIME**	**ORGANISATION**	**CONTACT**	**VENUE**
Monday 29th April	9-12pm	NES - Protocols & Briefings	Louisa Karika SLM PM	NES
	1-4pm	Meeting confirmations, Doc review, Briefings re Co-financing		NES
Tuesday	9-10.30pm	Discussions with MFEM	Vanessa Jenner - AMD	Clubana
	11-11.30am 6pm	Acting HOD Env Te Ipukarea Society	Joseph Brider Kelvin Passfield	
Wednesday 1st May	9 - 10am	Office of the Prime Minister - CPPO	Celine Dyer	OPM - CPPO
	10.30 - 11.30 am	MFEM - Development Coordination Div	Vanessa Jenner,Taimata Allsworth	MFEM 3rd floor
	11.30 am - 12.30pm	Ministry of Infrastructure & Planning	Mac Mokoroa (Acting HOM), Timoti Tangiruaine	MOIP office
	1.15-1.45pm	Associate Minister for Environment	Atatoa Herman	NES
		MFEM - Development Coordination Div	Vanessa Jenner,Taimata Allsworth	
	3 - 4 pm			
Thursday 30th April	9 - 10am	NES - Advisory & Compliance Division	Rimmel etc	NES
	10.15 - 11.15 am	Titikaveka Growers Association	Teava Iro	75906/23014
	11.30 am - 12.30pm			
	1.30 - 2.30pm			
Friday 30th April	9 - 10am	Ministry of Agriculture	TBC - William Wigmore - off island	MOA
	10.15 - 11.15 am	TGA	Visit planned to Composting Site	On-site
	11.30 am - 12.30pm	Ministry of Marine Resources	Ben Ponia	MMR
	1.30 - 2.30pm	ISACI/Koutu Nui - off island		

APPENDIX 6: Summary of Outputs by Outcome

NB: Much of this report was written by the SLM Project Coordinator, Ms Heimata Louisa Karika. It was edited and adapted by the author of the Terminal Evaluation

Outcome 1: Increased Knowledge and Awareness

1.1 Education and Awareness Raising Materials

Organisations such as NES and MOIP implement multiple projects simultaneously and in order to give the project its own identity, the project was branded through the development of a project logo and slogans in English and Maori.

tei to rima te mekameka o te enua

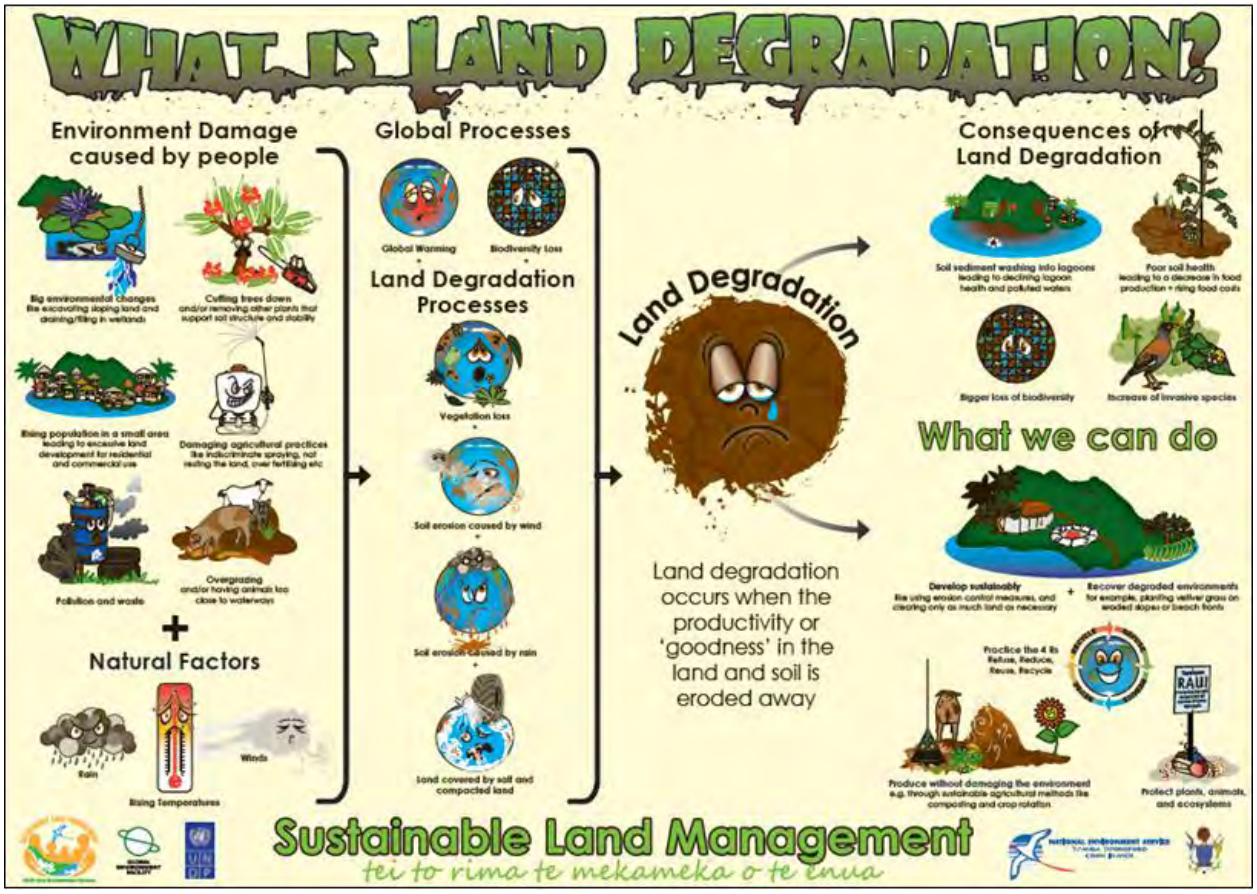
the future of our land is in our hands

The project brand was placed on all outputs produced by the project and widely used to promote the project. T-shirts were also produced by the project as they are good medium in the Cook Islands for promoting messages to the community. Project staff used these to identify themselves when going out to the community or in the field for data collection.

Later in the project, t-shirts were also distributed to Project Steering Committee members, NES and MOIP staff, participants in all training workshops including the Kia Orana Soil School as well as used as prizes for National Environment Week events, Lagoon Day, and other activities.

In collaboration with NES, the project produced radio adverts to raise awareness of the issue of land degradation and promote sustainable land management. Adverts for television were also produced to more specifically target the links between waste and sustainable land management. These were produced in collaboration with partners under the 2012 Year of Action against Waste.

Some of the most successful resources produced by the project were the posters designed to explain 'What is Land Degradation?'. Another was designed and produced specifically for Lagoon Day. The 'What is Land Degradation' poster (below) is based on a poster displayed at a UNCCD COP. The project localised it to focus on issues relevant to the Cook Islands as well as hiring a local graphics artist to do the same to the images. Multiple copies of these posters were distributed to primary and secondary schools, including in the Pa Enua.



The 'From the Mountains to the Sea' poster (below) was originally developed by a consultant for EIA capacity building and adapted by the PC. It was initially presented at Lagoon Day 2010 as a way to visualise environment problems and solutions on Rarotonga and link what was happening on the land to the impacts on the lagoons.

The response by teachers escorting classes around Lagoon Day was overwhelmingly positive, with multiple requests for the poster for their classrooms. It was decided that it should be developed into a smaller poster and circulated. A local graphics artist was hired to digitise the poster and multiple copies of these posters were distributed to primary and secondary schools, including in the Pa Enua.

Working group meetings were held with maori language experts and environment practitioners to create Maori words for SLM/Land degradation terminology - as they were technical terms that did not translate well to Maori. The goal was to develop Maori terms and officially submit them to the Maori Language Commission to approve and endorse before they could be used to translate project materials including radio and tv ads, posters etc. Other NES projects also took the opportunity to support this initiative by also organising follow-up meetings to translate their own technical terms.

Some Important Environment Words Translated

Land degradation	**Enua akatane'aia**
barren or degraded land	◂ enua tane'a
Barren or degraded soil	◂ one pariri
Land that could become degraded	◂ enua akatane'a
rich, fertile productive soil	◂ one ngarungaruā
Sustainable land management	**Ravenga akatereanga enua tau**
sustainable	◂ ravenga tau
Food security	**Merengonga kai**
Sustainable agriculture practises	**Ravenga tanutanu tau**
Soil erosion	**One varo'ia**
erosion by waves	◂ varo'ia e te ngaru
erosion by wind	◂ varo'ia e te matangi
erosion by water	◂ varo'ia e te vai
Sediment control measures	◂ tā'ei one
Sloping land	**enua pā'eke**

Act of excavation/ excavating	**Kō'anga**
going to excavate	◂ ka koia
has been excavated	◂ kua koia
excavation of sloping lands	◂ kō'anga i te enua pā'eke
Land compaction	**Tauromi enua**
Soil compaction	**Tauromi one**
Salt water Intrusion	
into freshwater	◂ iroanga te tai ki te vai
into soil	◂ iroanga te tai ki te one
brackish water	◂ vai kairo tai
Biodiversity	**Ao Ora Natura**
Endemic Species	**Kātiri Kura**
Native/ Indigenous Species	**Kātiri Enua or Kātiri Tupuna**
Alien/Non Indigenous/ Introduced Species	**Kātiri Porena or Kātiri Tuitarere**
Invasive/Noxious Species	**Kātiri kikino**
invasive plants	◂ Ngangaere kikino
invasive animals	◂ Manu kikino

Endangered Species	**Kātiri Ngaropoti**
Threatened Species	**Kātiri ka Pou**
Migratory Species	**Kātiri Ori**
Taxonomy	**Papa'anga Kātiri**
Ecosystem	**Mariko Ao Ora**
Habitat	**No'opunuia'au**
Overfishing	**'Arunga ika**
Waste	**Repo kino**
recycle	◂ akapuapinga akaou
reuse	◂ ta'angaanga akaou
hazardous substance/waste	◂ repo kirakira
Ozone Depleting Substance (ODS)	**Te au mea akamimiro i te ārea**
Ozone	◂ te ārea
Persistent Organic pollutant (POPs)	**Pakau makoako**
dangerous	◂ makoako
persistent	◂ mārō

Although the terms were translated, the Maori Language Commission is still in the process of being activated and the project was not able to get the translations officially endorsed, therefore none of the project resources were translated into Maori. These translations are held with NES and it is hoped that once the situation with the Maori Language Commission is resolved, these terms will move forward towards endorsement.

As part of the activities for the 2012 Year of Action against Waste, the project developed reusable shopping bags sourced from New Zealand and made from recycled PET. These bags were mainly distributed via two local community convenience stores to promote the 'Say Yes to Reusable' campaign and the ban on importation of non-biodegradable plastic shopping bags. Commercial supermarkets are also looking at bringing in reusable shopping bags for their customers in the future.

Other activities carried out by the Project including producing Information Briefs, in particular for HOMS and Ministers, as well as making presentations to schools, in workshops, national forums etc. SLM presentations were also made to the House of Ariki (traditional chiefs) and at Cook Islands Parliament for their annual HOA conference.

1.2 Education and Awareness Activities

Two of the biggest events for Education and Awareness are National Environment Week as well as Lagoon Day and the SLM project has been a major sponsor and participant of both. Given the size and importance of both activities, a lot of time was invested by the project coordinator in the organisation of the events and resource materials.

Annual Environment Campaigns

The SLM Project aligned its education and awareness activities with the annual environment campaigns for 2011 and 2012 as they both have linkages to SLM.

For 2011 this followed the theme ***Enua Mou, E Vai Ora*: Wetlands for Healthy Islands** where the project assisted by mapping remaining wetland on Rarotonga as well as working with NES on highlight sustainable practises on wetland agriculture and development. For 2012, the project was a supporting partner to the **Cook Islands 2012 Year of Action Against Waste – *Ta'au, Taku Tita* Campaign** which was formally launched by the Prime Minister of the Cook Islands as well as the Ministers for Health and Infrastructure & Planning.

Launch of the Taau Taku Tita – Year of Action Against Waste Campaign:

(L-R) Director of National Environment Service, Director of Recycle Cook Islands, Minister for Health, Prime Minister and Minister for Environment, Minister for Infrastructure and Planning, Acting Secretary for Ministry of Infrastructure and Planning

National Environment Week (NEW)

National Environment Week is an annual event held every first week of June to coincide with the UN World Environment Day on June 5th. Coordinated by NES, the focus of NEW is usually a series of events highlighting the theme for the annual environment campaigns. The SLM Project supported NEW 2011 including a performing arts competition for school children, art and poetry competition and environment quiz held. The SLM project offered a special prize to the performing arts competition for the team that shows the best linkage between SLM and Wetlands (the theme of the competition) and well as inputting land degradation and SLM questions into the environment quiz questions.

In the weeks prior to NEW, during and after, a number of newspaper articles and feature stories were published highlighting environment issues and good environment practises/sustainable living.

The SLM Project supported NEW 2012 by organising and sponsoring a number of events:

SLM Cloth Bag Art Exhibition
NEW 2012 was officially opened by Associate Minister for Environment Mr. Atatoa Herman with the opening of the SLM Cloth Bag Art Exhibition. In this exhibition, local artists were asked to be creative and use calico tote bags as their canvas in as an innovative way to promote a solution to waste on Rarotonga - reusable bags. The week-long exhibition also supported the Say Yes to Reusable Bags – TTT campaign

Launch of the Environment Week 2012 and the SLM Cloth Bag Art Exhibition:
(L-R) Director of National Environment Service Vaitoti Tupa, Ian and Kay George (Owners of The Art Studio), Associate Minister for Environment Atatoa Herman,

Launch of SLM Shopping Bags
The launch of this exhibition coincided with the launch of the SLM/TTT reusable bags being launched in two local stores on Rarotonga who are actively promoting the Say Yes to Reusable Bags campaign to their customers. Customer feedback thus far has been very positive. Government has also recently passed Plastic Bag Regulations that will ban the use of non-biodegradable shopping bags so much of this promotion will support the implementation of those regulations.

Miss Cook Islands 2012
The SLM project also sponsored the Stage Questions section of the Miss Cook Islands pageant held in the middle of Environment Week (June 7th). A new addition to the pageant, contestants each had to answer two questions, one of which was an environment or SLM question. Presentations to help contestants' preparation were also given prior to the event to broaden awareness of the issues and to encourage them to be environment ambassadors.

SLM Recycled Sculpture Competition
This was the last event for NEW'12 and involved various groups, government departments, businesses and other organisations creating sculptures of sea creatures out of waste material from their office/workplace/community and display these during Environment Week.

Groups were also given a chance to promote their green practices such as the 4Rs of waste management - Refuse, Reduce, Reuse and Recycle, energy efficiency, involvement in environment events. It was great to see more groups becoming environment-aware and more importantly practicing green best practices.

Lagoon Day 2010 – 2012

Lagoon Day is a major day for education and awareness activities on Rarotonga. The SLM Project has supported this annual event throughout the project life as land degradation and sustainable land management issues have always featured prominently.

Over 1000 students from primary and secondary schools on Rarotonga attend the two day Lagoon Day event every year. It is also attended well by members of the community. In 2012, students from the Pa Enua were able to be included for the first time by adjusting the timing of the event to coincide with their trips to Rarotonga for Careers Expo.

Posters and displays were assembled for Lagoon Day highlighting land degradation issues, our areas of concern and some sustainable land management practises to mitigate land degradation, all of which were actively promoted to all students, teachers and community members that attended the two day event.

A special tour is usually organised for the private sector, traditional leaders, heads of Government Ministries etc. to also help spread the messages of Lagoon Day. In the months leading up to Lagoon Day, during the event and after, a number of newspaper articles and feature stories were organised by the Lagoon Day Coordinator and published in the local newspaper or on local television/radio highlighting environment problems and good environment practises/sustainable living.

One of the greatest achievements of events such as Lagoon Day is that Government Ministries, NGO's, CBO's and the private sector and individuals all work together to organise the event and present good environment practices to the communities. Planning has begun for next year's Lagoon Day including aligning the event with the Year of Waste campaign.

World Day to Combat Desertification – 17th June

World Day to Combat Desertification is celebrated annually on June 17th as a way to highlight the issues of UNCCD, the parent convention for SLM. The SLM Project took those opportunities to raise awareness of land degradation issues of the Cook Islands as well as SLM project activities though full page newspaper spreads in the local newspaper. Included below are shots of the articles for 2010 (left, prior to the development of the project logo) and 2012 (right).

'Clean up the Cook Islands' 2012

The SLM Project also partnered with a number of government Ministries and NGOs to support the 'Clean up the Cook Islands' 2012 campaign which was held over the whole month of September. This included a number of clean-up events where over 1 tonne of rubbish in total was collected from the water and grounds of Rarotonga and the Restyle Wearable Arts competition highlight the recycling/reuse of various forms of waste materials into fashion and wearable arts.


17 JUNE WORLD DAY TO COMBAT DESERTIFICATION

Lessons on soil biodiversity from the World Cup

Cook Islands Sustainable Land Management Project

Takore ia atu te Tākinokino Enua


17 JUNE WORLD DAY TO COMBAT DESERTIFICATION

Cook Islands Sustainable Land Management Project (SLM)

What is Land Degradation?

Sustainable Land Management

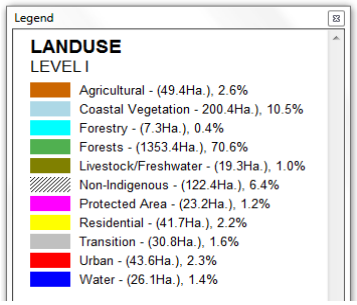
1.3 Land Degradation Assessment

One of the biggest problems the project faced was the identification of methodology for determining degradation and the extent of land degradation. Many of the methodologies were found to be pitched at the global level, or such a scale that would not suit small islands developing states. The attendance by the PC at the UNCCD CRIC 9/CST–S2 meeting held in Bonn in February 2011 as the Cook Islands representative – enabled a possible methodology to be identified. A side event was organised to present on the FAO LADA project which aimed to develop methodologies and toolkits for global, national and local level assessment of land degradation. The local level methodologies were suited to the Cook Islands situation.

Discussions were held with those involved with the China LADA project about the possibility of bringing a trainer from China to run an in-country training workshop in these LADA methodologies (more information under Outcome 2 – Training, Workshops, Demonstrations).

The aim of this technical workshop was to have a set of personnel trained in Land Degradation assessment within the key line ministries. From the initial training workshop these people would then design and carry out the data collection activities to assist with the LD assessment in two study areas.

The Southern Group island of Mauke was selected by the Project Steering Committee as a demonstration site and in support of this, additional land resource information was necessary to aid decision making on the direction of the demonstration site. Project staff aided by MOA carried out land mapping and land degradation assessment for the island of Mauke. Preliminary results were presented to the Island Council and traditional leaders of Mauke and it was identified plant invasive species were one of the biggest land degradation problems for Mauke.
GIS maps of land use/land cover, soil degradation, vulnerability maps and soil test results were produced for Mauke and used to draft a Mauke Land Degradation Assessment Report.



Outcome 2: Enhanced capacities for slm

2.1 GIS Activities

GIS Data Collection and Layers

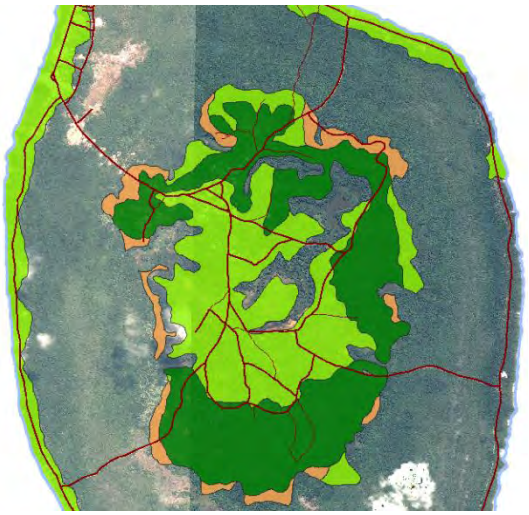
The SLM Technical Advisor was contracted in January 2010 and began work by collaborating with an ADB Project (ADB/ SOPAC - World Bank Initiative on Exposure Databases for Disaster Risk Reduction and Risk Financing for the Pacific Region) aimed at assessing vulnerabilities on Rarotonga using GPS data capture. Both the TA and Project Coordinator were involved in the data collection fieldwork as the data being collected contributed to the project by providing additional information to current GIS layers. It also provided a training opportunity for us as well as other key GIS users on Rarotonga in the use of handheld GPS units.

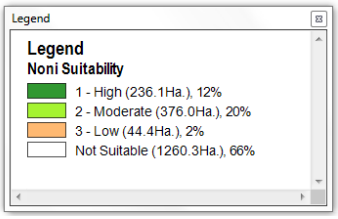
The SLM TA was involved in the European Union funded Muri Water and Sanitation Project. This project is undertook an assessment of the water and sanitation vulnerability of the Muri and Avana Community on the island of Rarotonga through a number of activities. As waste and sanitation on our islands are a key cause of land degradation the outcomes and data produced from this project directly contributed to data needed for the national report on land degradation. Much of this work involved the overlay of data layers for land resources, land ownership, demographic, utility and household information and locations to determine water and sanitation issues. Mapping of the household survey data into the GIS was also undertaken by the TA.

GIS layers for Land Ownership, Soils, Land Protection Zones, Utilities (Power, Water, Telecommunications) were mapped and compiled from various sources for the project area. GIS data bundles (as opposed to flat satellite images) necessary for vegetation mapping work were also purchased for some Southern Group islands with bundles for the rest of the islands being purchased by the Climate Change Vulnerability & Adaptation Assessment work being carried out under another project. By aligning our programmes we avoided duplication of expenditure and can expand mapping to cover all islands beyond the life of the project.

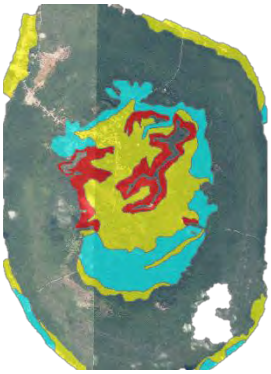
Crop Suitability Maps

The SLM project teamed up with an FAO/Ministry of Agriculture initiative to help produce Crop Suitability Maps based on soil types, for 43 different cash crops such as taro, pineapple, cabbage etc. These maps have been produced for five different Southern Group Islands and are targeted at supporting growers in their agriculture production while also promoting land suitability for land use. These maps have now been completed with a total of 215 maps produced for crop suitability. These maps, along with gross margins for each of the crops, will be used by Ministry of Agriculture staff when working with local growers.



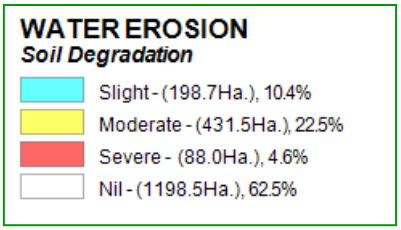


Soil Degradation maps



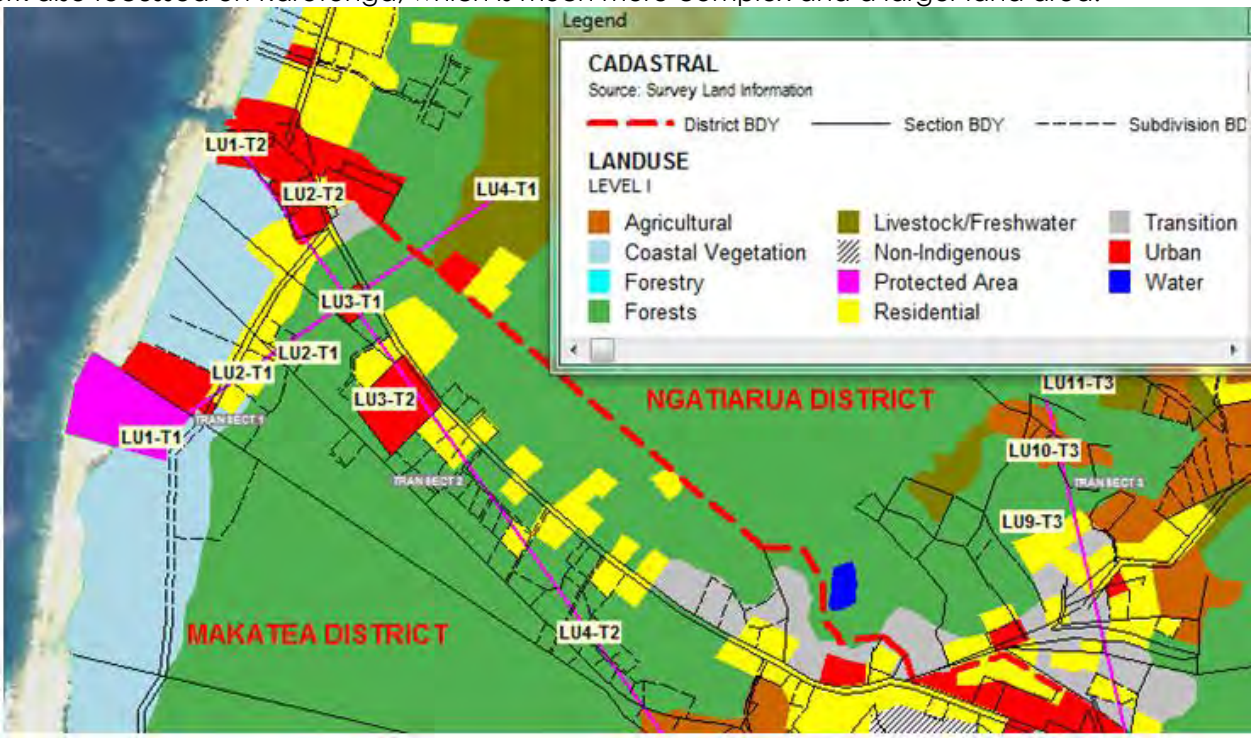
Soil degradation vulnerability maps have been produced for five different Southern Group islands, 35 maps in total were produced based on 8 different soil characteristics e.g. vulnerability to water erosion, vulnerability to wind erosion etc.

An example shown here is of vulnerability of Mauke Soils to water erosion.

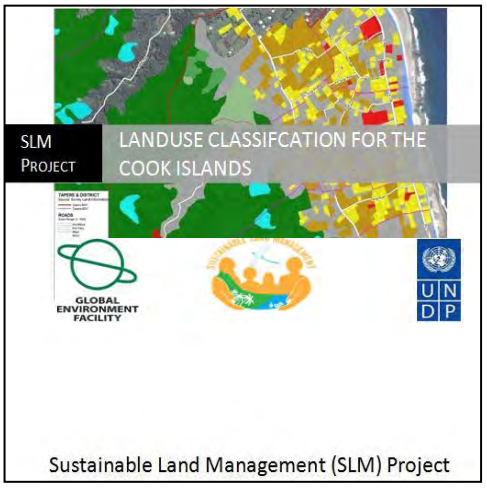


Land Use

A land use/land cover map for Mauke was also produced as part of the Mauke fieldwork. Later work also focussed on Rarotonga, which is much more complex and a larger land area.



In the process of mapping land use, it was decided that there was a need to produce a National Land Use Classification (LUC) System as the Cook Islands did not have this formalised. A draft LUC system was developed, as well as a manual on 'Land Use Classification for the Cook Islands'.



This manual will be used to describe the process of development and description of classification classes so that that land use mapping can be replicated in the future. The framework for the system has been agreed upon with further refinement and definition needed at the detailed levels before agreement and endorsement can be sort. Once this is finalised, land use GIS maps produced under the project will be adjusted to follow this model and the SLM National LUC report will be published.

It would be invaluable for this work and outputs to be linked to the Land Use Policy outputs. This LUC system is a living system that can be updated as more assessments are made or as conditions change.

GIS Equipment
Two Trimble handheld GPS (Junos) were purchased to aid data collection. The units and their associated software were sourced during mid-July 2010 and purchased by the end of 2010. This equipment has been used throughout the project for mapping in the field, in particular for Mauke and Rarotonga.

2.2 Community Mapping

The Southern Group island of Mauke was selected by the Project Steering Committee as a demonstration site and land mapping/assessment was carried out on Mauke. For the demonstration farm, Environment and Agriculture officers on Mauke in consultation with landowners decided to convert an area of Invasive tree forest (Acacia) into crop farming area where the will utilise lessons learnt from the Kia Orana Soil School to implement a biological agriculture farming system.

The long term goal is sustainable harvesting of maire through integrated crop management. The short term goal is to promote biological agriculture in the production of food and cash crops. Following clearance of Acacia trees in the agreed area under an GEF SGP project, the area had to be fenced off because of the problem of wandering goats and pigs that consume crops. Funds were allocated from the project and fencing materials purchased in early 2012 however there were insufficient supplies on island meaning additional materials had to be ordered from New Zealand. At the same time, problems with shipping to Rarotonga meant that there was only one company operating, greatly decreasing cargo space for importers.

Materials only arrived in Rarotonga mid-August and were taken to Mauke on the next available barge. Fencing installation was completed in October 2012 as well as planting *nono* (*Morinda citrifolia*) for the first stage of this demonstration. Maire (*Alyxia stellata*) will be planted at a later stage with assistance from the Ministry of Agriculture. The project was able to further support this work by helping with the development of a small scale compost and supplements centre. This was seen as essential in helping Mauke farmers deal with soil deficiencies through application of biological agriculture products, based on eco-farming principles. Project personnel intend to assist the Mauke community to access funding through the GEF Small Grants Project and other donors.

2.3 Institutional Review and Strengthening

Retreats were held to review current application procedures at the National Environment Service for development activities undertaken on Rarotonga. This especially focused on to reviewing and revamping the Environment Significance Declaration form under the Advisory and Compliance Division. This division deals with approvals for land development and is an important aspect to strengthen and mainstream SLM principles into. The new ESD form more clearly collects land use and environment information and is linked to a new database for Permits and Consents created under the Knowledge Management Consultancy.

Land resource information within National Environment Service was scattered and not databased. NES issues permits and consents related to developments on Rarotonga contain valuable information on land use and land use change. This information was needed to help mapping under the SLM project however it was in paper format and not in a searchable database. As part of strengthening NES capacities as well as contributing to the databases and clearing house mechanisms under the SLM project, a project database consultancy was designed to assist in this area and responsible for developing the Permits and Consents Database for NES.

2.4 National Institutional Structures & Functions Ehnanced

Activities under this output were completed in part through partner arrangements with ADB and others[7]. Governance issues unable to be addressed within the timeframe.

An Institutional and Legislative Review was carried out under ADB TA Institutional Strengthening Project. Institutional Strengthening work under the SLM project focused on strengthening NES Permits and Consents Procedures to ensure that relevant data is captured and managed through the Permits and Consents Database developed by the project.

The project also focussed on institutional strengthening of the Advisory and Compliance Division of NES that is responsible for the development consents process. Multiple sessions were held with NES staff to review processes and procedures so staff were able to better evaluate, monitor and document development projects. The Environment Significance Declarations form (the main form used for development applications) was revamped with support of the project to more clearly capture necessary data as well as more information. It is now much more user friendly and in a format to allow databases to be enhanced so that specific activities in areas of concern (e.g. all excavations on sloping lands) can be disaggregated if needed.

Project staff also worked with ACD to develop a Complaints/Monitoring booklet to better document any complaints received from members of the public as well as monitoring of ongoing approved developments. This helps to ensure an adequate paper trail should any breaches occur under the Environment Act. These improved forms and processes were supplied to the Environment offices in the Pa Enua.

The review of the development permit process was undertaken prior to the National Economic Summit. At that summit a proposal to combine the permits functions of MOIP, NES and MOH in one place was not supported.

The MOIP office has been under review for restructuring, as part of overall government restructuring over the life of the project. MOIP were aware that there were funds available to support strengthening of their planning unit however this was never utilised, as the overall fate of the Ministry was not confirmed. The Survey Department of MOIP was moved to the Ministry of Justice in 2012.

Despite a reasonable effort with institutional enhancements, the fluidity of ongoing debate on the structuring of government constrained outcomes. Much more institutional framework development is required in the areas of development management and EIA processes for good outcomes in the approval processes. With the eventual development of a land use planning system, there will be more reliance on strategic environmental assessments (SEA) which may be a more useful tool in customary use-hold systems. Without a confirmed Land Use Policy, which the SLM Project assisted with, work on setting up a 'planning' unit in MOIP was premature.

2.5 Training, Workshops and Demonstrations

Kia Orana Soil School Programme

The Kia Orana Soil School Programme was selected by the project as the delivery mechanism in capacity building related to biological agriculture and sustainable agricultural practices.

Many South Pacific farms, including those within the Cook Islands, are using chemical fertilisers which are costly to purchase, and have been associated with land degradation, water pollution, loss of species diversity, loss of biological activity and lower nutrient density in our food. By empowering farmers to move towards a more sustainable model without fear of lower yields or price, chemicals can be removed from the local ecology. The Kia Orana Soil School Programme showcased to its students viable, sustainable alternatives to chemical agriculture. While it is specifically the reduction in land degradation and soil erosion and improvement in the health and fertility of soils that this capacity building aims to support, sustainable farming practices also potentially positively impacts on issues of food security, livelihoods, soil carbon sequestration etc.

[7] Note that this partnering could qualify as co-financing but have not been included as part of the figures presented in the co-financing analysis. No evidence was present on the likely cost figures and sharing split.

A local NGO - the Titikaveka Growers Association (TGA) - was responsible for implementing the Kia Orana Soil School Programme and providing Secretariat services to the Programme including logistical support in the form of office space and administrative support. An MOU between the TGA, the SLM Project and the Ministry of Agriculture was signed for the delivery of this programme. Additionally, other partners including the Ministry of Health and the Department of National Human Resource Development are also supporting the programme, including the participation of Outer Island growers in this initiative.

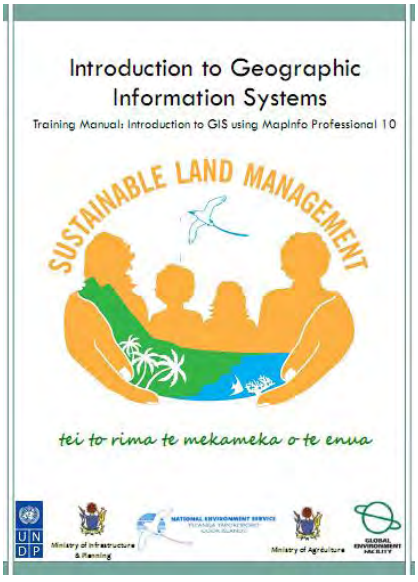
The usual modality for community trainings has involved one-off workshops and/or development of a single demonstration site for promotion. In developing a programme of applied training with built in support from mentors and fellow students, it is envisioned that each student will go on to develop individual 'demonstration' sites in the application of techniques on their own pieces of land. Two introductory courses were held on Rarotonga, one in Dec 2011 and the second in June 2012 which was followed by an advanced course for those that had completed the intro course. Students mainly comprised of local growers from Rarotonga and the Outer Islands as well as key Government organisations. The training introduced participants to the concept of biological agriculture, farming ecosystems, practical biological farm management, basic soil properties (biological, chemical, physical), soil testing as well as tools and guidelines that help assess and the health of the soils and crops.

The workshops generated a lot of open discussion between participants and trainers and generally promoted awareness of land degradation and sustainable land management concepts. Participants had many positive comments regarding the course at the closing session while others who have a lifetime of following conventional agriculture may still need time to digest the information obtained before positive behaviour change towards biological agriculture may be seen. Further soil schools will be necessary to effect change toward biological agriculture and Mauke Island is actively working with workshop trainers and the SLM Project staff to seek donor funding for training on island for Mauke and the nearby island of Mitiaro. NES will support their efforts towards accessing funding and implementing biological agriculture beyond the life of the project.

Ideally, support to farmers willing to convert to biological agriculture should be considered. One of the best ways to demonstrate a new way of doing things is by showing that it works at the community/farmer level. Having a series of farms operating successfully under biological agriculture would be the next step in furthering education and awareness on this issue.

GIS Training Workshops

An 'Introduction to GIS' workshop was carried out by the SLM Project in order to enhance capacity for GIS. Originally planned as a two week course, there were insufficient funds in-country to support this due to delays in funding disbursements and the decision was made to condense the workshop programme into 1 week and shift additional topics to the follow-up course. The course was facilitated by the SLM Project Coordinator and the course tutor was SLM Technical Advisor Mr Timoti Tangiruaine - one of the resident experts in GIS for the Cook Islands, supported by the SLM GIS Assistant Mr Olaf Rasmussen. This was the first GIS course that utilised local expertise instead of using SOPAC staff, as it was decided that there was more than sufficient capacity available locally for a basic introductory course.



This workshop included participants from 7 different Government Ministries/organisations, 2 NGO's, 1 IGO (Red Cross) and 1 Secondary Student as it was still school holidays at the time. SLM project staff also put together the training manual for the workshop which was distributed to all participants and the digital version shared with other organisations that have requested this resource.

Two local GIS personnel also received advanced GIS training with SOPAC in Fiji, one being the SLM GIS Assistant and the other a GIS expert based with the Cook Islands Red Cross. Rather than only

train project personnel, the decision was made to support the expansion of GIS capacity beyond the Ministry of Infrastructure and Planning in this way. The three week training aimed to teach specialist skills in using satellite imagery data to assist with vegetation and land cover mapping which is especially important for the project land degradation assessment work as well as being an extremely useful resource across multiple areas.

LADA Workshop Training
A trainer from China was engaged to conduct a training workshop on the FAO LADA project methodologies for the assessment of land degradation. This workshop was carried out from 8th - 19th August 2011 to introduce personnel within the key line ministries to LD and SLM, and to train them in LD assessment including through fieldwork to collect data and the development of draft LD assessment reports in two study areas. Participants from two outer islands were also funded by the project with a view to developing land degradation assessment reports on those islands.

This workshop was very well received with active participation by all and the project is thankful to Dr Kerbin Zhang from Beijing University and the China UNCCD LADA project taskforce for accepting the invitation to carry out this training for the Cook Islands and for doing so at minimal cost of airfare and DSA.

Land Use Planning and Soils Workshops
Through the FAO/Ministry of Agriculture Soils Project a number of training workshops were run; a Technical Workshop on Soils (targeting technical resource people), a workshop on Soil Suitability Maps for Crops (targeting growers), and a Land evaluation/Land use planning Workshop. The Project supported and participated in this workshop organised by MOA rather than duplicate these training opportunities.

Outcome 3: Systemic capacity building and mainstreaming

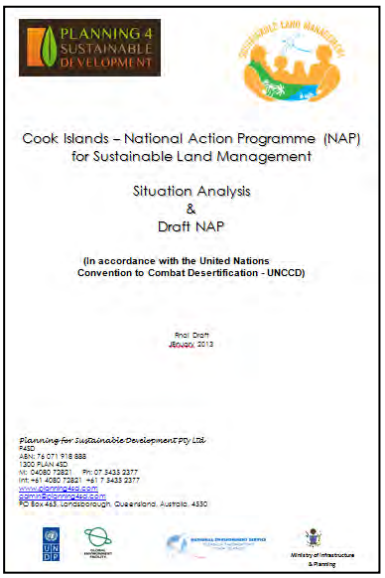
3.1 National Action Programme

A TOR was prepared in early 2010 for a consultancy contract that combined the National Action Programme, Integrated Financial Strategy and 4th National Report to UNCCD. This consultancy was advertised and awarded however due to personal circumstances the consultant then appointed was unable to complete the work. Airfares and DSA arrangements were paid for his arrival to commence the consultancy in late July in line with the 2010 Environment Forum. Those funds were eventually returned however the costs of the airline tickets were not redeemable. This meant a project loss of approx $3500 NZD. A large part of the 2010 budget was allocated to this activity and meant that the project underspent those funds.

Following discussions at the Convention level to align all NAPs to the UNCCD 10Year Strategy, plans for re-advertising the NAP/IFS strategy were put on hold until further information was available on NAP alignment. Guiding principles and information workshops and training was held to inform Parties of the NAP alignment process.

The consultancy for the development of a Cook Islands National Action Plan for LD and SLM and its Integrated Financial Strategy was revised and finally advertised in August 2012 through regional networks as well as the local newspaper. Applications were received from all over the world for this work. They were assessed based on experience/expertise, fees and how soon they could commence work. After some negotiation, Mr Matt McIntyre from Planning 4 Sustainable Development (Australia) was awarded the contract. Unfortunately after an assessment of applicants, the IFS contract was not awarded due mainly by the high fees for such work and a general lack of expertise in IFS. The IFS is still a priority for completion but will probably have to be deferred until after the SLM project is complete to allow local project staff to undertake this component in later 2013. To compensate for this shortcoming the NAP was generated with a costs Strategic Results Framework.
Mr Matt McIntyre (Planning 4 Sustainable Development) conducted in country consultations for the development of the National Action Programme for SLM in mid-October 2012, following a desktop review of land degradation and SLM in the Cook Islands.

Following development of the draft NAP, a workshop was held on the 27-28th Nov to review strategies and actions proposed. Unfortunately, a last minute workshop organised regarding the Pacific Plan with regional CROP agencies meant that some key stakeholders were not able to attend the NAP workshop. Despite this, the two day workshop did successfully review and revise the NAP log frame matrix and provide additional direction in the overall NAP.


PLANNING 4 SUSTAINABLE DEVELOPMENT

Cook Islands – National Action Programme (NAP) for Sustainable Land Management

Situation Analysis
&
Draft NAP

(In accordance with the United Nations Convention to Combat Desertification - UNCCD)

Final Draft
January 2013

Planning for Sustainable Development Pty Ltd

Further work on the NAP has since been undertaken with a further draft produced in early January 2013. Additional stakeholder consultations were carried out to help finalise the NAP, especially with those stakeholders that were not represented in the NAP workshop or those that would take a lead role in the implementation of the NAP. The final NAP is with NES and is expected be to submitted to Cabinet and the Steering Committee for endorsement in mid-2013.

3.2 Mainstreaming

The National Environment Service organised an Environment Forum from the 20th -22nd July 2010. Land Degradation was one of the thematic areas covered so the SLM Project supported this activity and both the Project Coordinator and the Technical Advisor presented at this Forum. Feedback was received from the working groups about priority actions for land degradation and these actions were reflected in the National Action Plan for UNCCD and the revised National Environment Strategic Action Framework.

The SLM Project also participated in multiple fora to try and mainstream land degradation and SLM across sectors, including at the National Climate Change Planning week Feb/Mar 2011, and the National Economic Development Summit through NES presentations to the Economic Taskforce and well as annually through the Government Ministry Budget Process. Integrated into the July 2013 – June 2014 business plan for the National Environment Service workplan are activities to continue the work of the SLM Project, including extending land use/vegetation mapping to the national level, driving implementation of the NAP and developing an Integrated Financial Strategy to support NAP implementation. The NES 2013 Education and Awareness campaign is also expected to follow a theme for integrated environment management that will incorporate sustainable land management issues and promote it beyond the life of the project.

3.3 Integrated Financial Strategy

5.3.1 See Section 5.1 on NAP and 9.3 on IFS.

3.4 Options for a Land Use Planning System

The SLM Project assisted the OPM in the review of a Land Use Policy in 2008. Stakeholder interest through workshops extended to visions of a land use planning system suited to the Cook Islands, rather than just 'policy' formulation. Custodianship of the land use policy was swapped to the OPM in 2008, in respect that the matter was a cross-sectoral issue, not just related to SLM.

The work on the revised Land Use Policy, generated in draft form was undertaken under the ADB TA legislative review undertook this work in part. The SLM team have continued involvement in the review of various drafts since 2008. The Land Use Policy development continues to be managed by OPM.

The Draft Land Use Policy was supported by mapping generated by the GIS system developed by MOIP as a SLM partner. Under the leadership of the Office of the Prime Minister, the SLM Project was supposed to fund the community consultation process. Stakeholder consultations were held during the SLM Project until it was decided in 2011 by the Steering committee that the current draft was not clear and needed to be revised/simplified. OPM were tasked with this review however the draft is still under review. Governments concern now is that the consultations that initiated the process in 2008, are now to far back and that a complete new draft and engagement process may be necessary. The importance of the need for land use planning has not diminished with Government;

however it is closely tied to debates about extending the roles of Villages in governance with the prospect of establishing Village Councils in due course. The delays in formulating the Policy are therefore justified.

Outcome 4: Enhanced technical support for SLM

4.1 Tools, Guidelines, Manuals and Information Dissemination

A number of manuals were produced (as mentioned above) and were printed and distributed under this Output as follows:

- Mauke LADA Report
- Introduction to GIS training Manual Part 1
- Introduction to GIS training Manual Part 2
- Soil School Report for Training
- Soil School Training Manual – Introductory
- Soil School Training Manual – Advanced
- Land Use Classification – database
- Land Use Look up table for Land Use mapping

4.2 Local and National Knowledge Management Networks

A Project Officer position TOR was developed and advertised to primarily focus on developing the databases and clearinghouse mechanisms for the project. This position was a short term contract cost shared by both the SLM and POPs projects. Through this position, the NES website was revamped onto a Joomla platform to enable NES, including the SLM project, to regularly update the webpage with relevant information without having to go through an IT company.

The Project Officer also worked with the Advisory and Compliance Division of NES to produce a Permits and Consents Database to compile and track all development permits that are processed through NES. This information is necessary to be able to monitor development activities on Rarotonga.

4.3 Monitoring and Evaluation Systems in Place

Work continues on the finalization of impact indicators (as a means to monitor SLM and LD) under the UNCCD follow-up work. Difficulties are faced in measuring existing indicators for the Cooks has limited reference material, baseline data and characterized spatial data. With the advancement in GIS under the project some of these shortcomings will be addressed in the hopeful follow-up activities for SLM (subject to finance).

A preliminary set of impact indicators was agreed upon and the project worked on measuring some of these, e.g. land cover, as well as trying to identify methodology suitable for small islands to determine affected areas so that extent of land degradation can be mapped. Mauke was used to test this methodology. The team observed that the depth and accuracy to which land degradation can be mapped is dependent on the amount of money and time to be invested in the process. If time and resources permit it is best to methodically survey the islands to ensure that the detailed mapping is sufficient to suit future decision-making needs. The methods need to be simpler but the base data needs to be more comprehensive. For more than a decade projects have been advised to rely on 'existing data'. Poor base data sets have formed insurmountable weaknesses in many programme and projects. The unit costs of base data supply has been getting cheaper with the advancement of technologies. Use of LiDAR is a preferred medium as the data and information that is able to be derived is such that it has multiple uses: from vegetation mapping, to carbon analysis, digital terrain layers for flood modelling, coastal mapping, coastal process analysis and more. More work is required to take the methods developed at Mauke and refined in Rarotonga – to the other Pa Enua. Mapping needs to be sufficient to identify areas of concern or areas vulnerable to degradation which can be monitored. Detrimental driving forces need also to be accounted. Progressive development of the GIS system will be invaluable to the generation of a worthy state of the environment reporting system (a Monitoring and Evaluation

tool) to respond to future pressures on land resources and ensure measures adequately mitigate the pressures and impacts.

4.4 Land Use Policy

A Land Use Policy had been drafted under the Office of the Prime Minister but required community consultations to gather feedback and support before it could be endorsed.

Funding was allocated under the project to support the consultation process however in 2012, the Steering Committee for the Land Use Policy decided the draft needed to be rewritten and directed OPM to undertake this task. This then meant that the community consultations process did not happen before the project end date.