

PAPUA NEW GUINEA ENABLING ACTIVITY PROPOSAL IN BIODIVERSITY

Country	Papua New Guinea
Project Title	Biodiversity Strategy and Action Plan
GEF Focal Area	Biodiversity
Country Eligibility	Ratified the CBD in 1993
GEF Financing Request	US \$182,000
Government Contribution	In kind and personnel
GEF Implementing Agencies	World Bank
National Executing Agency	Department of Environment and Conservation
GEF Operational Focal Point	Dr. Wari Iamo, Department of Environment and Conservation
CBD Focal Point	Department of Environment and Conservation
Clearinghouse Mechanism Focal Point	Department of Environment and Conservation
Estimated Starting Date	February 1998
Project Duration	12 months

BACKGROUND/CONTEXT

Papua New Guinea (PNG) occupies the eastern half of the island of New Guinea, which is located in the South Pacific, to the northeast of Australia at 141-152° W and 3-11° S. PNG gained its independence in 1975. The population of approximately 4.5 million is comprised of some 700 distinct cultures/language groups, with a per capita income of about US\$1,150. The geography of PNG is renowned for its ruggedness, leading to a wide variety of microclimates, landforms and vegetative community types. Economic growth over the past two decades has been spurred mainly through large intermittent mining, petroleum, and logging operations, though the majority of the population continues to rely upon subsistence agriculture, and forest and marine resource utilization.

PNG covers 46.3 million hectares, of which about 36 million ha, 77% of total land area, is still covered by closed natural forest. This tropical forest expanse constitutes one of the most significant tropical rainforest wildernesses remaining as a contiguous, largely intact tropical ecosystem. PNG's forests are among the most complex and species-rich terrestrial ecosystems in the world and contain considerable diversity in forest types. There are generally ten forest types acknowledged. Lowland systems include large areas of lowland wet forest and smaller but unique lowland monsoon forest. There are several montane forest types which vary greatly in structure and diversity, largely along elevational and rainfall gradients. Plant communities of note include the world's largest mangrove expanses, many varieties of orchids and rhododendrons, and large areas of sago swamp (*Metroxylon sagu*).

PNG also encompasses a large marine jurisdictional zone, with a Declared Fishing Zone that covers 2.3 million km². The mainland coastline alone constitutes some 5,160 miles of mangrove swamps, lagoons, wetlands, coral reefs and atolls, and seagrass communities. PNG is in close proximity to what is considered the epicentre of marine species diversity, which is

reflected in some of the richest coral reef fish faunas on the Earth. The total area of coral reefs at depths of up to 30 meters has been estimated at 40,000 km². More than 4,000 km² are covered with mangrove forests. The wide variety of coastal habitats contributes to extremely high biological diversity of shallow water marine organisms. Additionally, the country contains significant commercial fisheries including exceptionally rich tuna resources. The freshwater fauna is unique, though less developed. Relatively little is known regarding marine biodiversity; areas of special importance, and the necessary strategies and action plan to promote marine biodiversity conservation.

The region qualifies as a biodiversity hotspot. Best current scientific estimates are that 5% to 7% of the world's biodiversity is found in PNG, including an estimated 10,500-16,000 endemic plant species. Terrestrial biodiversity, which has been better quantified, includes approximately 200 mammal species, 15,000-20,000 plant species, 1,500 tree species and 750 bird species. This includes many species of international significance. Best known birds include birds of paradise (90% of the world's total species), bowerbirds, mound-builders, and cassowaries. 53% of PNG's bird species are endemic. PNG's reptiles include endemic species of freshwater crocodile, and the world's longest lizard (*Varanus salvadorii*) which can grow to 15 feet long. Outstanding insects abound such as bird-wing butterflies (Ornithoptera) which includes the world's largest butterfly.

Forest and marine resources are vitally important to the country's population that depends on their services and products to meet subsistence and development needs. Foodstuffs and other materials from the forests and seas remain a central component of the Papua New Guinean diet. There are an estimated 5,000 cultivars of sweet potato found within the country. Numerous other native plant species have traditionally been cultivated, including more than 30 root crops, 21 legume species, 40 leafy green vegetables, 60 other vegetables and roots, 43 varieties of nuts, 102 fruits and 89 other plants used for food or seasonings.

Forest degradation is a serious problem in Papua New Guinea. There is general agreement that the most significant threat currently posed to Papua New Guinea's biodiversity values stem from the degradation of terrestrial habitats by total or partial removal of natural forest cover. It is estimated that 15 million hectares of forests are accessible for timber harvesting. About 1.5 million hectares have already been logged. Annually about 25,000 hectares of natural forest are totally cleared for agricultural, clearcutting and infrastructure construction; another 125,000 hectares is selectively logged, albeit in an unsustainable manner; and it is estimated shifting cultivation clears another 200,000, although it is not clear what proportion of this is primary forest. Of the over 6 million hectares of approved timber blocks, more than 1.5 million hectares have been located in high priority biodiversity areas.

PROJECT OBJECTIVES AND SHORT DESCRIPTION

The principal objective of the proposed Biodiversity Enabling Project is to assist the Government of Papua New Guinea to implement commitments under the Convention on Biological Diversity through preparation of a National Biodiversity Strategy and Action Plan (NBSAP). The project will allow the government to define priority actions for terrestrial and marine biodiversity conservation and utilization within the context of sustainable development. The intention is that priority areas can be identified, and then matched with prospective donors.

New Guinea (1997), undertaken by the government in collaboration with UNEP. There will only be the need to slightly update the stocktaking information and identify the relevant materials most pertinent for each thematic area.

Defining priority actions, for both terrestrial and marine biodiversity, will consist of four major steps: identifying the causes of threats to biodiversity, setting goals, identifying the gap between current and desired outcomes, and defining policy instruments to address biodiversity degradation, particularly through sustainable use of biological resources. A multi-sectoral perspective will be critical. The Country Study in particular has made progress in this regard, but must be made more comprehensive, organized into a strategy and action plan, and refined through extensive consultations.

Ensuring effective implementation will require integration of proposed actions within the government's sectoral policies. Additionally this will require encouraging the participation of key stakeholders in planning and implementation, identifying clear institutional responsibilities, ensuring there is sufficient implementation capacity, reviewing and proposing measures to achieve an appropriate legal framework, commencing a mechanism to mobilize resource to finance implementation of strategy recommendations, and establishment of mechanisms for monitoring, evaluation and revision of priorities during implementation. The country's clearing-house in regards to the Convention on Biological Diversity will be established.

COVERAGE WITHOUT DUPLICATION

The NBSAP will, to the greatest possible extent, make use of existing information. As mentioned previously, there has been a great deal of stocktaking activities carried out over the past several years. Thus the largest coverage without duplication issue is the fact that a comprehensive and overall stocktaking exercise is not needed. There will, however, be a brief review of existing stocktaking efforts, updating if necessary, and prioritization of which known materials are most relevant for NBSAP purposes.

Stocktaking activities have included the *Papua New Guinea Country Study on Biological Diversity* (Sekhran and Miller eds., 1994) which carried out biodiversity stocktaking activities with support from the United Nations Environment Program, the *Papua New Guinea Conservation Needs Assessment Volume 1* (Alcorn 1993) and *Volume 2* (Beehler 1993) which sought to identify geographic areas of primary biodiversity importance and the *Catalogue of Biodiversity Data Holdings for Papua New Guinea* (Hedemark and Peters 1997), also with UNEP, which systematically constructed a database regarding all known information concerning the biodiversity of PNG. The *BIORAP* biodiversity mapping project which has been identifying regions with relatively more valuable biodiversity values utilizing GIS will also be utilized.

There have also been biodiversity conservation efforts by Government and civil society which have to varying extents made recommendations regarding items which may constitute a biodiversity strategy and action plan. Current active participants in biodiversity issues must be identified, asked to participate in the process and their views incorporated.

TIME PLAN AND SEQUENCING OF ACTIVITIES

The NBSAP process will span 12 months, starting with establishment of a Steering Committee and planning and consultation with national and international consultants. The data inventory phase will require only a short period to ensure stocktaking is up to date and relevant resources are prioritized. A Steering Committee, Task Force and Working Groups will be established, and preparation of a work plan and Terms of Reference for consultants will occur. These groups will be comprised of a multi-sectoral membership, including forestry, agriculture, fisheries and others in order to ensure that recommendations made will mainstream biodiversity across sectors. These activities will coincide with initiation of the analysis and assessment of options, followed by preparation of the draft BSAP. The time sequence of project activities is consistent with the *National Biodiversity Planning: Guidelines on Early Experiences Around the World* (WRI/UNEP/IUCN 1995), as well as the *Operational Criteria for Enabling Activities* (GEF 1996). The schedule for completion of various tasks is found below.

Activity/month	1	2	3	4	5	6	7	8	9	10	11	12
Establishment of Steering Committee and Working Groups	x											
Finalization of TOR for consultants	x											
Preparation of Work Plan	x											
Recruitment of National Consultants and International Consultant	x	x										
Establish Clearing-house Mechanism	x	x										
Review & Prioritization of Existing Information, update where necessary			x									
Analysis and Identification of Options and Priorities			x	x	x							
First National Workshop					x							
Regional Seminars & Discussions						x	x					
Preparation of Draft PNGBSAP						x	x	x				
Second National Workshop w/ donor round table									x			
Review and Finalization of PNGBSAP Based on Comments									x	x		
Public Awareness Campaign						x				x	x	
Printing and Publication of PNGBSAP											x	x
Preparation of National Report to CBD											x	x

BEST PRACTICE

The methods used in the implementation of this project will follow approaches in the

National Biodiversity Planning: Guidelines on Early Experiences Around the World and the *Operational Criteria for Enabling Activities*. Lessons learned and insights derived from the *Biodiversity Country Study Workshop*, *The Papua New Guinea Country Study on Biological Diversity*, *The Biodiversity Data Management Programme* and *The Conservation Needs Assessment* will be fully utilized. The Papua New Guinea Biodiversity Strategy and Action Plan will comply with best practices and lessons learned from GEF projects in Papua New Guinea and elsewhere.

The Papua New Guinea NBSAP's goals, objectives and actions will represent national priorities, and will be consistent with the local culture and social situation. The intent of the consultative and participatory process will be to build a national consensus on these matters. To the extent possible, the process will be implemented and driven by national expertise. The PNG NBSAP will be prepared by Papua New Guineans from the public and private sectors, including NGOs, through a process that fosters participation and local ownership of the strategy derived. Different stakeholders will have numerous opportunities to participate in and impact the process; including membership on the Steering Committee and Working Groups, and attendance at national and regional workshops. The NBSAP will be submitted to the government for endorsement and to Parliament for approval. A thorough and inclusive process is particularly critical within the Papua New Guinean social context, if eventual implementation is to have a high likelihood of success.

INSTITUTIONAL FRAMEWORK

The Department of Environment and Conservation (DEC), as the principal state agency for policy making, management and monitoring of the environment, will be the coordinating agency in the establishment of the Steering Committee. DEC will ensure that the Steering Committee is comprised of representatives from diverse segments of society and is multi-disciplinary, and multi-sectoral. The Steering Committee needs to reflect the interests of all those agencies and institutions concerned with biodiversity management including government agencies with a direct mandate (Forestry, Agriculture, Fisheries, Environment, Prime Minister's Office). Key institutions including central government agencies identified above, NGOs, church groups, private sector, landowners, research facilities and Universities, and the mining and forestry industry; will be represented on the Steering Committee.

The Steering Committee will coordinate and implement this project with the assistance of national and international consultants, and relevant DEC staff. The Steering Committee will focus on developing broad-based constituencies across sectors in support of the project, provide advice and guidance to others involved in the process, and ultimately have responsibility for long-term implementation of the BSAP. The Steering Committee will oversee and have ultimate responsibility for the entire project management and decision making. Day to day management of the process will reside in a small Task Force appointed by and accountable to the Steering Committee, and residing within DEC. Further, DEC will be established as the clearing-house mechanism focal point.

Responsibility for researching and writing various sections of the NBSAP will be vested in several thematic Working Groups. These small working groups will be designated by the Steering Committee and will be composed of between 1-3 individuals that will pull together

input from the Steering Committee and other sources. Working groups will be organized along sectoral lines in order to ensure biodiversity is integrated into sectoral development. Both terrestrial and marine based working groups will be comprised of experts in their fields. Given the relatively greater amount of biodiversity research done on terrestrial systems, a particular effort will be made to better understand aquatic systems and their biodiversity; including coastal zones, reefs and other land/water interfaces. Additionally, manners to finance biodiversity conservation in PNG must be further examined. Materials prepared will be reviewed and endorsed by the Steering Committee which will meet regularly to review progress, discuss options for action, review objectives and draft documents, and to build consensus between stakeholders.

Membership in the Steering Committee, Task Force and Working Groups will be based upon assuring representation from appropriate government ministries and department in recognition of the fact that this is an official government strategy, recognized technical expertise in biodiversity, forestry, agriculture and other technical fields, and upon NGO and civil society's incorporation into the Steering Committee and each thematic Working Group.

The World Bank will be the GEF Implementing Agency for preparation of the BSAP.

COST EFFECTIVENESS

The Papua New Guinea NBSAP will be prepared on a 12-month schedule. The cost effectiveness of this proposal lies in maximal use of the existing information and capacity developed in the course of the *GEF Integrated Conservation and Development Project, Papua New Guinea Country Study on Biological Diversity*, the *Conservation Needs Assessment*, *Biodiversity Data Management Report* and *BIORAP* data. In addition, the already completed first national report to the COP will be strengthened and built upon. In particular, the Country Study has already pulled together elements of a national biodiversity strategy. These extensive and well done earlier studies will be brought to completion with development of a comprehensive and explicit BSAP. There is still the need to undergo a thorough and participatory consultative process in order to achieve a consensus on a strategy and action plan to address known issues. Given the lack of transportation networks, and social necessity to be inclusive and thorough, the process costs are relatively high compared to comparable enabling activities elsewhere.

DEVIATION FROM CRITERIA AND NORMS

None.

PROJECT FINANCING

Activity	Product	Process	Total
Phase 1: Initial Assessment and Planning			
National Consultants and Working Groups	2,500	0	2,500
Documentation	500	0	500
Total	3,000	0	3,000
Phase 2: Capacity Building and Implementation			
International Consultant	8,000	6,000	14,000
National Consultants and Working Groups	8,000	8,000	16,000
Steering Committee Meetings	0	2,000	2,000
First National Workshop	0	10,000	10,000
6 Regional Workshops	0	30,000	30,000
Travel	3,000	4,500	7,500
Materials and Reports	3,000	0	3,000
Total	24,000	42,500	66,500
Phase 3: Dissemination and Evaluation			
International Consultant	10,000	4,000	14,000
National Consultants	18,000	9,000	27,000
Second National Workshop & Donor Roundtable	0	12,000	12,000
Dissemination of Drafts	0	2,000	2,000
Public Awareness	0	3,000	3,000
Publication of BSAP	9,000	0	9,000
Travel	3,000	4,500	7,500
Total	40,000	22,500	62,500
Phase 4: Infrastructure and Training			
PC Hardware	4,000	0	4,000
Software	1,000	0	1,000
Modem	500	0	500
Internet Service Provider	3,000	0	3,000
Technician Set-Up Fees	500	0	500
Internet and Email Training	0	3,000	3,000
Total	11,000	3,000	14,000
Total	78,000	68,000	146,000
GRAND TOTAL	78,000	68,000	146,000

ANNEX: Activity Matrix, Papua New Guinea Biodiversity Strategy and Action Plan

Enabling Activity	Output		Capacity Building		Public Participation	Comments
	Planning	Execution	Institutional Strength	Training		
<i>Stocktaking and Assessment based on Existing Information</i>						
Biodiversity and biological resources						1, 2
Cross-sectoral issues						1, 2
Policy and regulatory framework						1, 2
Institutional and human capacity						1, 2
Analysis of root causes of biodiversity loss						1, 2
Technologies for conservation and sustainable use						1
Activities with adverse impacts						1
Existing measures and programs						1, 2
Preliminary statement of objectives						1
Identification of gaps						1, 2
Assessment of existing needs						1, 2
<i>Identification and Analysis of Options to Meet the Objectives of the CBD</i>						
Strategies for conservation	X		X	X	X	4, 5
Strategies for sustainable use	X		X	X	X	4, 5
Strategies for benefit sharing	X		X	X	X	4, 5
<i>Planning and Preparation of a Strategy and Plan</i>						
National strategy	X		X	X	X	3
National action plan	X		X	X	X	3
<i>Planning and Preparation of CBD National Report</i>						
National report	X				X	6

Activity Matrix comments

1. Papua New Guinea carried out a country study on biological diversity in 1994 with assistance from UNEP.
2. The UNEP Biodiversity Data Management Programme (BDM) has recently completed its inventory of biodiversity data.
3. These strategies will be developed with the assistance of an international consultant.
4. Regional seminars and national workshops will be conducted to ensure public participation and to enhance the national ownership of the BSAP. Four regional seminars will seek to involve as many stakeholder groups as possible including regional government departments, local institutions, local NGOs, community based organization, community leaders and the private sector.
5. In addition to its goals in meeting the objectives of the CBD, preparing this NBSAP is important given a number of complementary activities including the World Bank's proposed Forestry and Conservation Project and ongoing UNDP GEF ICAD Project which are underway. These other projects would benefit from the guidance of the strategies and plans defined by this Enabling Activity.
6. A National Report to the CBD will be prepared to present the completed BSAP.



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PAPUA NEW GUINEA.
10/08/98

Glen Barry,
PNG Forestry & Environment
Specialist,
Sustainable Rural Development,
The World Bank Group,
Headquarters Washington, DC 20433,
U.S.A.

Date:
Our reference:
Action Officer:
Designation:
Your Reference:
Date:

Dear Glen,

RE: GEF BIODIVERSITY ENABLING ACTIVITIES

As a follow-up on our meeting Monday, 10th August, 1998, at 9.00am, in my office, Somare Foundation to confirm the plans for the Project on **BIODIVERSITY ENABLING ACTIVITIES**, I write to give my approval and the project shall proceed as soon as possible.

I have appointed Veari Kula, a Scientific Officer, in Species Management Unit, to be the Coordinator working in close consultation with Tony Kuman - who is the new coordinator for donor funded projects.

As we have agreed, I will select and appoint local and national consultants and also make inputs in selection of international consultants.

I look forward to executing this project as it will be a vehicle for this Department to have a clear set of priorities in biodiversity conservation which we can submit to government, donor agencies and non-government organisations for funding.

I await your early response.

Yours Faithfully,

DR WARI IAMO
Secretary