

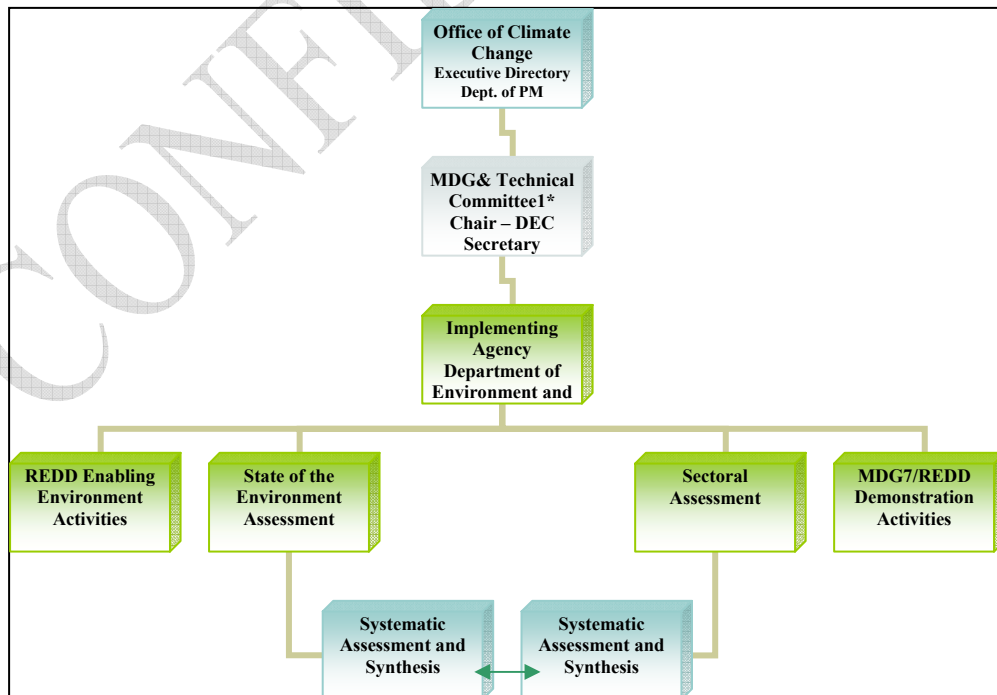
**PAPUA NEW GUINEA****READINESS PLAN IDEA NOTE (R-PIN)**

Country submitting the R-PIN:	Papua New Guinea
Date submitted:	Friday, July 18, 2008
1. General description:	
a) Name of submitting person or Institution: Title: Contact Information: Address: Telephone: Fax: E-mail: Website:	Dr. Warilea Iamo, Department of Environment and Conservation (DEC) Secretary Department of Environment and Conservation, PO Box 6601, Boroko, NCD Somare Foundation Bldg. Papua New Guinea (675) 3250180 (675) 3253551 Nil
b) List authors of and contributor to the R-PIN and their organizations:	Dr. Warilea Iamo, Secretary, DEC Dr. Kanaui, Secretary, PNG Forest Authority Dr. Theo Yasause, Executive Director, OCC&ES Kevin Conrad, Ambassador, Environment & Climate Change
c) Who was consulted in the process of R-PIN preparation, and their affiliation?	Dept. of Environment and Conservation PNG Forest Authority Dept. of Agriculture Dept. of Trade & Industry Dept. of Prime Minister

2. Which institutions are responsible in your country for:

- a) The following institutions are responsible for forest monitoring and forest inventories:
- PNG National Forest Authority (PNGNFA)
 - Forestry Research Institute (FRI)
 - University of Papua New Guinea – through the UPNG Remote Sensing Center
 - Department of Environment and Conservation (DEC)
- b) In the area of forest law enforcement, the PNG National Forest Authority is responsible for implementing the Forestry Act. This Act is responsible for the development of the National Forest development Guidelines which give a significant direction to the National Forest Plan which underpins all forest based activities.
- c) The PNG NFA and the DEC are responsible for forestry and forest conservation. The two agencies are responsible for the creation of forest reserves under the Forest Act and Wildlife Management areas, National Parks, reserves, sanctuary under the National Parks Act, the Fauna (Protection and Control) Act and the Conservation Areas Act.
- d) As for the Coordination across forest and agriculture sectors, and rural development, the Department of Environment and Conservation has developed a Management Arrangements and Strategy Development Framework for the MDG7 and REDD Policy Initiatives approved by the National Executive Council in 2007. See figure 1 below.

Figure 1: Management Arrangements and Strategy Development Framework for the MDG7 and REDD Policy Initiatives adopted from the DEC New Strategic Directions.



3. Current country situation (consider the use of Annex 1 to help answer these questions):

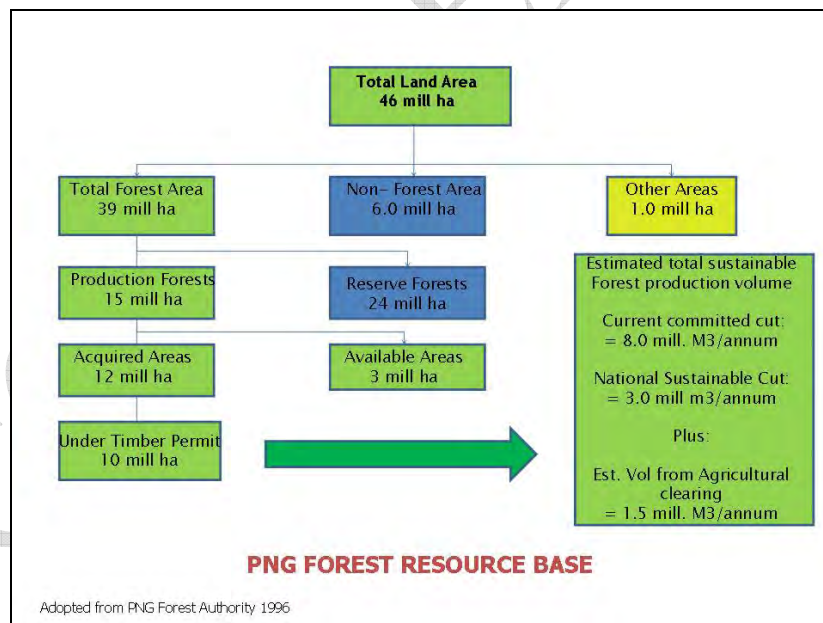
Introduction.

Papua New Guinea (PNG) is one of the last three major remnant tropical natural wilderness areas on earth. It holds over 7 percent of the world's total biological resources in its varied natural environments that range from the tropical oceans and seas to the high mountains above 3,000 meters. This equates to some 700,000 species – but unfortunately there is extremely limited data on marine species. This resource of biodiversity embodies the heart of sustainable livelihoods for both the urban and rural peoples of Papua New Guinea.

PNG has a population of 5.2 million people growing at 2.7% annually with 85 percent of its people living in the rural areas of the country. It is a country comprised of more than 10,000 tribes and a rich ethno-linguistic characteristic that is defined by 832 living languages. Constitutionally, these rural communities own the local resources and depend largely on subsistence agriculture and fishing for their livelihood. With such a significant biodiversity base, PNG faces many environmental, economic and socio-cultural challenges.

PNG Forest Resource Base

The Papua New Guinea Forest Authority (PNGFA, 1996) recorded a total remaining forest area of 39 million hectares. This total forest area is further categorized into different component of uses shown by the diagram below.



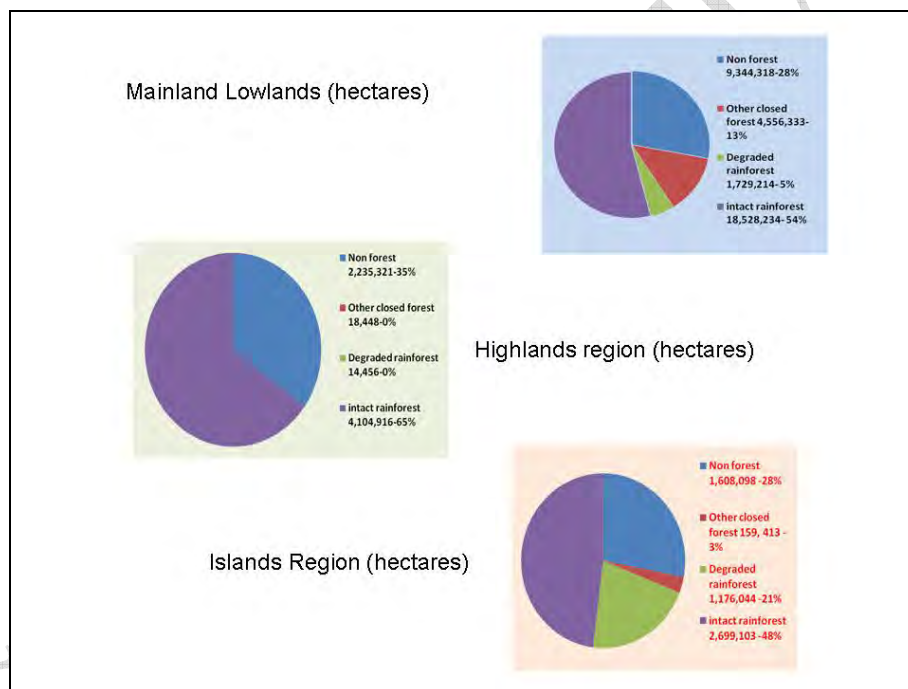
2002 State of PNG Forest.

Recently, "The State of the Forest of Papua New Guinea" produced by scientists at the University of Papua New Guinea Remote Sensing Centre and their colleagues at the Australian National University has provided some information to understand the PNG forest situation up to 2002. In particular the study generated a land cover map for the year 2002, which represents the most advanced information available to understand forest extension in PNG.

From this study (that matched the forest cover map with the SRTM NASA digital elevation model, Shuttle Radar Topography Mission) it was possible to derive the extent of each major forest types for the three broad regions and each of the 19 provinces that makeup PNG. The lowlands are most affected as shown by the results shown below.

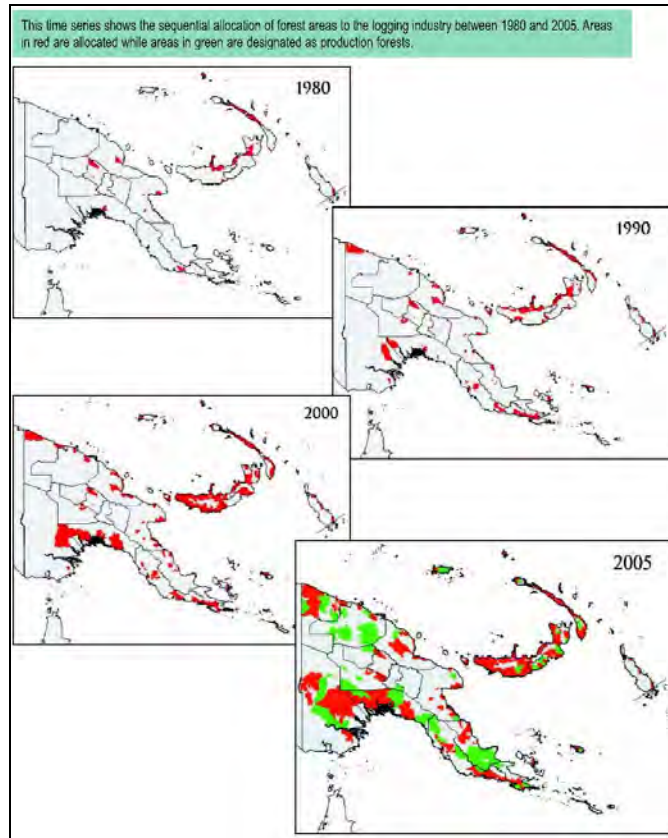
Forest Types	Percentages %
1. Swamp Forest	10
2. Dry evergreen Forest	2
3. Rainforest, upper montane	2
4. Rainforest, lower montane	27
5. Rainforest, lowland	57
6. Mangroves	2

Source: Shearman, P.L., Bryan, J.E., Ash, J., Hunnam, P., Mackay, B. and Lokes, B., 2008. The State of the Forest of Papua New Guinea. Mapping the extent and condition of forest cover and measuring the drivers of forest change in the period 1972 – 2002. University of Papua New Guinea, 2008.



The Studies also provided some information about what was occurring in PNG forests from 1972 to 2002 and although this information has been not collected with methodologies that fulfill the IPCC GPG for LULUCF reporting requirements, this information will be used as an 'indication' of ongoing trends in order to shape the new monitoring system while further analysis is expected to provide more consistent and robust results.

For example, the study provided a series of maps (see below) that show the expansion of logging activities from 1980 to 2005. Major deforestation areas were primarily found on the mainland, the New Britain Island and in Western Province.



For the first time, the UPNG Remote Sensing Centre provided a preliminary estimate of greenhouse or carbon dioxide emissions from deforestation and forest degradation in the country.

In summary, the scientists estimate:

- 4,724 – 4,735 million metric tons of carbon were stored in PNG's primary forests in 2002. This does not include carbon in the forest soils.
- Between 1972 and 2002 deforestation resulted in the release of a net 926.5 million tones of carbon (3,397 million tones of CO₂, with additional 76.39 – 88.83 Mt of carbon (280.1 -325.7 Mt of CO₂) being released through logging related forest degradation.

Over the last 30 years the main drivers identifies for the forest change in Papua New Guinea are as shown below:

- Plantations – 1%
- Forest Fires – 4.4%
- Subsistence agriculture – 45.6%
- Logging – 48.2%
- Mining - .6%

Logging and Subsistence agriculture account for the highest loss of forest. It is not clear if the oil palm and large agriculture land clearing is included under the subsistence agriculture component.

Specifically, there are two main groups of drivers for forest loss in PNG:

1. *Anthropogenic sources*
 - Shifting cultivation
 - Commercial logging
 - Large-scale commercial agriculture
 - Forest Fires
 - Mining and petroleum exploration and development
 - Infrastructure development
 - Settlements and urbanization
2. *Natural sources*
 - Earth quakes
 - Volcanic eruptions
 - Tectonic movements
 - Landslips
 - Flooding

The key issues in the area of forest law enforcement and forest sector governance in Papua New Guinea are:

- a. Need to strengthen capacity to exercise the functions of the Forestry Act:
 - i. All aspects of the planning, acquisition, and allocation process,
 - ii. Assistance to local and provincial interests, primarily through field support and servicing the Provincial Forest Management Committees,
 - iii. Improvement in PNG's forest research capacity to provide contemporary applied scientific support to the development and management of the forest resources
- b. Need to strengthen corporate public sector leadership and management of the Forest Authority as the co-coordinating agency for all forest based activities;
- c. Need to strengthen financial autonomy of administrative and monitoring functions;
- d. Need for increased input from the resources owners and provincial interests in co-ordination along with reliable investors to engage in better developed resource access, protection and sustainability of forest based industries;
- e. Maintenance of a transparent, stable and strong institutional resource management environment that attracts and retains private investment willing to support policies of environmental sustainability.

4. What data are available on forest dwellers in lands potentially targeted for REDD activities (including indigenous peoples and other forest dwellers)? E.g., number, land tenure or land classification, role in forest management etc.

At present, around 97% of the total land area in Papua New Guinea is legally owned and controlled by indigenous communities. Further, over 80% of the population of Papua New Guinea is still directly dependent on the local environment for their subsistence and livelihoods (2000 NSO Census Data).

As such, unlike many counties in the world, the biodiversity on the land is owned by indigenous individuals and by clans. These individuals and clans are legally in control of, and responsible for, the management of their land.

So while indigenous ownership is constitutionally secured, it will be very important that the rightful individuals and clans are involved when developing location-specific activities under REDD. There is, however, a well-established and effective legal process to verify legal tenure and land rights.

5. Summarize key elements of the current strategy or programs that your government or other groups have put in place to address deforestation and forest degradation, if any:

It is an established policy that the Forestry and Environmental Departments consult key stakeholders throughout the development of any forest concession or conservation area through public workshops and meetings. These activities include all relevant government agencies, NGOs, institutions, and the private sector.

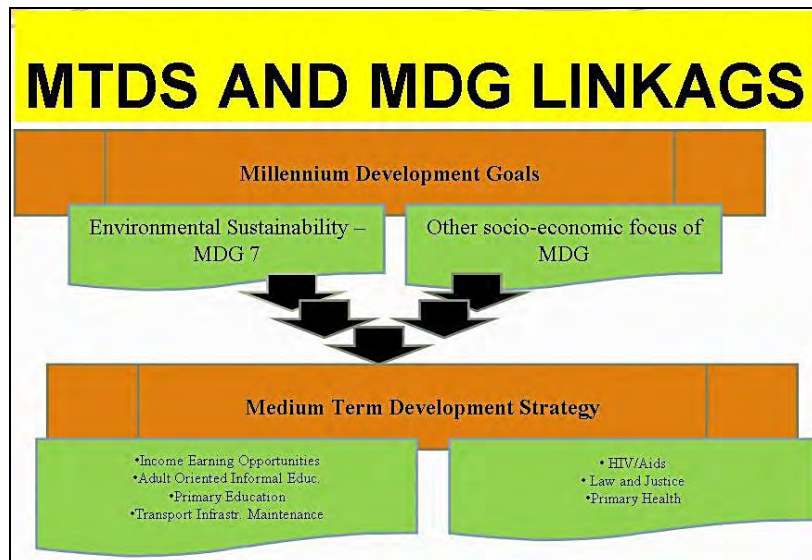
As a regulator, DEC uses this process for consultation with the key stakeholders and partners in the development of strategies that concern PNG environment sustainability and development. The strategies below have been developed using this stakeholders consultation process.

- a) DEC New Strategic Direction
- b) DEC Reduced Emissions from Deforestation and Degradation Program Framework 2008

The other related strategies and actions plans are;

- c) PNG National Biodiversity: Strategy and Action
- d) Protected Areas Initiative

The strategies below are consistent with the PNG Government's overall strategies, especially the Millennium Development Goals, and the sustainable development framework and the PNG Medium Term Development Strategy as shown in the flow diagram below:



Adopted from the Department of National Planning and Monitoring presentation by Koney Samuel.

Under the above outlined PNG Government main policy frameworks, the Department of Environment and Conservation has developed the following strategies and actions:

- DEC New Strategic Direction - 2007
- The PNG National Biodiversity Strategy and Action - 2007
- Protected Areas Initiative - 2006

While the PNG Forest Authority has developed the strategies, which are yet to be endorsed by Cabinet:

- National Forest Development Guidelines – May 2008
- PNGFA Forestry and Climate Change Framework for Action 2008 – 2015

6. What is the current thinking on what would be needed to reduce deforestation and forest degradation in your country? (e.g., potential programs, policies, capacity building, etc., at national or sub-national level):

DEC has developed a REDD Programme framework that identifies five key work streams for development of effective enabling environment for the REDD initiative. These are;

1. Carbon Assessment and Monitoring;
2. Policy, legal and Planning
3. Communication, Education and Awareness
4. Capacity development
5. National and sub-national demonstration activities

These general work streams are being developed into many sub-activities, each with budgets, milestones and timeframes.

And a National program monitoring and evaluation framework will be put in place to assess all aspects of the REDD Program and provide lessons learned to improve implementation as the program moves forward.

At the same time, the PNG Forest Authority has developed a Climate Change Framework for Action for 2008 – 2015. These programs identifies the following areas on the Climate Change and the REDD:

1. Implementing adaptation measures
2. contributing to migration of greenhouse gas emissions
3. improving decision making and good governance
4. improving the understanding of forestry and climate change
5. Education and awareness
6. Partnership and cooperation.

It also acknowledges a number of very important documents such as; PNG the Road to Bali – PNG Perspectives broad framework (2207), the National Forest Policy and its Act (1991), New Forestry Development Initiative (6 impact initiatives – 2007) and Establishment and Operations of State Marketing Agency (2008).

Under the DEC New Strategic Direction, 2007, provides a Management Arrangements and Strategy Development Framework for the MDG7 and REDD Policy which is shown above figure 1.

However, it is important that other government agencies need to participate in the development of the REDD strategies. Accordingly, these interdepartmental issues will be coordinated through the OCC&ES.

It is noted that further work in this area is most urgent to an integration of strategies are have avoid conflict land-uses and mechanisms.

7.What are your thoughts on the type of stakeholder consultation process you would use to: a) create a dialogue with stakeholders about their viewpoints, and b) evaluate the role various stakeholders can play in developing and implementing strategies or programs under FCPF support?

While further consultation is required specifically for REDD amongst the key stakeholders, the OCC&ES will coordinate this process in conjunction with the relevant departments, agencies, and international developmental partners. Presently, the DEC and NFA are holding collaborated meetings with the government line agencies, there are radio talk back sessions, and workshops currently being used to share information and obtain views. At the same time both agencies have developed and hope to use this consultation process.

- Task Force: establish multi-stakeholder consultative REDD Task Force
 - Identify Key stakeholders including the NGOs and the private sector
- Workshops: National and Provincial Meetings and Workshop
 - National Meetings and Workshops
 - Provincial Local level Governments
 - Key Stakeholders Meetings and Workshops
- Decision-making: National and Provincial Forest Board,
- PEC Submission

- NEC Submission

8. Implementing REDD strategies:

PNG is gearing up to participate in implementing the REDD strategies, however new and additional funding will be necessary to improve institutional capacity such that policy development, strategic planning and on-the-ground implementation can be effected quickly. Some of the issues for consideration are;

a) DEFINITIONS

Should be determined at the National level in consistent with that currently being used under both the UNFCCC and KP as follows;

- Deforestation – land use change from forest land to other land uses
- Degradation – decrease at national level of carbon stocks in forest land remaining as forest land Forest land – under the UNFCCC PNG will evaluate the adoption of the same forest definition contained in the FAO 2005 Global Forest Resource Assessment

b) TECHNICAL_& METHODOLOGICAL

- Additionality: By establishing national REDD reference scenario, the additionality of efforts to reduce emissions from deforestation and forest degradation can be judged quickly and accurately while underpinned by clear reduction objectives. Using historical reference levels, we can determine, at a national level, whether gross emissions have in fact been reduced.
- Leakage: By accounting for REDD on the national level, leakage will be captured in a manner not possible with sub-national or project-based accounting.
- Permanence: The set up of a national accounting system through successive commitment periods will insure that credits and debits are accounted for at the appropriate point in time. Moreover, Further, it is suggested that PNG establish of a carbon banking mechanism that credits early action and debits compliance failures. Further, leveraging the insurance markets to address traditional risks such as fire, flood, etc.

c) REFERENCE SCENARIO & MONITORING

A system to monitor changes in carbon stocks in forest land will be based on satellite remote-sensing technologies and field inventories techniques. In particular, the system will be consistent with the methodologies requirements of the IPCC LULUCF Good Practice Guidance and IPCC 2003 GPGs and will follow the indication included in the REDD Source Book edit by GOFC-GOLD.

- Reference Scenario (from 1990 to 2005) PNG is undertaking an assessment of historical gross emissions from forest land adjusted in accordance with PNG national circumstances to serve as a reference threshold for measuring reductions in gross emissions.

- Monitoring: These will include the assessment of changes in all five pools of carbon in forests (above and below ground biomass, dead wood, litter and soil) through the development of the existing forest permanent sampling plots.
- Such a system for monitoring and reporting emissions from REDD should have the following elements:
 - Scientifically sound
 - Transparent
 - Accurate
 - Based on IPCC LULUCF Good Practice Guidance and IPCC 2003 GPGs
 - Compliant to the requirements of the REDD Policy

d) REDD OPPORTUNITIES

PNG's position and commitments to REDD include:

- reducing the rate of deforestation and degradation; and,
- Increasing the activities for converting non-intact forests and other land use to intact forest.

e) REDD compensation mechanisms could be defined as having two components:

- Compensation for loss of revenue from activities that are driving increase the rate of deforestation and degradation; and,
- Compensation for implementing activities that reduce emissions under REDD mechanisms.

Within PNG, REDD is a component of the Government's Environment Sustainable Economic Growth (ESEG) policy initiative which aims to identify development options which are environmentally and ecologically sustainable, and could provide long term income generation opportunities for landowners and revenue streams for the Government. Further, REDD will be coordinated from the Department of the Prime Minister through the OCC&ES. However, the REDD strategy needs to be further developed over the coming months and years.

In implementing the REDD strategies or programs, DEC will need to develop clear policies and give special considerations to:

- Communication,
- Involvement and participation of key stakeholders,
- Clear policies and effective legislation,
- Continued Political will that will resources the strategy,
- Develop realistic benefit distribution,
- Efficient and effective capacity,
- Establish a accurate database

9. REDD strategy monitoring and implementation:

PNG will establish a Forest GHG Inventory Unit that will coordinate actions to monitor area and carbon pool changes.

The area change assessment will be realized mainly by a remote sensing laboratory. The laboratory will likely adopt an advanced version of the

methodologies develop by INPE (Brazilian Space Agency) in the PRODES Project (Prodes is an operational system to monitor forest area change in the Amazon region. The system is monitoring annual changes since 1988). There are plans for the technical staff of the Laboratory to be trained in Brazil at INPE through a cooperation project.

The carbon pool changes will be assessed by two laboratories, one for carbon forest inventory and one for carbon soil inventory. These laboratories will implement inventory methodologies provided by IPCC in the LULUCF Good Practice Guidance or the 2006 AFOLU Guidelines.

10. Additional benefits of potential REDD strategy)

There are other non-carbon values from which the government and the landowners can benefit, including;

1. Protected areas – tourism, maintaining cultural heritage, spiritual aspirations, recreation and others
2. Environment services for communities – clean water; coastal protection; catchment protection for water supply; clean air; and biodiversity protection

11. What type of assistance are you likely to request from the FCPF Readiness Mechanism?

DRAFT: NEEDS REVISION

Categories	DEC REDD Strategy Outputs	Budget Items	Total Requested (US\$)
a) Setting up a transparent stakeholder consultation on REDD (e.g., outreach, workshops, publications, etc.):	Engagement of landowners, provincial governments, consultation at national level with the key government agencies, donors, the private sector and the NGOs <u>DEC REDD Strategy 3</u>	National Experts International Experts Workshops/Meetings	31,500.00 45,000.00 30,000.00 <u>\$106,500.00</u>
b) Developing a reference case of deforestation trends: Assessment of historical emissions from deforestation and/or forest degradation, or projections into the future	<ul style="list-style-type: none"> • Aerial images • Satellite images • Ground truthing • Database development and management <u>DEC REDD Strategy 1</u>	National Experts International Experts Workshops/Meetings	21,000.00 30,000.00 150,00.00 <u>\$201,000.00</u>
c) Developing a national REDDS Strategy: Identification of programs to reduce deforestation and design of a system for providing targeted financial incentives for REDD to land users and organizations (e.g., delivery of payments, governance issues, etc.):	Engage consultants to look into; <ul style="list-style-type: none"> • Reforestation programs • Protected areas program • Forest reserves • Other community based conservation area <u>DEC REDD Strategy 2</u>	National Experts International Experts Workshops/Meetings	157,500.00 225,000.00 150,000.00 <u>\$532,500.00</u>
d) Design of a system to monitor emissions and emission reductions from deforestation and/or forest degradation:	Engage consultants to develop the system <u>DEC REDD Strategy 1</u>	National Experts International Experts Workshops/Meetings	15,750.00 22,500.00 15,000.00 <u>\$53,500.00</u>

e) Others?	1. Identify and develop demonstration activities	National Experts	126,000.00
	<u>DEC REDD Strategy 5</u>	International Experts	180,000.00
	2. Capacity building	Workshops/Meetings	120,000.00
	<ul style="list-style-type: none"> Capacity Needs Assessment 		<u>\$426,000.00</u>
	<u>DEC REDD Strategy 4</u>		
	3. Develop a payment system for those landowners taking part in the REDD demonstration program		Total Amount Requested (Estimated)
	<u>NEW REDD Activity</u>		<u>US\$1,319,250.00</u>

12. Please state donors and other international partners that are already cooperating with you on the preparation of relevant analytical work on REDD. Do you anticipate these or other donors will cooperate with you on REDD strategies and FCPF, and if so, then how?

A donor engagement partnership forum has been established and is chaired by UNDP. Potential donor support is being discussed with the World Bank; UNDP; FAO; GEF PAS; AusAID; Japanese Government;

13. Potential Next Steps and Schedule:

Have you identified your priority first steps to move toward Readiness for REDD activities? Do you have an estimated timeframe for them yet, or not?

DEC has developed a REDD Programme framework that identifies five key components for development of effective enabling environment for the REDD initiative. These are;

- Carbon Assessment and Monitoring
- Policy, legal and Planning
- Communication, Education and Awareness
- Capacity development
- Demonstration activities

And a program monitoring and evaluation will be put in place to assess all aspects of the REDD Program and provide lessons learned to improve implementation as the program moves forward.

The next step is to review the broad REDD program framework and design a project implementation document. This can be done within the next several months factoring also GoPNG funding support for implementation in 2009 onwards.

14. List any Attachments included
(Optional: 15 pages maximum.)

1. DEC Reduced Emissions from Deforestation and Degradation program Framework
2. PNG Forest Authority National Forest Development Guidelines – May 2008
3. PNGFA Forestry and Climate Change Framework for Action 2008 – 2015

NOTE:

Before Papua New Guinea can engage actively with the FCPF, the World Bank and UN-REDD must agree on terms for a Joint Readiness Approach that includes the following minimal elements:

1. Jointly Chairing the FCPF Participants Committee on a Rotational Basis
2. Jointly staffing the Facility Management Team
3. Completion of an acceptable Joint Readiness Work-plan

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