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United Nations Development Programme

Country: Papua New Guinea

PROJECT DOCUMENT

Project Title: Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits

UNDAF Outcome(s): Cluster 4: Environment, Climate Change and Disaster Risk Management, to provide strategic upstream advice to government and share best practices in sustainable natural resource management

UNDP Strategic Plan Environment and Sustainable Development Primary Outcome:

By 2015, Papua New Guinea has an enhanced capacity and resilience to cope with environmental degradation, natural and man-made hazards and the effects of climate change.

UNDP Strategic Plan Secondary Outcome: By 2015, selected government agencies, CSOs and communities in PNG have enhanced their capacity to develop and implement environmentally sustainable livelihoods projects based on low carbon and climate resilient development

Expected CP Outcome(s): Department for Environment and Conservation effectively plans, manages, monitors, and coordinates with other relevant government institutions the sustainable use of natural resources at the national, provincial and local levels

Expected CPAP Output(s): National authorities trained on mainstreaming and monitoring of environmental issues. Integrated environmental monitoring and compliance database is established in Papua New Guinea. Effective network established between Department for Environment and Conservation and other relevant government institutions with provincial and local authorities and NGOs, community-based organizations (CBOs) and FBOs

Executing Entity/Implementing Partner: Department of Environment and Conservation

Implementing Entity/Responsible Partners: United Nations Development Programme

Brief Description: This project builds upon the commitment of the Government to strengthen the environmental management information system within the Department of Environment and Conservation. The barriers to good environmental governance for the global environment are fundamentally an issue of accessing good knowledge and having a good system by which to make best use of this knowledge. The sustainable development baseline of the project lies in the Government's commitment to set up an environmental management information system, upon which GEF support will be used to strengthen the use of this system to access data and information directly relevant to the three Rio Conventions. In this way, the preparation of planning frameworks can be better informed of global environmental trends. GEF funds will be used to train government staff through directed workshops on *how* to collect and manage data and information relevant to planning best practices for global environmental governance in the three Rio Convention focal areas. The learn-by-doing exercises will be used to take the training one step further to train people to critical think about the know of data and information to create knowledge through practical testing and application. Whereas the GEF focal area projects currently under operation focus on the development, testing and application of focal area best practices, the CCCD project is targeted to institutionalizing the underlying set of capacities to carry out this work. The objective of this project is therefore to strengthen targeted capacities to establish and use an integrated Environmental Management Information System. In addition to the installation of the integrated EMIS and training on its use, the project will help institutionalize the EMIS by demonstrating its value and financial sustainability to stakeholders, as well as facilitating the appropriate legislative and institutional reforms.

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• DEC (Grant)	US\$ 300,000
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• GEF (Grant)	US\$ 500,000

Agreed by:

Department of Environment and Conservation

Mr. Gunther Joku
Secretary

Date/Month/Year

Agreed by:

Department of National Planning and Monitoring

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Agreed by:

United Nations Development Programme

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Acronyms and Abbreviations

ADB	Asian Development Bank
CBD	Convention on Biological Diversity
CCA	Climate change adaptation
CCCD	Cross-Cutting Capacity Development
CCD	Convention to Combat Desertification and Drought
CCI	Chamber of Commerce and Industry
CROP	Coordinating Regional Organizations of the Pacific
CSIRO	Commonwealth Scientific and Industrial Research Organization
CSO	Civil society organization
DCD	Department of Community Development
DEC	Department of Environment and Conservation
DISP	District Support Implementation Programme
DMPGM	Department of Mineral Policy and Geo-hazards Management
DNPM	Department of National Planning and Monitoring
DPCCT	Development Partners Climate Change Taskforce
DRR	Disaster risk reduction
DSP	Development Strategy Plan
EMIS	Environmental Management Information System
FCCC	United Nations Framework Convention on Climate Change
GEF	Global Environment Facility
MTDP	Medium Term Development Plan
NCCC	National Climate Change Committee
NEC	National Executive Council
NGO	Non-government organization
NPC	National Planning Committee
NSPF	National Strategic Planning Framework
NWS	National Weather Service
OCCD	Office of Climate Change and Development
PMU	Project management unit
PRIF	Pacific Regional Infrastructure Programme
REDD	Reducing Emissions from Deforestation and Forest Degradation
SCF	Strategic Climate Fund
SLM	Sustainable Land Management
SNC	Second National Communication
SOPAC	Pacific Islands Applied Geoscience Commission
SPC	Secretariat of the Pacific Community
SPCR	Strategic Programme for Climate Resilience
SPREP	Secretariat of the Pacific Regional Environment Programme
TWG	Technical working group
UNDP	United Nations Development Programme
WB	World Bank

PART I - PROJECT

A Project Summary

A.1 Project Rationale, Objectives, Outcomes/Outputs, and Activities

1. The NCSA process determined that there is an overall low systematic capacity to implement the Rio Conventions. This is in large part due to weak data and information management that is necessary for making sound decisions and planning good practice interventions, as well as not having the right indicator to monitor or measure performance. While data does exist in various departments and different forms, they are not accessible in a form or timely for use in decision-making and for reporting purposes. For example, data is collected by agencies and institutions in formats that make the information difficult to compare.

2. Since the NCSA was completed in 2010, Papua New Guinea has developed a number of important policies, strategies, and plans to advance the country's development agenda. This includes the preparation of Medium-Term Development Plan (2011-2015) prepared at around the same time to help operational the Vision 2050, which seeks to strengthen the sustainable economic sectors dependent on natural resources. This plan, prepared by the Department of National Planning and Monitoring, serves as an important policy that reinforces the legitimacy of the CCCD project to strengthen the development and access to data and information to screen and assess potential environmental impacts of proposed developments.

3. This project is strategic and transformative through its adaptive collaborative management approach that is part of the design of project activities. While an integrated environmental management information system is not necessary innovative, for PNG it will be innovative because of the current practice of closed systems. That is, data and information exists, but within institutions with institutionalized barriers against sharing. As a result, there is significant overlap in data and information management, and because of the mandates of each agency, they tend to manage data and information that they need to meet their mission objectives. This works fine for the few authorities that have the necessary financial resources, however, most other agencies can not afford the expense of creating data and information that already exists and which could be accessed at a significantly cheaper cost.

4. Strategically, the project includes activities that will call upon all stakeholder organizations to meet and negotiate sharing protocols, based on the data and information that each needs. Memoranda of Agreement would be signed to facilitate this sharing, which would then be institutionalized through bills for legislative and/or institutional reforms that would be submitted to Parliament. If successful, this project could lead to a transformative approach to collaboration in PNG. Through the project and specifically the EMIS, this project could demonstrate a good practice of environmental governance.

5. This project conforms to the GEF-5 Cross-Cutting Capacity Development (CCCD) Strategy, Programme Framework CD2, which calls for the strengthening of capacities generate, access and use of information and knowledge. The project will also contribute to CD5, which calls for enhancing capacities to monitor and evaluate environmental impacts and trends.

6. At the end of the project, the project will have resulted in improved capacities for meeting global environmental priorities. This general outcome will be measured by a variety of indicators, characterized as outputs, process, and performance indicators. Output indicators include the actual installation of the integrated EMIS. Process indicators include the very important collaboration among government agencies and authorities to share data and information through an agreed sharing protocol and data flow system, legitimized by the necessary approvals, e.g., Memoranda of Agreements. This project is organized into two linked components. What is the objective of this project? There should be no more than two objectives, and both must be complementary. They must also be structured in to reflect a contribution to the three Rio Conventions.

7. The project will take an adaptive collaborative management (ACM) approach to implementation, which calls for stakeholders to take an early and proactive role in the mainstreaming exercises, as well as to help identify and solve unexpected implementation barriers and challenges. By taking an ACM approach, project activities and outputs can be more legitimately modified and adapted to maintain timely and cost-effective project performance and delivery.

A.2 Key Indicators, Assumptions, and Risks

8. The main risk associated with this project is the lack of absorptive capacity of national institutions to implement activities. This risk is medium due to the relatively low level of engagement and collaboration between the DEC and other stakeholders. This risk will be managed by taking a learn-by-doing approach to project execution. The best way to raise absorptive capacities is for government staff to learn their skills through critical thinking exercises that the testing of the Environmental Management Information System will encourage. All project activities, including those that target systemic, institutional and individual capacities, will be designed through a comprehensive multi-stakeholder consultation to ensure they are implementable including provision for additional dedicated project staff. It is assumed that the commitment by the UNDP PNG Country Office for project oversight ensures that lack absorptive capacity is not the main reason to jeopardize the project.

9. Political instability is also a problem in PNG's government that can cause environmental initiatives to be abandoned, which threatens the MTDPs. Sustaining political stability will be necessary for realizing Vision 2050. Law and order and social unrest pose problems for the government, especially for potential investors interested to assisting PNG reach global environmental goals.¹

10. The other risk identified is delays in project implementation due to bureaucratic processes within the Government. This risk has medium consequences. The DEC will implement the project with direct support from the UNDP PNG Country Office. Key institutions at national levels will be increasingly involved during the project preparation phase. Representatives from different institutions, relevant local municipalities, NGO and academia will have representatives in the Project Steering Committee, and will be directly involved in project implementation.

11. A risk for the project is the frequent turn-over of staff especially after obtaining training. The probability of this happening is high with medium consequences. The project will address this by institutionalizing the system so that data and information remain in the system and not with individual staff who can leave with the data and jeopardize projects. Capacity building will be spread to a cross-section of people so that more staff can access and use the system, this will be the buffer against trained staff turnover.

12. Another risk is the organizations aversion to change from business as usual to embracing the improved system. This risk has medium consequences because; change is a constant forward movement and change is inevitable. Building a system for managing information is a positive step forward from the status quo. Feedback loops will be built into the system – the feedback loops can pinpoint when there is reluctance for change. In response, appropriate steps will be taken to address the issue. This risk will also be addressed by engaging people who are supportive of the changes taking place.

13. A further risk to the project is the lack of policy and legislation to support aspects of the project. For instance, this system need data, however, data most oftentimes is generated by organizations outside of the DEC. There are limited policy and legislation directives for data sharing. The consequences of this risk happening is high. Without data this system can remain obsolete. To address this risk, this project will involve and consult relevant stakeholders in all the step of the project to enable these stakeholders to appreciate the importance of this system for reporting on country efforts in meeting MEA obligations. Through such collaborations through the project stages, policy and legislation constraints will be identified

¹ Department of National Planning and Monitoring (2010). Papua New Guinea Medium Term Development Plan 2011-2015. *Building the foundations of prosperity*, 13.

and addressed to ensure data flow happens within the system.

14. The success of the project will be measured by a number of indicators, made up of a set of process indicators, output indicators and performance indicators that characterize an outcome indicator. of an integrated environmental information management system for monitoring and reporting of PNG's MEA targets and indicators. This are disaggregated into the development of, for example, web-based tools for facilitating ease of access of Rio Convention data, and the technical capacities of government staff and key stakeholders demonstrating improved skills at screening development plans using EMIS.

15. Another outcome indicator is the institutionalization of the EMIS, which is indicator by output indicators such as the Memoranda of Agreement among key partner institutions to share data and information relevant to the Rio Conventions and other MEAs and environmental policies. A process indicator would be that a bill recommending institutional reforms to make permanent the institutional arrangements under the Memoranda of Agreement would be submitted for approval by the end of the project.

B Country ownership

B.1 Country Eligibility

16. Papua New Guinea is eligible to receive technical assistance from UNDP, and is thus eligible for support under Global Environment Facility (GEF). Papua New Guinea ratified the Convention on Biological Diversity (CBD) on 16 March 1993, the Convention to Combat Desertification and Drought 6 December 2000, and the Framework Convention on Climate Change (FCCC) on 16 March 1993. Papua New Guinea ratified important protocols under the Rio Conventions in later years, namely:

- a. The Cartagena Protocol on Biological Safety on 14 October 2005 to protect biodiversity from the potential risks posed by genetically modified organisms that are the product of biotechnology.
- b. The Kyoto Protocol on 28 March 2002, committing to stabilize greenhouse gas emissions for the period 2008-2012 at the 1990 level.

17. Since gaining independence in 1975, the government of Papua New Guinea has ratified and acceded to 33 Multilateral Environmental Agreements (MEAs)², demonstrating commitment to global and national environmental and sustainable development challenges. The Government is also bound by other international and regional commitments for sustainable development, including the 1994 Barbados Programme of Action and the 2002 Johannesburg Plan of Implementation.

18. *Fit with the GEF-5 CCCD Strategy:* The GEF strategy for Cross-Cutting Capacity Development (CCCD) provides resources for reducing, if not eliminating, the institutional bottlenecks and barriers to the implementation of the Rio Conventions. This particular project is in line with CCCD Programme Framework 2, which seeks to generate, access and use of information and knowledge to meet Rio Convention obligations. Capacity development activities center on strengthening data and information management systems, in particular to access and integrate new knowledge and best practices for operationalizing Rio Convention obligations through national development planning frameworks. The implementation methodology of CCCD projects is through a learn-by-doing process and adaptive collaborative management. This project also contributes to CCCD Programme Framework 5, which seeks to enhance capacities to monitor and evaluate environmental impacts and trends. By strengthening an environmental data and information management system, PNG will be able to make better and timelier decisions to mitigate as well as to adapt to negative environmental impacts.

² Annex 9 provides a list of these MEAs.

B.2 Country Driven-ness

19. Papua New Guinea's United Nations Development Assistance Framework (UNDAF) 2011-2015, and CCA. Both UNDAF and UNDP have identified natural resource and environment degradation as a major threat to development, and UNDP PNG is investing core resources to support these. UNDP Country office in PNG has been supporting Papua New Guinea in implementing policies and programmes in the areas of Governance and Crisis Management, HIV and AIDS, Sustainable Livelihoods and Population, Gender and Foundations for Human development. All these programmes are aligned to PNG's National Development Plans, including the Vision 2050 (2010 – 2050), Development Strategic Plan (2010 – 2030) and the Medium Term Development Strategy (2011 – 2015).

20. This proposed project is central to the Sustainable Livelihood programme. Components and activities under UNDP's Sustainable Livelihood programme include: Enhancing the institutional and human capacity to mainstream environment into development planning and budgetary processes; building capacities and institutional strengthening for Adaptation and Mitigation of the Climate change challenges, and; community empowerment for improved livelihoods through sustainable use and management of environment and natural resources.

21. The project is also consistent with the National Policy initiatives of the Government of Papua New Guinea (GoPNG) such as the Vision 2050, Development Strategic Plan 2010 – 2030, Medium Term development Strategy 2010 – 2015, Environmentally Sustainable Economic Growth Policy (ESEG), The National Protected Areas Systems Policy, National Biodiversity Strategic Action Plan (NBSAP), National Action Plan (NAP), and, Climate Compatible Development Strategy. The underlying principle of these policy initiatives is to achieve sustainable development.

22. The project is also fully in line with the commitments made by the GEF for the United Nations Conference on Sustainable Development (Rio+20). In particular: it seeks to expand opportunities for joint implementation of projects and programmes for global environmental benefits. This project also commits to act on guidance from conferences of the Rio Conventions to promote joint reporting, especially for Small Island Developing States and Least Developed Countries. Additionally, this project continues to support capacity development in recipient countries by funding enabling activities through national and regional consultations.

23. More recently in February 2014, the Government of PNG's Parliament approved a bill calling for the transformation of the Department of Environment and Conservation into a non-commercial statutory body named the Conservation and Environment Protection Authority (CEPA), which will assume responsibility for the administration of legislative instruments currently under the responsibility of the DEC³. These include the Conservation Areas Act (1978) and the Environment Act (2000).

B.2.a National Capacity Self-Assessment

24. The National Capacity Self-Assessment (NCSA) report was completed in 2010 to assess the country's ability to meet and sustain global environmental objectives through overall environmental and natural resource management, paying particular emphasis on the capacity challenges and needs. The NCSA process determined that there is an overall low systematic capacity to implement the Rio Conventions. This is in large part due to weak data and information management that is necessary for making sound decisions and planning good practice interventions, as well as not having the right indicator to monitor or measure performance. While data does exist in various departments and different forms, they are not accessible in a form or timely for use in decision-making and for reporting purposes. For example, data is collected by agencies and institutions in formats that make the information difficult to compare.

25. Recommendations from the NCSA focused on the need for a comprehensive review and updating of policies and legislation, as well as to strengthen existing information systems. Many of the legislative

³ See Annex 1 for further details on the establishment of CEPA.

instruments contain provisions that are outdated and they need to be updated and more effectively institutionalized within government agencies. New and improved methodologies for monitoring, evaluating, and reporting indicators of environmental impacts. Overall environmental literacy was determined to be a priority, with national curricula needing strengthening by including the contribution of biodiversity conservation and importance of climate change to sustainable development of PNG. Finally, stronger linkages between national and provincial level coordination is needed, as well as to mainstream global environmental priorities within sectoral development planning.

26. In addition to the limited management of data, information and knowledge, the NCSA prioritized several other key cross-cutting gaps that prevent Papua New Guinea from implementing the Rio Conventions:

- Limited coordination of national strategies for MEA implementation.
- Limited communication and awareness-raising.
- Limited resource mobilization and project management.
- Limited partnerships and wide participation.
- Limited institutional and organizational capacity of focal institutions.
- Limited involvement in MEA negotiations and reporting.
- Limited mainstreaming of the Rio Conventions across government and other stakeholders.

27. Based on these challenges, the NCSA's main recommendation was to improve commitments and efforts to promote the identification of linkages and synergies between the Rio Conventions, the national implementation plans and strategies and other programmes that are reflective of the real needs of the rural communities. Many national leaders and stakeholders are not aware of PNG's obligations to the Rio Conventions, and as a result are not able to relate to these institutional mandates, community objectives and work plans.

B.2.b Sustainable Development Context

28. Papua New Guinea occupies the eastern half of the tropical island of New Guinea, sharing a border with the Indonesian province of West Papua to the west. Australia is south of PNG, the Solomon Islands are to the east, and the Federated States of Micronesia (FSM) to the north. PNG has active volcanoes and significant earthquakes and mudslides, and its coastal areas are susceptible to tsunamis and floods. In addition to the island of New Guinea, the country has four large islands (Manus, New Ireland, New Britain, and Bougainville) and 600 small islands lying between the Coral Sea and the South Pacific Ocean. The total land area is 465,000 square kilometers. There are more than 700 languages in Papua New Guinea.

29. PNG's mainland has one of the most rugged terrains in the world and its forest is the most extensive and species rich in the world. It is the third largest in forest after the Amazon and the Congo. The smaller islands include volcanic mountains and coral atolls. The ecosystems range from mountain glaciers in West Papua to humid tropical rainforests, swampy wetlands, and coral reefs. Much of the terrain has steep gradients, fast flowing rivers, and swamps, with some areas subject to active volcanoes, landslides, and tidal waves. PNG has considerable biodiversity, estimated to contribute roughly 6% of global biodiversity. PNG is rich in natural resources, including gold, copper, timber, agricultural products, and oil and natural gas. Although the economy has experienced sustained economic growth, the direct contribution of the mineral resources sector to reducing poverty is limited.

30. The economy is built upon both large-scale exports from natural resources (minerals and petroleum, timber, fish, and tree crops) and a semi-subsistence rural economy, which supports more than 85% of the population. Relatively high per capita GDP is associated with exports and incomes generated from minerals and petroleum sectors and the contribution of aid. Agriculture is the most important source of GDP for the country. Together with forestry and fisheries, it contributes 28% of GDP and around 13% of total export earnings. The mining and petroleum sectors contribute 26% to the overall GDP. Mining of mainly copper, gold, and silver and petroleum comprise the major export earnings for PNG. About 85% of the population

has a per capita income of less than one third of those in the urban sector.

31. PNG's population is estimated at 7.8 million people, with the majority of people living at subsistence level. The rapidly growing rural population of PNG is posing an increasing threat to the country's natural resources, upon which they are dependent. Unemployment in rural PNG is a leading cause of natural resource over-exploitation, in the absence of well-developed commercial and employment sectors. The government also relies on taxes and royalties from the exploitation of its natural resources as a principal source of revenue.

32. Papua New Guinea's Development Strategic Plan (DSP) wants to transform the economy from a low income to middle income country by 2030. To achieve this, PNG plans to quadruple its Gross Domestic Product (GDP), with a sustained economic growth of 8 % per annum, creating over two million jobs, reducing crime by 55 %, and opening up 20 % of customary land to commercial uses. Poverty in PNG is primarily rural, and is associated with the most isolated communities with poor access to services, markets, transportation, as well as being environmentally disadvantaged. Development has not occurred to any extent in these rural areas and a number of constraints make it unlikely to occur. One of the programmes under the DSP to address poverty is the development of ten 'Economic Corridors'. Through this investment in the Economic Corridors, PNG hopes to stimulate economic activity, reduce crime, as well as reverse rural-urban drift. The DSP sets a broad framework, targets, and strategies to achieve Vision 2050. Under the DSP, all policies, plans and strategies are to be re-aligned to the DSP.

33. Many people in PNG live in hazardous areas, which have been worsened by the impacts of climate change. These hazardous areas are commonly located away from roads, along provincial borders, inland between the highlands and the lowlands, or inland on the larger islands and on most of the small islands. The vulnerability of coastal communities in particular is expected to increase with climate change and the negative impacts will compromise national development plans.

34. In addition to climate change, PNG experiences environmental problems and vulnerability due to the unsustainable use of natural resources. Through the inappropriate use of land, farming systems have accelerated soil erosion, siltation and soil fertility loss. Risk management and sustainable land management have not been incorporated in land-use planning. Resource extraction is also significant factor in land degradation, not to mention the chemicals used in the mining process. PNG has many natural resources in gold, copper, silver, nickel, cobalt, petroleum and natural gas. The extraction process of these natural resources has been unsustainable and environmentally harmful.

35. Unsustainable logging practices have also resulted in negative environmental impacts (e.g., soil erosion, hydrology and water quality impacts, and loss of habitat and biodiversity). Poorly managed logging in the forestry sector is a major cause of deforestation. While the environmental impacts of large-scale mining operations (e.g., discharge of heavy metals, cyanide, and acids into rivers) have also created negative impacts on forests and water quality. The increased sedimentation from mining has made an impact on river flow and it potentially exacerbates floods. Unsustainable fishing practices put pressure on coastal and marine resources, which create environmental problems. There are concerns about overfishing of certain species. With the demand for more fish comes the demand for the use of mangrove forests for building materials, and resource need for smoking the fish. The clearance of mangrove forests has also affected the breeding grounds of some fish species and thus threatens food and income security. Furthermore, unsustainable fisheries practices such as use of dynamite and harvesting of corals destroy reef systems. The loss of reefs and mangrove forests expose the coastal communities to erosion from sea level rise and increased impact from flooding events.

36. While there are many natural resources in PNG, there are concerns for the ability of land resources to support people and biodiversity into the future. Soil surveys and assessments reveal that 1 % of land in PNG has high fertility status, 58% is subject to erosion, 30 % is considered marginal land suitable for agriculture, and 18 % is regularly inundated.

37. Mining provides PNG with natural resources; however, the mining cycle impacts the environment negatively, depending on the mining methods used and degree of activity. Impacts from mining can

continue long after mines have closed. Some of the worst examples of disastrous environmental and social impacts caused by mining can be found in PNG. This applies in particular to the Panguna Copper Mine and the Ok Tedi Mine. The oil and gas sector appear to have a lower environmental impact than mining.

B.2.c Global Environmental Values

38. Climate change and natural disasters are among those environmental issues facing PNG, largely resulting from storms and cyclones. The resulting impacts from climate change include the loss of food gardens and the salinization of clean groundwater. In the highlands episodes of hailstorms and frost have resulted in the destruction of gardens. Coastal flooding, inland flooding, landslides, malaria, agricultural loss, and coral reef decay are all components of PNG's environmental problems from climate change. In coastal areas, flooding continues to displace communities. Inland flooding regularly affects lowlands and highlands. Coastal and inland flooding has negative impacts on the health of the population through contaminated drinking water and inadequate disaster response. As a result of the salinization of freshwater that significantly reduces crop production, communities must move inland due to receding coastlines. In addition to flooding, PNG is also expected to experience increased frequency of drought.

39. Papua New Guinea is a major tropical wilderness area that still contains over 5% of the original and untouched tropical high-biodiversity terrestrial ecosystems in the world in less than 1% of the total land area. The endemism of the country's biodiversity is a result of mountainous isolation, topographic and soil habitat heterogeneity, high forest disturbance rates and abundant seasonal rainfall year-round. PNG boasts some 15-21,000 higher plants, 3,000 species of orchids, 800 species of coral, 600 species of fish, 250 species of mammals and 760 species of birds and 8 species of tree-kangaroos, out of which 84 genera of animals are endemic. Ecosystems range from lowland forests to montane forests, alpine flora down to coastal areas that contain some of the most extensive pristine mangrove areas in the world. Much of this biodiversity has remained intact for thousands of years because the inaccessibility of the terrain as well as the low population density and restrictions on the effectiveness of traditional tools.

40. An assessment of forest cover change in PNG in the 30 years between 1972 and 2002 showed that 2.9 million ha of forest had been degraded due to logging and was happening at a rate of 1.4 % of total forest area degraded per annum. An estimated that 48.2 % of forest cover had already been degraded by 1972, and by 2021, 83 % of all accessible forests would be cleared by 2021. Other drivers of forest change include subsistence agriculture at 45.6 %, fires at 4.4 %, plantation establishment at 1 %, and mining at 0.6 %. There are no large scale government programmes targeting forest regeneration. About 23 % of logged forests have already been converted to non-forest cover and plantation agriculture. Estimates indicate that the current area of land under agriculture leases make up a significant share of the accessible forest areas and if felled will result in a much bigger area of land being degraded. As a Party to the UNCCD, and in the absence of a NAP, the main guiding framework currently at the disposal of the PNG government to assist with implementation of the UNCCD is the UNCCD's 10-Year Strategic Plan.

41. PNG is experiencing the impacts of climate change as well as coming to terms with understanding the impacts of climate change on the future of the country. Coastal communities are facing erosion due to rising sea levels and increasing frequency of storm surges and king tides. According to recent models, the Melanesian sub-region may be the most affected area in the Pacific with potentially significant losses in marine biodiversity. Studies in the Pacific have predicted that cases of malaria and dengue are expected to increase in PNG due to climate change related issues.

B.2.d Policy and Legislative Context

42. Papua New Guinea has pursued social and economic development through a series of ambitious development programmes since gaining political independence in 1975. This development agenda takes its mandate from the National Goals and Directive Principles in the PNG constitution: (a) integral human development; (b) equality and participation; (c) national sovereignty and self-reliance; (d) natural resources and environment; and (e) Papua New Guinean ways. Development strategies since 1975 have aimed to help PNG improve its social and economic development. However, efforts to address national and global

environmental challenges are often neglected due to the cost and strain on national resources. Social and economic progress is slow in meeting the country's obligations due to limited capacity.

43. The concept of sustainable development in Papua New Guinea was written into the National Constitution in the beginning of the formation of the Independent State of Papua New Guinea prior to Independence in 1973. Since then, PNG has since made slow progress at the institutional, legal and policy levels. The notable results are reflected in national development planning process and the decentralization of roles and responsibilities between national, provincial, district and local level governments. Notwithstanding, efforts to date are have been insufficient to give prominence to environment, natural resources and its critical functions for the substance of human lives. PNG has a number of policies and plans that are directed to address climate change. These include:

Vision 2050

Development Strategic Plan 2010-2030

Medium-Term Development Plan 2011-2015

The Climate Compatible Development Strategy (CCDS)

Interim Action Plan for Climate Change

Reducing the Risk of Disasters and Climate Variability in the Pacific Islands

National Framework for Action (2005-2015)

Framework for the National Climate Change Strategy and Action Plan (2009)

44. PNG's Vision 2050 (2009) offers a broad approach to the country's developmental challenges, a goal of which is for their economic sectors directly dependent on natural resources to be sustainably managed, in particular mining, gas and oil, agriculture, forestry, and fishery. Vision 2050 is to be operationalized by various plans, such as the Development Strategic Plan, the Medium-Term Development Plan (MTDP, 2011-2015), and the Environmentally Sustainable Economic Growth (ESEG) Policy. Other important policy instruments include the National Agriculture Development Plan, the National Biodiversity Strategic Action Plan, and the Environmentally Sustainable Economic Growth Policy.

45. In response to the environmental directives in the constitution, and supporting the above-mentioned PNG has enacted over 45 pieces of legislation to regulate the use of the resources found in the environment. Many of these, if not most, contain important provisions for monitoring and managing environmental information. For example, the Environment Act (2000) mandates the Department of Environment and Conservation to monitor and manage environmental information as well as protect the environment. The Conservation Act (1978) also contains a provision to maintain a registry of conservation areas. The Wildlife Trade Act (1979) calls for the establishment Scientific Authorities as expert groups.

46. To make aid more effective and to move towards a more sustainable economy, the Government and development partners signed the PNG Commitment on Aid Effectiveness in 2008. This commits PNG to the implementation of international principles and for managing results, and mutual accountability, as set out in the Paris Declaration on aid effectiveness. It is through this agreement that PNG and the development partners have committed to work towards mutual accountability. Although the development plans, policies and programmes are in place, it is recognized that much more needs to be done to strengthen local capacities and raise awareness to mainstream and integrate environmental information and management.

B.2.e Institutional Context

47. PNG has a decentralized system of government. At the sub-national level, there are three levels of administration, the province, district and local level government administrations (LLGs). There are a total of 89 districts and 319 LLGs. While PNG has started addressing risks associated with the impacts of climate change in various national development frameworks, this is not so at the provincial and local levels. The provincial and local level governments are mandated to implement the Medium-Term Development Plan through programmes and projects, which are prioritized according to the local environmental and

development priorities.⁴

48. Various national institutions have mandates over their respective sectors with policies and laws in place that can accommodate sustainable development. The national development planning for all sectors is coordinated by the Department of National Planning and Monitoring (DNPM) through the MTDP. A priority of the DNPM is to mainstream poverty alleviation as its core business.

49. The Department of Environment and Conservation is responsible for the administration of the national laws and multilateral environmental agreements governing environment and conservation management and works in close collaboration with line agencies in its programmes. In February 2014, Parliament approved the transformation of the Department of Environment and Conservation to become the Conservation and Environmental Protection Authority (CEPA). This new authority would be a statutory body that would oversee compliance with the Environment Act, among others, and finance this oversight through the revenues from environmental fees and fines. See Annex 1 for further details.

50. National institutions, administrative and implementing capacity are cited as important factors facing PNG's ability to achieve sustainable development outcomes. While the policy framework may be adequate, the institutional framework has a number of weaknesses, including poor coordination and collaboration among each other. In PNG, information management is not well-coordinated and structured, and as a result, development plans take longer to prepare and are more expensive than necessary.

51. In March 2010, the cabinet created the necessary organizational and governance structure to address a range of climate change mitigation and adaptation strategies. The Office of Climate Change and Development (OCCD) is the GEF Operational Focal Point for the United Nations Framework Convention on Climate Change and is currently preparing PNG's second National Communication. The National Climate Change Committee (NCCC) is comprised of all heads of government departments and authorities, and report on a monthly basis to the Prime Minister. These include the National Disaster Centre, Department of Environment and Conservation, Department of Agriculture and Livestock, Department of Finance, and the Department of National Planning and Monitoring.

Table 1: Departments of Papua New Guinea that are headed by Ministers

Department of Environment and Conservation	Department of Finance
Department for Agriculture and Livestock	Department of Foreign Affairs and Trade
Department of Fisheries and Marine Resources	Department of Provincial and Local Level Government Affairs
Department of Forests and Climate Change	Department of Prime Minister
Department of National Planning and Monitoring	Department of Mining
Department of Petroleum and Energy	Department of Justice and Attorney General
Department of Treasury and Planning	Department of Education
Department of Health	Quarantine Inspection Authority

52. The OCCD includes multi-stakeholder Technical Working Groups (TWG) and sub-working groups made up of experts and stakeholders to identify, prioritize and develop adaptation solutions such as the Coastal Early Warning System (CEWS) and specific projects, such as community-based mangrove planting projects. These multi-stakeholder mechanisms serve the purpose of facilitating a comprehensive approach to monitoring, reporting, policy formulation and programming. Stakeholders in PNG also include academia and research institutions, NGOs and the private sector that have provided important contributions to the

⁴ Department of National Planning and Monitoring (2010), Medium-Term Development Plan 2011-2015, *Building the foundations of prosperity*, Government of Papua New Guinea, 142 pp

work of the OCCD, NPH, and DEC.

53. There are a number of problems that hinder the operations of government ministries to address environmental issues, with particular reference to the global environment. One problem is related to technical and human capacity constraints. There are insufficient resources on climate change to make informed decisions about development issues for affected communities. For example, there are no water and rain gauges for many communities living near rivers to help monitor flood conditions. Nor are early warning systems in place that limit the functionality of the National and Provincial Disaster Centres.

54. While PNG's environmental policies and legislation in PNG include provisions to collect and manage data information and management, the legislation assumes that the data would be collected and managed. This assumption is pervasive throughout official documents. For instance, one key result area in the DEC Corporate Plan 2009-2013 is to increase the use of scientific information to inform decisions. A priority action that was supposed to be undertaken was to conduct surveys to collect information, however, there is limited direction on how data will be collected, managed and used.

55. Programme 9 of the National Biodiversity Strategy and Action Plan similarly calls for monitoring, evaluation and adaptive management of conservation programmes. However, the management of information was not clearly articulated as to how it would be used to inform policy-making and planning. An earlier study also determined that much work was needed to develop an information system for sustainable land management. This led to the strengthening of the Resources Information System in 2008 with support from the European Union. At the regional level PNG received support from initiatives such as the Pacific Islands Global Observing system; and the South Pacific Sea Level and Climate Monitoring system.

56. As mentioned above, there are many individual information management systems relevant to natural resource management and environmental conservation. Most of these are project-based due to the challenge of financial sustainability, due to unpredictable and inadequate levels of government budgetary allocation. Many of these are relatively basic information systems, while a few have more extensive systems, such as the Forest Authority, National Fisheries Authority and Mineral Resources Authority. These three agencies (authorities) are distinguished from other organizations is that the authorities are government statutory bodies that raise their own revenues.⁵

B.2.f Barriers to Achieving Global Environmental Objectives

57. Despite having a relatively strong policy and legal framework, PNG remains significantly constrained to achieve global outcomes for environmental sustainability. The two national MDG reports and the supplementary report on environmental sustainability note a mixed result for achievement of outcomes for supporting environment sustainability. The main constraints are implementation capacity and lack of adequate monitoring systems. This is exacerbated by weak coordination among the central agencies and an allocation of adequate implementation funds.

58. Another area where there are gaps in PNG's progress towards sustainable development are the weak links between the national, provincial, district and local tiers of government. The high reporting requirement for all international conventions and obligations places considerable burden on already limited staffing capacity, and some consolidation or synergies necessary to ease the burden on the already stretched human resources. Enforcement of environmental regulatory framework is further hampered by the inability to access the necessary data and information in a form that serves as evidence on a timely basis, as well as a result of limited financial resources, technology, and technical skills.

59. Among the opportunity costs of inadequate access to key data and information is the inability to understand and address issues of property rights on PNG's rich biodiversity. Without an adequate data and

⁵ Annex 2 is an extensive list of the various information systems in Papua New Guinea relevant to natural resource management and environmental conservation. Notwithstanding, there may be others that are implicated.

information management system, PNG is unable to adequately monitor, assess, and control non-licensed research and export of PNG's sovereign endemic species, the result of which is the loss of inestimable future revenues.

60. Further constraints to the protection of PNG's rich biodiversity resources are the impacts of important economic activities such as mining, logging, and large scale agricultural projects. These economic activities are also causing important land degradation problems that are also affecting the health of local and downstream communities. The preparation and enforcement of robust environmental impact assessments are dependent on the sound, timely and affordable access to data and information.

61. While data and information exist in the country, there is no systematic way of knowing what is available and from whom. Neither is it clear how reliable, accurate and up-to-date these data are. Furthermore, the use of data and information is not readily translated into higher level knowledge that could be integrated into socio-economic development plans. Instead, data and information is limited to its use for reporting trends and other indicators of change.

62. A major problem leading to the lack of demand for deeper knowledge other than basic data and information is that policy-makers are not sufficiently trained in how to use more complex knowledge. There is a need to clearly illustrate to top decision-makers and land-owners the underlying economic values associated with maintaining a healthy environment and the very real and potentially high economic costs that accompany environmental degradation. Similarly, the general public has limited awareness of the urgency of environmental degradation, and for this reason the value of key indicators is lost on them in the absence of well-structured and targeted awareness-raising programmes.

63. Perhaps the single most important barrier to facilitating and catalyzing sound cost-effective planning and decisions for the global environment is that information is also not shared freely between departments, agencies or authorities. Indeed, there is very limited communications and meetings between the staffs in different agencies and departments on their respective programme of work. As a result, the silo approach to fulfilling organization mandates is pervasive, and as a result, opportunities for synergies, cost-effectiveness, and economies of scale are not realized. Furthermore, a holistic approach to planning and decision-making are limited by this general lack of information sharing, the result is that global environmental implications are inadequately analyzed. Another consequence is the inconsistency of strategic planning documents.

64. Information sharing is equally problematic among non-state stakeholders, including those that are accountable to the DEC. The same applies to local communities that get funding from development partners (e.g., UNDP and JICA) to carry out environmental projects. Although most do submit reports to their respective donors, they are not shared with the DEC.

C. Programme and policy conformity

C.1 GEF Programme Designation and Conformity

65. This project conforms to the GEF-5 Cross-Cutting Capacity Development (CCCD) Strategy, Programme Framework CD2, which calls for the strengthening of capacities generate, access and use of information and knowledge. The project will also contribute to CD5, which calls for enhancing capacities to monitor and evaluate environmental impacts and trends.

66. This project will undertake a set of targeted activities to set up an integrated environmental management information system, provide training on how to manage it, in particular to input and systematize data and information for ease of access. This system will be centrally located within DEC but also appropriately networked with other management information systems in order to reduce unnecessary duplication of data collection. Particular attention will be given to identifying data and information needed to assess global environmental trends and to allocate their collection and management within the appropriate existing information system. Training will also be provided to help planners and decision-makers better understand how to use this data and information. The project will take a learn-by-doing approach to the use of data and information, by selecting a high value development plan to reinforce the capacities learned as well as to demonstrate the value of the project, as well as to learn lessons for its replication to other development plans.

67. As a targeted CCCD medium-size project, the system boundary of the project limits activities to the setting up of the EMIS, integrating it with other relevant information systems, and providing training for its use. While the project will work to institutionalize the integrated EMIS, which will include securing memoranda of agreement to coordinate and share information across departments, agencies and other organizations, it will only be able to set stage for long-term cooperation and coordination through identifying the necessary legislative and regulatory amendments and reforms.

68. GEF Cross-Cutting Capacity Development is a programme that does not lend itself readily to programme indicators, such as reduction of greenhouse gas emissions over a baseline average for the years 1990 to 1995, or percentage increase of protected areas containing endangered endemic species. Instead, CCCD projects are measured by output, process, and performance indicators that are proxies to the framework indicators of improved capacities for the global environment. To this end, CCCD projects look to strengthen cross-cutting capacities in the five major areas of stakeholder engagement, information and knowledge, policy and legislation development, management and implementation, and monitoring and evaluation. For this particular project, indicators will be include output indicators such as the systematic identification of data needs for all three Rio Conventions, process indicators such as workshops that include technical staffs from all key departments and agencies.

69. Performance indicators will include an assessment of knowledge gained over the course of project implementation. This project will implement capacity development activities through an adaptive collaborative management approach to engage stakeholders as collaborators in the design and implementation of project activities that take into account unintended consequences arising from policy interventions.

70. The project is also consistent with the programmatic objectives of the three GEF thematic focal areas of biodiversity, climate change and land degradation, the achievement and sustainability of which is dependent on the critical development of capacities (individual, organizational and systemic). Through the successful implementation of this project, these focal area projects will have better access to data and information to improve the implementation and monitoring of the National Biodiversity Strategy and Action Plan, the National Communication on climate change, and national reports on land degradation. Table 2 summarizes the project's conformity with the 11 operational principles of capacity development identified in the GEF Strategic Approach to Capacity Building.

Table 2: Conformity with GEF Capacity Development Operational Principles

Capacity Development Operational Principle	Project Conformity
Ensure national ownership and leadership	The PNG Parliament approved the transformation of the DEC to become a statutory body, which includes the setting up of the EMIS. To this end, the government allocated US\$ 300,000, which would complement the GEF CCCD project to ensure that the EMIS helps improve decision-making for the global environment. The EMIS will serve as an important tool for improving the screening and assessment of development policies, programmes, plans and projects on national priority.
Ensure multi-stakeholder consultations and decision-making	The design and implementation of the project required multi-stakeholder consultations given that the project seeks to strengthen an integrated environmental management information system, which can only be done through partnerships to network existing systems. Project implementation will require Memoranda of Agreement to ensure multi-stakeholder participation and collaboration.
Base capacity building efforts in self-needs assessment	This project is in response to PNG's NCSA, which identified the lack of a system to manage data and information to inform the national reporting process to the Rio Convention secretariats. The many and diverse stakeholders at the project validation workshop reaffirmed the project objective and strategy as meeting a top priority need. While data and information exist, participants were unanimous in saying that access to quality data and information is one of the biggest challenges to meeting Rio Convention obligations and other environmental priorities.
Adopt a holistic approach to capacity building	This project takes a holistic approach by involving as many stakeholders as possible, particularly in the interest of securing agreement among agencies that have data and information systems that could be networked to the EMIS. Only this holistic approach can cost-effectiveness and synergies be created. These stakeholders will also participate in the training and learn-by-doing exercises to see the value of taking a holistic approach to data and information management, i.e., by sharing comparative advantages and expertise.
Integrate capacity building in wider sustainable development efforts	The project's training and learn-by-doing will be directly targeted to using the integrated EMIS to screen and assess ("sustainable") development policies, programmes, plans and project from a Rio Convention lens, using the Rio Convention-coded indicators. The learn-by-doing exercise will select a high-value development project to both test the integrity and performance of the EMIS, as well as to demonstrate its value to stakeholders.
Promote partnerships	By its very nature, this project requires collaboration and coordination among relevant government agencies to integrate their respect information system, as well as to agree on sharing protocols. The comparative expertise among the diverse stakeholders will be demonstrated through the learn-by-doing application of the EMIS, which will seek to foster stronger partnerships, both between government departments as well as with non-state organizations, including NGOs, academia and civil society.
Accommodate the dynamic nature of capacity building	The project will take an adaptive collaborative management approach to its implementation, and to that extent will call upon the project steering committee to meet every three months at minimum. These meetings will be immediately preceded by project stakeholder review meetings to review project progress and report on recommended modification to project execution. The project objective will not change, neither will the outputs, but the activities necessary to deliver the agreed outputs may be modified to take into account unforeseen events. This will impact the nature of capacity building, and positively should be used to seize opportunities for creating synergies with other related capacity building activities. They adaptive collaborative management will not be used to reduce significantly reduce targets or milestones.
Adopt a learning-by-doing approach	The core of the project's capacity development activities is via a learning-by-doing approach. Government representatives and other stakeholders will be involved in developing and institutionalizing the EMIS. The learn-by-doing exercises will be applied to a high-value development project to facilitate both critical thinking as well as to demonstrate the value of partnerships.

Combine programmatic and project-based approaches	By design, the learn-by-doing use of the integrated EMIS to screen and assess environmental impacts is structured as a project since this allows the exercise to be manageable, measurable, and time-bounded. The institutionalization of the project through component 2 specifically seeks to programme the use of the EMIS as a corporate programme of DEC, and later the CEPA to programme screenings and EIAs.
Combine process as well as product-based approaches	The transformative value of this project is indeed through the integration of its process with the products to be delivered. Whereas the product of this project is strengthened capacity for improving decisions for the global environment, which is manifest by both the EMIS infrastructure and its associated training, it is the process of active stakeholder engagement that will demonstrate the value of breaking down traditional barriers to data and information exchange. The adaptive collaborative management and learn-by-doing approaches are both reflective of the integration of process and product-based approaches to capacity development.
Promote regional approaches	The regional character of the integrated EMIS is to be seen through the contribution of data and information that is local, traditional, and/or indigenous in nature. Therefore, regional stakeholders may be critical stakeholders in the project design. Certainly, the high-value development project that is to be tested may have a regional character, which will warrant testing regionally-sourced data and information. For this reason, stakeholder participation will need to engage regional stakeholders in order to ensure legitimacy.

C.1.a Guidance from the Rio Conventions

71. This project responds to very clear guidance from the three Rio Conventions to better manage information and to create and use knowledge for improved decision-making for the global environment. While the focus of the project is on these strengthening cross-cutting capacities, the project will also be strengthening other cross-cutting capacities in stakeholder engagement (i.e., strengthening collaboration among stakeholders to share information and collaboratively engage in knowledge creation); organizational capacities (i.e., strengthening an environmental management information system within DEC that is networked with other information systems); environmental governance (i.e., facilitating the adoption of legislative, regulatory, and institutional reforms to sustain good environmental management practices, with particular emphasis on the global environment); and monitoring and evaluation (i.e., institutionalizing feedback loops where data, information and knowledge is used to adaptively and collaboratively manage environmentally friendly (with particular emphasis on the global environment) sustainable development. Table 3 identifies the articles of the Rio Conventions that call for development of cross-cutting capacities.

Table 3: Capacity Development Requirements of the Rio Conventions

Type of Capacity	Convention Requirements	FCCC	CBD	CCD
Stakeholder Engagement	Capacities of relevant individuals and organizations (resource users, owners, consumers, community and political leaders, private and public sector managers and experts) to engage proactively and constructively with one another to manage a global environmental issue.	Article 4 Article 6	Article 10 Article 13	Article 5 Article 9 Article 10 Article 19
Organizational Capacities	Capacities of individuals and organizations to plan and develop effective environmental policy and legislation, related strategies, and plans based on informed decision-making processes for global environmental management.	Article 4 Article 6	Article 8 Article 9 Article 16 Article 17	Article 4 Article 5 Article 13 Article 17 Article 18 Article 19

Type of Capacity	Convention Requirements	FCCC	CBD	CCD
<i>Environmental Governance</i>	Capacities of individuals and organizations to enact environmental policies or regulatory decisions, as well as plan and execute relevant sustainable global environmental management actions and solutions.	Article 4	Article 6 Article 14 Article 19 Article 22	Article 4 Article 5 Article 8 Article 9 Article 10
<i>Information Management and Knowledge</i>	Capacities of individuals and organizations to research, acquire, communicate, educate and make use of pertinent information to be able to diagnose and understand global environmental problems and potential solutions.	Article 4 Article 5	Article 12 Article 14 Article 17 Article 26	Article 9 Article 10 Article 16
<i>Monitoring and Evaluation</i>	Capacities in individuals and organizations to effectively monitor and evaluate project and/or programme achievements against expected results and to provide feedback for learning, adaptive management and suggesting adjustments to the course of action if necessary to conserve and preserve the global environment.	Article 6	Article 7	

C.2 Project Design: GEF Alternative

72. The incremental approach to this project lies in building upon the commitment of the Government to strengthen the environmental management information system within the Department of Environment and Conservation. As outlined in Section B.2.f, the barriers to good environmental governance for the global environment is fundamentally an issue of accessing good knowledge and having a good system by which to make best use of this knowledge. The sustainable development baseline of the project lies in the Government’s allocation of US\$ 600,000 to set up an environmental management information system, upon which the GEF increment will be used to strengthen the use of this system to access data and information directly relevant to the three Rio Conventions. In this way, the preparation of planning frameworks can be better informed of global environmental trends. GEF funds will be used to train government staff through directed workshops on *how* to collect and manage data and information relevant to planning best practices for global environmental governance in the three Rio Convention focal areas. The learn-by-doing exercises will be used to take the training one step further to train people to critical think about the know of data and information to create knowledge through practical testing and application. Whereas the GEF focal area projects currently under operation focus on the development, testing and application of focal area best practices, the CCCD project is targeted to institutionalizing the underlying set of capacities to carry out this work.

C.2.a Project Rationale

73. This project is strategic and transformative through its adaptive collaborative management approach that is part of the design of project activities. While an integrated environmental management information system is not necessary innovative, for PNG it will be innovative because of the current practice of closed systems. That is, data and information exists, but within institutions with institutionalized barriers against sharing. As a result, there is significant overlap in data and information management, and because of the mandates of each agency, they tend to manage data and information that they need to meet their mission objectives. This works fine for the few authorities that have the necessary financial resources, however, most other agencies can not afford the expense of creating data and information that already exists and

which could be accessed at a significantly cheaper cost.

74. Strategically, the project includes activities that will call upon all stakeholder organizations to meet and negotiate sharing protocols, based on the data and information that each needs. Memoranda of Agreement would be signed to facilitate this sharing, which would then be institutionalized through bills for legislative and/or institutional reforms that would be submitted to Parliament. If successful, this project could lead to a transformative approach to collaboration in PNG. Through the project and specifically the EMIS, this project could demonstrate a good practice of environmental governance.

C.2.b Project Goal and Objectives

75. The goal of this project is for Papua New Guinea to develop and manage information for better planning decisions that help protect the global environment. This requires the country to have, among others, the capacity to access and use data and information, as well as best practices for integrating global environmental priorities into planning, decision and reporting processes. To this end, the project's objective is *to strengthen targeted capacities to establish and use an integrated Environmental Management Information System for measuring progress to implement the Rio Conventions and other MEAs*. In addition to the installation of the integrated EMIS and training on its use, the project will help institutionalize the EMIS by demonstrating its value and financial sustainability to stakeholders, as well as facilitating the appropriate legislative and institutional reforms.

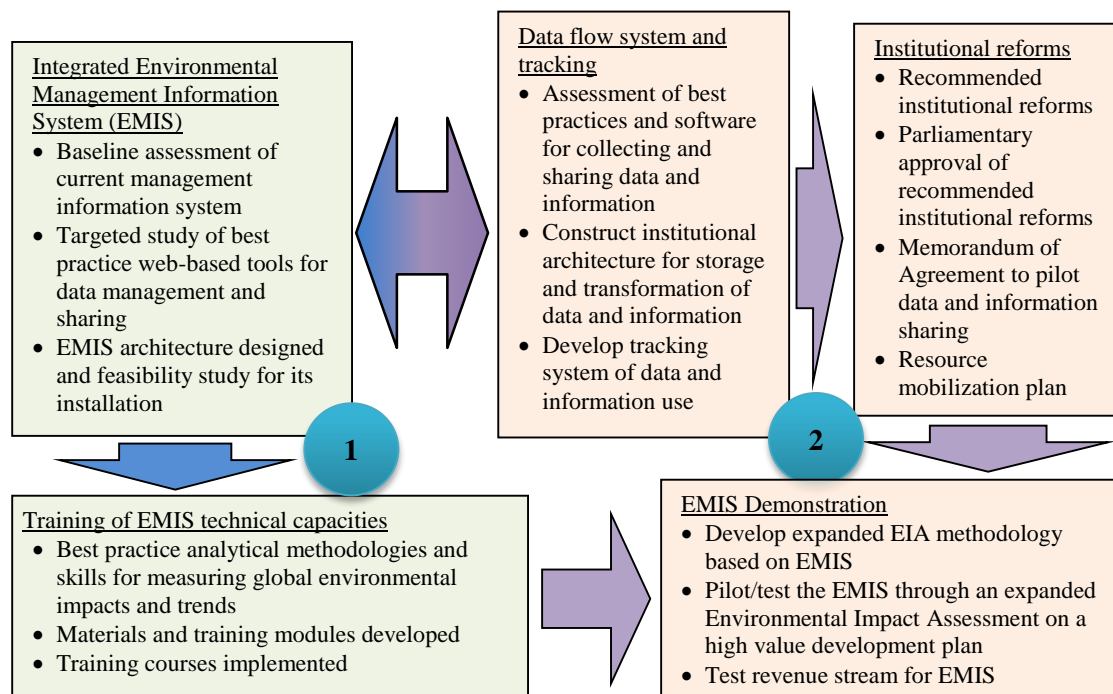


Figure 1: Project design

C.2.c Expected Outcomes

76. At the end of the project, the project will have resulted in improved capacities for meeting global environmental priorities. This general outcome will be measured by a variety of indicators, characterized as outputs, process, and performance indicators. Output indicators include the actual installation of the

integrated EMIS. Process indicators include the very important collaboration among government agencies and authorities to share data and information through an agreed sharing protocol and data flow system, legitimized by the necessary approvals, e.g., Memoranda of Agreements. This project is organized into two linked components. Figure 1 summarizes the design of the project.

Component 1: Establish integrated environmental information management system

Component 2: Institutional Strengthening for improved monitoring of the global environment and capacity to replicate successful environmental information management and integration practices

77. Not only will this project will produce additional important benefits in the form of national reporting to the three Rio Conventions, but to other multilateral environmental agreements of which PNG is signatory⁶ as well as on the Millennium Development Goal 7. The preparation of these reports will be made easier through the structuring the EMIS to specifically code global environmental data and information.

C.2.d Project Components, Outputs, and Activities

Component 1: **Establish integrated environmental information management system**

78. This component focuses on the establishment of an integrated environmental information management system to collect data and information for better assessing compliance with environmental regulation, with particular reference to meeting Rio Convention obligations. This system will cover other non-Rio Convention MEAs that will be co-financed by the Government of Papua New Guinea. The Outputs under this component are:

Outcome 1: **An integrated environmental management information system is installed that effectively codes data and information relevant to the three Rio Conventions, and which is used to inform more holistic planning frameworks and decision-making.**

1.1 Integrated Environmental Management Information System (EMIS)

79. This output will include a number of activities to strengthen the existing data and information management system, much of which operates through pen and paper. The system will be upgraded to be a more functional internet and intranet-based system that allows for real time tracking of environmental indicators. This output will be largely financed by the Government of PNG, with a small portion from the GEF to finance software that is particular to the three Rio Conventions.

Target indicator: In-depth baseline assessment of current management information system is completed by month 4 of the project. In particular, undertake an assessment of the data, information, and knowledge gaps and weaknesses to measure global environmental impacts and trends. This includes an assessment of the institutional structures and mechanism to manage data, information and knowledge as well as recommendations on priority capacity development activities at the systemic, institutional, and technical levels

Target indicator: Undertake a targeted study of best practice web-based tools for environmental data and metadata sharing and storage management at all levels as part of the design of an integrated EMIS, completed by month 8.

Target indicator: Design and feasibility study of an integrated EMIS completed by month 8 and approved for implementation by month 12. This will be independently peer reviewed by month 6. This study will include the technological hardware and software requirements.

⁶ Annex 9 provides a list of these MEAs.

Target indicator: EMIS infrastructure installation begins by month 12 and completed by month 18

1.2 Technical capacities for EMIS

80. This output focuses on strengthening technical capacities to manage the EMIS. This includes the technical operation of the EMIS as well as the monitoring capacities to use best practice methodologies for collecting and inputting data and information into the EMIS. This will include three separate courses, one for each of the three Rio Conventions, on how collect, use and report on national data and information for national reporting. These courses will be designed to build upon parallel trainings provided by other projects under implementation, such as the GEF enabling activity projects. This output is differentiated from the design of the EMIS under output 1.1, which will focus on the technological requirements for installing and servicing of the EMIS, and Component 2, which will focus on the learn-by-doing creation of knowledge through the use of data and information made available through the EMIS.

Target indicator: Expert working groups are established under each of the Rio Conventions to review data and information needs for decision-making by month 2

Target indicator: In conjunction with the design of an integrated EMIS, identify best practices for collecting technical data and information by month 6. This will include a comprehensive set of data and information needs, each described according to their measurement metrics and methodologies, as well as lead agency that will collect the requisite data.

Target indicator: Best practice materials and training modules are collected and prepared by month 10 of the project.

Target indicator: Training courses begin by month 12. All technical government staff that have responsibilities related to the collection and use of environmental data participate in all training courses. A minimum of 100 government staff have participated in training courses, with the average score of all attendees no lower than 80% test score. Training courses end by month 30.

Target indicator: At the beginning of each course, test each participant's knowledge of material to be taught. At the end of each course, test each participant's knowledge of the material taught. Undertake a statistical analysis of the incremental learning.

Target indicator: A series of ten (10) one-day sensitization workshops will be undertaken to raise awareness by a larger number ($N > 150$) mid-level and senior decision-makers and planners by month 32 of the project.

Component 2: Institutional strengthening for improved monitoring of the global environment and capacity to replicate successful environmental information management and integration practices

Outcome 2: Holistic planning and decision-making for the global environment is institutionalized

81. Whereas Component 1 focuses on establishing an integrated Environmental Management Information System and providing training on its use, Component 2 focuses on institutionalizing the EMIS and the technical capacities developed. The outputs under this component are targeted to facilitating agreement and parliamentary approval of legislative and institutional reforms, instituting a tracking system to reaffirm the value of the EMIS to all stakeholders, and strengthening critical thinking of many planners and decision-makers on how to interpret and apply best practices to meet global environmental objectives.

2.1 Institutional reforms

82. This output will include activities necessary to ensure the long-term viability of the EMIS. This will build on the outputs of Component 1, and include recommendations of institutional reforms that require Parliamentary approval of associated legislation and/or regulation. Under this output, a set of activities will be directed towards a systematic and sustainable approach to long-term financing. This includes securing long-term government commitment for budgetary allocations to the integrated EMIS, as well using the Donor Coordinating Committee in PNG and other development partners as well as the private sector to meet regularly on resource mobilization.

Target indicator: Building on output 1.1, convene expert working group and stakeholder meetings to agree on recommendations of institutional reforms. Expert working group presents a consensus agreement on prioritized recommendations by month 12.

Target indicator: Prepare parliamentary brief to recommend and approve, as appropriate, institutional reforms by month 14.

Target indicator: Ministers and parliamentary members discuss parliamentary brief and approve appropriate decision by month 18.

Target indicator: Institutional reforms are initiated by target institutions by month 20. Over 67% of institutional reforms are completed by month 32. This includes detailing the specific institutional requirements necessary to ensure the steady flow of data and information through the data flow system developed under output 2.2.

Target indicator: Resource mobilization plan is prepared, peer reviewed and approved by Project Steering Committee by month 12.

Target indicator: Resource mobilization plan is under early implementation by month 14.

Target indicator: Memorandum of agreement among partner agencies and other stakeholder organizations to pilot the sharing of data and information during the project is signed by month 3. New Memorandum of Agreement is signed among partner agencies and other stakeholder organizations to share data and information per institutional reforms signed by month 32.

2.2. Data flow system and tracking

83. This system establishes very clear institutional guidelines for the collection and sharing of data and information and will be structured through the institutional reforms of output 2.1. This includes developing a tracking mechanism for monitoring, reporting and dissemination of environmental information for policy formulation and development planning.

Target indicator: As a targeted activity of outputs 1.1 and 2.1, contract an independent assessment of best practices and software for collecting and sharing data and information, including their use to prepare complex models. This study should be completed by month 8.

Target indicator: Construct an institutional architecture for the storage and transformation of data and information by month 10. This will be an input to output 1.1.

Target indicator: Develop a tracking mechanism to monitor the use of data and information for policy formulation and development planning by month 10. This will be an input to output 1.1. This will include the contribution of the EMIS to the preparation of national reports under the Rio Conventions and other MEAs.

2.3. EMIS Demonstration

84. This output will test the value of the EMIS and strengthen the technical capacities through a learn-by-doing application of skills on a selected high value development plan through the conduct of an expanded Environmental Impact Assessment.

Target indicator: The Project Steering Committee will select a high value development plan by month 20.

Target indicator: Each Rio Convention expert working will review this same plan to identify the data and information requirements to evaluate it for its potential impacts on the global environment by month 21.

Target indicator: Develop an expanded EIA methodology that integrates the new best practice methodologies and EMIS by month 24.

Target indicator: Initiate the conduct of the new and improved EIA by month 25. Conduct a peer review of the draft EIA by month 27, and finalize the EIA by month 29.

Target indicator: Undertake a comprehensive review of the lessons learned through the project. Report not initiated until after EMIS demonstrated in completed or before month 30 and completed by month 33.

C.3 Sustainability, Replicability and Lessons Learned, Risks

C.3.a Sustainability

85. Sustainability of the project will be ensured by securing institutional reforms that will be project-based and legitimized through Memoranda of Agreement. These are intended to facilitate an agreement over the three years of project implementation on collaborative arrangements for the active engagement of partner stakeholders in the establishment of the EMIS, in particular on the agreement of global environmental data and information that need to be systematically measured and coded. These arrangements will also facilitate the sharing of data and information at a sufficiently low transactional cost to make sharing an overall better option than working in silos. Participating in the EMIS must also be accompanied by a clear and thorough analysis and establishment of incentives, preferably non-monetized incentives. These include accountability for quality analyses and the significant lowering of the opportunity cost of business-as-usual.

86. The core of the integrated EMIS will be housed within with the Department of Environment and Conservation, the institutionalization of which was reaffirmed by the Parliamentary approval in March 2014 through the transformation of the DEC to the Conservation and Environmental Protection Authority (CEPA). The sustainability of the project will also be strengthened by the activities directed at improving the awareness and understanding of the EMIS' value. Training and learn-by-doing of government staff and other stakeholder representatives will be undertaken at sufficiently high numbers to reduce the impact of staff turnover and loss of institutional memory. In this way, the skills and knowledge that reside within individual staff of DEC and other stakeholder organizations remain available. The project will also embark on a structured approach to resource mobilization. This includes securing revenue from biodiversity offsets and permit fees, as well as other innovative sources that are to be determined.

C.3.b Replicability and Lessons Learned

87. The replicability of the project lies in the collaborative agreements among stakeholders to share data and information. The project will demonstrate this by testing the use of the EMIS on a high value development plan through the Environmental Impact Assessment process that now includes clear indicators to measure data and information directly relevant to the three Rio Conventions. Lessons learned will be used to improve the EMIS and future EIAs.

88. Another opportunity for replicability lies in the use of the skills learned under the project for national reporting under MEAs other than the Rio Conventions. The EMIS will contain data and information relevant to these, and many of the analytical methodologies will be transferable to other MEAs.

89. The project will also seek to replicate similar collaborative arrangements to share and use information at the regional and local levels based on lessons learned. The testing of the EMIS may involve one particular region, and subsequent application of the EMIS and skill set will certainly be used for development plans as they are submitted for screening and analysis from other regions.

C.3.c Risks

90. The main risk associated with this project is the lack of absorptive capacity of national institutions to implement activities. This risk is medium due to the relatively low level of engagement and collaboration between the DEC and other stakeholders. This risk will be managed by taking a learn-by-doing approach to project execution. The best way to raise absorptive capacities is for government staff to learn their skills through critical thinking exercises that the testing of the Environmental Management Information System will encourage. All project activities, including those that target systemic, institutional and individual capacities, will be designed through a comprehensive multi-stakeholder consultation to ensure they are implementable including provision for additional dedicated project staff. It is assumed that the commitment by the UNDP PNG Country Office for project oversight ensures that lack absorptive capacity is not the main reason to jeopardize the project.

91. The other risk identified is delays in project implementation due to bureaucratic processes within the Government. This risk has medium consequences. The DEC will implement the project with direct support from the UNDP PNG Country Office. Key institutions at national levels will be increasingly involved during the project preparation phase. Representatives from different institutions, relevant local municipalities, NGO and academia will have representatives in the Project Steering Committee, and will be directly involved in project implementation.

92. A risk for the project is the frequent turn-over of staff especially after obtaining training. The probability of this happening is high with medium consequences. The project will address this by institutionalizing the system so that data and information remain in the system and not with individual staff who can leave with the data and jeopardize projects. Capacity building will be spread to a cross-section of people so that more staff can access and use the system, this will be the buffer against trained staff turnover.

93. Another risk is the organizations aversion to change from business as usual to embracing the improved system. This risk has medium consequences because; change is a constant forward movement and change is inevitable. Building a system for managing information is a positive step forward from the status quo. Feedback loops will be built into the system – the feedback loops can pinpoint when there is reluctance for change. In response, appropriate steps will be taken to address the issue. This risk will also be addressed by engaging people who are supportive of the changes taking place.

94. A further risk to the project is the lack of policy and legislation to support aspects of the project. For instance, this system need data, however, data most oftentimes is generated by organizations outside of the DEC. There are limited policy and legislation directives for data sharing. The consequences of this risk happening is high. Without data this system can remain obsolete. To address this risk, this project will

involve and consult relevant stakeholders in all the step of the project to enable these stakeholders to appreciate the importance of this system for reporting on country efforts in meeting MEA obligations. Through such collaborations through the project stages, policy and legislation constraints will be identified and addressed to ensure data flow happens within the system.

C.4 Stakeholder Involvement

95. During the project development phase, key project stakeholders were identified and consulted. Taking an adaptive and collaborative management approach to execution, the project will ensure that key stakeholders are involved early and throughout project execution as partners for development. This includes being involved as part of an expert team for each of the three Rio Conventions, or, as a staff to get training on best practice and methods for data and information collection and analysis.

Stakeholder	Mandate	Possible roles in project execution
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.

96. Given the project strategy, the key project stakeholders include state agencies mandated by law to address the country obligations to the MEAs. These stakeholder representatives will participate in developing the EMIS, as well as receiving training on best practices for its use, including the preparation

of country planning reports. Stakeholders will also participate in the learn-by-doing exercises in order to raise their level of critical thinking and analytical capabilities for integrating Rio Conventions into policy interventions, as well as monitoring and evaluation. Stakeholders are governmental representatives as well as non-state actors from academia, the private sector, and civil society organizations. During the establishment of technical working groups on the three Rio Conventions, these non-state actors will be invited in the project activities to share their comparative expertise, but also to undertake selected project activities.

97. The Department of Environment and Conservation currently consults both national experts and for advice in technical workshops to acquire the required information. Most expert advice provided by national experts is from experience attained from various fields of work or being informed by their own data repositories.

98. NGOs implement the sustainable environment mandate right where the agenda matters, however, DEC has never been able to get this information to augment its efforts. Conservation goals are being achieved in the field but most of it is never reflected in the DEC and government documents. This is due to lack of a working system that enables NGOs to be accountable for their activities.

99. Taking an adaptive and collaborative management approach to execution, the project will ensure that key stakeholders are involved early and throughout project execution as partners for development. This includes their participation in the Project Advisory Board, review of project outputs such as recommendations for amendments to policies, plans, programmes and legislation, as well as participation in monitoring activities.

C.5 Monitoring and Evaluation

100. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures. The project team and the UNDP Country Office (UNDP CO) will undertake monitoring and evaluation activities, with support from UNDP/GEF, including by independent evaluators in the case of the final evaluation. The logical framework matrix in Annex 4 provides a logical structure for monitoring project performance and delivery using SMART indicators during project implementation. The output budget and the work plan in the UNDP project document provide additional information for the allocation of funds, both the GEF and co-financing, for expected project deliverables and the timing of project activities to produce these deliverables. Annex 5 provides a breakdown of the total GEF budget by outcome, project management costs, and allocated disbursements on a per year basis. A GEF tracking tool for CCCD will be used as part of monitoring and evaluation activities to assess project delivery. The work plan is provisional, and is to be reviewed during the first Project Advisory Board and endorsed at the project initiation workshop.

101. The following sections outline the principle components of monitoring and evaluation. The project's monitoring and evaluation approach will be discussed during the project's initiation report so as to fine-tune indicators and means of verification, as well as an explanation and full definition of project staff M&E responsibilities.

102. A project initiation workshop will be conducted with the full project team, National Project Director, relevant government counterparts, co-financing partners, the UNDP CO, with representation from the UNDP/GEF Regional Coordinating Unit as appropriate. Non-governmental stakeholders should be represented at this workshop.

103. A fundamental objective of this initiation workshop will be to further instill and understanding and ownership of the project's goals and objectives among the project team, government and other stakeholder groups. The workshop also serves to finalize preparation of the project's first annual work plan on the basis of the project's log-frame matrix. This will include reviewing the log frame (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise, finalize the Annual Work Plan (AWP) with precise and measurable performance (process and output) indicators,

and in a manner consistent with the expected outcomes for the project.

104. Specifically, the project initiation workshop will: (i) introduce project staff to the UNDP/GEF expanded team that will support the project during its implementation, namely the CO and responsible Project Management Unit⁷ (PMU) staff; (ii) detail the roles, support services and complementary responsibilities of UNDP CO and PMU staff with respect to the project team; (iii) provide a detailed overview of UNDP/GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the combined Annual Project Reports - Project Implementation Reviews (APR/PIRs), Project Advisory Board (PAB) meetings, as well as final evaluation. The initiation workshop will also provide an opportunity to inform the project team on UNDP project-related budgetary planning, budget reviews, and mandatory budget re-phasing.

105. The initiation workshop will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for PMU staff and associated decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

106. The initiation workshop will present a schedule of M&E-related meetings and reports. The Project Manager in consultation with UNDP will develop this schedule, and will include: (i) tentative time frames for PAB meetings, and the timing of near-term project activities, such as the in-depth review of literature on natural resource valuation; and (ii) project-related monitoring and evaluation activities. The provisional work plan will be approved in the first meeting of the PAB.

107. Day-to-day monitoring of implementation progress will be the responsibility of the Project Manager based on the project's Annual Work Plan and its indicators. The Project Manager will inform the UNDP CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

108. The Project Manager will fine-tune outcome and performance indicators in consultation with the full project team at the initiation workshop, with support from UNDP CO and assisted by the UNDP/GEF. Specific targets for the first year implementation performance indicators, together with their means of verification, will be developed at the initiation workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the Project Team, and agreed with the Executing Agency (DEC) among other key project partners sitting on the PAB.

109. Periodic monitoring of implementation progress will be undertaken by the UNDP CO through the provision of quarterly reports from the Project Manager. Furthermore, specific meetings may be scheduled between the PMU, the UNDP CO and other pertinent stakeholders as deemed appropriate and relevant (particularly the PAB members). Such meetings will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

110. Annual Monitoring will occur through the Annual Project Advisory Board meeting. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to PAB meetings at least twice per year. The first such meeting will be held within the first twelve months following the initiation workshop. For each year-end meeting of the PAB, the Project Manager will prepare harmonized Annual Project Report / Project Implementation Reviews (APR/PIR) and submit it to UNDP CO, the UNDP/GEF Regional Coordination Unit, and all PAB members at least two weeks prior to the meeting for review and comments.

111. The APR/PIR will be used as one of the basic documents for discussions in the PAB year-end

⁷ The Project Management Unit (PMU) will be an administrative extension of the DEC, which will provide administrative support.

meeting. The Project Manager will present the APR/PIR to the PAB members, highlighting policy issues and recommendations for the decision of the Committee participants. The Project Manager will also inform the participants of any agreement(s) reached by stakeholders during the APR/PIR preparation, on how to resolve operational issues. Separate reviews of each project output may also be conducted, as necessary. Details regarding the requirements and conduct of the APR and PAB meetings are contained with the M&E Information Kit available through UNDP/GEF.

112. The terminal review meeting is held by the PAB, with invitation to other relevant Government and municipal stakeholders as necessary, in the last month of project operations. The Project Manager is responsible for preparing the terminal review report and submitting it to UNDP COs, the UNDP/GEF Regional Coordinating Unit, and all participants of the terminal review meeting. The terminal review report will be drafted at least one month in advance of the terminal review meeting, in order to allow for timely review and to serve as the basis for discussion. The terminal review report considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. The report also decides whether any actions remain necessary, particularly in relation to the sustainability of project outputs and outcomes, and acts as a vehicle through that lessons learned can be captured to feed into other projects under implementation or formulation. The terminal review meeting should refer to the independent final evaluation report, conclusions and recommendations as appropriate.

113. The UNDP CO, in consultation with the UNDP/GEF Regional Coordinator and members of the PAB, has the authority to suspend disbursement if project performance benchmarks are not met as per delivery rates, and qualitative assessments of achievements of outputs.

114. A project initiation report will be prepared immediately following the initiation workshop. This report will include a detailed First Year Work Plan divided in quarterly time-frames as well as detailed activities and performance indicators that will guide project implementation (over the course of the first year). This Work Plan will include the proposed dates for any visits and/or support missions from the UNDP CO, the UNDP/GEF Regional Coordinating Unit, or consultants, as well as time-frames for meetings of the project decision-making structures (e.g., PAB). The report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months' time-frame.

115. The initiation report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation, including any unforeseen or newly arisen constraints. When finalized, the report will be circulated to project counterparts who will be given a period of one calendar month in that to respond with comments or queries.

116. The combined Annual Project Report (APR) and Project Implementation Review (PIR) is a UNDP requirement and part of UNDP's Country Office central oversight, monitoring and project management. As a self-assessment report by project management to the Country Office, the APR/PIR is a key input to the year-end Project Advisory Board meetings. The PIR is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from on-going projects. These two reporting requirements are very similar in input, purpose and timing that they have now been amalgamated into a single APR/PIR Report.

117. An APR/PIR is to be prepared on an annual basis by June, but well in advance (at least one month) in order to be considered at the PAB meeting. The purpose of the APR/PIR is to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work. The APR/PIR is discussed by the PAB, so that the resultant report represents a document that has been agreed upon by all of the key stakeholders.

Table 4: Estimated M&E budget

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Inception Workshop and Report	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP CO, UNDP GEF 	Indicative cost: 10,000	Within first two months of project start up
Measurement of Means of Verification of project results.	<ul style="list-style-type: none"> ▪ UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members. 	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on <i>output and implementation</i>	<ul style="list-style-type: none"> ▪ Oversight by Project Manager ▪ Project team 	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	<ul style="list-style-type: none"> ▪ Project manager and team ▪ UNDP CO ▪ UNDP RTA ▪ UNDP EEG 	None	Annually
Periodic status/ progress reports	<ul style="list-style-type: none"> ▪ Project manager and team 	None	Quarterly
Mid-term Evaluation	<ul style="list-style-type: none"> ▪ Project manager and team ▪ UNDP CO ▪ UNDP RCU ▪ External Consultants (i.e. evaluation team) 	None	At the mid-point of project implementation. Not mandatory for MSP projects.
Final Evaluation	<ul style="list-style-type: none"> ▪ Project manager and team, ▪ UNDP CO ▪ UNDP RCU ▪ External Consultants (i.e., evaluation team) 	Indicative cost: 20,000	At least three months before the end of project implementation
Project Terminal Report	<ul style="list-style-type: none"> ▪ Project manager and team ▪ UNDP CO ▪ local consultant 	0	At least three months before the end of the project
Audit	<ul style="list-style-type: none"> ▪ UNDP CO ▪ Project manager and team 	Indicative cost per year: 3,000	Yearly
Visits to field sites	<ul style="list-style-type: none"> ▪ UNDP CO ▪ UNDP RCU (as appropriate) ▪ Government representatives 	For GEF supported projects, paid from IA fees and operational budget	Yearly
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US\$ 40,000 (+/- 5% of total budget)	

118. A standard format/template for the APR/PIR is provided by UNDP/GEF. This includes the following:

- An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome;
- The constraints experienced in the progress towards results and the reasons for these;
- The three (at most) major constraints to achievement of results;
- Annual Work Plans and related expenditure reports;
- Lessons learned; and

- Clear recommendations for future orientation in addressing key problems in lack of progress.

119. UNDP will analyze the individual APR/PIRs by focal area, theme and region for common issues/results and lessons. The APR/PIRs are also valuable for the independent evaluators who can utilize them to identify any changes in the project's structure, indicators, work plan, among others, and view a past history of delivery and assessment.

120. Quarterly Progress Reports are short reports outlining the main updates in project performance, and are to be provided quarterly to the UNDP Country Office. UNDP CO will provide guidelines for the preparation of these reports, which will be shared with the UNDP/GEF RCU.

121. During the last three months of the project, the PMU will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the project, lessons learned, the extent to which objectives have been met, structures and mechanisms implemented, capacities developed, among others. Together with the independent final evaluation, the project terminal report is one of two definitive statements of the project's activities during its lifetime. The project terminal report will also recommend further steps, if necessary, in order to ensure sustainability and replicability of the project outcomes and outputs.

122. An independent final evaluation will take place three months prior to the terminal tripartite review meeting, and will focus on: a) the cost-effectiveness, efficiency and timeliness of project implementation and performance; b) highlight issues requiring decisions and actions; and c) present initial lessons learned about project design, implementation and management. Findings of this evaluation will be incorporated as lessons learned, and recommendations for improvement addressed to ensure the institutional sustainability of project outputs, particular for the replication of project activities. The final evaluation will also look at project outcomes and their sustainability. The final evaluation should also provide recommendations for follow-up activities, as appropriate. The terms of reference for the final evaluation will be prepared by the UNDP CO based on guidance from the UNDP/GEF Regional Coordinating Unit, in consultation with the DEC.

123. The Project Manager will provide the UNDP Resident Representative with certified periodic financial statements and an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in UNDP's Programming and Finance manuals. The audit on project will be conducted according to UNDP financial regulations and rules and applicable audit policies. The audit will be conducted by the legally recognized auditor of UNDP Papua New Guinea. Table 4 above summarizes the estimated budget allocated for M&E.

D. Financing

D.1 Financing Plan

124. The financing of this project will be provided by the GEF, with co-financing from the Government of Papua New Guinea and UNDP. The allocation of these sources of finances is structured by the two main project components, as described in section C.2.b above. Table 5 below details this allocation. The GEF increment has been very successful in leveraging co-financing greater than the expected 1:1 ratio. A significant portion of this co-financing is also in the form of cash, i.e., US\$ 50,000 from UNDP and US\$ 300,000 from the DEC.

Table 5: Project Costs (US\$)

Total Project Budget by Component	GEF (\$)	Co-Financing (\$)	Project Total (\$)
Establish integrated environmental information management system	244,500	275,000	519,500
Institutional strengthening for improved monitoring of the global environment	208,000	209,000	417,000
Project Management	47,500	166,000	213,500
Total project costs	500,000	650,000	1,150,000

Table 6: Estimated Project management budget/cost (estimated cost for the entire project)

Component	Estimated Staff weeks	GEF (\$)	Co-Financing (\$)	Project Total (\$)
Locally recruited personnel: Project Manager (1)	60	24,500	23,500	48,000
Locally recruited personnel: Project Assistant	160	0	75,000	75,000
Internationally recruited consultant (2)	3	10,000	0	10,000
Office facilities and communications (3)		0	60,000	60,000
Travel		2,500	7,500	10,000
UNDP cost recovery charges - Bills		10,500	0	10,500
Total project management cost		47,500	166,000	213,500

* Local and international consultants in this table are those who are hired for functions related to the management of project. Please see Table 7 below for consultants providing technical assistance for special services.

125. An internationally recruited consultant will be contracted to undertake the independent final evaluation towards the end of the project. The travel budget includes the costs of DSA, TE and return airfare for the international consultant. The travel budget also includes financing for to cover the cost of local consultant travel to the regions where they will be facilitating the negotiations and drafting of sectoral policy, programmes, plans, or legislation.

126. Both local and international consultants will be recruited to support this project. Although the project involves setting up the EMIS infrastructure, much stakeholder engagement is necessary in order to raise awareness and instill new skills for integrating the global environment into development decisions. While the project will recruit these consultants, a large number of government staff will participate in the training and learn-by doing exercises.

Table 7: Consultants for technical assistance components (estimated for entire project)

	Estimated Staff weeks	GEF (\$)	Co-Financing (\$)	Project Total (\$)
Local Consultants				
National CBD Specialist	30	12,000	12,000	24,000
National CCD Specialist	30	12,000	12,000	24,000
National FCCC Specialist	30	12,000	12,000	24,000
Public Administration Expert	100	40,000	40,000	80,000
Policy/Legal Expert	30	12,000	12,000	24,000
IT and Knowledge Management Expert	60	24,000	24,000	48,000
Total		112,000	112,000	224,000

	Estimated Staff weeks	GEF (\$)	Co-Financing (\$)	Project Total (\$)
International Consultants				
International Specialist – CBD	15	37,500	0	37,500
International Specialist – CCD	15	37,500	0	37,500
International Specialist - FCCC	15	37,500	0	37,500
International Technical Specialist	12	30,000	0	30,000
International Evaluation Specialist	4	10,000	0	10,000
Total		152,500	0	152,500

127. No UNDP Implementing Agency services are being charged to the Project Budget. All such costs are being charged to the IA fee. The Government of Papua New Guinea has requested UNDP to provide a few execution services (including procurement and recruitment) under the National Execution Arrangements, and these will be charged to the Project Budget. Details of such charges can be provided at the time these services are requested.

D.2 Cost Effectiveness

128. Explain how the financing of project is cost-effective. Refer to the leveraging power and synergies, as well as the percentage of project management costs of the total project budget. Include any other relevant information that strengthens the argument that the project is cost-effective.

Table 8: Project Costs (%age)

Project Budget Component by Contribution type	Contribution (US\$)	Percentage (%)
Component 1: GEF	244,500	21
Component 1: Co-Financing	275,000	24
Component 2: GEF	208,000	18
Component 2: Co-Financing	209,000	18
Project Management: GEF	47,500	4
Project Management: Co-Financing	166,000	14
Total	1,150,000	100

D.3 Co-financing

129. Important co-financing is being provided by the Government of Papua New Guinea to establish their Environmental Management Information System. A significant portion of the government co-financing will be used to acquire hardware and software, as well as to make available government staff to participate in training on how to use the EMIS, in particular how to use newly accessible data and information to develop improved policy interventions to meet global environmental benefits. Expertise is very difficult to access in Papua New Guinea, and as a result international specialists must be recruited to interpret the three Rio Conventions' data and information management needs.

Table 9: Co-financing Sources

Name of Co-financier	Classification	Type	Amount	
			Confirmed (US\$)	Unconfirmed (US\$)
DEC	Government	Grant	300,000	
DEC	Government	In-Kind	300,000	
UNDP	GEF Implementing Agency	Grant	50,000	
Total Co-financing			650,000	

D.4 Total GEF Work Plan and Budget

Award ID:	TBC
Project ID:	TBC
Award Title:	Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits
Business Unit:	PNG10
Project Title:	Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits
PIMS No:	4930
Implementing Partner (Executing Agency)	Department of Environment and Conservation (DEC)

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	Budget Notes:
COMPONENT 1: Establish Integrated Environmental Information Management System (EMIS)	DEC	62000	GEF	71300	Local Consultants	30,000	9,000	9,000	48,000	1
				71200	International consultants	37,500	24,000	21,000	82,500	2
				72100	Contractual services: Companies	73,000	21,000	20,000	114,000	3
					Sub-total GEF	140,500	54,000	50,000	244,500	
					Total Outcome 1	140,500	54,000	50,000	244,500	

COMPONENT 2: Institutional strengthening for improved monitoring of the global environment	DEC	62000	GEF	71300	Local Consultants	20,000	27,000	17,000	64,000	1
				71200	International consultants	13,000	29,500	17,500	60,000	2
				72100	Contractual services: Companies	15,000	39,000	24,000	78,000	3
				74100	Professional Services	-	3,000	3,000	6,000	7
					Sub-total GEF	48,000	98,500	61,500	208,000	
					Total Outcome 2	48,000	98,500	61,500	208,000	

GEF Outcome/Atlas Activity	Responsible Party/Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	Budget Notes:
Project Management	DEC	62000	GEF	71300	Local Consultants	8,500	8,000	8,000	24,500	4
				71200	International consultants	0	0	10,000	10,000	5
				71600	Travel	0	0	2,500	2,500	6
				74599	UNDP cost recovery charges - Bills	2,750	2,750	5,000	10,500	7
					Sub-total GEF	11,250	10,750	25,500	47,500	
					Total Outcome 3	11,250	10,750	25,500	47,500	
					GEF Total	199,750	163,250	137,000	500,000	

Budget Notes:

1. Local Consultants cost: National CBD Specialist, National CCD Specialist, National FCCC Specialist, Public Administration Expert, Policy/Legal Expert, IT and Knowledge Management Expert (See Annex 10)
2. International Consultants cost: International Specialist – CBD, International Specialist – CCD, International Specialist – FCCC, International, Technical Specialist, International Evaluation Specialist (See Annex 10)
3. Contractual Services: Contractual services: Rio Convention data analysis software, Meeting services for expert and stakeholder consultation, Workshop venue cost for trainings, Rio Convention data flow system and tracking software (See Annex 10)
4. Project Manager cost
5. International Consultant for Terminal Evaluation
6. Travel
7. Direct Project Services Cost, as per the UPL, according to signed Letter of Agreement (Annex 12)
8. Audit fee, USD3,000 per year

E. Institutional Coordination and Support

E.1 Core Commitments and Linkages

130. Papua New Guinea's overall policy on the environment is to create awareness of the dangers of environmental degradation and enhance its monitoring capabilities to ensure strict compliance by all of the regulations of the various environmental acts and legislation. This applies to the natural resource sectors of forestry, mining, agriculture and fisheries. The aim is to use terrestrial and marine resources on a sustainable basis to provide long-term development opportunities for natural resources owners, to pursue the protection and conservation of ecologically and culturally important forest areas and to maintain sound environment management practices. The government priorities are to ensure resource owners play meaningful role in the planning and implementation of development and conservation activities, by improving their understanding of the environmental and social impact of different land use. The government has also placed an emphasis on increasing the capacity of relevant agencies to ensure environmental regulations are being monitored and respected. This includes support for capacity building of environmental related non-government organizations and community-based organizations. The CCCD project is a direct contribution to helping Papua New Guinea meet its national environmental priorities through the strengthening of data and information management capacities as well as monitoring and reporting of environmental and/or development indicators.

E.1.a Linkages to other activities and programmes

131. There are many programmes and projects with which this project has linkages. The most relevant and their status are summarized in Annex 13. One of the very first activities to be undertaken by the project at its inception is the baseline assessment of the current data and information management systems with which the proposed EMIS will seek to create synergies. This assessment will be undertaken through a detailed expert review, consultations with the various stakeholder institutions, and building upon this analysis facilitate a series of consultations among these institutions to discuss and agree on the collaborative approaches and partnerships.

132. For example, the Office of Climate Change and Development (OCCD) is already benefitting from specialized data and information management, including specialized software. Much of the data and information requirements that are needed for climate change are being addressed by various climate change enabling activity projects that are funded by the GEF. This CCCD project will *not* duplicate their work, but rather identify specific data that are not being collected that can be done so under the CCCD project. The expert working group on climate change established under the CCCD project will involve key representatives from stakeholder institutions to discuss the data and information weaknesses and agree on how best to address these, in particular how to manage the data and information through the integrated and networked EMIS.

133. This same approach applies to other programmes and activities that have similar data and information management. Where this CCCD project is unique from all other projects, is that there is no comprehensive approach in Papua New Guinea to reconcile and network these many data and information management systems. While there are *ad hoc* agreements between projects and programmes for data and information sharing, these are largely through externally-funded projects. The CCCD project aims to institutionalize these partnerships and develop robust yet adaptable data sharing protocols. This includes assessing cost recovery from the use of the EMIS in order to ensure its financial sustainability. This specific exercise will be undertaken through the resource mobilization plan.

E.2 Implementation and Execution Arrangements

134. The project implementation and execution arrangements have primarily been designed around the need to ensure effective whole-of-Government engagement on key aspects of national policy development and decision-making, while recognizing the critical role that partnerships will play in the implementation process. As articulated above, a key barrier to effective implementation of GEF projects has been the failure to engage effectively with key agencies, particularly of the national Government that has the ability to undermine whether deliberately or incidentally the objectives of GEF funded projects in PNG. The new whole-of-Government approach successfully developed by the DEC for the implementation of GEF projects in its effort to meet the country's obligations under the Rio Conventions provides a clear direction and approach for future biodiversity conservation work in PNG for national and global benefits. The policy coordination and stakeholder engagement approach and consultation provides for effective coordination within and across each level of Government and provides for formal engagement of relevant authorities in decision making at different levels.

135. UNDP is the GEF Implementing Agency for this project, with the UNDP Country Office responsible for transparent practices, appropriate conduct and professional auditing. UNDP PNG will be responsible for project oversight, ensuring milestones are achieved. It will undertake quarterly financial and technical monitoring as part of its oversight functions. In addition, UNDP will be responsible for: (i) coordinating with the UN Country Team in PNG with a view to mainstreaming in their interventions at the country level and funding as appropriate; (ii) establishing an effective networking between project stakeholders, specialized international organizations and the donor community; (iii) facilitating networking among the country-wide stakeholders; (iv) reviewing and making recommendations for reports produced under the project; and, (v) establishing and endorsing the thematic areas, with a view to ensuring linkage to national policy goals, relevance, effectiveness and impartiality of the decision making process.

136. The Executing Agency is the Department of Environment and Conservation, which will assign a National Project Director (NPD) and provide its staff and network of experts as support to Project Management Unit (as part of government co-financing). The DEC will be responsible for the following functions:

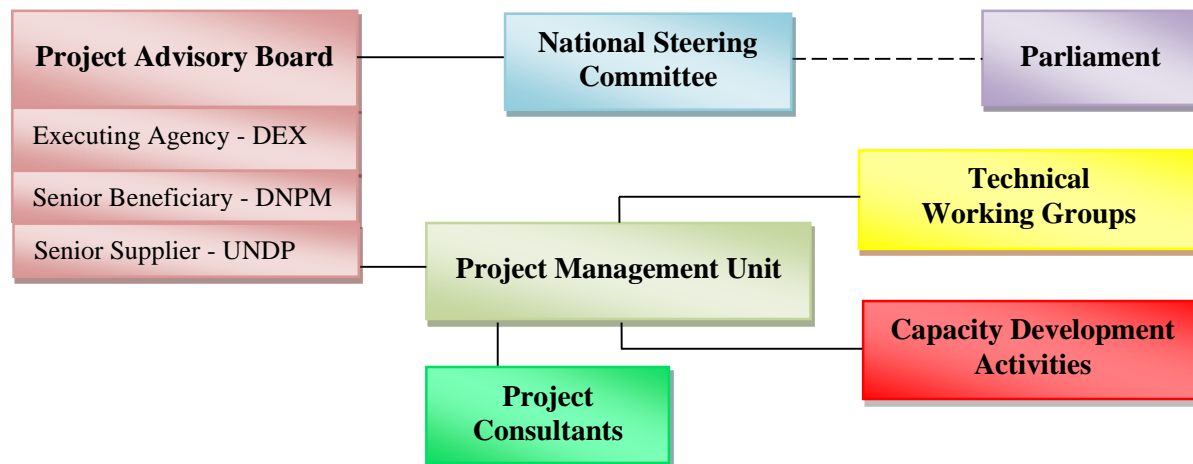
- Coordinating activities to ensure the delivery of agreed outcomes;
- Certifying expenditures in line with approved budgets and work plans;
- Facilitating, monitoring and reporting on the procurement of inputs and delivery of outputs;
- Coordinating interventions financed by GEF/UNDP with other parallel interventions;
- Preparation of Terms of Reference for consultants and approval of tender documents for subcontracted inputs; and
- Reporting to UNDP on project delivery and impact

137. The Managers within DEC who report to the NPD are responsible for: (i) ensuring professional and timely implementation of the activities and delivery of the reports and other outputs identified in the project document; (ii) coordination and supervision of the activities outlined in the project document; and, (iii) facilitating communication and networking among key stakeholders at the national level.

138. Project Advisory Board: This Board will be established at project inception, and will provide management oversight of project activities and is to be chaired by the GEF Focal Point, who is located in the DEC. The Board will review progress and evaluation reports, and approve programmatic modifications to project execution, as appropriate and in accordance to UNDP procedures. Policy recommendations will be discussed and recommended for consideration by the Cabinet of Ministers and Parliament. The Board will be chaired by the NPD (see paragraph 142). In addition to the DEC, government membership of the Project Advisory Board will include the Department of National Planning and Monitoring (DNPM) as well as Department of Agriculture and Livestock, National Agriculture and Quarantine Inspection Authority, UPNG, Papua new Guinea Forest Authority, Office of Climate Change and Development and selected representatives of relevant statutory agencies, one representative from the NGO community and academia. Non-state

stakeholders will also be represented on the Project Advisory Board, namely from the private sector, academic and research institutions, NGOs, and CSOs. The Project Advisory Board will meet at least four (4) times per year, practically at the UNDP Country Office Headquarters. Meetings will be co-financed by UNDP.

Figure 2: Project execution



139. Specifically, the PAB will be responsible for: (i) review and approval of the Project’s Annual Work Plan; (ii) provision of advice as requested for the project when guidance is required by the National Project Director, ensuring coordination among agencies and key sectors; (iii) provide guidance to implementation to ensure consistency with national policies and strategies; (iv) provide oversight to the work of the implementing units and organizations, monitoring progress (v) review financial management and annual financial reports; (vi) monitor effectiveness of project implementation and structures; and (viii) provide guidance to major evaluations, review evaluation reports and monitor implementation.

140. The DNPM is the Senior Beneficiary of the project on the basis that the project will be strengthening and integrating Rio Convention provisions into their sectoral policies, legislation, policies and plans and institutional mandates. UNDP will be the Senior Supplier, providing technical guidance and support for the cost-effective procurement and implementation of project services and activities, including project implementation oversight through regular monitoring and reporting.

141. National Project Director: A senior government official will be designated at the National Project Director (NPD), and will be responsible for the administrative, financial and technical coordination of the project and reporting progress, and overall management oversight of the project. The NPD will devote a significant part of his/her working time on the project. Duties and responsibilities of the NPD are described in Annex 7. In the fulfillment of his/her responsibilities, the NPD will be supported by the Project Advisory Board and a full-time National Project Manager (NPM). The NPD will be assisted by key technical and administrative staff. He/she will also participate in meetings of the UNDP Outcome Board.

142. Project Management Unit: A Project Management Unit (PMU) is to be created and its role is to provide administrative support to the Managers of each GEF activity within DEC under the day-to-day guidance of the NPD. The PMU shall be based at the DEC and administered by a full-time National Project Manager (NPM) and supported by a part-time assistant. The PMU shall be staffed by regular personnel of the DEC, to be complemented by staff to be contracted under this and other GEF or donor funded projects. The PMU is responsible for overall management, monitoring, and coordination of Project implementation according to UNDP rules on managing UNDP/GEF projects. Specifically, its responsibilities include: (i) contracting of and contract administration for qualified local and international experts who meet the formal

requirements of the UNDP/GEF; (ii) management and responsibility of all financial administration to realize the targets envisioned; (iii) organizing the meetings of the PAB; (vii) review and approval of work and financial plans of implementing partners; (viii) monitor and support the activities of the implementing partners.

143. Consultants: The project will contract an international expert for each of the three Rio Conventions. Their role is to lead the technical consultations on the development of Rio Convention data and information needed for the EMIS, as well as the study on the best practice analytical methodologies, among other technical needs directly related to each of the Rio Conventions. The project will also contract an international consultant to design the EMIS infrastructure and to assist in the cost-effective procurement of the hardware and software company for the design and procurement of the technology needed to set up the EMIS. Three national consultants will be recruited to support the work of the three international consultants. These national consultants will co-facilitate the technical trainings and learn-by-doing exercises with the international consultants and under the supervision of the Project Manager. See Annex 7 for indicative Terms of References for these experts.

144. Capacity Development Activities: The project will take an adaptive collaborative management (ACM) approach to implementation. That is, UNDP and DEC will manage project activities in order that stakeholders are involved early and throughout project implementation, providing regular input of the performance of project activities. This will help signal unforeseen risks and contribute to the timely modification and realignment of activities within the boundaries of the project's goal and objectives.

145. Technical Working Groups (TWGs): A working group comprised of independent experts, technical government agency representatives, as well as representatives from stakeholder groups will discuss and deliberate on various technical deliverables under the project. This includes the peer review of draft technical studies. There will be a TWG for each of the three Rio Conventions.

146. Stakeholder Consultations: These consultations will focus on the active participation of stakeholders in project activities as well as management. Stakeholder representatives will be invited to actively engage as participants in the training and learn-by-doing exercises. A special meeting of stakeholders will take place prior to the meeting of the Project Advisory Board to make recommendations for their consideration as part of the project's adaptive collaborative management.

147. Communications and visibility requirements: Full compliance is required with UNDP's Branding Guidelines. These can be accessed at <http://intra.undp.org/coa/branding.shtml>, and specific guidelines on UNDP logo use can be accessed at: <http://intra.undp.org/branding/useOfLogo.html>. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects needs to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo. The GEF logo can be accessed at: http://www.thegef.org/gef/GEF_logo. The UNDP logo can be accessed at <http://intra.undp.org/coa/branding.shtml>.

Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.pdf. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

148. Learning and knowledge sharing: Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.

The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any

other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects.

Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

F Legal Context

149. This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA (or other appropriate governing agreement) and all CPAP provisions apply to this document. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

150. The implementing partner will put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried; as well as assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

151. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

146. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP/GEF hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document The list can be accessed via:

<http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>.

PART II: ANNEXES

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Annex 1: The Conservation and Environment Protection Authority Act

This Act transforms the Department of Environment and Conservation into a non-commercial statutory authority to be called the *Conservation and Environment Protection Authority* (CEPA). This Authority will assume responsibility for the administration of legislation currently administered by the Department, namely:

- The Fauna (Protection and Control) Act (1966)
- The Crocodile Trade (Protection) Act (1974)
- The Conservation Act (1978)
- The International Trade (Fauna and Flora) Act (1979)
- The Environment Act (2000)

This Act provides for the conservation and protection of the environment in accordance with the Fourth National Goal and Directive Principle (Natural Resources and Environment) of the Constitution. The National Parks Act (1982) is repealed and its processes absorbed into the new legislation. CEPA will be able to hold property and land, and source and manage funds from within the country and overseas for purposes of environmental management and conservation. However, no land may be sold without the consent of the National Executive Council. CEPA will administer environmental permits and conservation trade measures, and will be able to conduct its own prosecutions for offences. CEPA will in effect become the State's environmental auditor. The functions of the Authority are as follows:

- Do all things necessary for the conservation and protection of the environment in accordance with the environment conservation laws and any policy directions of the Minister and the National Executive Council
- Coordinate with provincial and local level governments and sub-national authorities to foster, management, and monitor environmental conservation strategies and programmes in the country
- In relation to land under the care, control and management of the Authority;
 - Establish and maintain zoological and botanical parks and gardens
 - Permit and assist zoological and botanical research
 - Construct buildings, walks, drives, fences, enclosures, dams, reservoirs, drains, and other structures for or in connection with the purposes of the Authority
- Impose and receive rents, fees, charges, and bonds in respect of its functions under any environmental conservation law, including but not limited to providing services related to the approval and issue of environmental permits, and the investigation and audit of activities under the Environment Act (2000)
- Promote Papua New Guinea's laws, regulation, and policies relating to conservation and environmental matters within the country and overseas
- Give advice to the Minister and maintain dialogue with other government agencies on environmental conservation laws and policies
- Encourage, accept, administer, and allocate aid monies, whether from within the country or elsewhere, for purposes consistent with its objects
- Accept donations, gifts, devises, and bequests made to the Authority and control, manage, and develop those donations, gifts, and bequests in accordance with any conditions attached to them
- Where it considers it necessary or convenient to do so, establish committees and similar bodies in relation to its functions, in accordance with regulation and to that effect
- Perform such other functions and duties as may be conferred on it by this Act of any other law

This Act also establishes a Board to direct the financial and human resources of CEPA, and be comprised of seven (7) members, including the Managing Director, the Departmental Heads for treasury, national planning and monitoring, and provincial and local level governmental matters, as well as three persons nominated by the Business Council of Papua New Guinea, of which one is a lawyer and another a registered public accountant.

Annex 2: *Environmental information management systems in Papua New Guinea*

The Department of Environment and Conservation: On-going and current Information Management Systems Arrangements Listed in this table are the information management systems managed by the Department of Environment and Conservation (DEC)		
Name of Information System	Status	Next steps /Way forward
Sustainable Indicators	<p>This information system is mainly on the MDG7 indicators and targets</p> <p>DEC has submitted supplementary reports on the MDG7 to the Department of National Planning and Monitoring.</p>	DEC needs more dedicated officers in this area.
ArcGIS	<p>This is a geographical data base that is managed by the Environmental Information and Science branch of the DEC. It's operated on MS Access and records of personal geographical database information.</p>	<p>More staff is needed in this area because some of the officers in this section have been moved to other sections.</p> <p>Overtime, the EIS and GIS sections of the DEC have been given little or no attention at all. And as a result, only two officers are placed in the section to attend to pressing issues regarding the information management systems – environment</p> <p>Under the current transitional arrangements for DEC to CEPA, environment information management systems are becoming an important tool to be used for the sustainability of the organization in the long run. And so it is important that the ArcGIS hardware is upgraded to meet the current development challenges in terms of environmental management and governance for national and global benefits.</p>
PNG Sustainable Information Management System (SIMS) 1993 – 1996 updated to Bio Information Management Systems	<p>The PNG SIMS was designed in 1993 with the aim of managing the biological information of the country. Due to the many reasons notably, financial constraints and lack of capacity, it was not operational till the current reforms whereby the name has been changed to be the Bio Information Management Systems.</p> <p>Under the current CEPA arrangements, it is considered that up to date data and information on the biodiversity of the country is important. And also for reporting purposes, the Biodiversity Information Management system has been set up.</p>	<p>The way forward in this approach on the BIMS is for DEC staff involved one way or the other on information management should undergo trainings to enhance their capacity.</p> <p>Sustainable financing is important</p>
Updated Environmental Permitting Systems	<p>The Environmental Permit database is currently updated to integrate the principle of REDD+ and Biodiversity offsets.</p>	<p>There is a need for tracking devices to be installed to monitor the permits issued and also in applications.</p>
Hydrological data base	<p>The hydrological database of DEC plays important roles as specified under the Environment Act 2000 and various guidelines on the amount of water discharged, water quality and others.</p>	<p>There is a need now for installation of new software and also for a software engineer to develop the software as it's different from the MS applications. This is a costly exercise but it's important as far as CEPA is concerned.</p>

<p>Kokoda Initiative</p>	<p>The Kokoda Initiative is a partnership between the PNG and Australia on the Owen Stanley Ranges, Brown River Catchment and historic Kokoda Track. Among the many programs and projects that the initiative implements, is the social mapping and land mapping activity that involves the Geographical Information Systems (GIS) tools that the DEC rely upon for decision making.</p> <p>DEC work in partnership with the UPNG and the Australian National University has made significant progress in the conservation of the catchment protection area and its natural and cultural resources and values. This was achieved through investing in activities that provide strong foundation for effective management of the catchment including forging strong partnership with the Commonwealth scientific and industrial research organization and parks Australia, to support a biodiversity capture and collection programme to continue capacity building and training in the areas of spatial and social mapping and archaeology.</p>	<p>On-going training of officers to use the technology is a need for DEC at the moment as it transit into being an Authority.</p>
<p>Species management inventory</p>	<p>Coordinated by the Sustainable Environmental programme branch, the inventory takes stock of all the newly found species (both plants and animals). WWF is a good partner in this programme. Registration of researched information on biological species around the country – hot spots of rare species and also within the Protected Areas, national parks and wildlife sanctuary.</p> <p>This however, is not managed effectively but on ad hoc basis by the DEC. however, its managed well by the WWF</p>	<p>DEC needs more capacity in this area in terms of additional computers and hardware to store this information and updated over a period of time.</p> <p>Also, changes in political heads and shifting of priorities every five years are a big challenge to ensuring consistency with the data and information.</p> <p>Sustainable financing is also an important factor in this area</p>

Other Agencies and Partners

Name of Information System	Lead Agency	Linkages to DEC's mandate and environmental programme priorities	Status /Issues	Next steps
<p>Remote Sensing Centre The UPNG is a resourceful partner to this project as it housed the Geo book and also up to date environmental data.</p> <p>Earth Receivable Station A ground stationed satellite orbiting at 9am everyday (5 days clear) is stationed at the campus to receive geographical information. It was funded by the EU. The station is not in operation anymore.</p>	University of PNG	<p>The Environmental Sciences strand of the UPNG partners with the DEC as the government authority responsible for the information and data management of the country's biodiversity and natural resources.</p> <p>DEC provides the learning opportunities for the environmental sciences students to be engaged in different fields of the department to gain hands on experiences on the practical side of the theory component taught to them at the University.</p> <p>The University shares the information and expertise in providing data and information and partners in the development of most of the national reports, policies, strategies, legislations and projects on environmental management.</p>	<p>Although there is clear understanding between the DEC and UPNG, there are still limited efforts in sharing of information and knowledge.</p> <p>Individual resistance to change is also a main challenge experienced by DEC in various avenues where information and contributions are sought from the UPNG</p> <p>Also, on a number of engagements, the UPNG are hired as consultants to provide the expertise and the information needed by DEC and the GoPNG.</p> <p>The UPNG is an institution established under an Act of Parliament and so it has its own Jurisdictions to operate under. And so the GoPNG through the DEC could not manipulate their actions but only through MoU/MoA or other contractual agreements.</p>	<p>Revisit of any MoU / MoA between the two organizations.</p> <p>Particular attention should be on the sharing of information between the two organization</p>
<p>Electronic Tenement Administration System</p>	Mineral Resource Authority (MRA)	List of exploration licenses both active and in application overlap with declared protected areas. This was found out in a recent exercise involving plotting protected areas data against tenement maps.	<p>Environmental information should be readily available for decision making</p> <p>The current Tenement system can only be successful provided that there is an up to date data for protected areas available at the time of application for mining permits.</p>	
<p>PNG Info</p>	Dept. of National Planning	<p>Coordinated by the Department of National Planning and Monitoring, the PNG Info is a database of all the development information, including the key sectoral deliverables, indicators and targets.</p> <p>DEC is a member to the technical committee and represents the environment sector.</p>	<p>There is still lacking in DEC an – up-to date information centre to link up to this national information database.</p> <p>Most of the information when sent to National planning office is distorted or lost and not accurately reflected in the development agenda of the country. So this project is important to DEC/CEPA</p>	

<p>National Marine species inventory</p> <p>*similar to what DEC Marine section is doing</p>	<p>National Fisheries Authority</p>	<p>The Department of Environment and Conservation and The National Fisheries Authority recognize the rights of the coastal resource owners.</p> <p>The PNG Marine Programme would ensure the customary needs of coastal communities are recognized and respected in all transactions affecting the resources or the area in which they operate.</p> <p>Hence both the DEC and NFA are working in collaboration to ensure the Coral Triangle Initiative (CTI) is well and truly implemented in partnership with public, private and non-government agencies in Papua New Guinea, with full support from notable political and donor partners and with various government support in-country.</p> <p>The data collected and collated by DEC and NFA are not properly managed in a central location that is easily accessible.</p>	<p>There is a need to establish and develop information and data management systems (similar to the terrestrial data management system PNGSIMS) to support decision-making on marine and related issues; and</p>	
<p>Species Inventory Conservation Programme</p> <ol style="list-style-type: none"> 1. Freshwater 2. Forests 3. Marine Species 	<p>WWF</p>	<p>Supporting both Marine and terrestrial programmes, the WWF has a strong and up-to-date database of the species, both plants and animals in most parts of the country.</p> <p>Partnership, technical assistance, small-scale environmental projects in WWF priority areas.</p>	<p>Help DEC with very good data base on protected areas and policy.</p> <p>Community Awareness on Tri-National Partnership for Western Pacific Leatherback Turtle Conservation project started in July 2007. New Guinea Initiative (NGI). Focus on interventions at national, regional and/or global levels, and is built on the work and achievements of the programs such as the Forests of New Guinea (FoNG). Initial focus of NGI is on establishing institutions that meld traditional management and modern sustainable resource planning in two biodiverse landscapes in Southern PNG to improve</p>	<p>DEC should strengthened the partnership and reach an understanding to access and share the information</p> <p>The only issue of this partnership is coordination and management of the information</p>

			livelihoods and maintain biological and cultural diversity	
Plants and Seeds Inventory	National Agriculture Research Institute (NARI)	<p>NARI partners with DEC to deliver on many of the GoPNG's development initiatives.</p> <p>Of significance is their work towards fulfilling the third objective of the UNCBD, is the: "fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.</p>	NARI together with key stakeholders partners with DEC in supplying the information and data on genetic resources of the country. Initial work on the ABS initiative has not been completed.	<p>There is a GEF Regional ABS Project under the Nagoya Protocol</p> <p>Implementation Fund (NPIF) that DEC could coordinate on to strengthen this information and data base.</p> <p>Also, update the current status of the information that would assist in a long way towards ratification and implementation of the Nagoya Protocol under the CBD.</p>
Geographical Database on Forests	The Papua New Guinea Forest Institute	<p>The responsibility to provide through research, scientific information & basis for the sustainable management of Papua New Guinea's forests.</p> <p>Research activities within FRI are arranged within four programmes: sustainable forest management; planted forests; forest biology; and national botanical garden. Two other support programmes: technical services and administration, provide services to ensure that resources are available to undertake approved research and that the results of research are communicated to those who need them.</p>	Research - help with GIS & develop data for policy development.	DEC needs to integrate this information into the IEMS.
Land use planning/policy	Department of Lands & Physical Planning	<p>A proper land use planning that incorporates environmental sustainability.</p> <p>Land clearing policy has to incorporate environment sustainability.</p>	Develop sound policy & legislative framework that promotes the balanced use of land for sustainable economic, social & environmental development while guaranteeing land rights.	GIS capacity- capacity to monitor land use.

Sustainable forest management & good governance in the forestry sector	Papua New Guinea Eco-Forestry Forum	DEC help on-ground implementation of sustainable forestry.	Well-established network, it is in a good position to make meaningful contribution to the REDD+ process.	
PNG Country Programme PNG Environmental Education Programme	Wildlife Conservation Society (WCS)	Partnership, targeted research, studies, awareness raising, education and training within small-scaled community based environmental projects.	Training future conservation leaders; conducting much-needed research; managing two site-based conservation areas, Crater Mountain Wildlife Management Area and Mekil Conservation Initiative. <ul style="list-style-type: none"> • Carter Mountain Wildlife Management Area • Mekil Conservation Initiative • Avian community ecology • Ecology and conservation of cassowaries • Long-beaked echidna ecology • Biogeography and conservation planning • Conservation education • Field training for PNG students 	
The Nature Conservancy's Tropical Marine Programme <ol style="list-style-type: none"> 1. Biodiversity conservation 2. Protected areas 3. Sustainable livelihoods 4. Marine environment 	The Nature Conservancy (TNC)	Partnership, targeted research, studies. Small-scaled community based environmental projects in rural areas with particular attention to biodiversity conservation	TNC helped establish the Mama Graun (Mother Earth) Conservation Trust Fund – the first of its kind in PNG designed to provide long-term, uninterrupted funding for conservation work. TNC is working with local clans in Adelbert Mountain to pioneer a new conservation mechanism – Conservation Covenants (essentially long-term land leases. Following recent discussions with landowners and government agencies the Conservancy has begun implementing this groundbreaking project. TNC developed a multi-pronged conservation programme, including the establishment of: a network of locally managed marine protected areas; a local conservation NGO; a research and conservation centre; and an outreach and education programme. TNC helped	Sustainable financing and effective coordination of the management of information and data collected by TNC

			establish the first marine ‘community protected area’ in Kimbe Bay.	
National Sustainable Development Programme Sustainable Development Programme in Western Province	PNG Sustainable Development Programme Ltd	Investments, partnership in sustainable management of natural resources, sustainable development, protected areas and biodiversity conservation while supporting the income learning opportunities in local communities, etc. 1. Sustainable development 2. Rural development 3. Energy 4. Community development	Support to sustainable agriculture (Lake Murray Village Rubber project, South Fly and Lower Middle Fly Village Holder Rubber projects, South Fly Cashew Nursery project), promoting sustainable forestry development and management (Western province Barramundi Development Program), developing fisheries and eco-tourism industries, and maintaining environment sustainability (Western Province Hatchery and Aquaculture Development project, Barramundi Habitat Conservation and restocking Programme, Promoting Eco-Tourism Industry project),	
National Tourism Activity Database	PNG Tourism Promotion Authority (PNG TPA)	Integrate the National Government Tourism Policy into its ESEG Policy Framework. Working in collaboration with the TPA in implementing its strategic plans especially in the area of Environment Protection and enhancement of PNG’s unique cultural heritage and natural environment. Look at environmental impact from waste management by influx of tourists at the community level & what criteria for issuing license to tour companies.	Mandated to develop, market and promote PNG as a Desired Tourist Destination PNG TPA is responsible for tourism development in the context of the Government’s Export Driven Economic Policy in line with the Medium Term Development Strategy. PNG TPA is also involved in fostering the development of tourism in PNG in a manner calculated to maximize the economic benefits of the industry to Papua New Guineans, while at the same time protecting the society, culture, and the environment of the country from harmful exploitation.	Useful to DEC in terms of the being an industry that is promoting economic growth and at the same time advocate to preserve the environment and enhancing the unique PNG cultural diversity.

Annex 3: Capacity Development Scorecard

Project/Programme Name: Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits

Project/Programme Cycle Phase: Project preparation Date: March 2014

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
CR 1: Capacities for engagement						
Indicator 1 – Degree of legitimacy/mandate of lead environmental organizations	Institutional responsibilities for environmental management are not clearly defined	0		The DEC is mandated by law to deal with all environmental issues in the country. The DEC is the focal point for the Rio Conventions, while the Office of Climate Change and Development (OCCD) is responsible for the FCCC. Apart from DEC and the OCCD, it is unclear how the other agencies are mandated to address the Rio Agenda.	The capacity of lead environmental organizations and individual capacities will be strengthened. By the end of project, PNG will have improved capacities to coordinate environmental data and information in such a way that will create synergies in the other government agencies for the national implementation of the Rio Conventions	2
	Institutional responsibilities for environmental management are identified	1				
	Authority and legitimacy of all lead organizations responsible for environmental management are partially recognized by stakeholders	2				
	Authority and legitimacy of all lead organizations responsible for environmental management recognized by stakeholders	3	3			
Indicator 2 – Existence of operational co-management mechanisms	No co-management mechanisms are in place	0		Most of the programmes and policy functions of the DEC are implemented together with other agencies and organizations. For example, the Coral Triangle Initiative and marine programmes are co-managed by the National Fisheries Authority. However, these are all project based. There are virtually no functional co-management arrangements for the sharing of data and information.	The project will place significant emphasis on consensus building and collaboration on the shared access to data and information. One of more Memoranda of Agreement will be negotiated and signed to facilitate co-management of the integrated Environmental Management Information System	2
	Some co-management mechanisms are in place and operational	1	1			
	Some co-management mechanisms are formally established through agreements, MOUs, etc.	2				
	Comprehensive co-management mechanisms are formally established and are operational/functional	3				
Indicator 3 – Existence of cooperation with stakeholder groups	Identification of stakeholders and their participation/involvement in decision-making is poor	0		Inadequate planning and engagement of stakeholders in conservation projects lead to commitments that are either half-hearted commitment or no commitment at all. Limited consultations prior to the project implementation results in insufficient awareness and commitment to conservation projects.	From the onset of project implementation, stakeholder representatives will be engaged in a regular process of consultation and participation in substantive project activities, in large part as project partners. They will participate in the training and learn-by-doing exercises.	2
	Stakeholders are identified but their participation in decision-making is limited	1	1			
	Stakeholders are identified and regular consultations mechanisms are established	2				
	Stakeholders are identified and they actively contribute to established participative decision-making processes	3				

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
CR 2: Capacities to generate, access and use information and knowledge						
Indicator 4 – Degree of environmental awareness of stakeholders	Stakeholders are not aware about global environmental issues and their related possible solutions (MEAs)	0		Stakeholders are aware of the issue of climate change, forest degradation and biodiversity conservation because these affect them directly; however, due to lack of awareness, not many know that these three environmental challenges make up the Rio Agenda. With such a link established, Government agencies responsible for implementing the Rio Agenda can easily link Rio Agenda to what people already know. Financial as well as technical assistance can be sought from under the Rio Agenda.	In addition to the three Rio Conventions, this project will respond to PNG's data and information management needs under other multilateral environmental agreements A series of sensitization workshops will be undertaken to raise awareness of the value and contribution of the EMIS widely to government and other stakeholders.	1, 2
	Stakeholders are aware about global environmental issues but not about the possible solutions (MEAs)	1	1			
	Stakeholders are aware about global environmental issues and the possible solutions but do not know how to participate	2				
	Stakeholders are aware about global environmental issues and are actively participating in the implementation of related solutions	3				
Indicator 5 – Access and sharing of environmental information by stakeholders	The environmental information needs are not identified and the information management infrastructure is inadequate	0		PNG targets in terms of the Rio Conventions have not been sufficiently articulated, although good efforts are underway, in particular through GEF-funded enabling activities. Notwithstanding, this data remains relatively inaccessible other than for internal OCCD, the Office of the Prime Minister and few key development partners. This has resulted in data deficient reports that could use this same data and information, but which do not have the resources to create them. Efforts in data collection are being made by other stakeholders, in particular NGOs, but there is no policy for facilitating the sharing of data. There is limited capacity and infrastructure for sharing and managing information collected from different sources.	The project will facilitate collaborative arrangements among stakeholders to secure low cost and barrier-free access and sharing of information, reinforced through Memoranda of Agreement. The EMIS will include an Internet-interface that is user-friendly for access data and information relevant to the three Rio Conventions, among other MEAs.	1
	The environmental information needs are identified but the information management infrastructure is inadequate	1	1			
	The environmental information is partially available and shared among stakeholders but is not covering all focal areas and/or the information management infrastructure to manage and give information access to the public is limited	2				
	Comprehensive environmental information is available and shared through an adequate information management infrastructure	3				

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
Indicator 6 – Existence of environmental education programmes	No environmental education programmes are in place	0		Efforts have been in made to teach environment studies from the primary level to the University level, but these are not fully developed and delivered. NGOs have developed curricula on climate change but these are yet to be integrated into the national curricula. The wider public is not sufficiently aware or understands the Rio Conventions, though traditionally they do make the connections from the local to the global. Awareness-raising is undertaken in an <i>ad hoc</i> manner.	The project will undertake some sensitization workshops that will involve the wider public. A number of the project trainings could be carried out at the university. Consultations will be undertaken to facilitate the adoption of the existing Rio Convention curricula.	2
	Environmental education programmes are partially developed and partially delivered	1	1			
	Environmental education programmes are fully developed but partially delivered	2				
	Comprehensive environmental education programmes exist and are being delivered	3				
Indicator 7 – Extent of the linkage between environmental research/science and policy development	No linkage exist between environmental policy development and science/research strategies and programmes	0		In PNG there is very little linkage between scientific research and the formulation of environmental strategies and policies. Most policies are driven by a political agenda, resulting in frequent changes in the government. This includes staff turnover, the result of which is reduced pool of technically qualified staff.	As part of the information management system, the importance of using data for decision-making will be part of the training and sensitization workshops. This will be strengthened by building the capacity of staff to manage data for policy and strategy formulation.	1
	Research needs for environmental policy development are identified but are not translated into relevant research strategies and programmes	1	1			
	Relevant research strategies and programmes for environmental policy development exist but the research information is not responding fully to the policy research needs	2				
	Relevant research results are available for environmental policy development	3				
Indicator 8 – Extent of inclusion/use of traditional knowledge in environmental decision-making	Traditional knowledge is ignored and not taken into account into relevant participative decision-making processes	0		Traditional knowledge is acknowledged as a valid knowledge system in decision-making but it is not collected and used at the national level for environmental conservation issues. Despite that, the DEC supports the use of traditional knowledge at the local level through the Wildlife management Areas – a form of Protected Area that is done on customary land by the owners of the land.	The project will encourage the documentation of traditional knowledge as part of the data and information management, which is in line with the CBD.	1, 2
	Traditional knowledge is identified and recognized as important but is not collected and used in relevant participative decision-making processes	1	1			
	Traditional knowledge is collected but is not used systematically into relevant participative decision-making processes	2				
	Traditional knowledge is collected, used and shared for effective participative decision-making processes	3				

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
CR 3: Capacities for strategy, policy and legislation development						
Indicator 9 – Extent of the environmental planning and strategy development process	The environmental planning and strategy development process is not coordinated and does not produce adequate environmental plans and strategies	0		There are adequate environmental plans and strategies in the DEC but these are partially implemented because of funding and other constraints. Past political instability has hampered sustained efforts for environmental conservation generally, due to changes in leadership and frequent new policy directives.	The EMIS will be institutionalized with DEC, the transformation of which will strengthen its long-term-financial sustainability, which in turn will facilitate more sustained implementation of national environmental strategies, including those with a global agenda. The EMIS is already part of the DEC corporate plan. Training workshops under the project are directly targeted to sufficiently large numbers of individuals in order to have the human resources necessary for policy implementation and oversight.	1, 2
	The environmental planning and strategy development process does produce adequate environmental plans and strategies but there are not implemented/used	1				
	Adequate environmental plans and strategies are produced but there are only partially implemented because of funding constraints and/or other problems	2	2			
	The environmental planning and strategy development process is well coordinated by the lead environmental organizations and produces the required environmental plans and strategies; which are being implemented	3				
Indicator 10 – Existence of an adequate environmental policy and regulatory frameworks	The environmental policy and regulatory frameworks are insufficient; they do not provide an enabling environment	0		Adequate environmental legislation is in place, but requirements of the Rio Conventions are not effectively integrated into or interpreted through national legislation. There is little coordination on the implementation of natural resource and environmental policies. Policy interventions often result in overlap, duplication of effort and weak implementation.	Networking amongst the different actors will be encouraged through this project. Policy guidelines and public awareness materials as well as in-depth analysis of best practices will lead to better enforcement of the existing environmental policies and strategies	1, 2
	Some relevant environmental policies and laws exist but few are implemented and enforced	1				
	Adequate environmental policy and legislation frameworks exist but there are problems in implementing and enforcing them	2	2			
	Adequate policy and legislation frameworks are implemented and provide an adequate enabling environment; a compliance and enforcement mechanism is established and functions	3				

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
Indicator 11 – Adequacy of the environmental information available for decision-making	The availability of environmental information for decision-making is lacking	0		Various PNG studies have been found to contain inaccurate or outdated data and information. There is limited capacity to identify the right targets to assess trends and progress relevant to the Rio Conventions. This is a result of there being limited in-country capacity to analyze data. These limitations make environmental information inadequate to support environmental decision-making processes. Decision-makers are also not adequately versed on the technical issues, and thus do not consult or make use of technical information as part of their decision-making process.	The project will train government staff and other stakeholders on how to collect and interpret data and information decision-making. This will include deconstructing Rio Convention obligations into measurable indicators.	1, 2
	Some environmental information exists but it is not sufficient to support environmental decision-making processes	1	1			
	Relevant environmental information is made available to environmental decision-makers but the process to update this information is not functioning properly	2				
	Political and administrative decision-makers obtain and use updated environmental information to make environmental decisions	3				
CR 4: Capacities for management and implementation						
Indicator 12 – Existence and mobilization of resources	The environmental organizations do not have adequate resources for their programmes and projects and the requirements have not been assessed	0		DEC has established partners that provide on-going funding and technical resources support. These are mainly UN agencies that provide both funding and technical assistance as part of its capacity-building support to the department to support implementation of obligations under the various multilateral environment agreements that the Government has ratified. Other major donors have to be secured to provide financing.	The project will undertake a structured set of activities to mobilize resources over the short-, medium-, and long-term.	2
	The resource requirements are known but are not being addressed	1	1			
	The funding sources for these resource requirements are partially identified and the resource requirements are partially addressed	2				
	Adequate resources are mobilized and available for the functioning of the lead environmental organizations	3				
Indicator 13 – Availability of required technical skills and technology transfer	The necessary required skills and technology are not available and the needs are not identified	0		Consideration of environmental issues in sectoral and regional planning is not systematic and rarely carried out. Some training is provided, but none on the integration of Rio Convention provisions into sectoral and regional planning. Sometimes, even when technology transfer takes place, there are no national experts to operationalize the activities (as they lack the capacity to do so).	The learn-by-doing exercises will demonstrate the value of the EMIS and catalyze the integration of the Rio Conventions	2
	The required skills and technologies needs are identified as well as their sources	1	1			
	The required skills and technologies are obtained but their access depend on foreign sources	2				
	The required skills and technologies are available and there is a national-based mechanism for updating the required skills and for upgrading the technologies	3				

Capacity Result / Indicator	Staged Indicators	Rating	Score	Comments	Next Steps	Contribution to which Outcome
CR 5: Capacities to monitor and evaluate						
Indicator 14 – Adequacy of the project/programme monitoring process	Irregular project monitoring is being done without an adequate monitoring framework detailing what and how to monitor the particular project or programme	0	0	Monitoring is undertaken within the construct of externally funded programmes and projects, but not systematically within corporate programmes due to insufficient resource, in particular financial and technical.	The project will include a data tracking system, which will be institutionalized within the construct of the EMIS	2
	An adequate resourced monitoring framework is in place but project monitoring is irregularly conducted	1				
	Regular participative monitoring of results in being conducted but this information is only partially used by the project/programme implementation team	2				
	Monitoring information is produced timely and accurately and is used by the implementation team to learn and possibly to change the course of action	3				
Indicator 15 – Adequacy of the project/programme monitoring and evaluation process	None or ineffective evaluations are being conducted without an adequate evaluation plan; including the necessary resources	0	0	There are limited examples of an adequate project/programme monitoring and evaluation in place in PNG. PNG has implemented numerous environmental programmes/project since ratifying the Rio Conventions, however, there is a lack of will to revisit those efforts and learn from those experiences.	Part of the training on the use of the EMIS will include how to use data and information to assess trends and progress to information policy decisions. The learn-by-doing exercises will help government staff engaging in them to think critically.	1, 2
	An adequate evaluation plan is in place but evaluation activities are irregularly conducted	1				
	Evaluations are being conducted as per an adequate evaluation plan but the evaluation results are only partially used by the project/programme implementation team	2				
	Effective evaluations are conducted timely and accurately and are used by the implementation team and the Agencies and GEF Staff to correct the course of action if needed and to learn for further planning activities	3				

Annex 4: Logical Framework

This log frame is to be reviewed and revised with the input of UNDP and the International Technical Advisor at the time of project inception.

Project Strategy	An integrated Environment Information Management System (EMIS)			Sources of verification	Risks and Assumptions
	Indicator	Baseline value	Target value and date		
Long-term goal: To develop and manage information for better planning decisions that help protect the global environment					
<p>Project objectives:</p> <p>To strengthen national capacities to measure, report and verify internationally agreed targets and indicators of global environment benefits</p>	<p>Outcome indicators:</p> <ul style="list-style-type: none"> An integrated environmental information management system for monitoring and reporting of PNG's MEA targets and indicators Capacity to use the information management system for monitoring and reporting of PNG's MEA targets and indicators 	<p>Baseline:</p> <ul style="list-style-type: none"> Absence of a system for managing data and information for reporting Limited capacity for handling data and information for reporting on MEA including the Rio Conventions 	<p>By the end of the project:</p> <ul style="list-style-type: none"> Rio Convention obligations are being better implemented through an integrated system of data and information managements system. Future reports will not be data deficient Increased capacity within relevant stakeholder groups to handle data and information relevant to the Rio Convention 	<p>Sources of verification:</p> <ul style="list-style-type: none"> Strategic documents within the DEC will indicate that the new system is institutionalized. The physical infrastructure for data management The increased reports produced by relevant staff using scientifically credible data and information 	<p>Risks and assumptions:</p> <ul style="list-style-type: none"> This project will receive full government support Involvement of the UNDP will ensure, the lack of absorptive capacity does not undermine project
Project Strategy	Objectively verifiable indicators			Sources of verification	Risks and Assumptions
	Indicator	Baseline value	Target value and date		
Outcome 1: A capacity to manage and use integrated information systems for Rio Convention implementation					
<p>Output 1.1</p> <p>A data storage and management system for all MEAs monitoring and reporting</p>	<ul style="list-style-type: none"> In-depth baseline assessment of current management information system. A review of best practice tools for environmental data 	<ul style="list-style-type: none"> Reports from PNG have been shown to have either data that cannot be used or no data at all or the data is outdated. There is limited capacity to identify the right targets to measure for the Rio 	<ul style="list-style-type: none"> Baseline assessment of current management information system to be completed by month 4 of the project. Targeted study of best practice web-based tools for 	<ul style="list-style-type: none"> Meeting Minutes Working Group meeting reports Independent evaluation reports Independent 	<ul style="list-style-type: none"> The various government authorities maintain commitment to negotiate and agree on differential enforcement of the EMIS to effectively meet Rio Convention obligations

	<p>and metadata sharing and storage management at all levels as part of the design of an integrated EMIS</p> <ul style="list-style-type: none"> An integrated EMIS infrastructure 	<p>Agenda. There is limited capacity to analyze data. These limitations render environmental information inadequate to support environmental decision-making processes. Furthermore, information on environmental issues is technical and this may discourage decision makers to consult them.</p> <ul style="list-style-type: none"> Very rudimentary tools for data storage and sharing 	<p>environmental data and metadata sharing and storage management at all levels as part of the design of an integrated EMIS, completed by month 8.</p> <ul style="list-style-type: none"> Design and feasibility study of an integrated EMIS completed by month 8 and approved for implementation by month 12. EMIS infrastructure installation begins by month 12 and completed by month 18 	<p>reports on EMIS</p> <ul style="list-style-type: none"> Rio Convention National reports and Communications GEF Cross-Cutting Capacity Development Scorecard Statistical analyses of surveys 	<ul style="list-style-type: none"> The project will be executed in a transparent, holistic, adaptive, and collaborative manner
Project Strategy	Objectively verifiable indicators			Sources of verification	Risks and Assumptions
	Indicator	Baseline value	Target value and date		
Output 1.2: Strengthened Technical capacity to manage and use integrated information systems for Rio Convention implementation	<ul style="list-style-type: none"> Expert working groups will be established under each of the Rio Conventions A collection of the best practices for collecting technical data and information for the Rio Conventions. Lead agencies identified who will collect the required data and information for Rio Reporting. A training course module for all 	<ul style="list-style-type: none"> Limited data and information relevant to the Rio Conventions exists. MEA reports are done by individual experts Data collected is not done in a standardized manner resulting in difficulties in compiling data for a country-wide report. Limited technical capacity to analyze data and information 	<ul style="list-style-type: none"> Expert working groups will be established under each of the Rio Conventions to review data and information needs for decision-making by month 2 Identified best practices for collecting technical data and information by month 6. Best practice materials and training modules are collected and prepared by month 10 of the project. Training courses begin by month 12. All technical government staff that have responsibilities related to the collection and use of 	<ul style="list-style-type: none"> Meeting minutes Reports by the expert working group Survey analysis Tracking and progress reports Final report on the lessons learnt 	<ul style="list-style-type: none"> Members of the MEA technical committees will be comprised of proactive experts and project champions Survey results will show an increased awareness and understanding of the Rio Conventions' implementation through standardized data and information collection method. Lead agencies will allow their staff to attend all trainings

	technical government staff that have responsibilities related to the collection and use of environmental data participate in all training courses.		environmental data will participate in all training courses. A minimum of 100 government staff have participated in training courses, with the average score of all attendees no lower than 80% test score. Training courses end by month 30. <ul style="list-style-type: none"> At the beginning and ending of each course, each participant will be evaluated, to determine knowledge gained. This will be analyzed to determine incremental learning. This will be undertaken for each course. 		
Outcome 2: Institutional strengthening for improved monitoring of the global environment and capacity to replicate successful environmental information management and integration practices					
Project Strategy	Objectively verifiable indicators			Sources of verification	Risks and Assumptions
	Indicator	Baseline value	Target value and date		
Output 2.1: Institutional and organizational reforms to enable incorporation of global environment commitments into planning and monitoring processes	<ul style="list-style-type: none"> Agreement on recommendations of institutional reforms. Parliamentary brief for approval on appropriate, institutional reforms Parliament's approval on proposed institutional reforms Institutional reforms initiated in target institutions 	<ul style="list-style-type: none"> Data for MEA reporting is collected on an ad-hoc manner that is also not standardized across the relevant agencies responsible for implementing the Rio Conventions Resources are not utilized best to serve the Rio Convention agenda Key partner agencies have no obligation to report to each other as well as share 	<ul style="list-style-type: none"> Convene expert working group and stakeholder meetings to agree on recommendations of institutional reforms. Expert working group presents a consensus agreement on prioritized recommendations by month 12. Prepare parliamentary brief to recommend and approve, as appropriate, institutional reforms by month 14. Ministers and parliamentary 	<ul style="list-style-type: none"> Formal communications Meeting minutes, including list of participants Analytical reports Tracking and progress reports A government gazette that shows parliament approval of the reform 	<ul style="list-style-type: none"> Best practices and lessons learned from other countries are appropriately used The PNG parliament approves the institutional reforms Enabling policy and legislation in place to support the signing of any MOA.

	<ul style="list-style-type: none"> ▪ Resource mobilization plan is prepared, peer reviewed and approved by Project Steering Committee. ▪ Memorandum of agreement among key partner agencies to pilot the sharing of data and information during the. ▪ New Memorandum of agreement is signed among key partner agencies to share data and information per institutional reforms. 	data and information	<p>members discuss parliamentary brief and approve appropriate decision by month 18.</p> <ul style="list-style-type: none"> ▪ Institutional reforms are initiated by target institutions by month 20. Over 67% of institutional reforms are completed by month 32. ▪ Resource mobilization plan is prepared, peer reviewed and approved by Project Steering Committee by month 12. ▪ Resource mobilization plan is under early implementation by month 14. ▪ Memorandum of agreement among key partner agencies to pilot the sharing of data and information during the project is signed by month 3. New Memorandum of agreement is signed among key partner agencies to share data and information per institutional reforms signed by month 32. 		
Project Strategy	Objectively verifiable indicators			Sources of verification	Risks and Assumptions
	Indicator	Baseline value	Target value and date		
Output 2.2: Data flow system and tracking	<ul style="list-style-type: none"> ▪ A collection of best practices and software for collecting and sharing data and information, including their use to prepare complex models. 	<ul style="list-style-type: none"> ▪ There is limited capacity to identify, assess and manage environmental information for national reporting MEA obligations ▪ Monitoring reports are 	<ul style="list-style-type: none"> ▪ An independent assessment of best practices and software for collecting and sharing data and information, including their use to prepare complex models. This study should be completed by 	<ul style="list-style-type: none"> ▪ Formal communications ▪ Meeting minutes, including list of participants ▪ Analytical reports 	<ul style="list-style-type: none"> ▪ The relevant government agencies and stakeholders will participate fully in the program. ▪ All stakeholders will have access in one way or another to the information

	<ul style="list-style-type: none"> ▪ An architecture for the storage and transformation of data and information ▪ A mechanism for monitoring the use of data and information for policy formulation and development planning ▪ Using the EMIS for the preparation of national reports under the Rio Conventions and other MEAs. 	<p>internal documents that have unclear value to planners and decision-makers</p> <ul style="list-style-type: none"> ▪ Monitoring and compliance guidelines and tools are not widely known among planners and decision-makers ▪ Inter-Ministerial Council focuses on climate change, but there is no equivalent policy decision-making mechanism that is as effective on biodiversity or land degradation ▪ Trainings to take place on environment-related issues, however these remain targeted to focal area issues, with inadequate attention to environmental legislative reforms 	<p>month 8.</p> <ul style="list-style-type: none"> ▪ An institutional architecture will be constructed for the storage and transformation of data and information by month 10. ▪ A tracking mechanism to monitor the use of data and information for policy formulation and development planning by month 10. ▪ Contribution of the EMIS to the preparation of national reports under the Rio Conventions and other MEAs. 	<ul style="list-style-type: none"> ▪ Tracking and progress reports ▪ Inter-Ministerial Council decisions 	<p>that is stored in the system.</p>
Project Strategy	Objectively verifiable indicators			Sources of verification	Risks and Assumptions
	Indicator	Baseline value	Target value and date		
Output 2.3: EMIS Demonstration	<ul style="list-style-type: none"> ▪ A high value development plan ▪ A collection of data and information requirements for their potential impacts on the global environment ▪ An expanded EIA 	<ul style="list-style-type: none"> ▪ There has been a lack of a system that allows data flow in national government agencies concerned with the MEAs – and especially the Rio Conventions. 	<ul style="list-style-type: none"> ▪ The Project Steering Committee will select a high value development plan by month 20. ▪ Each Rio Convention expert working will review this same plan to identify the data and information requirements to evaluate it for its potential impacts on the global 	<ul style="list-style-type: none"> ▪ Meeting minutes ▪ Tracking and progress reports ▪ Survey results ▪ Peer review reports 	<ul style="list-style-type: none"> ▪ All relevant stakeholders are amendable to the reform to allow data to flow in the system.

	<p>methodology that integrates the new best practice methodologies and EMIS.</p> <ul style="list-style-type: none"> ▪ A peer review of the draft EIA 		<p>environment by month 21.</p> <ul style="list-style-type: none"> ▪ Develop an expanded EIA methodology that integrates the new best practice methodologies and EMIS by month 24. ▪ Initiate the conduct of the new and improved EIA by month 25. Conduct a peer review of the draft EIA by month 27, and finalize the EIA by month 29. ▪ Prepare lessons learned report between months 30 and 33. 		
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Annex 5: Outcome Budget (GEF Contribution and Co-financing)

Description		Year	Year	Year	Co-		Total
		1	2	3	GEF	financing	
		452,958	357,295	339,747	500,000	650,000	1,150,000
Component 1	Establish Integrated Environmental Information Management System (EMIS)	289,100	184,400	46,000	244,500	275,000	519,500
Output 1.1	Integrated Environmental Management Information System (EMIS)						
1.1.1	Undertake assessment of baseline information management system	43,600			23,200	20,400	43,600
1.1.2	Design EMIS based on best practice, tools and design	43,600			23,200	20,400	43,600
1.1.3	Undertake a feasibility study of the integrated EMIS	43,600			23,200	20,400	43,600
1.1.4	Undertake an independent, peer review of EMIS design	28,400			16,800	11,600	28,400
1.1.5	Install the EMIS infrastructure	32,000	120,000		58,000	94,000	152,000
Output 1.2	Technical capacities for EMIS						
1.2.1	Establish expert working group under each Rio Convention	25,900			9,300	16,600	25,900
1.2.2	Identify and select Rio Convention indices and measurement methodologies for EMIS	53,600			37,200	16,400	53,600
1.2.3	Prepare training module	18,400	18,400		18,600	18,200	36,800
1.2.4	Undertake the training courses		46,000	46,000	35,000	57,000	92,000
Component 2	Institutional strengthening for improved monitoring of the global environment	98,108	106,145	212,747	208,000	209,000	417,000
Output 2.1	Institutional reforms						
2.1.1	Undertake stakeholder meetings to agree on institutional reforms	9,200	9,200	9,200	10,200	17,400	27,600
2.1.2	Submit reform brief to parliament for deliberation and approval		3,000	22,200	11,400	13,800	25,200
2.1.3	Initiate approved institutional reforms			39,600	12,200	27,400	39,600
2.1.4	Prepare and approve resource mobilization plan	6,800	20,000	6,800	17,200	16,400	33,600
2.1.5	Negotiate and sign Memoranda of Agreement with relevant stakeholders	6,733	6,733	6,734	10,400	9,800	20,200
Output 2.2	Data flow system and tracking						
2.2.1	Review best practice for collecting and sharing data	21,875	3,362	3,363	12,200	16,400	28,600
2.2.2	Build the architecture for data storage	6,000	4,000	18,600	12,200	16,400	28,600
2.2.3	Develop a tracking mechanism to monitor the usage of EMIS	6,000	4,000	18,600	12,200	16,400	28,600
Output 2.3	EMIS Demonstration						
2.3.1	Selection of high value development plan	19,200			13,400	5,800	19,200
2.3.2	Undertake a review of the Rio Convention data and information requirements	22,300	10,650	10,650	27,200	16,400	43,600
2.3.3	Develop expanded EIA methodology using best practice		18,400	18,400	18,600	18,200	36,800
2.3.4	Test the new and improved EIA process		26,800	26,800	32,200	21,400	53,600
2.3.5	Review lessons learned of EMIS demonstration and recommend improvements			31,800	18,600	13,200	31,800

Description		Year	Year	Year		Co-	Total
		1	2	3	GEF	financing	
Project Management		65,750	66,750	81,000	47,500	166,000	213,500
A	Locally recruited personnel: Project Manager (1)	16,000	16,000	16,000	24,500	23,500	48,000
B	Locally recruited personnel: Project Assistant	25,000	25,000	25,000	0	75,000	75,000
C	International Evaluation Consultant Fee (2)	0	0	10,000	10,000	0	10,000
D	Office facilities and communications (3)	20,000	20,000	20,000	0	60,000	60,000
E	Travel	2,000	3,000	5,000	2,500	7,500	10,000
F	UNDP cost recovery charges - Bills	2,750	2,750	5,000	10,500	0	10,500

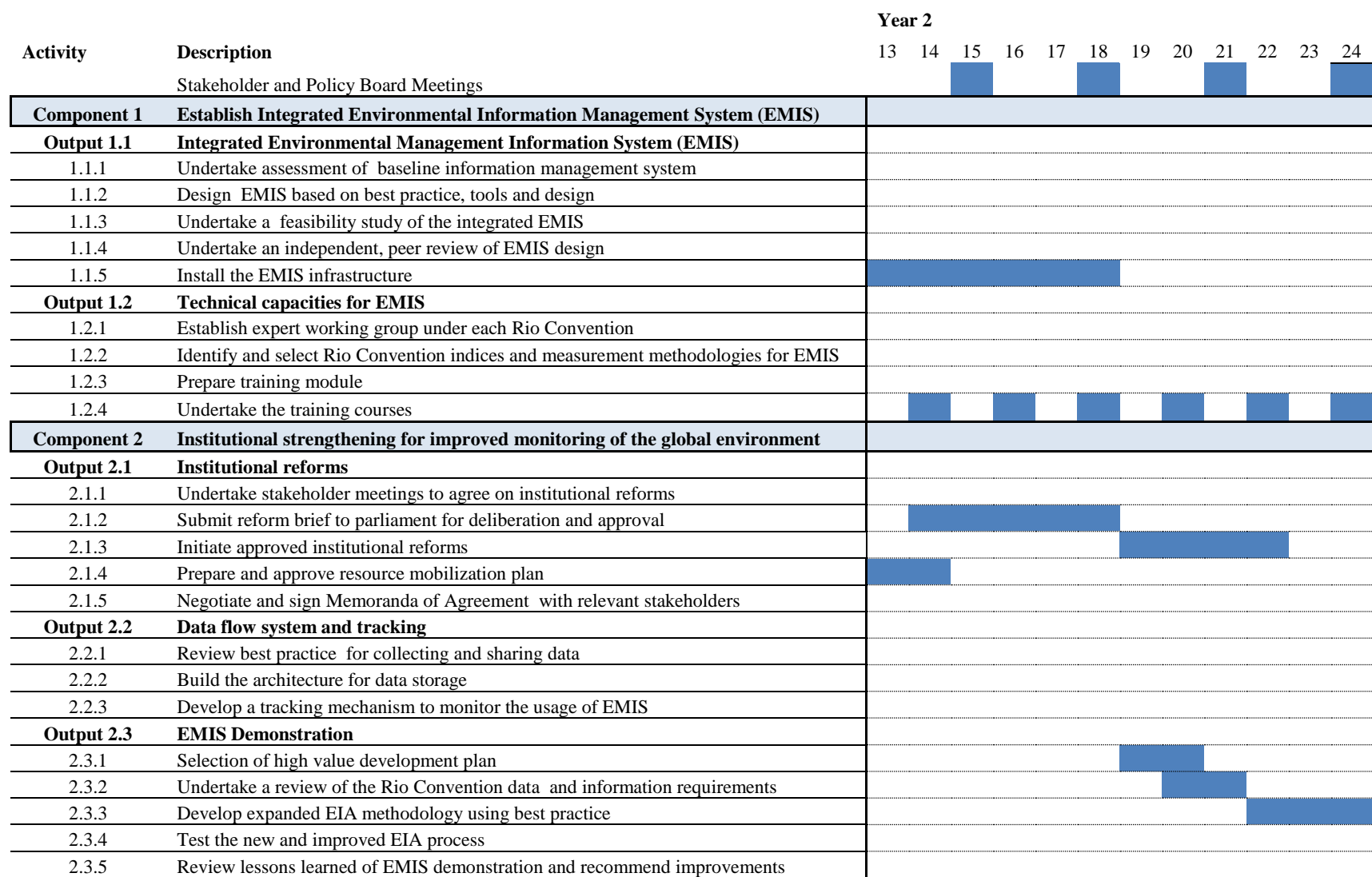
Notes

- (1) The Public Administration Expert and Project Manager are the same individual
- (2) The International Consultant will conduct an independent evaluation of the project
- (3) In addition to office space for the project team, this budget will cover the cost of Project Board meetings, 4x per year.

Annex 6: Provisional Work Plan

This work plan is to be reviewed and revised with the input of UNDP and the International Technical Advisor at the time of project inception.

Activity	Description	Year 1											
		1	2	3	4	5	6	7	8	9	10	11	12
	Stakeholder and Policy Board Meetings			■			■			■			■
Component 1	Establish Integrated Environmental Information Management System (EMIS)												
Output 1.1	Integrated Environmental Management Information System (EMIS)												
1.1.1	Undertake assessment of baseline information management system	■	■	■	■								
1.1.2	Design EMIS based on best practice, tools and design				■	■	■	■	■				
1.1.3	Undertake a feasibility study of the integrated EMIS					■	■	■	■				
1.1.4	Undertake an independent, peer review of EMIS design						■	■	■				
1.1.5	Install the EMIS infrastructure												■
Output 1.2	Technical capacities for EMIS												
1.2.1	Establish expert working group under each Rio Convention	■	■										
1.2.2	Identify and select Rio Convention indices and measurement methodologies for EMIS		■	■	■	■	■						
1.2.3	Prepare training module						■	■	■	■			
1.2.4	Undertake the training courses									■		■	■
Component 2	Institutional strengthening for improved monitoring of the global environment												
Output 2.1	Institutional reforms												
2.1.1	Undertake stakeholder meetings to agree on institutional reforms									■	■	■	■
2.1.2	Submit reform brief to parliament for deliberation and approval												
2.1.3	Initiate approved institutional reforms												
2.1.4	Prepare and approve resource mobilization plan												■
2.1.5	Negotiate and sign Memoranda of Agreement with relevant stakeholders		■	■									
Output 2.2	Data flow system and tracking												
2.2.1	Review best practice for collecting and sharing data				■	■	■	■					
2.2.2	Build the architecture for data storage						■	■	■	■			
2.2.3	Develop a tracking mechanism to monitor the usage of EMIS						■	■	■	■			
Output 2.3	EMIS Demonstration												
2.3.1	Selection of high value development plan												
2.3.2	Undertake a review of the Rio Convention data and information requirements												
2.3.3	Develop expanded EIA methodology using best practice												
2.3.4	Test the new and improved EIA process												
2.3.5	Review lessons learned of EMIS demonstration and recommend improvements												



Year 3

Activity	Description	25	26	27	28	29	30	31	32	33	34	35	36	
	Stakeholder and Policy Board Meetings			■			■			■			■	
Component 1	Establish Integrated Environmental Information Management System (EMIS)													
Output 1.1	Integrated Environmental Management Information System (EMIS)													
1.1.1	Undertake assessment of baseline information management system													
1.1.2	Design EMIS based on best practice, tools and design													
1.1.3	Undertake a feasibility study of the integrated EMIS													
1.1.4	Undertake an independent review of EMIS design													
1.1.5	Install the EMIS infrastructure													
Output 1.2	Technical capacities for EMIS													
1.2.1	Establish expert working group under each Rio Convention													
1.2.2	Identify and select Rio Convention indices and measurement methodologies for EMIS													
1.2.3	Prepare training module													
1.2.4	Undertake the training courses		■		■		■		■		■		■	
Component 2	Institutional strengthening for improved monitoring of the global environment													
Output 2.1	Institutional reforms													
2.1.1	Undertake stakeholder meetings to agree on institutional reforms													
2.1.2	Submit reform brief to parliament for deliberation and approval													
2.1.3	Initiate approved institutional reforms													
2.1.4	Prepare and approve resource mobilization plan													
2.1.5	Negotiate and sign Memoranda of Agreement with relevant stakeholders													
Output 2.2	Data flow system and tracking													
2.2.1	Review best practice for collecting and sharing data													
2.2.2	Build the architecture for data storage													
2.2.3	Develop a tracking mechanism to monitor the usage of EMIS													
Output 2.3	EMIS Demonstration													
2.3.1	Selection of high value development plan													
2.3.2	Undertake a review of the Rio Convention data and information requirements													
2.3.3	Develop expanded EIA methodology using best practice													
2.3.4	Test the new and improved EIA process	■												
2.3.5	Review lessons learned of EMIS demonstration and recommend improvements		■											

Annex 7: Terms of References

The following Terms of Reference outlines the general responsibilities to be carried out by consultants contracted under the project.

Background

The United Nations Development Programme (UNDP), acting as an implementing agency of the Global Environment Facility (GEF), is providing assistance to the Department of Environment and Conservation (DEC) under the Government of Papua New Guinea in the preparation of the GEF Medium Size Project (MSP) “Strengthening Capacities to measure, report, and verify indicators of global environmental benefit.”

Environmental monitoring and information management is critical for understanding the current status and dynamic changes in the state of environment. Consistent and regular monitoring, research and data analysis provide the essential foundation for adequate policy response and timely and appropriate national decision-making processes. Hence, the issue would have both global and national priority dimensions. The proposed project addresses convention obligations related to reporting requirements under the three main focal areas: Biodiversity, Climate Change and Land Degradation. It specifically fits under the fifth (5) strategic objective of the Cross Cutting Capacity Development (CCCD) strategy developed under GEF-5, i.e., “enhancing capacities to monitor and evaluate environmental impacts and trends”. The goal of the project is to strengthen the availability and use of environmental information to make better decisions to meet obligations under the three Rio Conventions.

Project Goal and Objectives

The goal of this project is for Papua New Guinea to make better planning decisions that will help protect the global environment. This requires the country to have, among others, the capacity to access and use data and information, as well as best practices for integrating global environmental priorities into planning, decision and reporting processes. To this end, the project’s objective is to strengthen targeted capacities to establish and use an integrated Environmental Management Information System. In addition to the installation of the integrated EMIS and training on its use, the project will help institutionalize the EMIS by demonstrating its value and financial sustainability to stakeholders, as well as facilitating the appropriate legislative and institutional reforms.

Project Strategy

The incremental approach to this project lies in building upon the commitment of the Government to strengthen the environmental management information system within the Department of Environment and Conservation. The barriers to good environmental governance for the global environment are fundamentally an issue of accessing good knowledge and having a good system by which to make best use of this knowledge. The sustainable development baseline of the project lies in the Government’s commitment to set up an environmental management information system, upon which GEF support will be used to strengthen the use of this system to access data and information directly relevant to the three Rio Conventions. In this way, the preparation of planning frameworks can be better informed of global environmental trends. GEF funds will be used to train government staff through directed workshops on *how* to collect and manage data and information relevant to planning best practices for global environmental governance in the three Rio Convention focal areas. The learn-by-doing exercises will be used to take the training one step further to train people to critical think about the know of data and information to create knowledge through practical testing and application. Whereas the GEF focal area projects currently under operation focus on the development, testing and application of focal area best practices, the CCCD project is targeted to institutionalizing the underlying set of capacities to carry out this work.

This project is strategic and transformative through its adaptive collaborative management approach that is part of the design of project activities. While an integrated environmental management information system is not necessary innovative, for PNG it will be innovative because of the current practice of closed systems.

That is, data and information exists, but within institutions with institutionalized barriers against sharing. As a result, there is significant overlap in data and information management, and because of the mandates of each agency, they tend to manage data and information that they need to meet their mission objectives. This works fine for the few authorities that have the necessary financial resources, however, most other agencies can not afford the expense of creating data and information that already exists and which could be accessed at a significantly cheaper cost.

Strategically, the project includes activities that will call upon all stakeholder organizations to meet and negotiate sharing protocols, based on the data and information that each needs. Memoranda of Agreement would be signed to facilitate this sharing, which would then be institutionalized through bills for legislative and/or institutional reforms that would be submitted to Parliament. If successful, this project could lead to a transformative approach to collaboration in PNG. Through the project and specifically the EMIS, this project could demonstrate a good practice of environmental governance.

Project Outcomes and Components

At the end of the project, the project will have resulted in improved capacities for meeting global environmental priorities. This general outcome will be measured by a variety of indicators, characterized as outputs, process, and performance indicators. Output indicators include the actual installation of the integrated EMIS. Process indicators include the very important collaboration among government agencies and authorities to share data and information through an agreed sharing protocol and data flow system, legitimized by the necessary approvals, e.g., Memoranda of Agreements. This project is organized into two linked components.

Component 1: Establish integrated environmental information management system

This component focuses on the establishment of an integrated environmental information management system to collect data and information for better assessing compliance with environmental regulation, with particular reference to meeting Rio Convention obligations. This system will cover other non-Rio Convention MEAs that will be co-financed by the Government of Papua New Guinea.

Component 2: Institutional Strengthening for improved monitoring of the global environment and capacity to replicate successful environmental information management and integration practices.

Component 2 focuses on institutionalizing the EMIS and the technical capacities developed. The outputs under this component are targeted to facilitating agreement and parliamentary approval of legislative and institutional reforms, instituting a tracking system to reaffirm the value of the EMIS to all stakeholders, and strengthening critical thinking of many planners and decision-makers on how to interpret and apply best practices to meet global environmental objectives.

Not only will this project produce additional important benefits in the form of national reporting to the three Rio Conventions, but to other multilateral environmental agreements of which PNG is signatory as well as on the Millennium Development Goal 7. The preparation of these reports will be made easier through the structuring the EMIS to specifically code global environmental data and information.

Responsibilities

1. National Project Director (NPD)

The Government of Papua New Guinea must appoint a national director for this UNDP-supported project. The National Project Director supports the project and acts as a focal point on the part of the Government. This responsibility normally entails ensuring effective communication between partners and monitoring of progress towards expected results.

The National Project Director is the party that represents the Government's *ownership* and *authority* over the project, *responsibility* for achieving project objectives and the *accountability* to the Government and UNDP for the use of project resources.

In consultation with UNDP, the Department of Environment and Conservation as the concerned 'ministry' will designate the National Project Director from among its staff at not lower than the Deputy Minister or Head of Department level. The National Project Director (NPD) will be supported by a full-time National Project Manager (NPM).

Duties and Responsibilities of the NPD

The NPD will have the following duties and responsibilities:

- a. Assume overall responsibility for the successful execution and implementation of the project, accountability to the Government and UNDP for the proper and effective use of project resources)
- b. Serve as a focal point for the coordination of projects with other Government agencies, UNDP and outside implementing agencies;
- c. Ensure that all Government inputs committed to the project are made available;
- d. Supervise the work of the National Project Manager and ensure that the National Project Manager is empowered to effectively manage the project and other project staff to perform their duties effectively;
- e. Select and arrange, in close collaboration with UNDP, for the appointment of the National Project Manager (in cases where the NPM has not yet been appointed);
- f. Supervise the preparation of project work plans, updating, clearance and approval, in consultation with UNDP and other stakeholders and ensure the timely request of inputs according to the project work plans;
- g. Represent the Government institution (national counterpart) at the tripartite review project meetings, UNDP Outcome Board, and other stakeholder meetings.

Remuneration and entitlements:

The National Project Director may not receive monetary compensation from project funds for the discharge of his/her functions.

2. Project Manager

A Project Manager will be recruited to oversee the project implementation under the guidance of the NPD, the Project Advisory Board, and with the support of UNDP PNG. He/she will be recruited for an estimated 60 weeks for project management activities and will hold a separate contract as the Public Administration Expert. In addition to overseeing the implementation of the project's capacity development activities, the project management will carry out the monitoring and evaluation procedures per UNDP agreed policies and procedures. These include:

- Oversee the day-to-day monitoring of project implementation
- In consultation with stakeholders, recommend modifications to project management to maintain project's cost-effectiveness, timeliness, and quality project deliverables (adaptive collaborative management) to be approved by the Project Advisory Board
- Prepare all required progress and management reports, e.g., APR/PIR and project initiation report
- Support all meetings of the Project Advisory Board
- Maintain effective communication with project partners and stakeholders to dissemination project results, as well as to facilitate input from stakeholder representatives as project partners
- Support the independent terminal evaluation
- Ensure full compliance with the UNDP and GEF branding policy

3. Project Assistant

The Project Assistant will be recruited for 160 weeks and will support the Project Manager in the carrying out of his/her duties, which will include:

- a. Organizational and logistical issues related to project execution per UNDP guidelines and procedures
- b. Record keeping of project documents, including financial in accordance with audit requirements
- c. Ensure all logistical arrangements are carried out smoothly
- d. Assist Project Manager in preparation and update of project work plans in collaboration with the UNDP Country Office
- e. Facilitate timely preparation and submission of financial reports and settlement of advances, including progress reports and other substantial reports
- f. Report to the Project Manager and UNDP Programme Officer on a regular basis
- g. Identification and resolution of logistical and organizational problems, under the guidance of the Project Manager

The Project Assistant will have at least five (5) years' experience in supporting the implementation of UNDP implemented projects, with preference in environment and natural resource management projects.

4. International Specialist on the Convention on Biological Diversity

This international specialist will be responsible for undertaking those project activities that require expertise on interpreting and translating CBD obligations into national programmable activities. The specialist will prepare the appropriate technical background studies, as well as also serve as a co-facilitator in the trainings on the using data and information relevant to meeting biodiversity conservation objectives, with particular emphasis on endangered endemic species and their ecosystems.

The CBD specialist will have at least 10 years of work experience, of which at least the last two (2) years include active involvement in CBD negotiations. He/she will have a PhD in natural resource management, with a specialization directly related to biodiversity conservation in Papua New Guinea and/or the surrounding region. Under the supervision of the Project Manager, the specialist will coordinate his/her work with that of other national experts and specialists. This includes coordinating activities with those under implementation by the development partners. An estimated 15 weeks have been estimated for undertaking project activities.

5. National Consultant on the Convention on Biological Diversity

This national consultant will be responsible for working with the International consultant to undertake those project activities that require expertise on interpreting and translating CBD obligations into national programmable activities. The consultant will work with the international specialist prepare the appropriate technical background studies, as well as also serve as a co-facilitator in the trainings on the using data and information relevant to meeting biodiversity conservation objectives, with particular emphasis on endangered endemic species and their ecosystems.

The CBD national consultant will have at least 10 years of work experience in biodiversity conservation programming and project implementation. Some experience of which at least the last two (2) years include active involvement in CBD negotiations He/she will have a PhD in natural resource management, with a specialization directly related to biodiversity conservation in Papua New Guinea and/or the surrounding region. Under the supervision of the Project Manager, the specialist will coordinate his/her work with that of other national experts and specialists. This includes coordinating activities with those under

implementation by the development partners. An estimated 15 weeks have been estimated for undertaking project activities.

7. International Specialist on the Convention on Desertification and Drought

This international specialist will be responsible for undertaking those project activities that require expertise on interpreting and translating CCD obligations into national programmable activities. The specialist will prepare the appropriate technical background studies, as well as also serve as a co-facilitator in the trainings on the using data and information relevant to meeting biodiversity conservation objectives, with particular emphasis on sustainable land management and land degradation.

The CCD specialist will have at least 10 years of work experience, of which at least the last two (2) years include active involvement in CCD negotiations. He/she will have a PhD in natural resource management, with a specialization directly related to land management issues in Papua New Guinea and/or the surrounding region. Under the supervision of the Project Manager, the specialist will coordinate his/her work with that of other national experts and specialists. This includes coordinating activities with those under implementation by the development partners. An estimated 15 weeks have been estimated for undertaking project activities.

8. National Consultant on the Convention on Desertification and Drought

This national consultant will be responsible for working with the International consultant to undertake those project activities that require expertise on interpreting and translating CCD obligations into national programmable activities. The national consultant will prepare the appropriate technical background studies, as well as also serve as a co-facilitator in the trainings on the using data and information relevant to meeting land degradation objectives, with particular emphasis on sustainable land management and land degradation.

The CCD national consultant will have at least 10 years of work experience, of which at least the last two (2) years include active involvement in CCD programming and project implementation. He/she will have a PhD in natural resource management, with a specialization directly related to land management issues in Papua New Guinea and/or the surrounding region. Under the supervision of the Project Manager, the specialist will coordinate his/her work with that of other national experts and specialists. This includes coordinating activities with those under implementation by the development partners. An estimated 15 weeks have been estimated for undertaking project activities.

9. International Specialist on the Framework Convention on Climate Change

This international specialist will be responsible for undertaking those project activities that require expertise on interpreting and translating FCCC obligations into national programmable activities. The specialist will prepare the appropriate technical background studies, as well as also serve as a co-facilitator in the trainings on the using data and information relevant to meeting climate change mitigation and mitigation objectives, with particular emphasis on endangered endemic species and their ecosystems.

The FCCC specialist will have at least 10 years of work experience, of which at least the last two (2) years include active involvement in FCCC negotiations. He/she will have a PhD in a field directly relevant to climate change science, with a specialization directly related to mitigation and adaptation strategies relevant to Papua New Guinea and/or the surrounding region. Under the supervision of the Project Manager, the specialist will coordinate his/her work with that of other national experts and specialists. This includes coordinating activities with those under implementation by the development partners. An estimated 15 weeks have been estimated for undertaking project activities.

10. National Consultant on the Framework Convention on Climate Change

This national consultant will be responsible for working with the International consultant to undertake those project activities that require expertise on interpreting and translating FCCC obligations into national programmable activities. The national consultant will prepare the appropriate technical background studies,

as well as also serve as a co-facilitator in the trainings on the using data and information relevant to meeting climate change mitigation and mitigation objectives, with particular emphasis on endangered endemic species and their ecosystems.

The FCCC national consultant will have at least 10 years of work experience, of which at least the last two (2) years include active involvement in FCCC programming and project implementation. He/she will have a PhD in a field directly relevant to climate change science, with a specialization directly related to mitigation and adaptation strategies relevant to Papua New Guinea and/or the surrounding region. Under the supervision of the Project Manager, the specialist will coordinate his/her work with that of other national experts and specialists. This includes coordinating activities with those under implementation by the development partners. An estimated 15 weeks have been estimated for undertaking project activities.

11. Information Technology Specialist (National)

An information technology specialist will be recruited to oversee the technical design of the EMIS, including the procurement of the technological hardware and software for its installation. Under the supervision of the Project Manager, he/she will work with the international Rio Convention specialists, as well as with the relevant information technology managers in the different departments to network the EMIS with their information systems. The specialist will apply technical expertise to the implementation, monitoring, and maintenance of the EMIS. With at least five (5) years' of work experience, the specialist will have at least a Master's degree in information technology, including network analysis, system administration, security and information assurance, IT audit, database administration, and web administration. An estimated 12 weeks have been estimated for undertaking project activities.

12. Public Administration Expert (National)

The individual recruited as the Public Administration Expert will be recruited for an estimated 100 days and hold an additional separate contract as the Project Manager. He/she will work with the international specialists as well as with the information technology specialist to assess and institutionalize the EMIS within DEC as well as with the partner government departments and other stakeholder organizations' information systems. He/she will work with the information technology specialist to undertake the in-depth baseline assessment of the current management information systems in PNG as well as to design the institutional architecture of the EMIS. This expert will also work with the legal expert to assess and recommend institutional and associated regulatory reforms to be submitted for Parliamentary approval, as well as work of the Rio Convention experts through the expert working groups, as well serve as a resource person and facilitator for the training and learn-by-doing working groups.

The Public Administration Expert will have a post-graduate degree in public administration or related field, and have a minimum of ten (10) years' experience in progressively responsible and substantive areas in environmental and natural resource governance programming and planning.

9. International Evaluation Consultant

The international evaluation consultant will be an independent expert that is contracted to assess the extent to which the project has met project objectives as stated in the project document and produced cost-effective deliverables. The consultant will also rate capacities developed under the project using the Capacity Development Scorecard.

The Terms of Reference for the International Evaluation Consultant will follow the UNDP/GEF policies and procedures, and together with the final agenda will be agreed upon by the UNDP/GEF RCU, UNDP Country Office and the Project Team. The final report will be cleared and accepted by UNDP (Country Office and Regional Coordination Unit) before being made public.

9. Policy/Legal Expert

The Policy/Legal expert will contribute to the substantive work under the project by assessing the policy and legal implications of Rio Convention instituting the EMIS, in particular the collaboration among key agencies and other stakeholder organizations. The expert will work with the Public Administration expert as well as with the others, as appropriate to draft and negotiate the Memoranda of Agreement to share data and information, as well as draft the bills that need Parliamentary approval.

The policy/legal expert will have a post-graduate degree in law, with a specialization on environmental law and policy of Papua New Guinea. S/he will have to have a minimum of ten (10) years' experience in progressively responsible and substantive areas in environmental and natural resource governance programming and planning. An estimated 30 weeks have been estimated for undertaking project activities by this national expert.

10. International Technical Specialist

An international technical specialist will be retained on a part-time basis to provide necessary technical advisory services on the implementation of key project activities, in particular the review of recommendations to integrate and institutionalize Rio Convention obligations within the EMIS, among other substantive activities, as appropriate. These services will be provided over the course of the three-year implementation period to provide technical backstopping to help ensure the timely and high quality project delivery.

QUESTION 1:

Has a combined environmental and social assessment/review that covers the proposed project already been completed by implementing partners or donor(s)?

Select answer below and follow instructions:

- NO** → Continue to Question 2 (do not fill out Table 1.1)
- YES** → No further environmental and social review is required if the existing documentation meets UNDP’s quality assurance standards, and environmental and social management recommendations are integrated into the project. Therefore, you should undertake the following steps to complete the screening process:
 1. Use Table 1.1 below to assess existing documentation. (It is recommended that this assessment be undertaken jointly by the Project Developer and other relevant Focal Points in the office or Bureau).
 2. Ensure that the Project Document incorporates the recommendations made in the implementing partner’s environmental and social review.
 3. Summarize the relevant information contained in the implementing partner’s environmental and social review in Annex A.2 of this Screening Template, selecting Category 1.
 4. Submit Annex A to the PAC, along with other relevant documentation.

TABLE 1.1: CHECKLIST FOR APPRAISING QUALITY ASSURANCE OF EXISTING ENVIRONMENTAL AND SOCIAL ASSESSMENT	Yes/No
1. Does the assessment/review meet its terms of reference, both procedurally and substantively?	
2. Does the assessment/review provide a satisfactory assessment of the proposed project?	
3. Does the assessment/review contain the information required for decision-making?	
4. Does the assessment/review describe specific environmental and social management measures (e.g., mitigation, monitoring, advocacy, and capacity development measures)?	
5. Does the assessment/review identify capacity needs of the institutions responsible for implementing environmental and social management issues?	
6. Was the assessment/review developed through a consultative process with strong stakeholder engagement, including the view of men and women?	
7. Does the assessment/review assess the adequacy of the cost of and financing arrangements for environmental and social management issues?	

Table 1.1 (continued) For any “no” answers, describe below how the issue has been or will be resolved (e.g., amendments made or supplemental review conducted).

QUESTION 2:

Do all outputs and activities described in the Project Document fall within the following categories?

- Procurement (in which case UNDP’s [Procurement Ethics](#) and [Environmental Procurement Guide](#) need to be complied with)
- Report preparation
- Training
- Event/workshop/meeting/conference (refer to [Green Meeting Guide](#))
- Communication and dissemination of results

Select answer below and follow instructions:

- NO** → Continue to Question 3
- YES** → No further environmental and social review required. Complete Annex A.2, selecting Category 1, and submit the completed template (Annex A) to the PAC.

QUESTION 3:

Does the proposed project include activities and outputs that support *upstream* planning processes that potentially pose environmental and social impacts or are vulnerable to environmental and social change (refer to Table 3.1 for examples)? (Note that *upstream* planning processes can occur at global, regional, national, local and sectoral levels)

Select the appropriate answer and follow instructions:

- NO** → Continue to Question 4.
- YES** → Conduct the following steps to complete the screening process:
 1. Adjust the project design as needed to incorporate UNDP support to the country(ies), to ensure that environmental and social issues are appropriately considered during the upstream planning process. Refer to Section 7 of this Guidance for elaboration of environmental and social mainstreaming services, tools, guidance and approaches that may be used.
 2. Summarize environmental and social mainstreaming support in Annex A.2, Section C of the Screening Template and select “Category 2”.
 3. If the proposed project **ONLY** includes upstream planning processes then screening is complete, and you should submit the completed Environmental and Social Screening Template (Annex A) to the PAC. If downstream implementation activities are also included in the project then continue to Question 4.

TABLE 3.1 EXAMPLES OF UPSTREAM PLANNING PROCESSES WITH POTENTIAL DOWNSTREAM ENVIRONMENTAL AND SOCIAL IMPACTS	Check appropriate box(es) below
1. Support for the elaboration or revision of global-level strategies, policies, plans, and programmes. <i>For example, capacity development and support related to international negotiations and agreements. Other examples might include a global water governance project or a global MDG project.</i>	
2. Support for the elaboration or revision of regional-level strategies, policies and plans, and programmes. <i>For example, capacity development and support related to transboundary programmes and planning (river basin management, migration, international waters, energy development and access, climate change adaptation etc.).</i>	<input checked="" type="checkbox"/>
3. Support for the elaboration or revision of national-level strategies, policies, plans and programmes. <i>For example, capacity development and support related to national development policies, plans, strategies and budgets, MDG-based plans and strategies (e.g., PRS/PRSPs, NAMAs), sector plans.</i>	<input checked="" type="checkbox"/>
4. Support for the elaboration or revision of sub-national/local-level strategies, policies, plans and programmes. <i>For example, capacity development and support for district and local level development plans and regulatory frameworks, urban plans, land use development plans, sector plans, provincial development plans, provision of services, investment funds, technical guidelines and methods, stakeholder engagement.</i>	<input checked="" type="checkbox"/>

QUESTION 4:

Does the proposed project include the implementation of *downstream* activities that potentially pose environmental and social impacts or are vulnerable to environmental and social change?

To answer this question, you should first complete Table 4.1 by selecting appropriate answers. If you answer “No” or “Not Applicable” to all questions in Table 4.1 then the answer to Question 4 is “NO.” If you answer “Yes” to any questions in Table 4.1 (even one “Yes” can indicated a significant issue that needs to be addressed through further review and management) then the answer to Question 4 is “YES”:

- NO** → No further environmental and social review and management required for downstream activities. Complete Annex A.2 by selecting “Category 1”, and submit the Environmental and Social Screening Template to the PAC.
- YES** → Conduct the following steps to complete the screening process:
 1. Consult Section 8 of this Guidance, to determine the extent of further environmental and social review and management that might be required for the project.
 2. Revise the Project Document to incorporate environmental and social management measures. Where further environmental and social review and management activity cannot be undertaken prior to the PAC, a plan for undertaking such review and management activity within an acceptable period of time, post-PAC approval (e.g., as the first phase of the project) should be outlined in Annex A.2.
 3. Select “Category 3” in Annex A.2, and submit the completed Environmental and Social Screening Template (Annex A) and relevant documentation to the PAC.

TABLE 4.1: ADDITIONAL SCREENING QUESTIONS TO DETERMINE THE NEED AND POSSIBLE EXTENT OF FURTHER ENVIRONMENTAL AND SOCIAL REVIEW AND MANAGEMENT		Answer (Yes/No/ Not Applicable)
1. Biodiversity and <u>Natural</u> Resources		
1.1	Would the proposed project result in the conversion or degradation of <u>modified habitat</u> , <u>natural habitat</u> or <u>critical habitat</u> ?	No
1.2	Are any development activities proposed within a legally protected area (e.g., natural reserve, national park) for the protection or conservation of biodiversity?	No
1.3	Would the proposed project pose a risk of introducing invasive alien species?	No
1.4	Does the project involve natural forest harvesting or plantation development without an independent forest certification system for sustainable forest management (e.g., <i>PEFC</i> , the <i>Forest Stewardship Council certification systems</i> , or <i>processes established or accepted by the relevant National Environmental Authority</i>)?	No
1.5	Does the project involve the production and harvesting of fish populations or other aquatic species without an accepted system of independent certification to ensure sustainability (e.g., the <i>Marine Stewardship Council certification system</i> , or <i>certifications, standards, or processes established or accepted by the relevant National Environmental Authority</i>)?	No
1.6	Does the project involve significant extraction, diversion or containment of surface or ground water?	No

TABLE 4.1: ADDITIONAL SCREENING QUESTIONS TO DETERMINE THE NEED AND POSSIBLE EXTENT OF FURTHER ENVIRONMENTAL AND SOCIAL REVIEW AND MANAGEMENT	
<i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction.</i>	
1.7 Does the project pose a risk of degrading soils?	No
2. Pollution	Answer (Yes/No/ Not Applicable)
2.1 Would the proposed project result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and transboundary impacts?	No
2.2 Would the proposed project result in the generation of waste that cannot be recovered, reused, or disposed of in an environmentally and socially sound manner?	No
2.3 Will the proposed project involve the manufacture, trade, release, and/or use of chemicals and hazardous materials subject to international action bans or phase-outs? <i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Convention on Persistent Organic Pollutants, or the Montreal Protocol.</i>	No
2.4 Is there a potential for the release, in the environment, of hazardous materials resulting from their production, transportation, handling, storage and use for project activities?	No
2.5 Will the proposed project involve the application of pesticides that have a known negative effect on the environment or human health?	No
3. Climate Change	
3.1 Will the proposed project result in significant ⁸ greenhouse gas emissions? <i>Annex E provides additional guidance for answering this question.</i>	No
3.2 Is the proposed project likely to directly or indirectly increase environmental and social vulnerability to climate change now or in the future (also known as maladaptive practices)? You can refer to the additional guidance in Annex C to help you answer this question. <i>For example, a project that would involve indirectly removing mangroves from coastal zones or encouraging land use plans that would suggest building houses on floodplains could increase the surrounding population's vulnerability to climate change, specifically flooding.</i>	No
4. Social Equity and Equality	Answer (Yes/No/ Not Applicable)
4.1 Would the proposed project have environmental and social impacts that could affect indigenous people or other vulnerable groups?	No
4.2 Is the project likely to significantly impact gender equality and women's empowerment ⁹ ?	No

⁸ Significant corresponds to CO₂ emissions greater than 100,000 tons per year (from both direct and indirect sources). Annex E provides additional guidance on calculating potential amounts of CO₂ emissions.

⁹ Women are often more vulnerable than men to environmental degradation and resource scarcity. They typically have weaker and insecure rights to the resources they manage (especially land), and spend longer hours on collection of water, firewood, etc. (OECD, 2006). Women are also more often excluded from other social, economic, and political development processes.

TABLE 4.1: ADDITIONAL SCREENING QUESTIONS TO DETERMINE THE NEED AND POSSIBLE EXTENT OF FURTHER ENVIRONMENTAL AND SOCIAL REVIEW AND MANAGEMENT		
4.3	Is the proposed project likely to directly or indirectly increase social inequalities now or in the future?	No
4.4	Will the proposed project have variable impacts on women and men, different ethnic groups, social classes?	No
4.5	Have there been challenges in engaging women and other certain key groups of stakeholders in the project design process?	No
4.6	Will the project have specific human rights implications for vulnerable groups?	No
5. Demographics		No
5.1	Is the project likely to result in a substantial influx of people into the affected community(ies)?	No
5.2	Would the proposed project result in substantial voluntary or involuntary resettlement of populations? <i>For example, projects with environmental and social benefits (e.g., protected areas, climate change adaptation) that impact human settlements, and certain disadvantaged groups within these settlements in particular.</i>	No
5.3	Would the proposed project lead to significant population density increase which could affect the environmental and social sustainability of the project? <i>For example, a project aiming at financing tourism infrastructure in a specific area (e.g., coastal zone, mountain) could lead to significant population density increase which could have serious environmental and social impacts (e.g., destruction of the area's ecology, noise pollution, waste management problems, greater work burden on women).</i>	No
6. Culture		
6.1	Is the project likely to significantly affect the cultural traditions of affected communities, including gender-based roles?	No
6.2	Will the proposed project result in physical interventions (during construction or implementation) that would affect areas that have known physical or cultural significance to indigenous groups and other communities with settled recognized cultural claims?	No
6.3	Would the proposed project produce a physical "splintering" of a community? <i>For example, through the construction of a road, powerline, or dam that divides a community.</i>	No
7. Health and Safety		
7.1	Would the proposed project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions? <i>For example, development projects located within a floodplain or landslide prone area.</i>	No
7.2	Will the project result in increased health risks as a result of a change in living and working conditions? In particular, will it have the potential to lead to an increase in HIV/AIDS infection?	No
7.3	Will the proposed project require additional health services including testing?	No
8. Socio-Economics		
8.1	Is the proposed project likely to have impacts that could affect women's and men's ability to use, develop and protect natural resources and other natural capital assets?	Yes

TABLE 4.1: ADDITIONAL SCREENING QUESTIONS TO DETERMINE THE NEED AND POSSIBLE EXTENT OF FURTHER ENVIRONMENTAL AND SOCIAL REVIEW AND MANAGEMENT	
<i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their development, livelihoods, and well-being?</i>	
8.2 Is the proposed project likely to significantly affect land tenure arrangements and/or traditional cultural ownership patterns?	No
8.3 Is the proposed project likely to negatively affect the income levels or employment opportunities of vulnerable groups?	No
9. Cumulative and/or Secondary Impacts	Answer (Yes/No/ Not Applicable)
9.1 Is the proposed project location subject to currently approved land use plans (e.g., roads, settlements) which could affect the environmental and social sustainability of the project? <i>For example, future plans for urban growth, industrial development, transportation infrastructure, etc.</i>	N/A
9.2 Would the proposed project result in secondary or consequential development which could lead to environmental and social effects, or would it have potential to generate cumulative impacts with other known existing or planned activities in the area? <i>For example, a new road through forested land will generate direct environmental and social impacts through the cutting of forest and earthworks associated with construction and potential relocation of inhabitants. These are direct impacts. In addition, however, the new road would likely also bring new commercial and domestic development (houses, shops, businesses). In turn, these will generate indirect impacts. (Sometimes these are termed “secondary” or “consequential” impacts). Or if there are similar developments planned in the same forested area then cumulative impacts need to be considered.</i>	Yes

ANNEX A.2: ENVIRONMENTAL AND SOCIAL SCREENING SUMMARY
(To be filled in after Annex A.1 has been completed)

Name of Proposed Project: National capacity development for implementing Rio Conventions through environmental governance

A. Environmental and Social Screening Outcome

Select from the following:

- Category 1. No further action is needed
- Category 2. Further review and management is needed. There are possible environmental and social benefits, impacts, and/or risks associated with the project (or specific project component), but these are predominantly indirect or very long-term and so extremely difficult or impossible to directly identify and assess.
- Category 3. Further review and management is needed, and it is possible to identify these with a reasonable degree of certainty. If Category 3, select one or more of the following sub-categories:
- Category 3a: Impacts and risks are limited in scale and can be identified with a reasonable degree of certainty and can often be handled through application of standard best practice, but require some minimal or targeted further review and assessment to identify and evaluate whether there is a need for a full environmental and social assessment (in which case the project would move to Category 3b).
- Category 3b: Impacts and risks may well be significant, and so full environmental and social assessment is required. In these cases, a scoping exercise will need to be conducted to identify the level and approach of assessment that is most appropriate.

B. Environmental and Social Issues (for projects requiring further environmental and social review and management)

In this section, you should list the key potential environmental and social issues raised by this project. This might include both environmental and social opportunities that could be seized on to strengthen the project, as well as risks that need to be managed. You should use the answers you provided in Table 4.1 as the basis for this summary, as well as any further review and management that is conducted.

There are no real negative social impacts of this project, which is largely about facilitating a broad engagement of stakeholders from key government departments and agencies, as well as other non-state actors to agree on the sharing of data and information. The project will provide technical training on good/best practices to collect and manage data, and importantly undertake learn-by-doing exercises to encourage critical thinking on the use of data and information in the assessment of development policies and plans from a stronger global environmental perspective. It is in the latter where environmental impacts are expected, for the positive. That is, through this project, the expected outcome is the better alternatives will designed in the

environmental impact assessments. Women will be encouraged to participate in the training workshops and learn-by-doing exercises.

C. Next Steps (for projects requiring further environmental and social review and management):

In this section, you should summarize actions that will be taken to deal with the above-listed issues. If your project has Category 2 or 3 components, then appropriate next steps will likely involve further environmental and social review and management, and the outcomes of this work should also be summarized here. Relevant guidance should be obtained from Section 7 for Category 2, and Section 8 for Category 3.

Further environmental and social review and management is recommended to ensure that the project is being adaptively and collaboratively managed, as this is critical to project success. Stakeholders in PNG are traditionally accustomed to work independently, and not collaborate. This project therefore targets the underlying barriers to the management of environmental data and information by getting stakeholders and key decision-makers to work together. A memorandum of agreement will help reinforce collaboration.

The risk to this project is that stakeholders do not have strong environmental values and become disinterested. The project will manage this risk by convening numerous training and awareness-raising meetings and workshops, among other means to actively engage stakeholders. Incentives for their active participation will be sought.

The project's design also sets out to shorten the divide between protecting the environment and socio-economic priorities. This is to be achieved through mainstreaming. That is, a country that pursues priority socio-economic development could also be pursuing global environmental priorities that science has shown to be inherently fundamental to sustaining development. It is through the training and learn-by-doing exercises that stakeholders will learn how to reconcile priority socio-economic priorities with global environmental obligations

The project will take an adaptive collaborative management approach to ensure that project activities remain appropriate to meeting long-term objectives. This approach is designed to strengthen the legitimacy of project activities throughout its implementation with stakeholders.

The Local Project Appraisal Committee (LPAC) for this project will be convened after CEO endorsement.

D. Sign Off

Project Manager _____

Date

PAC _____

Date

Programme Manager _____

Date: 14 March 2014

Jorg Schimmel, ARR

Annex 9: PNG's Multilateral Environmental Agreements

Convention concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972)
Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (Noumea, 1986)
Convention for the Protection of the Ozone Layer (Vienna, 1985)
Convention of the World Meteorological Organization (Washington, 1947)
Convention on Conservation of Nature in the South Pacific (Apia, 1976) - signatory
Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973; and Amendments to Article XI, Bonn, 1979)
Convention on Persistent Organic Pollutants (Stockholm, 2001)
Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel, 1989)
Convention on the International Maritime Organization (Geneva, 1948)
Convention on the International Regulations for Preventing Collisions at Sea (London, 1972)
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (Washington, 1972; and Amendments, Torremolinos, 1978 and Colombo, 1980)
Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (Geneva, 1976)
Convention on the Prohibition of the Development Production and Stockpiling **of Bacteriological (Biological)** and Toxin Weapons and on their Destruction (Washington, 1972)
Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, 1971; and Amendments, Paris, 1982)
Convention to ban the Importation into Forum Island Countries of Hazardous Wastes and Radioactive Wastes and to control the Transboundary Movement and
International Convention for the Prevention of Pollution from Ships Hazardous Substances (London, 1978; and Amendments on Sewage and Garbage)
International Convention on Civil Liability for Oil Pollution Damage (Brussels, 1969; and Amendments, Brussels, 1992)
International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (Brussels, 1969)
International Convention relating to the Limitation of the Liability of Owners of Sea-going Ships (Brussels, 1957)
International Plant Protection Convention (Rome, 1951; and Revised Texts, Rome, 1979 and Rome, 1997)
International Tropical Timber Agreement (Geneva, 1983; and Amendments, Geneva, 1984)
Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto, 1997) - signatory
Management of Hazardous Wastes within the South Pacific (Waigani, 1995)
Plant Protection Agreement for the Asia and Pacific Region (Rome, 1956; and Amendments, Rome, 1967)
Protocol concerning Co-operation in Combating Pollution Emergencies in the South Pacific Region (Nouméa, 1986)
Protocol for the Prevention of Pollution of the South Pacific Region by Dumping (Noumea, 1986)
Protocol on Substances that Deplete the Ozone Layer (Montreal, 1987; and Amendments, London, 1990)
South Pacific Fisheries Treaty (Port Moresby, 1987)
South Pacific Forum Fisheries Agency Convention (Honiara, 1979)
The Antarctic Treaty (Washington, 1959)
United Nations Convention on the Law of the Sea (Montego Bay, 1982; and Agreements relating to the Conservation and Management of Straddling Fish Stocks and **H**ighly Migratory Fish Stocks, New York, 1995; and implementing Part XI, New York, 1994)
United Nations Framework Convention on Climate Change (New York, 1992)
United Nations Convention on Biological Diversity (Rio de Janeiro, 1992)
United Nations Convention on Combating Desertification (Rio de Janeiro, 1992)

Annex 10: Total GEF Budget and Work Plan

Award ID:	TBC
Project ID:	TBC
Award Title:	Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits
Business Unit:	PNG10
Project Title:	Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits
PIMS No:	4930
Implementing Partner (Executing Agency):	Department of Environment and Conservation (DEC)

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)
COMPONENT 1: Establish Integrated Environmental Information Management System (EMIS)	DEC	62000	GEF	71300	National CBD Specialist	6,000	1,000	1,000	8,000
				71300	National CCD Specialist	6,000	1,000	1,000	8,000
				71300	National FCCC Specialist	6,000	1,000	1,000	8,000
				71300	Public Administration Expert (1)	4,000	4,000	4,000	12,000
				71300	Policy/Legal Expert	2,000	1,000	1,000	4,000
				71300	IT and Knowledge Management Expert	6,000	1,000	1,000	8,000
				71200	International Specialist – CBD	10,000	6,500	5,500	22,000
				71200	International Specialist – CCD	10,000	6,500	5,500	22,000
				71200	International Specialist - FCCC	10,000	6,500	5,500	22,000
				71200	International Technical Specialist	7,500	4,500	4,500	16,500
				72100	Contractual services: Rio Convention data analysis software	58,000	0	0	58,000
				72100	Contractual Services: Meeting services for expert and stakeholder consultation	15,000	15,000	14,000	44,000
				72100	Contractual Services: Workshop venue cost for trainings	0	6,000	6,000	12,000
					Sub-total GEF	140,500	54,000	50,000	244,500
					Total Outcome 1	140,500	54,000	50,000	244,500

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)
COMPONENT 2: Institutional strengthening for improved monitoring of the global environment	DEC	62000	GEF	71300	National CBD Specialist	1,000	2,000	1,000	4,000
				71300	National CCD Specialist	1,000	2,000	1,000	4,000
				71300	National FCCC Specialist	1,000	2,000	1,000	4,000
				71300	Public Administration Expert (1)	10,000	10,000	8,000	28,000
				71300	Policy/Legal Expert	2,000	3,000	3,000	8,000
				71300	IT and Knowledge Management Expert	5,000	8,000	3,000	16,000
				71200	International Specialist – CBD	3,000	8,500	4,000	15,500
				71200	International Specialist – CCD	3,000	8,500	4,000	15,500
				71200	International Specialist - FCCC	3,000	8,500	4,000	15,500
				71200	International Technical Specialist	4,000	4,000	5,500	13,500
				72100	Contractual services: Rio Convention data flow system and tracking software	0	15,000	0	15,000
				72100	Contractual Services: Meeting services for expert and stakeholder consultation	15,000	12,000	12,000	39,000
				72100	Contractual Services: Workshop venue cost for trainings	0	12,000	12,000	24,000
				74100	Professional services		3,000	3,000	6,000
					Sub-total GEF	48,000	98,500	61,500	208,000
					Total Outcome 2	48,000	98,500	61,500	208,000

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)
Project Management	DEC	62000	GEF	71300	Locally recruited personnel: Project Manager	8,500	8,000	8,000	24,500
				71200	International Expert Final Evaluation (Fee only)	0	0	10,000	10,000
				71600	Travel	0	0	2,500	2,500
				74599	UNDP cost recovery charges - Bills	2,750	2,750	5,000	10,500
					Sub-total GEF	11,250	10,750	25,500	47,500
	Total Outcome 3	11,250	10,750	25,500	47,500				

Total Project					Total Project	199,750	163,250	137,000	500,000
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Annex 11: PDF/PPG Status Report

STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

The activities undertaken within the framework of PPG were directed towards the design and development of the medium size project “Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits”.

The project preparation stage envisioned the preparation of background assessments on the institutional context associated with managing data and information for decision-making on environmental issues, with a particular focus on the Rio Conventions. Consultations were held with various stakeholders to compare and contrast challenges and barriers to data and information management for decision-making. Particular attention was given to understanding how an integrated Environmental Management Information System could be constructed atop the current sustainable development baseline.

The validation workshop was a particular useful exercise in that it was well-attended by a good cross-section of stakeholders, who vetted project activities. All of these consultations and background assessments contributed to the drafting of the project document by an international consultant.

These outputs were funded by GEF resources, with the table below specifying how much of PPG funds were disbursed at the time of submission for approval.

A.1: DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:

The findings obtained during the preparatory phase confirmed that the approach identified during the PIF stage remains valid. Participants at the validation workshop reaffirmed their interest and commitment to the project. The project was designed in such a way to reduce implementation risks. This included the need to contract international experts since qualified national experts are very difficult to find.

PPG Grant approved at PIF:			
<i>Project Preparation Activities Implemented</i>	<i>GEF Amount (\$)</i>		
	<i>Budgeted Amount (\$)</i>	<i>Amount Spent to date(\$)</i>	<i>Amount Committed (\$)</i>
Assessment of the current state of environmental data and information management; consultations to inform best practicable approach to removing barriers to strengthening data and information management for the global environment	5,000	5,000	0
Assessment of the institutional functions of the DEC and other key stakeholders, including functional capacities for using data and information for policy formulation	5,000	5,000	0
Prepare proposal, including sustainability plan, M&E plan, stakeholder plan	12,000	12,000	0
Validation workshop	3,000	3,000	0
Total	25,000	25,000	0

Project Title Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits
Project number TBC

Excellency,

1. Reference is made to consultations between officials of the Government of Papua New Guinea (hereinafter referred to as “the Government”) and officials of UNDP with respect to the provision of support services by the UNDP country office for nationally managed programmes and projects. UNDP and the Government hereby agree that the UNDP country office may provide such support services at the request of the Government through its institution designated in the relevant programme support document or project document, as described below.
2. The UNDP country office may provide support services for assistance with reporting requirements and direct payment. In providing such support services, the UNDP country office shall ensure that the capacity of the Government-designated institution is strengthened to enable it to carry out such activities directly. The costs incurred by the UNDP country office in providing such support services shall be recovered from the administrative budget of the office.
3. The UNDP country office may provide, at the request of the designated institution, the following support services for the activities of the programme/project:
 - (a) Identification and/or recruitment of project and programme personnel;
 - (b) Identification and facilitation of training activities;
 - (a) Procurement of goods and services;
4. The procurement of goods and services and the recruitment of project and programme personnel by the UNDP country office shall be in accordance with the UNDP regulations, rules, policies and procedures. Support services described in paragraph 3 above shall be detailed in an annex to the programme support document or project document, in the form provided in the Attachment hereto. If the requirements for support services by the country office change during the life of a programme or project, the annex to the programme support document or project document is revised with the mutual agreement of the UNDP resident representative and the designated institution.
5. The relevant provisions of the Standard Basic Assistance Agreement (SBAA) between the Authorities of the Government of Papua New Guinea and the United Nations Development Programme (UNDP), signed by the Parties on **7 April 1981** (the "SBAA") including the provisions on liability and privileges and immunities, shall apply to the provision of such support services. The Government shall retain overall responsibility for the nationally managed programme or project through its designated institution. The responsibility of the UNDP country office for the provision of the support services described herein shall be limited to the provision of such support services detailed in the annex to the programme support document or project document.
6. Any claim or dispute arising under or in connection with the provision of support services by the UNDP country office in accordance with this letter shall be handled pursuant to the relevant provisions of the SBAA.
7. The manner and method of cost-recovery by the UNDP country office in providing the support services described in paragraph 3 above shall be specified in the annex to the programme support document or project document.
8. The UNDP country office shall submit progress reports on the support services provided and shall report on the costs reimbursed in providing such services, as may be required.

9. Any modification of the present arrangements shall be effected by mutual written agreement of the parties hereto.

10. If you are in agreement with the provisions set forth above, please sign and return to this office two signed copies of this letter. Upon your signature, this letter shall constitute an agreement between your Government and UNDP on the terms and conditions for the provision of support services by the UNDP country office for nationally managed programmes and projects.

Yours sincerely,

Signed on behalf of UNDP
Mirwais Ramaki
Officer-in-Charge

For the Government
Gunther Joku
Department of Environment and Conservation/ Conservation and Environment Protection Authority
[Date]

Attachment: Description of UNDP Country Office Support Services

1. Reference is made to consultations between the Department of Environment and Conservation, the institution designated by the Government of Papua New Guinea and officials of UNDP with respect to the provision of support services by the UNDP country office for the nationally managed programme or project Strengthening Capacities to Measure, Report and Verify Indicators of Global Environment Benefits project number **TBC**

2. In accordance with the provisions of the letter of agreement signed and the programme support document (*project document*), the UNDP country office shall provide support services for the Programme as described below.

3. Support services to be provided:

Support services (insert description)	Schedule for the provision of the support services (when applicable)	Cost to UNDP of providing such support services (where appropriate,)	Amount and method of reimbursement of UNDP (where appropriate)
1. Identification and/or recruitment of project personnel * Project Manager * Project Assistant	Sept 2014 – Aug 2017 Sept 2014 – Aug 2017	As per the UPL: US\$ 951.75 As per the UPL: US\$ 380.70	UNDP will directly charge the project upon receipt of request of services from the Implementing Partner (IP)
2. Procurement of goods: * Data show * PCs * Printers	Sept 2014 – Aug 2017	As per the UPL: US\$ 162.70 (for each purchasing process)	As above
3. Procurement of Services Contractual services for companies	Throughout implementation, as appropriate	As per the UPL: US\$ 514.34 (for each hiring process)	As above
4. Payment Process	Throughout implementation, as appropriate	As per the UPL: US\$ 30.38 (for each transaction)	As above
5. Staff HR & Benefits Administration & Management	Throughout implementation, as appropriate	As per the UPL: US\$212.48 (for each transaction)	As above
6. Recurrent personnel management services: Staff Payroll & Banking Administration & Management	Throughout implementation, as appropriate	As per the UPL: US\$ 828.90 (for each transaction)	As above
8. Ticket request (booking, purchase)	Throughout implementation, as appropriate	As per the UPL: US\$ 34.78 (for each transaction)	As above
10. F10 settlement	Throughout implementation, as appropriate	As per the UPL: US\$ 32.82 (for each transaction)	As above
		Total: USD 10,500	

4. Description of functions and responsibilities of the parties involved:

UNDP will conduct the full process while the role of the Implementing Partner (IP) will be as follows:

- The Implementing Partner will send a timetable for services requested annually/ updated quarterly
- The Implementing Partner will send the request to UNDP for the services enclosing the specifications or Terms of Reference required
- For the hiring staff process: the IP representatives will be on the interview panel,
- For Hiring CV: the IP representatives will be on the interview panel, or participate in CV review in case an interview is not scheduled

Annex 13: Summary of related programmes and projects in PNG

Community-based Coastal and Marine Conservation Project is a GEF funded Marine Conservation Programme with a component on Sustainable Land Management and Nutrition Programme, which aims to address over harvesting and managing both marine and land-based resources in a sustainable manner. The overall goal of the programme is to develop long-term integrated approach focusing on strengthening household food production while addressing a wide range of issues including health, traditional knowledge, sustainable marine and terrestrial resource and environmental management within the small island communities of Milne Bay Province.

GEF Small Grant Programme is a Programme focusing on supporting Non-government organizations and community based organizations to protect global environment through funding projects that addresses issues in biodiversity, climate change, international waters, ozone layer depletion and those that combat land degradation, desertification as they relate to focal areas.

The Remote Sensing Land Use Initiative Project is a UNDP supported project which aims to provide open access to the citizens, information about the status of land-use in the country. Land use planning is conducted with limited information that does not reflect the real situation. The project has been producing spatial account of the land use patters across the country, thereby equipping these managing land assets with reliable data on which to base their decisions and activities.

The formulation of the National Action Plan under the UNCCD is in the initial stages of development and will seek to collect relevant data to develop the proposals for the NAP. DEC-UNCCD Unit recently secured funding from UNCCD and has completed a series of stakeholders' workshops.

The National Strategy Study on UNFCCC Clean Development Mechanism (CDM) REDD+): This project has been revived by the World Bank. Australia's Department of Environment and Heritage (Environment Australia) has been identified as the implementing agency. The proposal is yet to be finalized.

Biodiversity Strategy and Action Plan: A principal requirement of Convention on Biological Diversity conservation that has not been complied with by PNG since ratifying the Convention in 1993 is the National Biodiversity Strategy and Action Plan (NBSAP). The implementation of the CBD commenced in earnest with the development of the National Forest Conservation Action Plan (NFCAP) in the mid-1990s. A number of major NFCAP projects laid the foundations, however this momentum has not been maintained due to budgetary and capacity constraints. The PNG National Report was also to have been submitted to the CBD Secretariat by 1998 through the NBSAP Project; however this action programme never eventuated. However, with the call for the Third National Report, PNG has begun work on formulating the Framework for the National Biodiversity Strategy and Action Plan.

Persistent Organic Pollutants (POPs) Pilot Project: The objective of the project is to strengthen national capacity to manage persistent organic pollutants (POPs) and to assist the Government in meeting its obligations under the Stockholm POPs Convention. The project will assist in developing a National Implementation Plan (NIP) for POPs management, thus enabling the government to reduce and eventually eliminate POPs emissions

PNG Policy on the Protected Areas: This is a policy that supports the development and management of a National Protected Area Network and guide organizations and agencies involved in biodiversity conservation in PNG to harmonize their efforts in a structured and logical approach to the development of protected areas. The Policy will offer a blue print based on international and national obligations and international best practice applied to the unique context of PNG. The Policy will provide the basis for collaboration and cooperation between organizations and for meaningful engagement of community engagement in the protected areas development, establishment and management process.

Climate Compatible Development Strategy: (CCDS) sets out the strategic direction for PNG's action against climate change domestically, with a strong focus on REDD-plus. The main elements of the draft CCDS and the process for multi-stakeholder consultation have been endorsed by the National Executive Council (NEC). The CCDS is envisaged to be finalized and released in its final form later this year.

Interim Action Plan: sets out the immediate priorities for action over the next 6-12 months while the CCDS is being finalized. This progress frames the efforts over the coming months and years, during which GoPNG will move to implement climate-compatible development, specifically including the following actions related to REDD-plus readiness:

- Mitigation from REDD-plus activities need to be incorporated into national development planning and policies will have to be reviewed to ensure they are climate-compatible.
- Further research and analysis will be required in some areas, such as developing a comprehensive greenhouse gas inventory.
- REDD readiness activities will require the development of new capacities in the institutions involved.
- Pilot programs will be required to enhance the knowledge base, identify the most effective institutional arrangements, test the new policies and build capacity.
- A large-scale consultation exercise will need to be launched to involve local communities and landowners in critical elements of the strategy, especially arrangements for benefit sharing.
- A Measurement, Reporting and Verification (MRV) system, fund disbursement mechanism and benefit-sharing models that ensure benefits accrue equitably to resource owners will have to be developed.

Papua New Guinea – Australia Forest Carbon Partnership: The Prime Ministers of Australia and Papua New Guinea established the Papua New Guinea-Australia Forest Carbon Partnership on 6 March 2008. Under this Partnership, Papua New Guinea and Australia have agreed to cooperate in three main areas: policy dialogue on national and international REDD-plus policy; increase PNG capacity in forest carbon monitoring and assessment; and cooperation on participation in international carbon markets, including on REDD-plus demonstration activities. As announced at the PNG-Australia Madang Ministerial Forum, Australia is contributing up to A\$3 million in initial funding which will include technical, scientific and analytical support for the design of Papua New Guinea's carbon monitoring and accounting systems. This Partnership represents one of the support windows under the Australian Government's A\$ 273 million International Forest Carbon Initiative (IFCI). Other IFCI windows of direct relevance to PNG are:

- An allocation for NGOs to develop concepts for demonstration activities to inform the development of a national REDD+ framework—this work is nearing completion, with four of the five NGO concepts presented to the Government of Papua New Guinea in July 2010.;
- The Asia Pacific Forestry Skills and Capacity Building Programme.

Australia has worked with the GoPNG to identify an initial package of assistance under the PNG-Australia Forest Carbon Partnership. It aims to:

- Build the capacity of GoPNG institutions to articulate and implement national climate change policies that meet relevant international standards;
- Build the capacity of GoPNG and other relevant institutions to develop a robust national carbon monitoring and accounting system;
- Support GoPNG to engage in international dialogue on REDD-plus.

GoPNG has requested that the Forest Carbon Partnership work plan be updated which is under consideration by officials. It is envisaged that the updated work plan would complement the REDD readiness efforts covered under the National Joint Programme by lending support to areas that are not comprehensively covered in the NJP.

Japan International Cooperation Agency (JICA): With the support of a PGK 20 million (700 million yen) grant from the Japanese government, PNGFA is aiming to improve its remote sensing and GIS capabilities. The grant comes under the forestry preservation programme (FPP), and was signed by the Government of Japan and GoPNG on March 19, 2010. The main objectives of the project, which focuses on software and hardware equipment, but includes training of staff from all relevant collaborators, are:

- Update the forest resource information of the country;
- Strengthen institutional and capacity building of the PNGFA and other collaborators in assessing changes in forest cover; and
- Support PNG's capabilities to report its GHG emissions to UNFCCC.

The funds will be used to purchase equipment and soft (non-physical) components which may include:

- The Japanese Aerospace Exploration Agency (JAXA) remotely sensed data;
- ALOS Satellite Imagery
- Geographical Information System (GIS) related equipment, computer hardware, software/licensing & software upgrading;
- Ground truthing instruments;
- Training in the use of GIS and processing of ALOS/SPOT data;
- Training PNGFA staff on the Global Positioning System (GPS); and
- Field data collection and data processing.

European Union: The European Union (EU) is currently funding activities of UPNG aimed at supporting PNGFA in the implementation of a new climate monitoring network as well as upgrading the forest inventory mapping system. In addition, it is foreseen that two REDD-plus related projects are launched in 2011. These will contribute to remote sensing forest degradation and to improve the productivity and quality of Teak plantations.

Moreover, the EU has also been initiating discussions with Papua New Guinea's stakeholders in view of informing of the possibility for implementing a Forest Law Enforcement, Governance and Trade (FLEGT) mechanism. Finally, additional funds may further be allocated to the sector depending on identification processes to be carried out in 2011.

PART III: GEF LETTERS OF ENDORSEMENT AND CO-FINANCING

ANNEX A GEF ENDORSEMENT LETTER.....44
ANNEX B LETTERS OF CO-FINANCING.....45

- A. Endorsement letter of PFO GEF; endorsement letters by convention focal points (standard!!)
- B. Letters of co-financing: each of the organizations will write a letter intending to fund a part of the project, either in-kind or in cash.
[Letters are attached in a separate attachment.]