



# PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: GEF TRUST FUND

## PART I: PROJECT INFORMATION

Project Title:	Strengthening the Management Effectiveness of the National System of Protected Areas		
Country(ies):	Papua New Guinea	GEF Project ID:	5510
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5261
Other Executing Partner(s):	Ministry of Environment and Conservation, Conservation and Environment Protection Authority, YUS Conservation Organization, Tenkile Conservation Alliance	Submission Date:	20 August 2013
GEF Focal Area (s):	MFA Biodiversity, Land Degradation	Project Duration (Months)	60
Name of parent program (if applicable):	PICS R2R - Pacific Islands Ridge-to-Reef National Priorities	Project Agency Fee (\$):	983,642

### A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK:

<i>Focal Area Objectives</i>	<i>Trust Fund</i>	<i>Indicative Grant Amount (\$)</i>	<i>Indicative Co-financing (\$)</i>
BD-1 1.1: Improved management effectiveness of existing and new protected areas.	GEFTF	10,107,870	38,000,000
LD-3 3.2: Integrated landscape management practices adopted by local communities	GEFTF	821,488	4,600,000
<b>Total Project Cost</b>		<b>10,929,358</b>	<b>42,600,000</b>

### B. INDICATIVE PROJECT DESCRIPTION SUMMARY

<i>Project Objective:</i> To strengthen national and local capacities to effectively manage the national system of protected areas, and address threats to biodiversity and ecosystem functions in these areas.						
<i>Project Component</i>	<i>Grant Type</i>	<i>Expected Outcomes</i>	<i>Expected Outputs</i>	<i>Trust Fund</i>	<i>Indicative Grant Amount (\$)</i>	<i>Indicative Co-financing (\$)</i>
Component 1: Management capabilities of the PNG State to support and oversee Protected Area Management	INV	<p>1.1 Institutional capacity of Ministry of Environment and Conservation<sup>1</sup> (and relevant Provincial Government counterparts) for PA system planning and management improved, as indicated by a minimum 35% increase in relevant scores on the Capacity Development Scorecard (Baseline will be established during the PPG)</p> <p>1.2 Oversight and coordination of the national PA system (specifically National Parks, Wildlife Sanctuaries and Conservation Areas) is strengthened through standardized and scientifically-based monitoring of status and pressures, agreed national standards and guidelines for PA management and minimum technical standards for PA management and staff.</p>	<p>-Relevant policies relating to PA management and biodiversity conservation strengthened in consultation with central and provincial government agencies and stakeholders. Specifically a) Policy to integrate support for Conservation Areas and other components of the national PA system into national, provincial and district-level land-use and sectoral planning processes and budgets. b) An enabling policy that establishes an effective national system to license and regulate development impacts on biodiversity, within the functional mandate of the Conservation and Environmental Protection Authority (CEPA). c) An administrative regulation or similar issuance describing the process by which funds and revenues for PA management will be earmarked within the overall CEPA financial structure.</p> <p>-Capacity of CEPA replaced for effective management of the national PA system,</p>	GEF	4,225,337 (BD: 3,785,300 LD: 440,037)	17,600,000

<sup>1</sup> Functional responsibility currently rests with the Department of Environment and Conservation (DEC), however the Ministry is in the process of reconstituting this Department as a Statutory Authority (The Conservation and Environment Protection Authority – CEPA). Subject to Parliamentary approval CEPA will ultimately assume responsibility for support to and oversight of the national PA system.

		<p>1.3 Effective management of National Parks demonstrated through increased management effectiveness at Varirata National Park and better integration of the Park into the broader Sogeri Plains landscape to reduce erosion and sedimentation levels in the Laloki River:</p> <p>(1). Increase in METT scores for VNP: baseline 30, alternative 50  (2.) Sedimentation levels in the Laloki River reduced by at least 5% as measured at the Sirinumu Dam intake, against baseline levels in June 2014.</p>	<p>through: (i) establishment of PA management standards and PA performance monitoring system for different categories of PAs; (ii) institutionalization of clear reporting structure and methods for all categories of PAs; (iii) establishment of law enforcement and habitat/biodiversity monitoring protocols; (iv) clear official guidelines for community involvement in the management of Conservation Areas; (v) clear capacity development strategies and action plans for increasing management effectiveness of the PA system (National Parks, Wildlife Sanctuaries and Conservation Areas); (vi) incentive mechanisms for increasing motivation of technical staff; (vii) establishment and institutionalization of PA data/information and knowledge management system enabling learning from and up-scaling of pilot/individual project activities.</p> <p>-Training Programmes targeting PA managers institutionalized within national training curricula and institutions. Diploma-level PA management modules developed with UPNG, Forest Research Institute or other suitable academic institutions for mid-level managers. Certificate-level training programmes instituted for senior field staff and site managers. At least 100 PA field staff (primarily Community Rangers) trained and certified in SMART enforcement, patrolling and biological monitoring of key ecosystems and threatened species. A national center of excellence for Conservation Area management established.</p> <p>- Establishment of a functional National Park management system for Varirata NP, with effective management, infrastructure and facilities, to allow the Park to function as a showcase for the PNG national park system.</p> <ul style="list-style-type: none"> <li>• Establishment of a designated conservation zone within the Sirinumu Dam Integrated Land Use Plan, encompassing the existing Varirata National Park (1,060ha and at least 7,000ha of adjacent forest landscape.</li> <li>• Improvements in watershed management in the Sirinumu catchment through conservation farming, establishment of community-agreed riparian buffers and other measures within the Sirinumu Dam Integrated Land Use Plan.</li> <li>• Integration of national environmental standards and regulations (from CEPA) into the development and implementation of the Sirinumu Dam Integrated Land Use Plan.</li> </ul>			
Component 2: Strengthening the capacity of the state and local communities to cooperatively manage protected area sites	INV	<p>2.1 Effective management of PAs covering an area of 331,000 hectares, evidenced by:</p> <p>1. Increase in the METT scores: YUS: baseline 60, alternative 75  Toricelli: baseline 60 alternative 72</p> <p>2. Stable or increased populations of threatened species (against baselines estimated during the PPG phase)  <b>YUS:</b> Emperor Bird of Paradise</p>	<p>-Expansion of the gazetted YUS Conservation Area through the redelineation of agreed conservation zones with participating landowners, to increase the total Conservation Area from 76,000ha to at least 151,000ha. Management systems improved, capacities developed through targeted training of Community Rangers and technical staff and the provision of monitoring and patrolling equipment.</p>	GEF TF	6,204,021 (BD: 5,900,021 LD: 304,000)	22,870,000

	<p>(<i>Paradisaea guilielmi</i>), Matschie's Tree Kangaroo (<i>Dendrolagus matschiei</i>)</p> <p><b>Torricelli:</b> Tenkile tree kangaroo (<i>Dendrolagus scottae</i>), Weimag tree kangaroo (<i>D. pulcherrimus</i>), Black-spotted Cuscus (<i>Spilocuscus rufoniger</i>), Northern Glider (<i>Petaurus abidi</i>)</p> <p>2.2 Traditional systems and models for management and conservation of biodiversity strengthened across at least 331,000 ha of priority landscape consisting of: (a) the expanded YUS Conservation Area (151,000ha) and (b) the Torricelli Mountain Range Conservation Area (180,000ha).</p> <p>- Formal agreements in place between communities in participating conservation areas and central and/or Provincial Governments, to provide financial and in-kind (service provision) support to participating communities, resulting in at least PGK 400 (approx. USD200) in additional resources per household per year being provided to the communities concerned.</p> <p>2.3 Erosion and sedimentation levels in the Yuruwa River (YUS CA) reduced by at least 5% (against baselines and at measurement sites to be agreed during the PPG phase). Sedimentation levels in the Laloki River (Varirata NP) reduced by at least 5% against baselines at project start, as measured at the Bomana water intake.</p>	<p>-Formal gazettement of the Torricelli Mountain Range Conservation Area (encompassing at least 180,000ha), including adoption of an approved management plan under the Conservation Areas Act. Management systems institutionalized, Community Rangers recruited, trained and equipped.</p> <p>-Conservation farming and livelihood activities result in reductions in pressure on the YUS and Torricelli landscapes:</p> <p>-Alternative protein sources (e.g. rabbits, farmed fish) contribute to a reduction hunting pressure from at least 18 villages in Torricelli.</p> <p>-Income generation from organic coffee and cocoa cultivation and sale provides increased cash incomes directly associated with the Conservation Area for at least 10 villages in the YUS landscape.</p> <p>-Improvements in watershed management in the YUS catchment system through conservation farming, establishment of community-agreed riparian buffers and other measures within community landscape management plans.</p> <p>- Reduced soil erosion from farming activities in the Sirinumu Dam catchment through establishment of buffer zones and reforestation of degraded hill slopes as part of the PNG Dam Authority catchment management plan.</p>			
Subtotal				10,429,358	40,470,000
Project Management Cost (PMC)			GEF TF	500,000	2,130,000
Total Project Cost				10,929,358	42,600,000

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

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	Ministry of Environment & Conservation	Cash	15,000,000
Bilateral Aid Agency (ies)	To be determined <sup>2</sup>	Cash	5,000,000
Local Government	Provincial and District Administrations	Unknown at this stage	10,000,000
CSO	NGOs & Landowners in YUS and Torricelli	Unknown at this stage	7,000,000
Private Sector	Agri & mineral resource industries	Unknown at this stage	5,000,000
GEF Agency	UNDP	Cash	600,000
<b>Total Cofinancing</b>			<b>42,600,000</b>

### D. INDICATIVE TRUST FUND RESOURCES (\$) REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY

<sup>2</sup> UNDP and DEC are in discussions with JICA on a potential partnership for this initiative

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (\$) (a)	Agency Fee (\$) (b)	Total (\$) c=a+b
UNDP	GEFTF	Biodiversity	Papua New Guinea	10,107,870	909,708	11,017,578
UNDP	GEFTF	Land Degradation	Papua New Guinea	821,488	73,934	895,422
<b>Total Grant Resources</b>				10,929,358	983,642	11,913,000

#### E. PROJECT PREPARATION GRANT (PPG)

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

	<u>Amount</u> Requested (\$)	<u>Agency Fee</u> for PPG (\$)
• (upto)\$300k for projects above \$10 million	300,000	27,000

#### PPG AMOUNT REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES)

Trust Fund	GEF Agency	Focal Area	Country Name/ Global	(in \$)		
				PPG (a)	Agency Fee (b)	Total c = a + b
GEFTF	UNDP	BD	Papua New Guinea	277,450	24,970	302,420
GEFTF	UNDP	LD	Papua New Guinea	22,550	2,030	24,580
<b>Total PPG Amount</b>				<b>300,000</b>	<b>27,000</b>	<b>327,000</b>

## PART II: PROJECT JUSTIFICATION

### PROJECT OVERVIEW

1. The Government of Papua New Guinea (PNG) has made a renewed commitment to support a viable and sustainable protected area system in the country, working in partnership with community landowners, non-government conservation organizations and local administrations. The Government is strengthening its capacities to manage the environment, by setting up a Conservation and Environmental Protection Authority (CEPA) under the Ministry of Environment and Conservation. This will strengthen the capacity of Government to license and regulate development and improve capacities to manage biodiversity *in situ*, including within PAs.
2. This project is designed to support this country commitment, by strengthening links between the central government's policy and institutional systems and 'bottom up' conservation initiatives that are being established by community landowners and conservation partners in key biodiversity areas throughout the country. The project will help the planned Conservation and Environment Protection Authority (CEPA) put in place a system for supporting and overseeing conservation areas—improving governance of the PA system while simultaneously strengthening PA management in areas with high biodiversity values. These conservation areas will generally be managed by other institutions, including community landowner groups (often with support from conservation NGOs) and Government institutions such as the planned PNG Dam Authority, power and water supply companies or private-sector partners.
3. This project is part of a medium-term modular approach to strengthening biodiversity conservation in PNG. It complements work undertaken under the GEF-4/ Australia supported *Community-Based Forest and Coastal Conservation and Resource Management* project (GEFSEC PMIS 3954) to develop models for conservation in the Owen Stanley Range and New Britain island. A third module focusing on biodiversity financing is planned in consultation with various partners, which will focus on biodiversity finance (biodiversity offsets framework, concession bidding, development of effective fund management mechanisms such as trust funds, etc).
4. Interventions will be located to spearhead a landscape approach to conservation—addressing threats within the site and in surrounding landscapes as needed to secure biodiversity values. This conforms to the ridge to reef approach. Three

landscapes have been chosen for this project; the YUS Conservation Area in the Huon Peninsula, the Torricelli Mountain Range in north-western PNG and the Varirata National Park and Sogeri Plateau outside Port Moresby (see attached maps). Each is characterized by different approaches to PA establishment and management. Two of these (YUS and Torricelli) are community-established and managed Conservation Areas, while Varirata is a nationally designated and state-managed National Park located within a critical watershed—supplying water to the capital city. PNG will share lessons and good practices with other countries participating in the Pacific Ridge to Reef Programme. Funding will be sourced from the biodiversity and land degradation focal areas, with the LD funds utilized to marry PA management and landscape management to address landscape level threats to ecosystem function and resilience such as sedimentation.

### **Global Environmental Problem, Root Causes and Barriers:**

5. New Guinea is one of the world's Megadiverse regions, containing an estimated 7% of the world's biodiversity in less than 1% of the land area. The island of New Guinea as a whole (combining mainland PNG and Indonesia's West Papua region) contains the largest contiguous area of forest remaining in the Asia-Pacific region and constitutes the third largest-tropical rainforest in the world. PNG has more than 18,894 described plant species, 719 birds, 271 mammals, 227 reptiles, 266 amphibians and 341 freshwater fish species. Endemism probably exceeds 30% for PNG and is well over 70% for Papuaia (the region from New Guinea to the Solomon Islands). It is also important to note that large gaps remain in the scientific knowledge of Papua New Guinea's biodiversity, and new species are constantly being discovered.
6. PNG's forests perform a number of crucial ecological functions, the importance of which tends to be underestimated. The broad range of these services includes regulation of water catchments and enhancement of water quality; global, regional and microclimate stabilization; soil and nutrient retention which is particularly important for the extensive cultivated gardens; insect and rodent control; crop pollination; and the maintenance of fish stocks. Riverine systems and estuaries also perform important functions, e.g. in wetlands management, transport of nutrients for offshore seagrass beds and reefs and stabilization of coastal systems.
7. The three landscapes chosen for the project each contain important species, ecosystem and functional values:
8. **The YUS Conservation Area:** The YUS region is located in the Huon Peninsula in Morobe Province, with a small part of the landscape located in Madang. It consists of the watersheds of the Yopno, Uruwa and Som rivers, which give the region its acronymous name. YUS ranges from the Bismarck Sea coast southwards into the Saruwaged Mountains, spanning an altitudinal line from sea level to 4,071 meters asl. The region contains large humid equatorial forests, fire-maintained grasslands, shrublands and alpine grasslands, as well as wetlands and seagrass beds along the coast, which are home to dugongs and marine turtles. The region is home to a large number of endemic species, many of which are under threat. This includes the Endangered Matschie's Tree Kangaroo, the Western Long-Beaked Echidna (CE), the Emperor Bird of Paradise (NT), the New Guinea Vulturine Parrot (Vu), the New Guinea Harpy-Eagle (Vu), Wahne's Parotia (Vu) and the Dwarf Cassowary (NT). The region is also home to two poisonous bird species: the Hooded Pitohui and the Blue-capped Ifrita. The region is home to a population of approximately 12,000 people living in a large number of villages. These communities have limited access to external markets and services, with transportation links limited to small aircraft providing an erratic service and no telecommunications facilities. As a result these communities are entirely dependent on their immediate environment for food and shelter. The largely intact and well-connect habitats across the entire ridge to reef system provide a resilient landscape with potential for climate adaptation.
9. **The Torricelli Mountain Range:** The Torricelli Mountain Range is located in the Sandaun and East Sepik Provinces in the north-west of PNG. The site contains a mix of lowland and mid-montane tropical rainforest with a high level of endemism. It is the only know landscape in which three species of tree kangaroo are found, all endemic: the Scott's Tree Kangaroo or Tenkile *Dendrolagus scottae*, the Golden-mantled Tree Kangaroo or Weimag (*Dendrolagus pulcherrimus*) and the Grizzled Tree Kangaroo or Yon-gi (*Dendrolagus inustus*). Other endemic species include the Black-spotted cuscus (*Spilocuscus rufoniger*) and the Northern Glider (*Petaurus abidi*). The Tenkile, Weimag, Black-spotted Cuscus and Northern Glider are all classified as critically endangered. The endangered Palm Cockatoo (*Probosciger aterimus*) is also found in the region. A recent camera trap study by the Tenkile Conservation Alliance also recorded an un-described species of forest wallaby.
10. The current Tenkile Conservation Alliance area contains 50 villages with more than 10,000 people who depend on subsistence agriculture (gardens) and hunting. The broader landscape in which the proposed Conservation Area will be established includes an additional 100 villages with up to a further 20,000 people. The river systems that flow from this mountain range run through extensive lowland forests and support important coastal ecosystems including the Sissano Lagoon and extensive mangrove and coral reef formations.
11. **Varirata National Park and the Sogeri Plateau:** Varirata National Park is located to the northeast of Port Moresby

on the ridge of the Sogeri Plateau, south of the Laloki River. The Park covers an area of 1,060ha ranging in elevation from 600-800 meters, and protects an important ecosystem that is an ecotone between savannah and monsoon rainforest. The Park is famed for a rich variety of birdlife, with well over 200 species recorded, and was the first location at which the poisonous properties of the Hooded Pitohui (*pitohu dichrous*) were described by science. Beyond its intrinsic conservation value, its proximity to Port Moresby makes the site of especially high conservation education significance, critical in building the conservation constituency in the emerging middle class; their support will be critical to sustaining investment in conservation country wide. The Park was established in 1972 as the first designated National Park in Papua New Guinea. It is located along the escarpment of the Astrolabe Mountains, which forms the southwestern boundary of the Sogeri Plateau. This plateau is the main catchment for the Laloki River, which is the primary source of water and hydroelectric power for Port Moresby, provided by the Sirinumu Dam. The sustainable management of the plateau is critical to preserve water regulation and provisioning services vital to the capital district.

### **Threats:**

12. The primary threats to biodiversity include forest conversion and degradation from logging, mining, expanding industrial agriculture and a rapidly expanding largely rural human population with expanding needs for cash crops and subsistence gardens. Compounding all of this is the looming threat of climate change. Over 80% of PNG's total population of 7.06 million in PNG live in rural areas and still live predominantly subsistence lifestyles that are directly dependent on the natural environment for sustenance and ecosystem services. Forests contribute a rich variety of foods and other items essential for daily survival and economic activity, and form fertile soils for subsistence food production. In total, more than one thousand species of PNG's plants have been identified that are used for food, medicine, ropes, building materials, stimulants, body decoration and adornment, art, utensils and canoes. Hunting and substantial fishing are still a major activity for many people in rural PNG and forms an important part of customary practice. However the rapidly growing human population (with an annual growth rate of 2.2%) places increasing pressure on the limited resource base.
13. Estimates cited in the PNG National Capacity Self-Assessment Report (forthcoming) suggest that with continuing population growth and existing farm productivity, all arable land in PNG will have to be used for food production by 2025. Demand for food and subsistence livelihoods is increasingly compounded by the need for cash to meet household necessities, pay for transportation and school fees, etc. as the modern cash economy gradually extends through the country. With limited commercial and industrial development in the country, the government is also forced to rely on natural resource exploitation (including through forestry, mining and petrochemicals) for the bulk of its fiscal revenue. This results in the unsustainable exploitation of the natural resource base for revenue generation, both by local communities and by the Government.
14. At the site level, the three target landscapes still face relatively low levels of current threats; however on current trends these threats are expected to grow in the future. This intervention provides an opportunity to address these growing threats now at relatively low cost, before the scale of threats becomes unmanageable.
15. At the **YUS Conservation Area**, the main threats are from selective hunting of key endangered species such as the tree kangaroos and dwarf cassowary. Hunting is carried out for household consumption, since these species still constitute the primary source of protein for communities living in the area. The Conservation Area was initially established specifically to address this threat. Forest clearance for food gardens represents a limited but growing threat linked to the growth in human population.
16. In the **Torrecelli Mountain Range**, the main threats are encroachment by logging, which is prevalent in adjacent lowland areas, and hunting of key wildlife species for food. Logging concessions (Forest Management Areas and Special Agricultural Business Leases) have been issued in the lowland forests to the north of the site, although none has yet been approved within the Mountain Range itself. Key food species currently under threat include all three species of tree kangaroo and the cuscus. Population growth is also a concern in this area, both through natural growth and through a limited amount of in-migration in lowland areas.
17. At **Varirata and the Sogeri watershed**, threats include plant collection (for edible plant products), seasonal fires spreading from adjacent agricultural lands, and some amount of swidden agriculture encroaching on the watershed's outer fringes. Population growth in Koiara district is also a growth threat, since this area is immediately adjacent to the rapidly-growing capital of Port Moresby where housing costs and expansion are extremely high. The urban fringe of Port Moresby is expected to extend to the bottom of the escarpment on which the site is located within the next few years. By developing a longer-term planning horizon for the watershed the project will help to manage these pressures, and maintain the critical ecosystem services (particularly water and power generation) which the site provides for Port Moresby.

18. Addressing these threats in the PNG context is complicated by the system of customary land ownership, where approximately 97% of the land in the country is under customary tenure. The country's constitution has one of the world's strongest customary rights frameworks under its National Goals and Directive Principles. Customary ownership is also recognized in national laws such as the Forestry Act 1991, Mining Act 1992, Lands Act 1996 and the Oil and Gas Act 1998. Communal ownership of land and other resources, under decision-making systems that require consultations and consensus, has made the establishment of large-scale protected areas (PA) under State management extremely difficult. At the same time, this customary tenure structure is also a barrier to large-scale land conversion for permanent agriculture or other uses, and has so far limited the impact of commercial logging compared with neighboring countries such as Indonesia. Addressing threats in these sites will therefore require a collaborative management paradigm, combining community-based conservation at the site level with a national system to coordinate and support an overall PA network.
19. The **long-term solution** required to address these threats is a robust Protected Area system that builds on and supports community-based conservation on the ground – including both smaller-scale local conservation areas and larger landscape-level gazetted Conservation Areas- combined with a comprehensive national mechanism to manage, regulate and finance the overall system. However a number of barriers constrain achievement of this long-term solution.:

#### **Barriers:**

##### **1. Inadequate institutional and technical capacities and financial resources to manage and support an effective PA System.**

20. At the national level, direct responsibility for management of the national PA system lies with the Department of Environment and Conservation (DEC). DEC is also responsible for formal oversight of and support to gazetted Conservation Areas and Wildlife Management Areas. The capacity of DEC to support its statutory duties for these PA categories is weak. DEC has a small PA management unit, comprising 15 staff, with currently no field cadre. Operational capacity to support or oversee protected areas is therefore non-existent. Systems and policies for national PA management remain fragmented and ad-hoc. PNG has completed a review of PA coverage against conservation needs and has identified important areas to be targeted for conservation. A National PA System Policy is currently under development, and formal endorsement of this policy is expected in 2013, triggering a review of conservation laws with a view to updating them. The review will clarify the roles and responsibilities of DEC, other public institutions (including provincial and local governments) and non-state actors for PA functions, so as to ensure PAs are effectively delivering their conservation goals. However capacities to implement this policy will remain limited. DEC lacks the institutional and technical capacity and funding resources to implement the full range of PA management functions (planning, monitoring, enforcement, data and information management, etc.). Other government institutions (including provincial and district governments) are not explicitly mandated to support conservation or management of PAs under their governing policies, and hence in order for comprehensive cross-sectoral support to be mobilized a range of relevant policies and plans will need to be revised and harmonized with the PA System Policy. There is also an absence of capacities and financial resources to manage National Parks such as Varirata, which are the direct responsibility of DEC. DEC currently has no field staff cadre, and oversight of National Parks such as Varirata is limited to ad-hoc visits by DEC managers.

##### **2. Local communities and local conservation actors lack access to comprehensive institutional and technical support and stable and predictable financial resources for the management of designated Conservation Areas**

21. At the site level, communities that have come together to establish and manage Conservation Areas also face a range of barriers. There is limited institutional capacity to organize landowners to work with potential conservation partners such as district and local governments, conservation institutions (e.g. the PNG Sustainable Development Programme) or potential stakeholders such as power and water companies and major investors (e.g. mining and LNG projects). Most landowner mobilization to create Conservation Areas has been support (and sometimes initiated) by conservation NGOs that are focused on particular sites that are of value for flagship species conservation or other external reasons. Once landowners set out to establish conservation areas, they also face barriers in accessing institutional and technical support, e.g. in community organization, conservation planning, development of alternative livelihood and food sources and conflict mediation and resolution. Some sources of support are available from Provincial and local governments, however many communities lack the information, communication networks or technical skills needed to access such programmes.
22. There is currently no national system to support or monitor progress of Conservation Areas. This creates a strong risk of such areas eventually losing momentum and regressing to 'paper parks', as occurred with many Wildlife Management

Areas established in the 1990s and 2000s. The lack of a national support framework also means that the conservation status and management quality of these sites is difficult to monitor.

**Baseline scenario and associated baseline projects:**

23. PNG has committed to establish a “comprehensive, effectively managed and ecologically-representative national system of protected areas”. The PNG national PA system consists of three types of PAs – (1) National Parks and Wildlife Sanctuaries designated under the National Parks Act 1982 and the Organic Law on Provincial and Local Level Government 1995, which are gazetted on freehold land and managed by the State, (2) Wildlife Management Areas designated under the Fauna (Protection and Control) Act 1966, which are managed by local communities on communal land for the conservation and sustainable use of wildlife resources, and (3) Conservation Areas established under the Conservation Areas Act 1978, which allow communities to declare Conservation Areas on communal land, with these declarations being endorsed by the Government following the submission of a formal request. Under these three acts there are currently 61 PAs totaling 1,897,500 ha, or slightly more than 4% of the country’s terrestrial area.

24. The area of National Parks and Wildlife Sanctuaries (including Protected Areas, Provincial Parks, etc.) is relatively small. However, these areas are critical, as they are directly managed by the State. In theory they have the highest level of conservation security and should provide a benchmark for effective PA management in the country. Gazetted WMAs cover an area of 1.7 million hectares. These areas are generally of high conservation importance, however their conservation security is limited as they generally address faunal management only and lack an active management presence. Conservation Areas are designed to manage fauna, flora and ecosystem service resources, and their management plans generally include an ongoing conservation and monitoring capacity drawn from the participating communities, e.g. through Community Rangers. At present YUS is the only gazetted Conservation Area in PNG, however there are on-going plans for at least two more, including at Torricelli. All three PA types face growing threats, from encroachment on neighboring lands leading to growing habitat insularization, from the overharvest of fauna and flora, and from human induced fires.

Type	No	Area (Hectares)	%
WMA	38	1,723,773	90.8
Sanctuary	5	75,271	3.9
Protected Area	2	20,245	1.1
Conservation Area	1	76,000	4.0
National Park	8	8,059	0.4
Provincial Park	1	77	0.004
Reserve	3	49	0.003
Memorial Park	3	5	0.0003
Total	61	1,897,595	100

25. However the national capacity to administer PAs is weak and many sites suffer from neglect- undermining their conservation utility. The Department of Environment and Conservation does not currently have a field cadre, and hence does not have any capacity for on-the-ground management or monitoring of PAs. Total Government funding available to support the national system is approximately US\$2.5 million per year, however the bulk of this funding is earmarked for DEC’s institutional and operational expenses. Actual Government funding for site-level PA management is effectively nonexistent. Varirata National Park receives ad-hoc allocations for maintenance of infrastructure, however there is no on-going management budget currently available. Management presence is limited to one part-time gatekeeper recruited from the local community.

26. Previous GEF support to biodiversity conservation in PNG includes three projects implemented by UNDP; the *Biodiversity Conservation and Resource Management Programme* (GEF PMIS 347, 1991-1998), the *Community-Based Coastal and Marine Conservation in Milne Bay Province Project* (GEF PMIS 1261, 2002-2006) and the *PAS: Community-Based Forest and Coastal Conservation and Resource Management in PNG Project* (GEF PMIS 3954, 2011-ongoing). These projects have provided a number of important lessons which have informed the design of this project, including:

- The importance of community involvement and community support for conservation efforts. The need for strong community support for conservation initiatives is a common thread running through all past conservation initiatives in PNG. The country’s community-based resource management system coupled with local communities’ strong dependence on their local environment for basic needs and livelihoods, requires that any new resource management regime (including conservation areas or protected areas) be carefully negotiated while respecting the needs and aspirations of participating communities. The lack of strong community-buy in hampered PA establishment attempts at Bismark Ramu and Lak in GEF PMIS 347, and inadequate attention to local needs and priorities also undermined the implementation of GEF PMIS 1261.



The on-going GEF PMIS 3954 project is strongly aware of this requirement, and is undertaking careful and extended community engagement and community entry processes at its target sites.

- The need for institutional capacity development to be approached as a strategic, long-term endeavor, rather than through time-bound project activities. The extensive capacity-building support provided to DEC and other partners in PMIS 347 was not sustained post-project, and similarly the capacity-building activities undertaken in Milne Bay Province through PMIS1261 have had limited long-term impact. Recognizing this, current capacity-building efforts are being built around a longer-term, modular approach across a range of separate projects and initiatives. The initial policy and institutional capacity-building undertaken through the ongoing PMIS 3954 project provides the foundation on which Component 1 of this current project is based. Further institutional strengthening (e.g. in the area of sustainable financing) are planned through future pipeline initiatives to be funded through Government resources as well as donor projects.

A more detailed description of the lessons learned from past initiatives will be provided in the full Project Document developed for CEO Endorsement.

27. Conservation activities at sites such as YUS and Torricelli are generally financed by external donors and conservation NGOs. Each site receives an average of US\$500,000 per year in support from a range of sources, however this funding is mostly ad-hoc and drawn from a variety of sources. YUS has an endowment of US\$2 million, which yields approximately US\$70,000 per year for basic management functions. YUS also received a sizeable grant from the German Government/ BMU (via Conservation International) which supported the establishment and operation of the YUS Conservation Area Management Committee and baseline conservation research and site management. As a gazetted Conservation Area YUS has a management plan which is endorsed by the Government and which is currently being updated. The Tenkile Conservation Alliance in Torricelli has been implementing a long-term conservation strategy for the region that includes plans to establish an officially recognized Conservation Area. Baseline support to TCA includes approximately US\$1.7 million from the EU, which was used to install water tanks for improved water supply in 320 locations across the landscape.

28. Recognizing the need to strengthen management of environmental conservation issues, the Government (through the Ministry of Environment and Conservation) is in the process of reconstituting DEC as a Statutory Authority with expanded powers and revenue-raising authority. This authority, to be called the Conservation and Environment Protection Authority (CEPA) has been approved by the Cabinet and is due to be formally established in 2014. CEPA will oversee all environmental conservation and protection functions in the Government, and will have the mandate to put in place an effective system to license and regulate all development activities that have an impact on biodiversity and the environment. The Authority will have the ability to raise funds through fees and charges, including for example by mandating offset mechanisms for biodiversity lost through development activities. The Government estimates that CEPA's total operational budget will be approximately PGK30-40 million PNG Kina (approx. US\$15-20 million) per year, for a total of US\$75-100 million over the duration of the project.

29. District and Provincial Governments in the proposed site areas (including both Central Province and the National Capital District for Varirata) have development budgets averaging PGK10 million per year or approximately PGK60 million (US\$30 million) per year across the three sites. This funding is used for development and social service provision activities, including conservation-related activities where requested by local communities. Examples of activities that are being funded include PGK5 million which has been allocated to upgrade the access road to Varirata National Park. Other conservation actors whose activities support the baseline project include conservation NGOs such as CELCOR, the Mama Graun Foundation, The Nature Conservancy and the Wildlife Conservation Society. These organizations support a range of conservation activities on the ground as well as national-level policy advocacy and awareness-raising actions, the total value of which is estimated at approximately US\$2 million per year or \$10 million over the duration of the project.

A summary of Protected Area activities supported by these and other NGOs is provided in the table below:

NGO	Activity
CELCOR	CELCOR provides legal support to communities wanting to establish conservation areas or to contest illegal and unsustainable exploitation of natural resources. It also provides community legal education (CLE) training programmes for communities across the country. CELCOR also supports the review of community conservation area management plans to ensure compliance with relevant laws and regulatory processes.
Mama Graun Foundation	Mama Graun provides small-scale grants to community conservation areas (including Locally-Managed Marine Areas) through the Mama Graun Conservation Trust Fund. Mama Graun is also receiving funding from Esso Highlands Limited to design and

	implement the Enhancing Conservation Capacity Program, which will include a conservation management course, scholarships and work placements. The conservation management course delivered in partnership with the University of Papua New Guinea will provide postgraduate diploma and masters-level training for conservation managers. This program is expected to help strengthen overall national capacities for conservation area management in PNG in the years to come.
The Nature Conservancy	Supporting conservation activities in the Bismarck Sea (sites at Manus, Madang and Kimbe Bay). Currently developing a new Strategic Plan for operations in PNG, which includes a proposal for a PNG Conservation Initiative to provide funding support to conservation initiatives that support the PNG Medium-Term Development Strategy. Targeting an endowment of approximately \$70 million to provide annual revenues of \$3.5 million.
Wildlife Conservation Society	Focuses on conservation activities in the New Ireland Seascape, including through the establishment of community-based marine reserves (tambu reefs) with support from the WCS New Ireland Seascape base in Kavieng. Currently three tambu reefs have been established, through partnerships with six villages in New Ireland Province: Ungakum, Kavulik, Silom, Lasigi, Malom and Dabanot
WWF	WWF have in the past provided support to conservation area initiatives in regions such as the Kikori River Basin, Fly River and the Hunstein Range. WWF also implemented an EU-funded project on conservation and sustainable use of the marine and coastal biodiversity of the Bismarck Seas from 2005-2010, with EUR1.8 million in funding from the EU. WWF are in the process of refocusing their activities on the Bismarck Sea region (including relocating operations to Madang) and future support to PAs or conservation areas is not yet clear.
Conservation International	Conservation International is supporting the establishment and management of the YUS Conservation Area, using funding provided by the German Government. CI were also the executing partner for the GEF/UNDP Milne Bay Marine and Coastal Conservation Project from 2002 to 2005. In addition, CI have undertaken a number of Rapid Assessments and biodiversity expeditions across PNG, including in the Nakanai Range in New Britain (2009) the Kaijende Highlands and Hewa Wilderness (2008) and the Mueller range (2009). These expeditions have provided a wealth of information on species richness and diversity which has helped inform conservation priority-setting and the targeting of conservation area establishment efforts.
JICA	JICA are currently developing an initiative to strengthen conservation and protected area management in PNG, in partnership with the Department of Environment and Conservation. This initiative is expected to support environmental awareness and education across the country, as well as supporting conservation and management activities at Varirata National Park and the broader Sogeri Plateau/ Laloki River catchment. The initiative is also considering the creation of a Man and Biosphere Reserve in the Varirata/Sogeri landscape.
European Union	Under the PNG- European Community Country Strategy Paper and National Indicative Programme for 2008-2013, the European Community has allocated a total of EUR71.5 million for the Rural Economic Development Programme. This programme includes a range of activities to support local development planning, rural water supply (through which support has been provided to the Tenkile Conservation Alliance in Torricelli) and to strengthen the resilience of rural agriculture in the face of climate change.
AusAID	As a major bilateral partner in PNG, the Government of Australia and AusAID have provided a broad range of support to sustainable development activities as part of the PNG-Australia Partnership for Development. This includes support to the PNG Australia Forest Carbon Partnership (\$2.5 million in 2012-2013), and the Climate Change Adaptation Initiative (\$2 million). The Government of Australia has also provided significant support to the Kokoda Initiative (2007-ongoing) which has amongst others supported the establishment of an interim protection zone for the landscape surrounding the Kokoda Track and Brown River.
Research and Conservation Foundation of PNG (RCF)	RCF has been supporting the management of the Crater Mountain Wildlife Management Area for many years, and continues to be the main provider of technical support and capacity-building to this WMA.

30. In order to move towards the long-term solution additional interventions will be required, as proposed herein.

### **Proposed Alternative Scenario, Outcomes and Components:**

31. Under the alternative scenario, additional investments by the GEF, Government of PNG and local partners will strengthen the national PA system and ensure the sustainability of investments in Conservation Areas on the ground. The objective of the project is *“To strengthen national and local capacities to effectively manage the national system of protected areas, and address threats to biodiversity and ecosystem functions in these areas”*. This objective will be achieved through two major components. The first component focuses on the establishment of a comprehensive and capable national system to oversee and support community-initiated conservation areas while effectively managing National Parks and other areas under direct Government jurisdiction. The second component focuses on strengthening national support to Conservation Areas, to ensure that these areas are effectively managed and sustained within a supportive national framework, including through the provision of stable and predictable financial support through various Government channels.

#### Project Components:

#### **Component 1: Management capabilities of the PNG State to oversee Protected Area Management**

32. This component will support the establishment of a more robust legal and policy framework for biodiversity conservation and PA management in PNG. It will use the National PA Policy and the establishment of CEPA as cornerstones for a comprehensive and effective national PA framework. The project will ensure that support for Conservation Areas and other community-managed conservation areas is integrated into relevant national, provincial and local land-use and sectoral planning processes to ensure adequate recognition of and financial support to these conservation initiatives. The project will also help CEPA to put in place a licensing and regulatory framework for development activities which impact on biodiversity resources or ecosystem services, to ensure that potential negative impacts are avoided, and where required that adverse impacts are compensated for through offsets or other compensatory mechanisms. The project will also directly support the creation of an effective conservation and PA management function under CEPA, including through the establishment of national standards, monitoring systems and protocols for PA management. A dedicated Protected Areas oversight unit will be created within CEPA, with sufficient technical, human and financial resources to effectively support and oversee conservation activities on the ground. Protocols to be established will include those for reporting on conservation area status and management effectiveness, biodiversity monitoring and law enforcement, and community involvement in the establishment and management of CAs. Institutional and technical capacities will be strengthened through clear and well-resourced capacity development action plans for CEPA’s conservation wing, and the introduction of new training programmes and incentive schemes to increase the skills and motivation of staff members. National-level training and capacity development programmes will also be instituted for Conservation Area managers and field staff, to ensure that gazetted Conservation Areas are managed to an adequate technical level grounded in the best available science. Where possible, PNG will make use of regional training opportunities to strengthen staff capacities, undertaken under the auspices of the Pacific Ridge to Reef Programme, thus optimizing the use of scarce conservation funds.
33. The systems and capacities established in CEPA will be validated and demonstrated through the improved management of Varirata National Park as a flagship demonstration PA for Papua New Guinea. The project will support CEPA in setting up an effective management structure for Varirata, including on-the-ground management staff and Community Rangers recruited from surrounding communities. Resources will also be invested in refurbishing and improving the infrastructure and facilities at the park, including rehabilitation of buildings, improvements to the access road and improved signage and interpretation. In addition, a broader Integrated Land Use Plan for the Sogeri Dam catchment area will be developed in collaboration with key stakeholders including the PNG Dam Authority, PNG Power and the Eda Ramu water supply company. This Plan will integrate Varirata and adjacent core conservation areas (e.g. the escarpment of the Astrolabe Mountains) into the management of the overall landscape for maintenance of critical ecosystem functions, most importantly water and hydropower provision for Port Moresby City. Through this plan, CEPA will also demonstrate the mainstreaming of environmental regulations into the development plans of a parastatal authority, specifically to address issues of agricultural encroachment and settlement expansion in a critical watershed. This pilot will serve to inform and strengthen CEPA’s institutional and technical capacities for mainstreaming environmental regulations into other government and semi-government organizations.

#### **Component 2: Strengthening the capacity of the state and local communities to cooperatively manage PA sites.**

34. Under this component the project will strengthen the management and conservation of two flagship sites, the YUS Conservation Area in Morobe and Madang Provinces and the planned Tenkile Conservation Area in the Torricelli Mountain Range in East Sepik and Sandaun Provinces. The project will support the establishment of well-managed and well-resourced Conservation Areas with landowner communities in these two sites, to serve as benchmarks for

- Conservation Areas under the strengthened national PA regime in PNG. The project will build upon on-going conservation and management activities in each of the sites, and will help to systematize and integrate these into the national system to set benchmarks and standards for PA management nationally.
35. The project will aim to facilitate the formal gazettement of large Conservation Areas in each site- in the case of YUS this being the regazettement of a significantly expanded site (from 76,000ha to 151,000ha). The creation and effective management of these Conservation Areas will help to reduce hunting and habitat conversion pressures on key threatened species, including flagship species such as tree kangaroos and birds of paradise. Conservation of these large and diverse landscapes will also demonstrate effective ridge-to-reef management approaches which can be replicated elsewhere, including in the proposed Conservation Area in the Managalas Plateau.
  36. A major focus will be placed on engendering the sustainable use of wild resources both for subsistence and artisanal purposes – strengthening community based natural resource management. This will include, support for population surveys to ensure sustainable offtakes, strengthening traditional management systems (i.e no take zones, rotational use), monitoring the impacts of use and improving enforcement and monitoring of management. This will focus on non-timber forest products, sustainably produced cash crops such as coffee and cocoa and offtakes of wildlife where sustainability can be assured with effective conservation management and where there are existing markets that can be harnessed. The development of supply chains for produce will be important to provide a utilitarian incentive for conservation. In particular, the project will look into the constraints currently being experience in transporting cash crops such as coffee and cocoa out of the project locations in a reliable and cost-effective manner. Sustainable use activities will be geared towards threat reduction and the maintenance of viable populations of keystone species such as tree kangaroos.
  37. In addition, the project will demonstrate integrated landscape management approaches in the project sites, to strengthen management of ecosystem services as part of broader conservation objectives. The project will support to sustainable farming for cash crops will help to stabilize land clearance and reduce erosion, particularly along the Yuruwa River system in the YUS conservation area, and in critical slope locations in the Torricelli Mountain Range. The project will also work with the power and water producers which operate the Sirinumu Dam (PNG Power and Eda Ranu respectively) to reduce the sediment load in the Laloki River through improvements in catchment management, establishment of buffer zones and enrichment planting of eroded slopes and gullies. Reduced sediment load at the water intakes will potentially increase the operating lifespan of the hydroelectric and water pumping infrastructure, thereby demonstrating how effective management of ecosystem services can provide tangible economic returns.
  38. The project will strengthen traditional management approaches (e.g. *tambu* and *ples masalai* zones) by working through established Conservation Area Management Committees and community land-use plans. The project will also help establish or expand Community Ranger programmes, and will help increase the technical and field skills of the Rangers to ensure effective biodiversity monitoring, enforcement and community engagement and conflict resolution capacities.
  39. Linkages between these Conservation Areas and broader government systems will be strengthened, both with the Ministry of Environment and Conservation/ CEPA for conservation and PA management purposes, and with local-level, District and Provincial Governments for broader development and service provision support to livelihoods, community mobilization and conservation activities. Improving the mechanisms by which these site-based initiatives are linked to broader national and local governance systems will help to increase the flow of financial and in-kind resources available to the CAs, as well as ensuring the institutional and financial sustainability of these community protected areas. The support and oversight systems developed for these sites will help to inform the development of the overall national PA system under Component 1.

#### **Incremental Cost Reasoning, and expected contributions from the baseline, GEFTF and co-financing:**

40. Under the baseline scenario, the national PA system will continue to be an ineffective mechanism to conserve PNG's globally-significant biodiversity and critical ecosystem services. In the absence of GEF funding the creation and management of Conservation Areas will continue to be ad-hoc processes initiated by external actors with limited long-term sustainability and unclear national benefits. The project will engineer a paradigm shift to put the national PA system on a more secure institutional framework, both at the national level and, through partnerships, at the local level. At the local level the project will demonstrate the effective operationalization of the Conservation Areas model, providing a platform for local landowners, central, provincial and local governments and conservation actors to collaborate on the protection and sustainable use of important biodiversity resources and ecosystems. Baseline funding will ensure the establishment of CEPA, and foundational conservation and community mobilization work at the YUS and Torricelli Mountain sites. It will also provide basic improvements to the infrastructure at Varirata National Park, in particular the upgrading of the access road (with funding from the Government co-finance allocation to the project). GEF resources

- will build upon this baseline to ensure that the conservation and PA management functions in CEPA are able to deliver a robust and effective national system to oversee and support conservation activities on the ground. GEF resources will also help to ensure that the flagship Conservation Areas at YUS and Torricelli are managed according to a clear set of standards and best practices, with capacities in place at the technical and field/ Community Ranger level to monitor biodiversity status and threats and overall ecosystem health. GEF resources will also help to unlock additional financial and in-kind support from local, district and Provincial government partners to strengthen the financial health of the CAs.
41. Co-financing is being mobilized from the Government of PNG for the rehabilitation of infrastructure and establishment of a management presence at Varirata National Park. Government co-financing will also support the management and conservation of the YUS and Torricelli sites, in particular through provision of improved technical capacities, livelihood infrastructure and equipment and improved connectivity. In addition, Government funding is being leveraged to support the development of a platform for sharing knowledge and experience across partners and sites, under the overall leadership of DEC. The Government of Japan (through JICA) has been approached by the Government to provide financial resources to support the conservation of Varirata National Park, and improvements to the management of the broader landscape of the Sogeri Plains catchment through a Man and Biosphere Reserve approach. JICA funding has also been proposed for public awareness and advocacy activities, which will strengthen political and social commitment to the establishment of Conservation Areas and the protection of PNG’s biodiversity resources.
42. Under a fully incremental scenario PNG’s national PA system will expand through the establishment of an 180,000ha Conservation Area in the Torricelli Mountain Range, and the regazettement of the YUS Conservation Area to increase from 76,000ha to 151,000ha. In addition, approximately 7,000ha of additional forest landscape will be put under protection in the Sogeri Plains catchment as an annex to the Varirata National Park. Management effectiveness at all three sites (YUS, Torricelli and Varirata) will increase from 60 points to 75 in YUS, 60 to 72 in Torricelli and 30 to 50 in Varirata. Improvements in conservation farming practices and landscape management in Torricelli and Varirata will result in the stabilization of steep slopes in riparian areas and reductions in sedimentation in water systems.
43. Over-arching benefits to the country will be realized from the reinvigoration of the national PA system, which has suffered a steep decline in recent decades due to a lack of resources, unclear mandates and insufficient institutional and technical capacities.

**Global Environmental Benefits**

44. The immediate global environmental benefits are the conservation of more than 331,000 ha of critical landscape, and the maintenance of important populations of restricted-range flagship species including birds of paradise and four species of tree kangaroo. Through the establishment of an effective national PA system, the project will also contribute to the conservation of other critical ecosystems and landscapes throughout PNG. The project will help PNG towards achievement of the Aichi Targets, including in particular Targets 11 and 12 on protected area coverage and avoidance of extinctions respectively.

**Innovativeness, Sustainability and Potential for Scaling-Up:**

45. The project is innovative in the PNG context since it adopts a landscape approach for ridge-to-reef systems, and integrates ecosystem functions and climate responses with biodiversity conservation – a model that is new to the country. Institutional sustainability will be strengthened through the creation of a robust model for PA management within the CEPA structure, and actions on the ground will be sustained through partnerships with credible partners with good track records in the sites selected. The project is part of a longer-term modular approach to strengthening biodiversity conservation in PNG. Through this approach the Government of PNG is also initiating work on biodiversity financing (module 3), including offset systems to mitigate biodiversity loss, innovative PA management models such as concession bidding, and fund management structures such as biodiversity trust funds. This policy approach (which is already being applied in one mining project) will ensure the financial sustainability of the project’s investments through the creation of an on-going revenue stream to support conservation actions. This third module will also look at options for holding and disbursing conservation funds (e.g. through a conservation trust fund) as well as optimizing financial management and unlocking efficiencies. The site-level Conservation Area model being supported here can be scaled-up through the establishment of other conservation areas, e.g. on the Managalas Plateau (where community interest in a Conservation Area is already evident), at Wanang, Lakekamu and other potential sites. The model is predicated on the need for a strong institutional partner already present on the ground, however in the future initial community entry and engagement could be facilitated through intermediaries such as the Mama Graun Foundation or the GEF Small Grants Programme.

**A.2. Stakeholders.**

STAKEHOLDER	DESCRIPTION	POSSIBLE ROLES IN THE PROJECT
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GROUP		
Department of Environment and Conservation/ Conservation and Environment Protection Authority	DEC (soon to be reconstituted as CEPA) is the primary Government institution responsible for conservation and protected area management in PNG.	As the main executing government agency, DEC/CEPA will be responsible for overall implementation of the project and establishment of the national PA system.
Dept. of National Planning and Monitoring (DNPM)	DNPM is the government agency responsible for coordinating aid programmes, including oversight of UNDP activities in PNG	DNPM will monitor overall progress of the project as part of its role in supporting implementation of the UNDP Country Programme.
Academia and Research Institutions	This includes the national universities, research institutions involved with environmental conservation, agriculture and natural resource management.	To provide training (including for field staff and technical managers) as well as to help establish national standards and systems for PA management.
Provincial and Local Level Government	These are responsible for plan development and implementation at the community levels. They work closely with the NGOs and CBOs.	Their roles would be to support the implementation of the project at the local levels. They can support the project activities and also benefit from the project capacity building activities.
NGOs (Both national and international)	These would include organizations active in project landscapes, such as the YUS Conservation Organization and the Tenkile Conservation Alliance, as well as key conservation partners working on conservation capacity building such as The Nature Conservancy.	Their roles would be to work in collaboration with DEC and DNPM to implement activities of the project. Additionally, they can be potential financial or technical partners, providing needed data and information and at the same time benefit from the project
Private Sector and parastatal agencies	Development project proponents and investors whose operations are regulated by the DEC in terms of environment management, as well as the main users of ecosystem services such as PNG Power and Eda Ramu water supply company.	They can be potential financial and technical partners, and sources of data and information.
Local Communities and Landowner Groups	Landowner groups are the primary rights-holders in the project area and have direct control of forest and land resources	Primary partners in the establishment and management of Conservation Areas, and the main beneficiaries of livelihood and income generation support.

### A.3 Risks.

Risks (Threats and Opportunities)	Consequence <sup>3</sup>	Probability <sup>4</sup>	Risk Rating <sup>5</sup>	Proposed Mitigation Actions
Creation of Conservation function within CEPA does not occur	3	1	3	<ul style="list-style-type: none"> <li>Precondition for the project. CEPA model explicitly includes a conservation mandate and oversight of the National PA system. If an effective conservation function is not established, the project will redirect available resources to explore the option of creating a stand-alone PA entity, e.g. as a parastatal, foundation or other suitable model.</li> </ul>
Financial sustainability – flow of financial	3	2	6	<ul style="list-style-type: none"> <li>The project is part of a modular approach to strengthening the national system, where initial needs</li> </ul>

<sup>3</sup> 4: Extreme, 3:High, 2: Medium, 1:Low

<sup>4</sup> 4: Almost Certain, 3: Likely, 2: Possible, 1:Unlikely

<sup>5</sup> Multiply column 2 & 3

resources to support PAs is insufficient or interrupted				and feasibility analysis will be undertaken through this project and a full-fledged biodiversity financing initiative is being developed by the Government as part of module 3. The CEPA structure explicitly includes provision to generate revenues through licenses, fees and offset payments and hence a viable revenue stream can be instituted. This revenue framework will be described in an administrative regulation or similar instrument to be developed with support from the project.
Weak absorptive capacity in DEC	2	3	6	<ul style="list-style-type: none"> <li>Existing capacities are weak, however a comprehensive review and strengthening process is to be undertaken for the creation of CEPA. The current Government has demonstrated its commitment to a strengthened conservation and environment protection function through the rapid approval for the establishment of CEPA, and the priority accorded to its operationalization. The project will take a systematic, medium-term approach to strengthening capacities, including through better partnerships with other conservation stakeholders, including e.g. conservation NGOs and academic institutions. The creation of the proposed National Centre of Excellence for Conservation Area management (as described in Outcome 1.2) will help to strengthen conservation management capacities across a broad spectrum of actors, including NGOs, local and provincial governments and local communities. The integration of support to Conservation Areas into Provincial and local-level Government systems and plans will also ensure that there is a broader base of institutional capacity through which to support the establishment and operation of Conservation Areas.</li> </ul>
Social conflict in the community	2	2	4	<ul style="list-style-type: none"> <li>The selected Conservation Area sites already have completed social mapping and extensive community consultations, with strong systems in place to avoid and manage conflict. At Varirata the project will work with the resource users (PNG Dam Authority, PNG Power and Eda Ramu) to ensure that existing social mapping and community engagement systems are strengthened as required to ensure consensus around the proposed catchment land use plan.</li> </ul>
Balancing community needs vs. livelihoods	2	2	4	<ul style="list-style-type: none"> <li>The Conservation Area approach at both YUS and Torricelli already has a strong focus on livelihoods, including in particular the provision of alternative protein sources to reduce hunting pressure and the development of cash generation activities to support community needs. These approaches will be continued and strengthened through the project.</li> </ul>
Climate Change	2	2	4	<ul style="list-style-type: none"> <li>All three sites have altitudinal transects which will aid in adapting to climate change impacts. The project will also address activities that create increased risks in the face of climate change, e.g. the use of fire for land clearance in situations of increased drought incidence.</li> </ul>
Gendered based conflicts over the roles	2	2	4	<ul style="list-style-type: none"> <li>An initial analysis of the community dynamics is imperative to determine how to most effectively</li> </ul>

of men and women in natural resource management				<p>address gender issues. This analytical process is already underway at YUS and Torricelli, and will be supported as required to develop a comprehensive analysis.</p> <ul style="list-style-type: none"> <li>• Women’s traditional roles and responsibilities in natural resource management will be identified and incorporated into the project at the detailed design stage.</li> </ul>
Interventions are not sustained post-project or scaled up to other conservation areas.	2	3	6	<ul style="list-style-type: none"> <li>• Past GEF experience in PNG has indicated a clear risk that stand-alone project interventions will not be sustained post-project. The intervention approach for this project has taken this risk into account by designing the project as part of a modular, medium-term programme strategy for on-going support to conservation in PNG. Just as this project will build upon the progress made and capacities developed under the previous GEF-4 project (GEF PMIS 3954), the Government of PNG expects subsequent programme interventions supported by the GEF, UNDP and other partners to sustain and build upon the systems and capacities being developed here. The Government’s commitment to sustaining the project’s interventions is also demonstrated through the decision to program significant cash co-financing through the pending Government PIP funding proposal that has been submitted by DEC with the endorsement of the Minister for Environment and Conservation.</li> <li>• Scale-up and replication to other Conservation Area sites will be dependent on the availability of suitable partners and communities willing to support the creation of CAs on their lands. There have already been indications of such demand through requests for support to DEC for the establishment of a Conservation Area in the Managalas Plateau, and requests from various stakeholders to support the conversion of existing Wildlife Management Areas to Conservation Areas. Based on this documented demand it is reasonable to expect that a successful model developed through this project can be replicated in a number of other locations over the coming years.</li> </ul>

#### A.4. Coordination:

46. The project will be coordinated with the activities of partners, and other complementary GEF initiatives, as two levels; nationally and at the local level.
47. At the national level, the project is part of a phased modular approach to GEF programming being implemented by the Government of PNG. It builds upon the initial community-based forest conservation work undertaken in the Owen Stanley Range and New Britain island under the on-going GEF-4 project *Community-Based Forest and Coastal Conservation and Resource Management* project (GEFSEC PMIS 3954). The local-level community conservation area models being developed under the GEF-4 project and the service delivery models being developed to support livelihoods in conservation areas will serve to inform the way in which the national PA system under CEPA provides support to communities in landscape-scale Conservation Areas such as YUS and Torricelli. The project will also build upon the ridge-to-reef resource management approach being developed by the ADB-GEF Coral Triangle Initiative pilot project in Kimbe Bay (West New Britain).



48. At the site level, the project builds upon the extensive support provided by the German Government (BMU/ICI, via Conservation International) to the initial establishment of the YUS Conservation Area during 2008-2012. The project will take on board the important lessons learned from the YUS model, which is the first formally gazetted Conservation Area in PNG. In the Torricelli Mountain Range the project will build upon support provided by a range of partners and donors in recent years, including small grants for livelihood enhancement provided by the GEF Small Grants Programme
49. In identifying areas for scaling-up and replication of the CA model the project will build upon the national prioritization exercises carried out with support from the UNDP/GEF PoWPA programme, as documented in the *Interim Terrestrial Conservation Assessment for Papua New Guinea: Protecting Biodiversity in a Changing Climate*. The insights provided by this assessment regarding the integration of climate resilience into PA site selection and management will also be valuable input.

Description of the consistency of the project with:

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

50. This project has been selected as a priority for PNG under the Pacific R2R Programme, based on its consistency with and contribution to key national strategies and plans including:
- a. **Papua New Guinea National Constitution Fourth Directive Principle:** Fourth Goal and directive Principle of the country's Constitution which states that; "*Papua New Guinea's natural resources and environment to be conserved and used for the collective benefit of us all and are replenished for the benefit of future generations.*"
  - b. **Vision 2050:** The Vision 2050 offers a more holistic approach to PNG's developmental challenges, and targets a 40-year period from 2010-2050. The 'ideal' of the Vision 2050 is that, the significant revenue projections from the mining, gas and oil projects are managed so that PNG develops and builds a solid and sustainable economic foundation based on renewable sectors. These renewable sectors are agriculture, forestry, fisheries and eco-tourism. Having Climate Change and Environmental Sustainability as its sixth (6<sup>th</sup>) development pillar, the Vision 2050 proposes that all environmental management systems are to be sustainable by 2015.
  - c. **Development Strategic Plan (DSP 2010-2030):** The Development Strategic Plan (DSP) is aimed at transforming PNG from a low income to middle income country by 2030. The DSP therefore sets a broad framework, targets, and strategies to achieve the vision of the government, the Vision 2050. The DSP spells out that PNG's national environmental programs will have to be aligned to international commitments to demonstrate PNG's obligation to the global community. This will strengthen PNG's voice in the international arena in terms of sustainable development.
  - d. **Medium Term Development Plan (MTDP 2010-2015):** The Medium Term Development Plan is the medium for translation of the Vision 2050 and the DSP into on-the-ground functionality. Of relevance to this project is the MTDP 4<sup>th</sup> Principle on 'National Endowments', which aims to maximize the value of PNG's natural resources and environment through sustainable primary production and downstream processing, with a focus on agriculture, forestry, fisheries and tourism supported by mining, petroleum and gas.
  - e. **Environmentally Sustainable Economic Growth Policy (ESEG):** The Department of Environment and Conservation (DEC) is in the process of finalizing the ESEG Policy. This policy, when finally approved by the National Executive Council (NEC) will mark a paradigm shift in DEC's approach to environmental management and conservation from an approach that is primarily focused on protecting the environment and biodiversity with legislation, regulations and promotion of voluntary compliance. The ESEG policy will now enable DEC to promote and facilitate greater economic (and social) development in a manner which ensures environmental values are maintained at a level of quality; which is useful and acceptable to the community; and one that can maintain ecological systems nationally, whilst enabling the sustainability of the development activities that they support.
  - f. **PNG National Protected Area Systems Policy (NPAS):** This policy is aimed to create a sustainably financed and effectively managed national Comprehensive, Adequate, Representative and Resilient (CARR) system of terrestrial and marine protected areas in Papua New Guinea. It identifies the new approaches and directions for the Government to take to develop the National Protected Areas Systems (NPAS). These include in improving decision-making, targeting investment in biodiversity, committing to ongoing traditional conservation programs and conservation across the landscape.

### **B.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities:**

51. This project is targeted to contribute to the Biodiversity Focal Area objective BD-1 "Improve sustainability of Protected Areas Systems". It will support the strengthening of the national Protected Area system and introduce a framework for institutional management and support to PAs that is more sustainable and replicable than current approaches.
52. The project will directly support PNG to achieve the following Aichi Targets; especially those under Strategic Goal B:

Reduce the direct pressures on biodiversity and promote sustainable use:

- **Target 5:** By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

- **Target 8:** By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity (Component 2)

53. The project will also support the implementation of Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity, particularly:

- **Target 11:** By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

- **Target 12:** By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

54. The project is also designed to respond to the Land Degradation Focal Area objective 3, and in particular to Outcome 3.2 “*Integrated landscape management practices adopted by local communities*”. It will help to build integrated natural resource management approaches (including sustainable farming) into the landscape management systems practiced by local communities in two important conservation landscapes in PNG.

55. The project is well aligned with the GEF/UNDP’s Programme Framework Document for the regional programme “*Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods*”. The project is primarily aligned with the Regional PFD Component 1: National Multi-focal Area Ridge-to-Reef Demonstrations in all Pacific Island Countries, particularly with the following two Outcomes:

- Ridge-to-Reef approach achieved in demonstration sites through the scaling up of IWRM and introduction of ICM towards integrated management of natural resources and to reduce watershed and coastal pollution in priority catchments
- Improved terrestrial and marine biodiversity conservation in priority catchments and linked coastal areas

56. Component 2 of the project also supports Component 2 of the Regional PFD: Improved Governance for Integrated, Climate resilient Land, Water, Forest and Coastal Management, particularly with respect to the following Outcome:

- National and local capacities for ICM, IWRM, SLM and SFM improved to enable best practice in integrated, climate resilient Ridge-to- Reef approaches in natural resource management

### **B.3 The GEF Agency’s comparative advantage for implementing this project:**


57. The UNDP’s Ecosystems and Biodiversity Programme has a large portfolio of biodiversity conservation projects globally, aligned under UNDP’s corporate policy framework on biodiversity titled “*The Future We Want: Biodiversity and Ecosystems— Driving Sustainable Development. United Nations Development Programme Biodiversity and Ecosystems Global Framework 2012-2020*”. In the UNDP operation in Papua New Guinea, the project fits within the UNDP Country Programme Document (CPD), covering 2012-2015, directly contributing to the achievement of CPD Outcome 39: “*By 2015, GoPNG and civil society have enhanced their capacity to implement biodiversity conservation, low carbon and climate resilient development initiatives for environmental sustainability and improved community livelihoods to reduce the vulnerability of women, girls, men and boys to disaster risks.*” The project builds on existing partnerships between UNDP and the Government of PNG, including in the implementation of the GEF-4 *Community-Based Forest and Coastal Conservation and Resource Management* project, the GEF Small Grants Programme and various capacity-building programmes for DEC financed by the UNDP Country Programme. The UNDP Country Office (CO) will assign an experienced programme manager within the Energy and Environment Unit to support implementation of the project, guided by the Deputy Resident Representative and supported by the administrative assistant, and the Country Office Operations team. The UNDP Regional Technical Adviser based in Bangkok will provide technical support to the CO for implementation, monitoring and evaluation of the project.

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

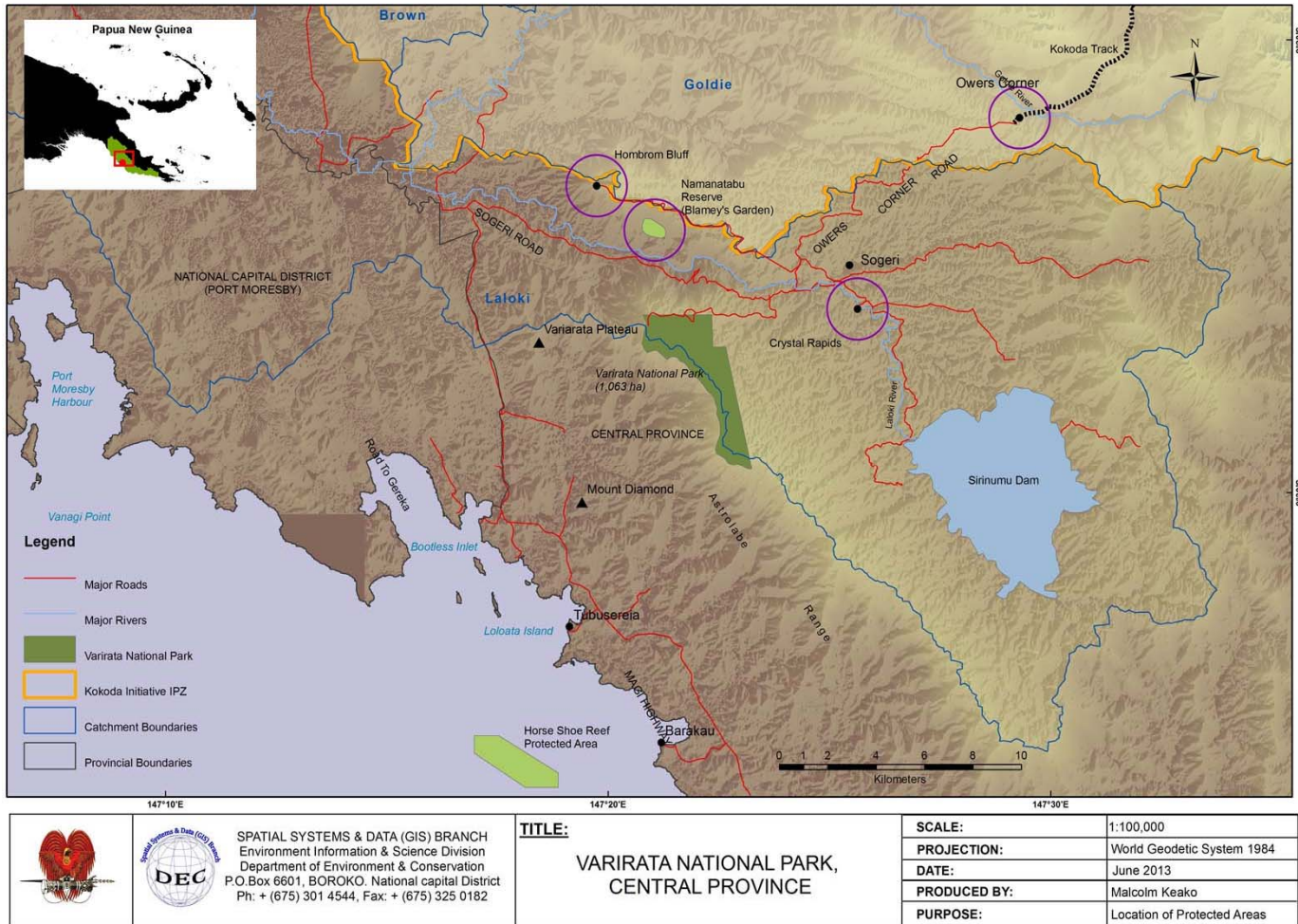
### **A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT ON BEHALF OF THE GOVERNMENT:**

<b>NAME</b>	<b>POSITION</b>	<b>MINISTRY</b>	<b>DATE (MM/dd/yyyy)</b>
Mr. Gunther Joku	Acting Secretary	<b>DEPARTMENT OF ENVIRONMENT AND CONSERVATION</b>	<b>04/02/2013</b>

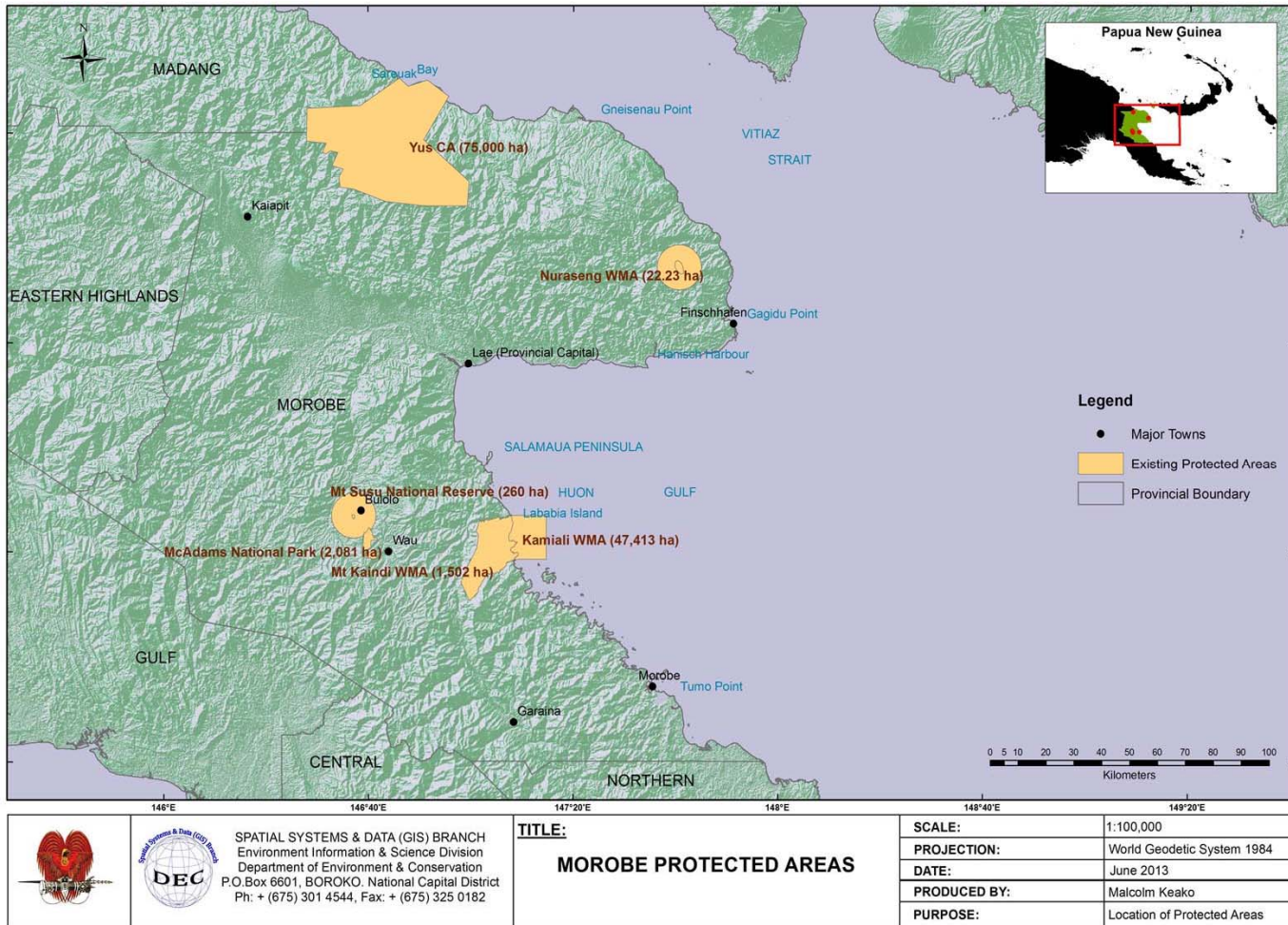
B. GEF Agency Certification

<b>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.</b>					
<b>Agency Coordinator, Agency name</b>	<b>Signature</b>	<b>DATE (MM/dd/yyyy)</b>	<b>Project Contact Person</b>	<b>Telephone</b>	<b>Email Address</b>
Adriana Dinu, UNDP/ GEF Officer-in- Charge and Deputy Executive Coordinator		August 20, 2013	Joseph D'Cruz, EBD	+66 813713207	joseph.dacruz @undp.org

Attachment 1- Map of the Varirata NP Landscape (Sogeri Plateau)



Attachment 2: Map of YUS Conservation Area



### Attachment 3: Map of Torricelli Mountain Range Conservation Area Landscape

