PROJECT IDENTIFICATION FORM (PIF)
PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	Integrated Sustainable Land and Coastal Management		
Country(ies):	Vanuatu	**GEF Project ID:**	
GEF Agency(ies):	FAO	**GEF Agency Project ID:**	622863
Other Executing Partner(s):	Ministry of Lands and Natural Resources; Ministry of Agriculture, Quarantine, Forestry and Fisheries	**Submission Date:**	August 29, 2013
GEF Focal Area (s):	Multi-focal Areas	**Project Duration:**	60 months
Name of parent program (if applicable): • For SFM/REDD+ ☒ • For SGP ☐ • For PPP ☐	Pacific Islands Ridge-to-Reef Programme	**Agency Fee ($):**	**414,511**

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK

Focal Area Objectives	Trust Fund	Indicative Grant Amount ($)	Indicative Co-Financing ($)
BD-1	GEFTF	1,651,377	4,200,000
LD-3	GEFTF	550,459	3,100,000
CCM-5	GEFTF	1,143,261	2,000,000
IW-3	GEFTF	145,551	400,000
SFM-1	GEFTF	600,000	2,150,000
SFM-2	GEFTF	515,032	2,150,000
	Total project cost	**4,605,680**	**14,000,000**

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To test and implement sustainable and integrated management of forest, land and marine resources to achieve effective ridge-to-reef conservation in selected priority watersheds in Vanuatu.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount ($)	Indicative Co-financing ($)
1. Strengthening of the protected area network.	TA	1. Improved management effectiveness of existing and new protected areas. *(Indicator: improved scores on GEF METT for each protected area)* 2. Terrestrial and marine (coastal) protected area network expanded to fill ecosystem gaps. *(Indicator at least 35,000 ha of new terrestrial and marine protected areas legally designated with the consent of local land owners).* 3. Increased revenue for protected area systems to meet total expenditures required for management. *(Indicators: increased income from marketing biodiversity related goods and services; amount of funds deposited in conservation trust fund).*	1.1. Protected area (PA) management plans produced and implemented for each PA (as part of integrated marine and land-use management plans) 2.1. Marine Protected Area (MPA) and Community Conservation Area (CCA) agreements negotiated and signed by government and local communities (at least 5 new agreements or one per target watershed) 3.1. Sustainable income generating activities pilot-tested and implemented (at least one at each PA). 3.2. Local conservation trust fund established, funded and operating in at least one PA.	GEFTF *BD-1*	1,000,000 *1,000,000*	2,200,000

2. Sustainable management of production landscapes.	TA	1. Integrated landscape management practices adopted by local communities. *(Indicators: quality of INRM practices applied in the 100,000 ha of target watersheds; reduced siltation and improved water quality compared to baseline established during project preparation).* 2. Sustainability of fish harvests improved. *(Indicator: extent to which new techniques and local rules are adopted; 10 percent increase in fish stocks in each MPA).* 3. Improved forest harvesting practices adopted by local communities. *(Indicators: increased income from NWFPs; extent to which new techniques and rules are adopted).*	1.1. Integrated land and marine management plans developed and implemented by local landowners at the watershed level on 100,000 ha. 1.2 Sustainable farming practices tested and implemented at 25 farms (five per watershed) 2.1. Improved and more sustainable fishing techniques pilot-tested and implemented in each MPA. 2.2. Conservation objectives mainstreamed into local fishing practices and management plans. 3.1. One-hundred local landowners trained in sustainable non wood forest product (NWFP) harvesting techniques, with increased value-addition and marketing.	GEFTF *BD-1* *LD-3* *IW-3* *SFM-1*	1,410,048 *300,000* *400,000* *138,620* *571,428*	6,500,000
3. Landscape restoration and reduced forest degradation.	TA	1. Restoration and enhancement of carbon stocks in forests and non-forest lands. *(Indicators: 8,000 ha of forest restored; 384,000 tC sequestered.*	1.1. Riparian zones restored with native tree species (to achieve 90% tree cover along all main watercourses). 1.2. Tree cover increased in watersheds by 10 percent (8,000 ha) through introduction of agroforestry and silvo-pastoral systems. 1.3. Reduced harvest of fuelwood for value-addition (drying/smoking) of agricultural products. 1.4. Carbon monitoring, reporting and verification (MRV) system pilot-tested in the target watersheds.	GEFTF *CCM-5* *SFM-2*	1,190,507 *800,000* *390,507*	3,000,000
4. Capacity building for integrated and sustainable natural resource management.	TA	1. Enhanced capacity for improved decision making and landscape management in support of ridge-to-reef conservation. *(Indicators: reduced siltation and improved water quality compared to baseline; number of developments in target watersheds where rural land-use planning guidelines are followed).*	1.1. Two-hundred and fifty (250) local landowners trained in relevant SLM/SFM and conservation techniques. 1.2. Twenty-five (25) government and NGO staff trained in INRM, PA management, carbon MRV and other relevant skills. 1.3. M&E system for biodiversity, climate change and sustainable forest management in target watersheds established and used to guide decision making for development activities.	GEFTF *BD-1* *LD-3* *CCM-5* *SFM-2*	685,806 *272,740* *124,246* *188,820* *100,000*	1,600,000

5. Dissemination of best practices and lessons learned, monitoring and evaluation		1 Project implementation based on results based management and application of project findings and lessons learned in future operations facilitated	1.1 Project monitoring system operating providing systematic information on progress in meeting project outcome and output targets 1.2 Midterm and final evaluation conducted 1.3 Project-related "best-practices" and "lessons-learned" published	GEFTF *CCM-5*	*100,000* *100,000*	50,000
				Sub-Total	**4,386,361**	**13,350,000**
Project management Cost (PMC): (BD- 78,637; LD- 26,212; CCM- 54,441; IW- 6,931 ; SFM- 53,098)					219,319	650,000
				Total project costs[4]	**4,605,680**	**14,000,000**

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
National Government	Ministry of Lands and Natural Resources	In-kind	1,000,000
National Government	Ministry of Agriculture, Quarantine, Forestry and Fisheries	In-kind	2,000,000
National Government	Ministry of Trade, Tourism, Commerce and Industry	In-kind	2,000,000
GEF Agency	FAO	In-kind	500,000
GEF Agency	FAO	Cash	500,000
Bilateral Aid Agency	AusAid/NZAid (Mama Graon Project)	Cash	2,500,000
Other Multilateral Agency	European Union (EDF 11: Rural Development in Vanuatu)	Cash	5,000,000
CSO	Vango (Vanuatu NGO Coalition members)	In-kind	500,000
Total Co-financing			**14,000,000**

C. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA(S) AND COUNTRY

GEF Agency	Type of Trust Funds	Focal Area	Country Name/ Global	Grant Amount ($)	Agency Fee ($)	Total ($)
FAO	GEF TF	Biodiversity	Vanuatu	1,651,377	148,623	1,800,000
FAO	GEF TF	Land Degradation	Vanuatu	550,459	49,541	600,000
FAO	GEF TF	Climate Change	Vanuatu	1,143,261	102,894	1,246,155
FAO	GEF TF	International Waters	Global	145,551	13,099	158,650
FAO	GEF TF	Multifocal Area (SFM)	Global	1,115,032	100,353	1,215,385
Total Grant Resources				**4,605,680**	**414,510**	**5,020,190**

D. PROJECT PREPARATION GRANT (PPG)

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

	Amount Requested ($)	Agency Fee for PPG ($)
• (Upto) $150k for projects up to & including $ 6 million	**135,000**	**12,150**

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

Type of Trust Funds	GEF Agency	Focal Area	Country Name/ Global	PPG ($)	Agency Fee ($)	Total ($)
GEF TF	FAO	Biodiversity	Vanuatu	40,000	3,600	43,600
GEF TF	FAO	Land Degradation	Vanuatu	20,000	1,800	21,800
GEF TF	FAO	Climate Change	Vanuatu	30,000	2,700	32,700
GEF TF	FAO	International Waters	Global	15,000	1,350	16,350
GEF TF	FAO	Multifocal Area (SFM)	Global	30,000	2,700	32,700
Total Grant Resources				**135,000**	**12,150**	**147,150**

PART II: PROJECT JUSTIFICATION

A. PROJECT OVERVIEW

A.1. Project description

Global environmental problems, root causes and barriers that need to be addressed

One of the major environmental problems in Vanuatu is land-use change and poor land management practices that result in a deterioration in biodiversity, land degradation and carbon dioxide (CO_2) emissions. The consequences of these activities can be seen most clearly in the loss of forest cover and, more importantly, forest degradation (currently Vanuatu has forest area of 440,000 ha, which is 36% of the total land area), which then leads to increased soil erosion, pollution of watercourses, and coastal siltation that damages reefs along with other marine resources and biodiversity.

Land-use change also has an important impact on biodiversity, when areas of high biodiversity value are cleared for pasture or crops. Vanuatu has a relatively low proportion of land in terrestrial protected areas (8,300 ha or about 3.7 percent of the land area) and a number of important ecosystems are either absent or only minimally covered by the current protected area network (e.g. montane rainforests and cloud forests).[1] In production landscapes, current farming and forest harvesting practices (e.g. collection of fuelwood and non-wood forest products) also have detrimental impacts on the biodiversity present in these areas.

Coastal erosion is another problem, often due to development (either directly or indirectly through, for example, sand mining) and over-fishing or other unsustainable fishing practices are also a problem in some locations. Many communities have expressed interest in creating locally-controlled and managed protected areas, but have to balance their desire for conservation against their needs for food security.

Though no project sites have been finalized yet, at this stage, the project sites that have been preselected are Green Hill (Tanna), Efate Land Management Area, Vatthe (Santo), Wiawi Bay (Malekula), Mescaline Islands and Aneityum. The below table summarizes the deforestation and forest degradation drivers in each preselected site. The sites were also selected keeping in mind some of the key criteria that are aligned with Vanuatu's NBSAP (for example: globally threatened species, rare or vulnerable species, biodiversity hotspots and endemic plant areas).

Project Site	**Site specific deforestation drivers and other key environmental issues**	**Biodiversity**
Green Hill	Invasive species, Over-grazing (cattle and goats of local communities), selective logging, poaching	Endemic plant areas, vulnerable and nearly threatened bird species (for example: *Megapodius layardi*)
Efate Land Management Area	Over-grazing (cattle ranching at larger scale), small-scale agriculture, selective logging, urban development and excessive fishing, poaching	Habitats of conservation significance (mangroves, rivers in the area) identified in NBSAP
Vatthe (Santo)	Invasive species, fuelwood collection, poaching	Contains globally threatened species (for example: *Birgus latro*), and endemic animal species
Wiawi Bay	Over-grazing, excessive fishing, fuelwood collection, selective logging, poaching	Endemic plant areas (for example: *Agathis silbae*), globally threatened species (for example: *Birgus latro*)
Mescaline Islands	Fuelwood collection, excessive fishing	Habitats of conservation significance (for example: bat caves), endemic plant areas
Aneityum	Small-scale agriculture, soil erosion, selective logging, poaching	Endemic plant areas (for example: *Orchidaceae* spp.), rare and vulnerable animal and bird species

The main root causes of these problems are as follows:

Poverty and population pressure: With a rural population density of about 12 persons per km^2 (and increasing rapidly), population pressure in Vanuatu is relatively high. Furthermore, about 90 percent of the rural

[1] It should be noted that an existing FAO-GEF project under the PAS aims to increase the area of protected areas by about 7,000 ha

population is engaged in subsistence agriculture and fishing to meet their daily needs. These challenges are exacerbated further by the low incomes and low education levels of many local people who are ill-equipped to learn and invest in more productive, efficient and eco-friendly production and harvesting techniques.

Development pressures: About 75 percent of Vanuatu's economy is related to tourism in some way and commercial agriculture (beef, copra and coffee) accounts for much of the remaining formal economy. These sectors are the main drivers of economic growth in the country, but their expansion often results in increasing demand for land (especially coastal land in the case of tourism) and other natural resources (e.g. fuelwood for drying copra). Commercial forestry was once a major driver of degradation, but now subsistence collection of forest products is the main problem, especially in areas with high population densities (e.g. Tanna).

Arrangements for customary land tenure: Ninety percent of land in Vanuatu is owned by indigenous communities and administered in accordance with their customs. A National Land Summit (in 2006) and several pieces of legislation have attempted to ensure that land leases and the management of land are in the best interests of landowning communities and the country. However, enforcement of the regulations governing land leases has been weak and the potential for conflict over land rights remains high. This makes it difficult to agree and enforce collective decisions over land use (e.g. for conservation) even where community members have expressed a strong desire to conserve areas or manage them in a certain way.

The main barriers that need to be addressed to overcome some of these problems are as follows:

Lack of technical and financial capacity: For many years, Vanuatu has relied heavily on donor agencies and international NGOs to provide funding and technical support for conservation and natural resource management. While this has had some success, it has led to weak national ownership of development outcomes, poor sustainability of results and limited mainstreaming of best practices into the ongoing activities of government staff and other local stakeholders. There exists some capacity at the national and provincial levels to provide traditional extension advisory services to clients, especially communities, but there is very little capacity to implement, monitor and manage sustainable land management (SLM), sustainable forest management (SFM) and biodiversity conservation. The level of public financing to provide these services is also limited, despite the fact that Vanuatu's natural environment is a major factor underpinning the island's growing tourism economy.

Land-use planning: Vanuatu has a land development policy that is currently being finalised and has draft rural land-use planning guidelines. However, decision-makers have little experience in this area and do not have much information about how to mitigate the impacts of land-use change or change land management practices to improve biodiversity, reduce land degradation or increase other environmental values. Developments often occur with little regard for their impacts on the environment even though, in many cases, small changes could mitigate some of the most significant negative impacts.

Opportunities for more sustainable livelihoods: The most significant barrier to conservation, SLM and SFM at the field level is the lack of knowledge and skills in local communities about how they can improve their livelihoods and, at the same time, conserve the natural resources upon which they are so reliant. Opportunities to participate in the formal economy (tourism, agriculture) are growing and local interest in conservation is also increasing, but local people do not yet have the capacity to satisfy both of these demands.

Another major opportunity is Vanuatu's strong and expanding reputation as a supplier of organic beef. Cattle are raised organically and extensively on many of the islands, but current practices usually involve large-scale clearing of forest for pasture. This is not necessary and silvo-pastoral systems that have worked in other countries could be introduced in Vanuatu to both increase returns to agriculture and reduce environmental impacts, as well as further strengthen Vanuatu's reputation as an organic producer.

Baseline scenario and associated baseline projects

Brief description of co-funded baseline project activities	**Cofinancing type and amount (USD)**	
Ministry of Lands and Natural Resources (MLNR) - Land lease registration - Research and awareness raising on environmental issues - Registration and assistance to Community Conservation Areas (CCAs) - Promotion of domestic energy resources - Development and implementation of land-use policy and guidleines	In-kind	1,000,000
Ministry of Agriculture, Quarantine, Forestry and Fisheries (MAQFF) - Forestry extension, including provision of planting materials for reforestation	In-kind	2,000,000

- Agricultural and fisheries extension activities - Management of terrestrial and marine protected areas - Development of marine hatcheries - Research and training in agriculture, forestry and fisheries		
Ministry of Trade, Tourism, Commerce and Industry (MTTCI) - Tourism promotion and development - Promotion of processing and manufacturing (with a focus on agro-processing)	In-kind	2,000,000
Food and Agriculture Organization of the United Nations (FAO) - Support to monitoring reporting and verification (MRV) of forest carbon - Support for forestry legislation (tree planting regulation) - Community resilience to cope with climate-change and natural disasters	Grant In-kind	500,000 500,000
AusAid/NZAid (Mama Graon Project) - Improved decision making and transparency in land management	Cash	2,500,000
European Union (EDF 11: Rural Development in Vanuatu) - Development of smallholder agriculture - Strengthening agricultural research and extension - Provide infrastructure in outer islands to support trade and rural development	Cash	5,000,000
Vango (Vanuatu NGO Coalition members) - Training and community organisation for rural development	In-kind	500,000

The table above gives a summary of the baseline activities that this project will build upon. The main activities (by area of intervention) are as follows:

Land registration and land-use planning: MLNR, supported by the Mama Graon Project, are working to strengthen land registration, reduce conflicts over land-use and improve land-use planning. These activities are mostly implemented at the national level and are improving the overall framework for land-use in Vanuatu. They include the development of rural land-use planning guidelines.

Agriculture and forestry extension (including reforestation): MAQFF, supported by FAO, are supporting reforestation and improved forest management for ecosystem restoration and the provision of forest products (mostly for local use). Agriculture extension focuses on improving production practices, value-addition and marketing. They are also working on research into crops to promote food security and reduce vulnerability to climate change (and FAO has just started a project in this area as well).

Protected area management: MLNR and MAQFF, supported by Vango, help local communities to create and manage terrestrial conservation areas (Community Conservation Areas or CCAs) and Marine Protected Areas (MPAs). This includes registering and formalising the areas, and providing technical assistance. Awareness raising activities carried out by MLNR and MAQFF have also focused on areas that are indicated in the PIF to be targeted as part of this project. The activities have focused on raising awareness on the environmental issues and its drivers in the locales.

In managing existing PAs; MLNR and MAQFF have invested in monitoring the effectiveness of these areas (and the results and lessons learnt from the monitoring of existing PAs will feed in to output 1.1) and small-scale interventions such as the provision of Fish Aggregating Devices or FADs (enabling people to fish out at sea and preserve their reefs) and hatcheries to restock local fisheries.

Tourism development: MTTCI support tourism marketing and development and are also promoting value-addition and marketing of local products (mostly food) for sale to tourists.

Rural development: The Eleventh European Development Fund (EU EDF) is just starting and will run from 2014-2020. The focus will be on investments to support rural development, with a major emphasis on agriculture. Although discussions are still at an early stage, activities could include, for example, development of smallholder agriculture, strengthening of agricultural extension services and infrastructure improvements to facilitate inter-island trade.

Carbon monitoring, reporting and verification (MRV): MAQFF (Forestry Department), supported by FAO and others, are working on the development of MRV guidelines and a national framework for REDD+. The main support for this is likely to come from the World Bank Forest Carbon Partnership Facility (FCPF) and Vanuatu has recently submitted a Readiness Preparation Proposal (R-PP) for funding. Activities under the R-PP are not included under the baseline because a decision has not yet been taken on funding, but if Vanuatu's request is successful (as expected) it will be included as part of the baseline during project preparation.

In addition to the above, the project will build upon other past and ongoing national initiatives, such as the GEF-funded Vanuatu Local Conservation Initiatives Project, the GEF-FAO Forestry and Protected Area Management Project and the Australian Centre for International Agricultural Research (ACIAR) protected areas project. It will also collaborate, where appropriate, with the two LDCF climate change adaptation projects in Vanuatu and the Secretariat of the Pacific Community (SPC)-GIZ Programme on Coping with Climate Change in the Pacific.

Non-timber Forest Products (NTFPs): MAQFF through its extension services provides support to local communities in improved management of NTFPs. MTTCI, promotes processing of NTFPs (with a focus on agro-processing) and manufacturing products from raw NTFP raw materials, this is carried out through capacity development and technical assistance, and creating market linkages. European Union, through its programme in Vanuatu, has invested in improving infrastructure for NTFP processing, especially in outer islands. For example, supplying processed canarium nuts to the bigger islands require meeting strict processing requirements like freezing all products within 24 hrs of processing.

The proposed alternative scenario, components and expected outcomes

The overall aim of this project is to focus some of the baseline activities above into a few selected watersheds and, utilising GEF resources, build upon these (mostly development orientated) activities to test and implement ridge-to-reef conservation. Potential target sites have been discussed and an indicative list has been identified, but they have not yet been finally selected as they should meet several criteria that will maximise the impact of the project. For example, an ideal watershed might have high biodiversity value in parts of the watershed and/or adjacent coastal area, local community interest in conservation, some development pressure (e.g. from agriculture or tourism), areas where land management could be improved and some potential for development of improved and more sustainable livelihoods.

Component 1: Strengthening of the protected area network. This component will focus on creating new protected areas (terrestrial and marine) in areas of high biodiversity value and where the connections from ridge-to-reef can add-value to the conservation effort. It will strengthen the management of these areas (plus any existing PAs in each watershed) by promoting a scientific approach to management, effective monitoring and evaluation of conservation activities and development and implementation of local conservation rules and regulations (through customary *"tabu"* processes). As these areas will be managed day-to-day by local people, local capacity building will be emphasised (see also Component 4). To support community acceptance of the conservation objectives, it will also test and implement income generating activities related to the conservation effort and field work like surveys, control of invasive species, community-based ecotourism, improved management and value addition of NTFPs (canarium nuts, handicrafts, etc) at each site and support the creation of a trust fund in at least one location to support the conservation effort.[2] The expected outcomes from this will be more effective management of the PAs, increased financial sustainability and, ultimately, improved biodiversity conservation in these areas.

Component 2: Sustainable management of production landscapes. The second component will focus on improving agricultural, forestry and fishery practices in the watersheds. In essence, improving these activities will be what supports the "to" part of the ridge-to-reef conservation effort. A preliminary assessment of the main areas for improvement in each watershed will be undertaken during project preparation, then this activity will refine the assessment, identify what practices need to be changed (and where) and draw this all together into an integrated management plan for each watershed that is understood and agreed through formal land-use agreements with local communities. This will be backed-up with technical assistance and small investments to test alternative techniques and encourage local communities to improve their forest, land and marine management practices.

Examples of techniques that could be employed in small-scale agriculture include: soil fertility management; low-tillage production; use of green manures and waste composting; and planting of trees and other soil stabilisers near watercourses. In forests, communities will be trained to asses potential yields of NWFPs and harvest within these limits or actively increase yields through enrichment, in order to reduce degradation from current (largely unmanaged) extractive practices. In fisheries, the introduction of fish-aggregating devices (FADs),[3] harvesting rules and closed areas (for restocking) will be measures used, amongst others, to increase the sustainability of fishing. By far the largest proposed change in land management practices will be the pilot-

[2] Discussions with MTTCI suggested that corporate sponsorship from some of the large tour and cruise operators may be feasible and the options for funding will be explored and refined during the project preparation phase.

[3] While preparing this PIF, one frequently cited example of a successful micro-investment is the installation of offshore fish-aggregating devices (FADs) that enable people to fish out at sea and support the enforcement of local restrictions on reef fishing.

testing and introduction of silvo-pastoral systems in some of the larger agricultural enterprises as an alternative to the clearance of forest for cattle raising (see below).

The expected outcomes from this will be more sustainable forest, land and fisheries management, plus increased and more sustainable local livelihoods, increased value of agricultural production (funded by cofinancing) and improved food security.

Component 3: Landscape restoration and reduced forest degradation. This component will focus specifically on some of the climate change mitigation aspects of current land-use and land management practices (i.e. LULUCF). Soil erosion and poor water quality are local environmental problems in some places, so the project will identify areas where restoration of riparian zones (through assisted natural regeneration and planting of native trees) will have maximal impact and be supported by local communities, then provide technical assistance for such restoration.

Another major driver of forest degradation is large-scale cattle farming. Organic beef production is a major and expanding part of Vanuatu's agricultural economy but, at present, this expansion is largely achieved by converting forest to (largely unmanaged) pasture land and putting cows on the land at relatively low densities with minimal management or use of inputs. This very simple system is not very productive (financially or in terms of beef yields per ha) and, due to the forest degradation, it is harmful to the environmental both locally and at the global level. Therefore, the project will explore, test and implement alternative silvo-pastoral systems that have worked in other countries. Most likely, this will involve the retention of some trees and planting of fodder crops and improved grasses in fenced areas (e.g. one-third trees, fodder crops and improved grasses) and rotation of cattle throughout these different areas over time. Vanuatu is familiar with silvo-pastoral production systems, with the common practice of rearing cattle under coconuts (for weed control), but there is little knowledge of these systems beyond this and this is a barrier that the project will seek to overcome. The proposed new system will continue to minimise artificial inputs, but combine retention of trees with better livestock management and the use of more productive fodder crops to deliver both climate change mitigation benefits (from reduced forest degradation) as well as increased incomes and yields.[4]

Another source of carbon emissions that will be examined and reduced will be the use of fuelwood for drying agricultural products (e.g. by replacing existing wood-fired facilities with solar driers and/or installing solar driers where value-adding activities are planned). All of these activities will be thoroughly monitored and assessed using the carbon MRV methodology currently being developed in Vanuatu. The expected outcomes will be reduced/avoided carbon emissions, restored landscapes in each watershed and increased areas of forest managed according to the principles of sustainable forest management.

Component 4: Capacity building for integrated and sustainable natural resource management. A major problem highlighted during the preparation of this PIF was the extremely weak level of capacity in Vanuatu and the prevalence of donors in many parts of the public sector. This leads to weak local ownership of development outcomes and poor sustainability of results. To address this challenge, a specific capacity building component is proposed. Part of this will focus on creating a group of landowners in each watershed that will act as local champions and support extension, replication and sustainability of the project's achievements. At the national level, the project will also support the systematic training of a number of government and local NGO staff that are in key positions or have the potential to reach such positions and are likely to become the environmental leaders of the future in Vanuatu.[5] Ultimately, the expected outcome of this will be the overall achievement of the project's outputs and outcomes, but one specific long-term outcome the project will focus on is implementation of Vanuatu's rural land-use planning guidelines. Further refinement and proper implementation of these guidelines will be the way that the knowledge and lessons learned from project activities (in the watersheds) will have an impact on the environment all over Vanuatu.

Incremental cost reasoning

Biodiversity baseline: Support for land registration increases potential to create PAs (e.g. CCAs) but also increases land development pressures by increasing tenure security. MLNR, MAQFF and Vango support community organisation and the creation of CCAs, MPAs etc., but at a minimal level and with little long-term

[4] See, for example, Calle *et al*, 2012, "Integrating forestry, sustainable cattle ranching and landscape restoration", Unasylva 239, Vol. 63, pp 31-40. This study has shown how relatively simple and minimal-cost changes in livestock and management can increase income and yields.

[5] It should be noted that many donors and projects support *ad-hoc* capacity building through workshops, seminars and other short-term events, etc. but what is proposed here is a more systematic assessment of what is really required to build the capacity of key staff working in the environment field and then a purposeful and continued development of their skills and experience throughout the lifetime of the project.

financial sustainability. Biodiversity conservation outcomes are further diminished by current land management practices in surrounding production landscapes and the lack of an integrated approach to natural resource management.

GEF alternative: Integrated landscape management plans (developed and agreed with communities) secure Biodiversity conservation in important marine and terrestrial areas, including through improved practices in production landscapes. GEF funding enables conservation activities in the protected areas to be implemented beyond a minimal level and with a greater chance of long-term sustainability through capacity building, development of local (BD-related) income generating activities and fundraising for PA management.

SLM/SFM/IW baseline: MAQFF, FAO and EU support rural development and MTTCI does the same in the tourism sector. These interventions have national development benefits (higher local incomes, increased food security etc.). but increase land development pressures in rural areas of Vanuatu. Rural land-use planning guidelines exist and could mitigate development impacts, but they are largely ineffective due to a lack of any local knowledge and/or experience in how such guidelines can and should be implemented/enforced. MAQFF (Forestry) provide trees for reforestation largely at the request of local landowners but do not have much of a systematic approach to this. Similarly, the Fisheries Department helps with restocking depleted local fisheries.

GEF alternative: Baseline projects supporting local development are supplemented by GEF-funded interventions to promote more sustainable production/harvesting/fishing techniques and alternative land management techniques that reduce the expansion of agricultural areas. Restoration efforts by the forestry and fisheries departments are more clearly focused and targeted on areas that will have the greatest beneficial impact. Rural land-use planning is strengthened by the experiences gained and lessons learned from activities at project target sites and through capacity building of key decision makers.

Climate Change/SFM baseline: Land development pressures (already referred to above) typically result in forest clearance or, at best, forest degradation. In addition, a number of value-adding activities currently being promoted (or likely in the future) involve drying/smoking agricultural products. At present, this is mostly done using fuelwood. In addition to providing trees for reforestation, MAQFF (Forestry) also support the development of carbon MRV, but only in terms of the national framework and with little real experience on the ground.

GEF alternative: Alternative land management techniques tested and promoted (to slow/reverse expansion of agriculture into forest areas). More integration of trees into current farming systems also tested, developed and implemented (MAQFF provide trees, while GEF supports technical assistance). Solar dryers piloted as alternatives to current technologies used to add-value to agricultural products. MAQFF (Forestry) staff gain practical field-level experience in actually implementing MRV and start to identify climate change mitigation activities with high benefit-cost ratios through experiences gained in the target watersheds.

Expected global environmental benefits

Protected Area (PA) network increased by 35,000 ha to improve ecosystem coverage (including 15,000 ha on land, doubling the Protected Area network to about 13 percent of the total land area). High priorities for selection as target sites likely to include cloud and other montane forests, as well as mangrove ecosystems. Increasing the protected area network and improving the management of existing PAs would result in conservation of global threatened species (for example: Birgus latro and Megapodius layardi), habitats of significance (for example: bat caves) and endemic plant areas (for example: Orchidaceae spp.)

Land and forest degradation reduced across 80,000 ha of mixed forest and agricultural land. Forest ecosystems restored at these locations resulting in a 10 percent increase in forest cover (or 8,000 ha of reforestation). Additional benefits to biodiversity conservation obtained from integrated ridge-to-reef management of natural resources within the project's targeted watersheds.

Sequestration of 384,000 tC through forest restoration (above),[6] plus additional sequestration to be obtained from forest restoration in riparian zones. Emission reductions also to be obtained from introduction of solar

[6] Calculation of carbon benefits: Vanuatu does not have complete information about forest stocking (the National Forest Inventory in 1993 only reported commercial stock volume). However, recent information from Fiji shows an average forest carbon stock there of about 48 tC/ha (GIZ, 2011, Fiji National Forest Carbon Stock Assessment) and native forest restoration in Vanuatu is likely to achieve at least a similar level of carbon stock. Thus, if the forest restoration in these watershed results in the creation of an additional 8,000 ha of fully stocked forest, then the carbon stock that will eventually be created would be 8,000 x 48 = 384,000 tC, or 1,405,440 tCO2eq. This would be a minimal estimate, because tree planting typically increases the stocking density compared to existing natural forest and, in addition to these areas, additional trees will be planted as part of riparian zone restoration. The carbon sequestration benefits from this project will be measured and verified through Vanuatu's MRV system that is currently being developed and will also be field-tested as part of this project.

drying equipment and techniques (to replace fuelwood). Estimates of carbon benefits from the latter two interventions to be determined during project preparation.

Innovativeness, sustainability and potential for scaling up

This project is quite innovative in that a comprehensive and integrated approach to environmental aspects of land/forest/fisheries management has not been tried before in Vanuatu (poorly co-ordinated donor projects have been more the norm in the past). Similarly, the proposed approach to capacity building will be more systematic than the usual donor-driven approach of one-day workshops, seminars and presentations, etc.

Sustainability will be promoted by encouraging the full and active participation of local landowners in both the project design and implementation. Landowner interest will also be one criteria used for the selection of watersheds to include in the project. By working at the scale of a whole watershed, it is expected that many of the experiences and lessons learned from this project will be easily replicated in other watersheds.

A.2 Stakeholders

A list of key stakeholders and their potential roles in the project is given in the table below. A detailed stakeholder analysis and mapping will be conducted during project preparation to include consultations with local communities, national project preparation workshops (inception and terminal) and socio-economic baseline surveys. Attention will be given to minority groups (women and youth) during these activities.

Stakeholders	Roles
Ministry of Lands and Natural Resources; Ministry of Agriculture, Quarantine, Forestry and Fisheries	Main implementation partners. Responsible for day to day execution, management, coordination and monitoring of the project.
Extension staff in agriculture, forestry and fisheries departments and MLNR Environment Department	Project beneficiaries (from capacity building) and project partners supporting implementation at community level.
EU, AusAid, NZAid, MTTCI	Co-financing partners.
Local communities (indigenous people)	Main project beneficiaries.
Civil society and non- governmental organizations	Project beneficiaries (from capacity building) and project partners supporting community organization, local capacity building and dissemination of knowledge.
Private sector	Project partners (in cases where land-use developments are of a commercial nature) and potential co-financing partners (e.g. through PA sponsorship).

A.3 Risks

There are three main risks associated with this project:

Risk	Rating	Mitigation Measures
Climate change. Climate change is likely to increase the occurrence of severe weather events, raise sea levels, and move the natural range of some species "up the hill" (assuming temperatures will increase). It may also have an impact on agriculture and livelihoods (damage to crops from storms, drought, etc.).	High	Monitoring and evaluation (under Component 4) will be designed to identify changes in ecosystems likely to be linked to climate change so that remedial actions can be taken. Plant and tree species used for restoration and improvements to agriculture (for SLM and income generation) will be selected so that they are resilient to the most likely impacts of climate change (e.g. drought, outbreaks of pests and diseases, etc.). Climate resilient forest and land management techniques will also be promoted in local communities (e.g. water conservation).
Local communities: Collaboration and involvement of landowning communities will be crucial for the long-term success of this project, but communities must meet their needs before they can set-aside areas for conservation. It may also still be difficult to reach agreement within communities on courses of action that will be enforceable and respected by all.	High	Communities will be active participants from the very beginning in the design, implementation and management of project activities. The project design will be guided and learn from the ongoing work on customary land reform and from the stakeholders involved in that process. It is also notable that there are already over 100 unofficial conservation areas in the country (Fourth National Report to Convention on Biodiversity (CBD)), so the project will stress the benefits of formalising conservation agreements where landowners wish to do this. A second strategy proposed to overcome reluctance will be the provision of incentives (i.e. development benefits) for communities to engage in conservation, in addition to building upon the existing interest in conservation and explaining how conservation

		and improved marine, forest and land management techniques can benefit local people in other ways.
Government capacity (human and financial): As already noted, the number of people involved in forestry, land management and the environment within government are very small. Furthermore, national government budgets for these activities are very small. This may have a negative impact on project delivery and will certainly put at risk some aspects of project sustainability.	Medium	The project recognises these weaknesses and has set-out to address them with a specific capacity building component that will target the most important areas and develop strategies to overcome weaknesses in these for the long-term sustainability of project outcomes. In addition to this, the project will emphasise working in collaboration across agencies and with local communities to reduce the demands placed on government staff. Broader support for the project will be generated by awareness raising targeted at influential decision makers at local and national levels. These mitigation measures will also be supported by regular monitoring of project progress, so that corrective actions can be taken if necessary.
Leakage in CC activities. Shifting of unsustainable agricultural practices and increase in wood harvesting in non-project areas	Low	Leakage in the context of this project is unlikely. Forest degradation from wood harvesting in Vanuatu is not driven by demand for industrial wood, but by fuelwood collection. However, fuelwood collection is very localized (on the many small islands with no inter-island trade in fuelwood), so reducing production in one place is unlikely to lead to increased production elsewhere to replace this. Furthermore, the idea of the project is replace the use of fuelwood with solar driers (as an alternative drying technology) to reduce demand rather than restrict or control supply. With respect to cattle raising, replacing widespread forest conversion with silvo-pastoral production should not increase areas used for cattle raising (above the baseline) because these systems - if implemented well - have been shown to have higher beef production per ha than production from unmanaged pasture land.

A.4 Coordination with other relevant GEF financed and other initiatives.

National Initiatives

Vanuatu has in place a number of government and/or multi-stakeholder bodies coordinating activities on biodiversity, climate change, land degradation and land-use. The committees include those dealing with the following: National Adaptation Programme of Action (NAPA) Coordination Committee, National Biodiversity Strategy and Action Plan (NBSAP) Review Committee, CBD Report Coordination Committee, UNFCCC National Communications Coordinating Committee, NCSA Committee, as well as specialised advisory and co-ordination committees within the departments that will be joint executing agencies for the project. Many of these committees have common memberships and some are more active than others depending on the task at hand. These committees will be the basis for the selection of the project steering and oversight committee so that there will be a linkage between all. Core members of these committees are representatives of the main executing departments and the project will ensure that the right officials and individuals are selected to represent agencies on the project steering committee and that there is continuity of personnel in such membership.

Other agency projects

GEF, FAO and other agencies (AusAID, EU, SPC, Forum Fisheries Agency (FFA), South Pacific Regional Environment Programme (SPREP), etc.) also have projects relevant to this one and discussions were held with some of these agencies during the drafting of this PIF to encourage collaboration and cofinancing. External agencies will be invited to attend Project Steering Committee meetings as partners (cofinanciers) or observers and will be invited to implement joint generic activities such as training, workshops and other events allowing for exchange of relevant experiences.

The project will be guided by the previous GEF SLM project in Vanuatu (in particular, some of the institutional and capacity issues on that project and the lessons learned from these) as well as FAO's experiences with the current GEF-FAO forestry and protected areas project. FAO is developing and/or managing a number of GEF projects in the region, as well as some major REDD+ and agriculture/food security projects, and FAO will coordinate internally among the different responsible departments (members of the Project Task Force). Broader coordination will also be achieved through participation of FAO and project staff in meetings of the two GEF Pacific programmatic approaches (GEFPAS and R2R).

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 National strategies and plans or reports and assessments under the relevant conventions

Biodiversity: The project will address a number of issues raised in Vanuatu's NBSAP (1999) and Third National Report to CBD (2006). Specifically, the need for watershed management, management of natural resources and conservation of significant species and places will be covered by this project. It will also address the two challenges raised in these documents about the need to conserve biological resources to support sustainable livelihoods, local food security and healthcare, as well as the need for more consideration of biodiversity in agricultural activities. The above are also consistent with Vanuatu's National Biodiversity Conservation Strategy (the national strategy to implement the NBSAP).

Land degradation: Vanuatu has not yet developed a National Action Plan (NAP) for sustainable land management, but the major land degradation threats identified in the Third National Report to UNCCD (2007) included: the lack of land use planning; increasing human population; unsustainable agriculture; and urban development practices. The project will focus on trying to solve all of these issues in an integrated way in the target areas and for future replication at a larger scale.

Climate change: Vanuatu's national communication to the Conference of the Parties to the UNFCCC (1999) prioritizes and identifies the following areas of action: encourage non-timber forest products, encourage sustainable agriculture systems, and improve data on GHG emissions. This project is well aligned with these areas of action.

Vanuatu's National Adaptation Programme of Action (2007) prioritised improvements in: agriculture and food security; water management policies; sustainable tourism; community based marine resource management; and sustainable forest management. Throughout the document, integrated, local and community-based approaches are proposed to address the potential problems in the future from climate change in the country. The approaches proposed here are consistent with the NAPA and would cover a number of activities specifically proposed in it (e.g. integrated coastal management, local income generating activities to increase resilience, management of water resources at the watershed scale).

The project is also aligned to the National Energy Policy Framework (2007). The framework sets 'Increase use of renewable energy' and 'An effective and equitable rural and remote areas energy planning' as a priority, and one of the actions recommended is the promotion of renewable energy in rural areas. This project under Component 3 would examine the possibilities of reducing fuelwood consumption through promotion of solar driers.

SFM: The Vanuatu Forest Policy 2011-2020 (2011) calls for greater involvement of local communities in forest management as well as in the protection and conservation of important ecosystems. The approach proposed in this project is entirely consistent with the policy and will contribute to some of its aims. Furthermore, it follows the proposed public-landowner collaboration model with the Forestry Department providing trees and advice for forest restoration and establishment of CCAs, while local communities invest their time in management activities and are ultimately left in control of their resources. The policy also lists out the following objectives that are directly relevant to this project; integrate climate change mitigation issues in to forestry sector planning and activities, establish and manage community and forest conservation areas for carbon storage, reduce forest degradation and related emissions from natural forests by applying principles of SFM, and establish a national forest carbon monitoring system for MRV of forest carbon stock changes.

B.2 GEF focal area strategies, eligibility criteria and priorities including Aichi Target(s).

Biodiversity: In the biodiversity Focal Area, this project will focus on Objective 1: to improve the sustainability of protected area systems by increasing the area of protected areas to fill ecosystem gaps (particularly montane forests and reef ecosystems) and increase the effectiveness of management of these areas through a ridge-to-reef approach. It will also aims to reduce the funding gap for protected area management by developing some income generating activities (related to sustainable use of biodiversity) and the creation of a fund for private sponsorship of conservation activities (in at least one site).

Climate change: For climate change it will promote conservation and enhancement of carbon stocks through sustainable management of land use, land-use change, and forestry (Objective 5), specifically by developing and implementing agricultural practices that reduce forest degradation and encourage forest restoration (e.g. agroforestry and silvo-pastoral production systems) and reduce demands for fuelwood.

International waters: The project will make a modest contribution to GEF's international waters Objective 3, by supporting actions to improve water quality (e.g. riparian zone rehabilitation) and increase the sustainability of fishing through the creation of MPAs/fish refugia.

Land degradation: The project will attempt to reduce pressures on natural resources from competing land uses in the wider landscape (Objective 3), by improving the productivity of agriculture and introducing systems that do not rely on further forest clearance, as well as developing capacity to plan and implement integrated natural resource management (INRM). Many activities on this part of the project (mostly Component 2) are also expected to deliver local socio-economic benefits and any good practices developed on the project will be disseminated for replication elsewhere.

Sustainable forest management and REDD+: The project should contribute to both objectives in this Focal Area. It will support decision making for forest restoration and the development and implementation of more sustainable harvesting practices (wood and non-wood forest products, mostly for subsistence use). It will also promote good management practices within landowning communities. With respect to the second objective, it aims to reduce the pressures to convert forests to other land uses (explained above) and will make a modest contribution to Vanuatu's efforts to generate carbon market revenues, by supporting field testing of forest carbon MRV (to complement the activities of others being developed at the national level).

Aichi Targets: The project will contribute to achievement of a number of Aichi Targets, the most relevant being Target 10: to minimise the multiple anthropogenic pressures on coral reefs and other vulnerable ecosystems. The condition of coral reefs included in the project target areas will be assessed as part of project preparation (to set a baseline) and assessed a second time towards the end of the project.

B.3 The GEF Agency's comparative advantage for implementing the project

As the GEF Agency for the Vanuatu national R2R project, FAO will bring to the project its considerable experience in forestry, fisheries natural resource management (where FAO is already recognised by the GEF as having comparative advantage). FAO has a Sub-Regional Office for the Pacific Islands (SAPA) based in Samoa with 20 multidisciplinary full-time staff (including a forestry specialist); SAPA currently manages a diverse portfolio of projects. Therefore, it has operational capacity to implement this project very well. In addition to this, technical backstopping will be provided by a multi-disciplinary Project Task Force comprising FAO technical staff (in forestry, agriculture, fisheries, soil and water management and other necessary disciplines) based in Rome and Bangkok.

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

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

NAME	POSITION	MINISTRY	DATE
Mr. Albert Abel WILLIAMS (Operational Focal Point, since June 10, 2011).	Director, Department of Environmental Protection and Conservation	Ministry of Lands and Natural Resources, PMB 9063, George Pompidou Building, Port Vila, Shea Province Vanuatu Tel: + 678 25302 Fax: 011 678 22227 awilliams@vanuatu.gov.vu	April 3, 2013

B. GEF AGENCY CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.			
Agency Coordinator	**Signature**	**Date**	**Project Contact Person**
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