Submission Date: 30 November 2009 **Resubmission Date**: 14 December 2009

PART I: PROJECT IDENTIFICATION

GEF PROJECT ID: 4182 PROJECT DURATION: 6 years GEF AGENCY PROJECT ID: 4186

COUNTRY(IES): Malaysia

PROJECT TITLE: Biodiversity Conservation in Multiple-Use Forest Landscapes in Sabah, Malaysia

GEF AGENCY(IES): UNDP

OTHER EXECUTING PARTNER(S): Government of

Sabah, Malaysia;

GEF FOCAL AREA (S): Biodiversity

GEF-4 STRATEGIC PROGRAM(s): BD-SP1; BD-

SP3; BD-SP4

NAME OF PARENT PROGRAM/UMBRELLA PROJECT (if applicable):

INDICATIVE CALENDAR*					
Milestones	Expected Dates mm/dd/yyyy				
Work Program (for FSP)	March 2010				
CEO Endorsement/Approval	Dec 2011				
Agency Approval Date	Jan 2012				
Implementation Start	March 2012				
Mid-term Evaluation (if	March 2015				
planned)					
Project Closing Date	Feb 2018				

^{*} See guidelines for definition of milestones.

A. PROJECT FRAMEWORK

Project Objective: To institutionalize a multiple-use forest landscape planning and management model which brings the management of critical protected areas and connecting landscapes under a common management umbrella, implementation of which is sustainably funded by revenues generated within the area

Project	Туре	Expected Outcomes	Expected Outputs		ve	Indicativ Co- Financing		Total (\$)
Components	ē			Financir (\$) a	%	(\$) b	<u>%</u>	
1. An enabling environment for optimized multiple use planning, financing, management and protection of forest landscapes.	TA	 State-level process in place by end of year 3 to ensure no net loss of biodiversity from existing State-owned forested landscapes.¹ State-level policies and regulations for REDD, biobanking and other revenue generating options, together with policy related to funds management and re-injection to PAs and forestry management by end of year 3. 30% increase in relevant multiple-use, landscape-level forestry, forest protection and financial management capacities of State Forest Department, State Economic Planning Unit and other stakeholders in Sabah, as measured by capacity development scorecard by end of 	1.1 State-level regulations and policies for planning and management of forest protected areas and surrounding landscapes based on biodiversity and ecological function conservation objectives. 1.2 New state-level regulations and policies for generating and disbursing revenues at landscape level from innovative financing mechanisms such as: (i) REDD+ and other climate change related financing mechanisms; (ii) biodiversity banking; (iii) watershed services; (iv) ecotourism, and; (v) bio-prospecting 1.3 Enhanced capacities of staff within relevant state-level Government departments, including State Economic Planning Unit, Sabah Forest Department, Sabah Foundation and Town & Country Planning to design, implement and manage / oversee multipleuse, landscape-level forest management and sustainable financing schemes, including enhanced capacities to monitor ecosystem service markets 1.4 Enhanced, cost-effective systems for compliance monitoring and enforcement of multiple use forest regulations. 1.5 State and national guidelines and operational policies for multiple-use forest landscape planning, management and conservation that build on the lessons learned from work at the demonstration site	750,000	30	1,750,000	70	2,500,000

¹ Outcomes and outputs *in italics* indicate project components which will be entirely co-financed.

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	project						
2. Multiple-use forest landscape planning and management system demonstrated at pilot site	TA Multiple use forest landscape planning, management and conservation system operational within project demonstration area • Species and ecosystem biodiversity conserved in approximately 261,000 ha. of the Kalabakan-Gunung Rara area, within a sustainably-managed fores landscape of 393,544 ha including adjacent protected areas. • At least 50,000 ha. protected areas. • Total percentage of area allocated for agricultural production (including oil palm) at least 60% lower compared with baseline scenario in other comparable landscapes	2.1 Biodiversity overlay of the demonstration forest landscape, highlighting areas of importance to PA sustainability, e.g., priority conservation corridors and dispersal areas for key species. 2.2 Economic model to determine optimal mix of production and conservation land uses to maximise sustainable revenues from the demonstration landscape. 2.3 Landscape-level management plan based on optimal combination of land uses including PAs and sustainable production. 2.4 Pilot implementation of landscape-level management plan, including new PA establishment and implementation of sustainable use management system based on sustainable off-take, monitoring and enforcement 2.5 Adaptive forest landscape management in the context of economic drivers (e.g., agriculture and logging, prices of commodities, employment) and biodiversity threats and pressures including climate change, through periodic assessments and revisions of landscape management plan.	2,000,000	31	4,500,000	69	6,500,000
3. Sustainable financing of protected areas and associated forest landscape areas demonstrated at the pilot site	landscapes. TA • 3-4 most promising revenue generating mechanisms designed and piloted, including at least one each from REDD / carbon and water-related services • Annual revenues generated within demonstration area by end of project equivalent to 50% of annual landscapelevel management costs and on upward trend • No net loss in estimated value of ecosystem functions, i.e., full maintenance of natural capital, within pilot site area • Total area of logging concessions limited to 25% or less of demonstration site, or an alternative sustainable ceiling established under the multiple-use landscape management model	3.1 Environmental economic and financial analyses of actual and potential land use scenarios, incorporating estimates of landscape-level total economic value, including ecosystem services, conservation and other values. 3.2 Identification and assessment of revenue generating mechanisms under above alternative scenarios, including from the following potential sources: (i) biodiversity-related uses, e.g., biodiversity banking and offset schemes, bioprospecting, eco-tourism, etc.; (ii) climate mitigation uses, e.g., REDD / carbon finance; (iii) PES schemes from water-related services; (iv) sustainable forestry uses; (v) Other applicable uses as identified in the prefeasibility study undertaken during project formulation. 3.3 Detailed operating and financial agreements between FD and private sector and other partners 3.4 Financial accounting and monitoring of agreements 3. 5 Tested and operational systems for allocation and re-injection of revenues into PAs and landscape-level management 3.6 Tested and operational financial systems for benefit sharing 3.7 Adaptive financial management, including shifting balance of desired uses based on changes in ecosystem markets	1,250,000	42	1,750,000	58	3,000,000
Project Manageme			400,000	_		67	1,200,000
Total Project cost	s		4,400,000		8,800,000		13,200,000

^a List the \$ by project components. The percentage is the share of GEF and Co-financing respectively of the total amount for the component.

^b TA = Technical Assistance; STA = Scientific & Technical Analysis.

B. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Project Preparation*	Project	Agency Fee	Total
GEF		4,400,000	440,000	4,840,000
Co-financing		8,800,000	-	8,800,000
Total		13,200,000	440,000	13,640,000

C. INDICATIVE <u>CO-FINANCING</u> FOR THE PROJECT (including project preparation amount) **BY SOURCE and BY NAME** (in parenthesis) if available, (\$)

Sources of Co-financing	Type of Co-financing	Amount
Government of Sabah, Malaysia	Cash and in-kind	8,800,000
Total co-financing		8,800,000

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY (IES) SHARE AND COUNTRY(IES)*

N/A* No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

PART II: PROJECT JUSTIFICATION

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

- 1. Malaysia is a megadiverse country, richly endowed with biological diversity in its forests and marine ecosystems. The forest biodiversity resources in the East Malaysian State of Sabah reflect the national picture. Sabah, which is located on the island of Borneo, is estimated to contain about 6,000 species of flowering plants, 650 species of ferns and ferns allies, and 2,000 species of orchids, many of which are found nowhere else in the world. To date, at least 189 species of land mammals have been recorded, of which 42 species are endemic to Borneo. Globally significant species include the orang-utan, Proboscis monkey, sun bear, Banteng/Tembadau, Sumatran rhino, Borneo pygmy elephant and clouded leopard. Five hundred and forty species of birds, representing 60 families, have also been recorded.
- 2. Most of Sabah's forests are located within a larger ecological area known as the "Heart of Borneo." This area contains some 200,000 km² of ecologically interconnected rainforest in the Indonesian province of Kalimantan, the East Malaysian states of Sabah and Sarawak and the nation of Brunei Darussalam. The area has recently become the subject of enhanced international cooperation amongst the various political entities responsible for its management.
- 3. The goal of long-term conservation and sustainable use of forests within the Heart of Borneo area is confronted by a number of threats and other challenges. In recent decades, conversion and degradation of forest habitat have proceeded apace. Resulting habitat loss and fragmentation have been accompanied by extensive loss of biodiversity along with reduced resilience of remaining natural habitat areas. In the process, protected areas (PAs) have become increasingly threatened by ecological isolation.
- 4. Logging and conversion to oil palm plantations have been the primary drivers of the above processes. Both of these activities offer significant short-term remuneration, albeit at the cost of long-term loss of significant amounts of natural capital. A key challenge facing Malaysia and the State of Sabah in particular is to develop economically and financially feasible approaches to conservation and sustainable use of forested landscapes within a context marked by, among other factors, a changing climate. Sabah's success in meeting this challenge would generate substantial global benefits from enhanced biodiversity conservation and carbon sequestration both within protected areas and across broader forested landscapes.
- 5. Fortunately, as new opportunities arise to assign market values to ecological functions such as climate mitigation and biodiversity conservation, the economic factors underlying land use decisions are beginning

² The clouded leopards found on Borneo and Sumatra have been reclassified as a new species, distinct from those found throughout mainland Asia. These new species were documented only recently in the proposed project site, specifically in the Danum Valley. http://news.mongabay.com/2008/0410-interview_hearn_ross.html

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to shift in the direction of conservation. Approaches such as REDD+ and biodiversity banking offer the potential simultaneously to conserve biodiversity, mitigate climate change, enable sustainable development and generate revenues for use in management of protected areas and their surrounding landscapes. However, optimizing these various objectives through land use and other management decisions remains a complex process. Certain areas, representing core areas for biodiversity, clearly require the highest levels of protection. In the case of Sabah, about 1.2 million ha. or 16.6% of the territory, have been designated as terrestrial protected areas³; and increasing the coverage and management effectiveness of the PA system remain priorities for conservation. However, other areas across the forested landscape may be more suitable for alternative conservation-oriented uses associated with biodiversity banking, generation of forest carbon credits or for more directly economic uses such as Reduced Impact Logging (RIL) or even oil palm. What is essential from a biodiversity point of view is that the matrix of land uses continues to provide habitat and connectivity/corridors for PAs while helping to maintain landscape-level ecological functions and resilience over the long term.

- 6. From a management perspective, another essential component of a sustainable and biodiversity-friendly system of landscape management is that the selected combination of land uses generates sufficient revenues to substantially defray the costs of optimal management of both protected areas and surrounding corridors and production landscapes. Some 53% of Sabah's land area is under the authority of the Forestry Department, much of it within the designated Heart of Borneo area. These include seven classes of forest reserve, four of which may be regarded as protected areas. While the Department does receive some funding from direct budgetary allocations, the majority of its funding comes from revenues generated by management of lands under its jurisdiction. Its ability to sustainably generate revenues across landscapes, both within and outside of protected areas, is thus critical to its being able to finance and maintain an effective management presence over these areas. In summary, the FD's ability to define, zone, regulate and adaptively manage an appropriate combination of sustainable uses across the landscape under its management is a key factor not only in reducing threats to protected areas directly but also in ensuring that PA management is optimally funded.
- 7. The proposed project site (see **Map 1**) represents one such landscape area. It is located within the Yayasan Sabah Forest Management Area, which covers an approximately one million ha. area of central Sabah and is commonly known as the 'YS Concession area.' The project demonstration site covers an estimated 393,544 ha. of the YS concession area and represents the largest area of mostly contiguous forest remaining in Sabah. The site is an important component of the Heart of Borneo and represents one of the most diverse in terms of flora and fauna in Malaysia. It includes areas currently under a variety of management designations and uses, as follows:
 - a) 132,280 ha are within three of Borneo's most important conservation areas, i.e., the Maliau Basin Conservation Area (58,480 ha), the Danum Valley Conservation Area (43,800 ha) and the Imbak Canyon Conservation Area (30,000 ha). These areas contain some of the largest and most important expanses of pristine lowland dipterocarp forest remaining in Southeast Asia.
 - b) 180,426 ha are located within Kalabakan and Gunung Rara Forest Reserves, and are potentially open to sustainable logging, though they are not logged currently. The two forest reserves, together with Kuamut Forest Reserve, also connect Deramakot Forest Reserve, the first certified tropical natural production forest in the world, with the larger continuous forests in the Heart of Borneo.
 - c) 43,821 ha constitute an Industrial Timber Plantation (plantation forest), of which 6,000 ha is currently under rubber and another 500 ha is about to be planted with timber. The remaining area is not planted yet and consists of previously logged areas that are degraded but not converted;
 - d) 21,800 ha are within two Natural Forest Management (NFM) logging concessions;⁶

³ This compares with some 2.69 million ha. of commercial forest reserve, i.e., areas potentially open to logging.

⁴ See http://www.sabah.gov.my/jhl/ProtectedAreas.htm

⁵ Yayasan Sabah, or the Sabah Foundation, was established in 1966 by an act of the Sabah Legislative Assembly. Its management of the area is governed by a "Sustainable Forest Management Licence Agreement" (SFMLA) with the Sabah State Government on Sept. 10, 1997.

⁶ Sabah is the only state in Malaysia to practice a model where concessions are given out on 100-year sustainable forest management/ Reduced Impact Logging concessions, rather than short-term "logging" concessions as is done in the Peninsular or Sarawak. A company gets a 100-year concession to manage the forest area sustainably, rather than just a 3-5 year concession to log, after which the concession area reverts to the Government. This was first piloted at Deramakot, and is now being progressively introduced across the rest of Sabah. Natural Forest Management as defined under Clause 49 of Sustainable Forest Management License Agreement (Forest Zoning Criteria)

- e) 15,217 ha are currently under various forms of conservation, including Virgin Jungle Reserves, Water Catchments, Salt Licks, the Maliau-Inikea Linkage Corridor, Maliau-Imbak-Danum Wildlife Corridor and the Maliau Basin Buffer Zones I and II, ⁷ etc.).
- 8. The site is highly significant in terms of global biodiversity. Its lowland dipterocarp forests are particularly rich in species diversity, with 814 species of woody plants of 1 cm diameter and larger found in a 50 hectare area. Endemic, rare and threatened species within the project area include the protected *polod* palm species (*Arenga undulatifolia*) and the elephant ear orchid (*Phalaenopsis gigantea*). About half of the pygmy elephant population in Borneo (Malaysia and Indonesia) currently lives in the central forest reserves area of Sabah, mainly in GRFR and KFR. Orang-utans, numbering approximately 700, and rhinoceros also share the same habitat. The area was identified as a priority habitat for the Bornean elephant and orang-utan in an assessment conducted by the Sabah Wildlife Department, WWF-Malaysia and the French NGO HUTAN in 2003. Due to its relatively large size and low potential for human-elephant conflict, the project site has the potential to be the most significant pygmy elephant conservation area in the long-term.
- 9. While globally significant biodiversity is probably most heavily concentrated within the three existing conservation areas, the remainder of the still heavily forested landscape found throughout the site also shelters important biodiversity. In addition, this area provides connectivity to and buffers the critical storehouses of biodiversity found within the PAs. This latter function becomes of special importance within a context of climate change, when ecosystem resilience cannot be maintained by focusing on relatively small and increasingly isolated protected areas, but instead requires a matrix of compatible surrounding land uses. Potential climate change impacts on species composition and ecosystem function further increase the importance of these interconnecting landscape areas for the ecological sustainability of the conservation areas.
- 10. Unfortunately, the long-term role of the site's forested landscape areas in providing connectivity to the area's PAs, and important habitat in its own right, is under threat from a number of factors. As highlighted above for the Heart of Borneo as a whole, the most significant threat is habitat loss, degradation and fragmentation arising from conversion and logging of forest habitats. Forest conversion is the biggest threat to biodiversity conservation. The forest landscape in the project site has undergone dramatic changes since 1998 primarily due to the conversion of forest lands into extensive tree-crop (rubber and oil palm) monocultures. Compounding conversion is forest degradation. With a large part of the remaining forest tentatively earmarked for designation as Natural Forest Areas, which would open them to Reduced Impact Logging (RIL) under the baseline scenario, areas of undisturbed natural forest habitats, particularly those found within PAs, may soon become "islands" within the broader landscape. In addition, the edges of logging concessions have been encroached and their land cleared.
- 11. Conversion and degradation have reduced the area and quality of natural habitat and led to its fragmentation; together, these factors have put at risk the survival of key migratory wildlife species such as elephants, rhinoceros and hornbills. Over-extraction of timber resources has impaired ecosystem recovery and resulted in the loss of forest ecosystem functions. Substitution of fast-growing tree plantations for natural forest has also increased fire risks, with wildfires capable of spreading more easily into protected areas in a context of climate change. The simplified canopy structure and the slow decomposition of litter have increased fuel loads. Logging also leaves substantial debris; the broken canopy allows rapid drying of the debris and increased fire risks. Plantations and logging have also created improved access to the forests, where the increased presence of humans has also increased the likelihood of forest fires, especially during the dry seasons. Opening or logging at the headwaters or at the upper catchments brings about erosion and sedimentation, affecting water quality and aquatic wildlife in the river systems and in the coastal areas. Finally, poaching, including the illegal collection of non-timber forest products (NTFPs) and wildlife, is further endangering existing populations of orang-utans, rhinos, elephants and even birds and reptiles. Together, these factors have reduced the ecological functions and biodiversity support capacity of landscape areas, thereby undermining the resilience and sustainability of the area's PAs.
- 12. The long-term solution to the above threats and their underlying causes is a landscape management approach which nests PAs within a matrix of conservation-compatible land uses in order to maintain biodiversity, ecosystem functions and resilience. Under any financially realistic version of this solution, the PAs and surrounding landscape must also generate the large majority of revenues needed for their own optimal management.

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⁷ As indicated in the (Special Environmental Impact Assessment) /SEIA June 2002 and MBCA Strategic Management Plan 2003 (Sabah Foundation)

- 13. The following **barriers** are preventing the emergence of the above-defined long-term solution and in so doing are compromising both forest resource sustainability and biodiversity conservation:
 - a) Inadequate policy framework, weak institutions and limited technical capacities at state level. There is currently neither an adequate enabling environment for landscape-level, multiple use forest management and financing in Sabah nor sufficient qualified staff to manage such a system. Specific barriers include: (i) no regulatory or planning framework for defining a set of landscape-level conservation and sustainable use objectives, activities, budgets, indicators, etc.; (ii) no framework for managing that landscape according to the defined objectives; (iii) no policies / regulations for generating and/or reinjecting revenues from anything other than timber (i.e., from the 'multiple uses' in question); (iv) no guidelines or policies for multiple use forest landscape planning, management or conservation; (v) limited technical capacities to implement multiple use strategies, and; (vi) inadequate systems of monitoring and enforcement.
 - b) Inadequate and fragmented management approach, including inefficient regulation of timber harvesting at demonstration site. Management of the forest landscape within which the proposed project site is located is based on an outdated management plan developed by the Sabah Foundation nearly three decades ago. Under this plan, over-harvesting of timber resources has taken place in areas where timber extraction has been permitted, which has contributed to fragmentation of the area's landscape. The issuance of logging permits is often connected to a need for additional state revenues. Inefficient harvesting regimes do not provide sustainable revenue streams, resulting in further pressure for forest conversion to agriculture (e.g. oil palm). State Government regulations require a Forest Management Plan (FMP) based on Sustainable Forest Management (SFM) principles for production forest landscapes. However, no such plan has been produced for these forests to date. Specific management-related barriers include: (i) limited information about biodiversity distribution within the site area, needed for zoning; (ii) lack of knowledge of suitability of various alternative uses; (iii) inadequate monitoring, needed for adaptive management, and; (iv) gaps in operating capacities and approaches needed for integrated, adaptive management of the overall landscape.
 - Failure to adequately monetize and re-invest a broad stream of benefits arising from forest resources: Sabah's forests provide not only timber but a range of ecosystem services through the regulation of local and global climate, aesthetics and eco-tourism, protection from natural disasters, water regulation and biodiversity conservation. However, there is a widespread failure to monetize or otherwise 'capture' an adequate portion of the economic, social and environmental benefits produced by these forests. Several innovative opportunities for generating revenues based on these values exist, including mechanisms such as REDD Plus, biodiversity banking, sustainable timber certification and NTFPs. However, these opportunities, some of which are fairly new, have yet to be fully explored or taken advantage of. 8 Specific barriers to successfully harnessing these revenue-generating opportunities include the following: (i) lack of capacity to define, develop and manage new revenue generating opportunities; (ii) lack of mechanisms for investing financial resources generated into protected area and landscape-level conservation and management; (iii) in the case of REDD Plus, barriers include the absence of a national policy framework for generating and trading REDD or REDD Plus credits and inadequate capacities to quantify changes in carbon stocks in state forests. A critical result is that simply opening an area up to logging may end up being seen as the easier solution when additional revenues are needed. The failure to tap into new revenue generating opportunities also has implications for funding of management efforts. The Sabah Forestry Department estimates that baseline management and protection of the State's Forest Reserves (totaling 3.6 million hectares) requires approximately RM27.78 (approximately US \$8.00) per hectare per annum. This is equivalent to slightly more than USD2 million per annum for the proposed project area. More effective management regimes will require additional resources to develop and pilot, even if they ultimately result in lower per-hectare management costs over the long term due to higher efficiency. The current funding gap is estimated to be in excess of 50%.
- 14. The proposed project's objective is to demonstrate and begin to institutionalize a multiple-use forest landscape planning and management model which brings the management of critical protected areas and connecting landscapes under a common management umbrella, implementation of which is sustainably funded by revenues generated within the area. The project is expected to serve as a model where the forest can be managed viably by achieving an optimal balance across potentially competing uses one which

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⁸ The potential for progress in biodiversity banking was illustrated by the creation in 2008 of the Malua Wildlife Habitat Conservation Bank, which covers a c. 34,000 ha. area just north of Danum Valley Conservation Area, within the Ulu Selama-Malua SFM area. See http://www.maluabiobank.com/

maximizes economic, social and environmental benefits to society. Lessons from the project will be used to develop guidelines and best practices to upscale the approach in other forest landscapes within the State and in other parts of Malaysia and the Heart of Borneo.

- 15. Project components as shown in the framework are elaborated further below.
 - a) Component 1: State-level policies, regulations and institutional and human capacities provide an enabling environment for optimized multiple use zoning, planning, financing and management: Under this component, the project will support the establishment of a forest management policy and regulatory framework in Sabah that supports biodiversity conservation within multiple-use forest landscapes, including protected areas and surrounding production landscape. This framework will consist of two distinct, yet related elements. First, it will support the design of policy and regulatory reforms aimed at mainstreaming biodiversity conservation into forest landscape plans and other State development plans to ensure that biodiversity values are maintained if not enhanced in the long run. This will include policies for managing protected areas under the responsibility of the forest department through a landscape-level approach. The second element will consist of those portions of the policy framework needed to underpin various innovative mechanisms for generating and re-injecting revenues into forest protected area and landscape management. Key elements of this reform are expected to include: (i) a "no net loss of biodiversity" policy, which would attach a value or cost to biodiversity loss; (ii) support for REDD and bio-banking, including for validating credits, (iii) policies to allow the State Forest Department to collect revenues from bio-banking, REDD and other mechanisms and to re-inject some or all of this revenue into management of PAs and associated forest landscapes. GEF support will be focused on the design and implementation of sustainable financing options under (ii) and (iii), while associated policy elements, enforcement and monitoring, etc. will be undertaken with co-financing support. The project will provide capacity building activities for all stakeholders focusing on the design, implementation, monitoring and evaluation of an umbrella multiple-use forest landscape management plan which includes protected areas and interconnecting landscape areas. This will include support for improving the ability of the Forest Department to monitor market trends related to forest ecosystem services. While the priority will be placed on State government institutions, the private sector will also be included, as implementation of the enabling policies hinges on multi-stakeholder participation.
 - Component 2: Demonstration of multiple-use forest landscape planning and management system: Under this component, an umbrella landscape-level management plan will be prepared and implemented. A first step will be to assess and map the biodiversity values in the landscape, particularly their importance to PA ecological sustainability. Second, a set of possible alternative uses will be identified and the feasibility of these alternate uses will be assessed across the landscape. This assessment will help determine which areas of the forest may be most appropriate for activities such as establishment of new PAs, biobanking for orangutans and other species, reforestation for CDM A/R credits, REDD Plus, industrial timber plantations, oil palm, etc. Third, based on the preceding assessment and on the economic and financial analysis being prepared under Output 3.1, a landscape-level management plan will be developed based on the combination of land uses that appears to optimize the flow of economic, social and environmental benefits from the landscape. Fourth, the management plan will be implemented. This may involve a combination of establishment of corridors, concession awards, gazettement and establishment of an estimated 50,000 ha of new PAs, strengthened management of existing PAs, biodiversity monitoring, etc. Financial aspects of management plan implementation will be covered under Component 3. Finally, implementation of the plan will be assessed periodically, based on changes in economic drivers, revised evidence and forecasts related to climate impacts and other considerations.
 - c) Component 3: Demonstration of innovative sustainable financing methods for multiple use forest landscape management: Under this component, concrete steps will be taken to monetize the flow of economic, social and environmental benefits arising from the demonstration forest landscape through a combination of traditional and innovative environmental financing mechanisms. During the PPG, a variety of revenue generating options will have been identified and preliminarily assessed, including related opportunities for partnerships. These will include several different payment schemes based on ecosystem services, such as biodiversity banking and bio-prospecting, including schemes focused on climate mitigation, such as REDD Plus. During the full project, a comparative extended benefit-cum investment analysis will estimate the environmental economic and financial costs and benefits associated with several alternative scenarios, each of which will be based on a different combination of land uses and associated revenue generation options. Taken together, the combination of schemes chosen across the landscape should be capable of generating a flow of revenues adequate to cover the

costs of managing the demonstration site's protected areas and landscapes without depleting the area's stock of environmental values. Revenues should be comparable with those that could have been generated under the baseline scenario, which would have included substantial logging and/or conversion to oil palm. Once the combined set of schemes has been approved, the project will support the development of detailed agreements with the various partners, followed by monitoring of their implementation. The schemes themselves are expected to be financed through a combination of public and private sector co-financing, depending in part on the extent to which they are proven or experimental. As per a revised set of procedures developed under Outcome 1, revenues generated by the various schemes will be made available for re-investment into the landscape, including PAs. Depending on the level of revenues generated, funds will be available for enhanced FD management efforts, as well as for benefit-sharing with local communities where applicable.

16. Assistance provided by the GEF will strengthen the conservation of the largest area of mostly contiguous forest in Sabah, and one of the most important remaining forest landscapes in the Heart of Borneo. Extensive global benefits are expected given the high levels of biodiversity within the project demonstration site, as described in paragraph 8 above. Improved management of this critical landscape will reduce pressures on three globally-recognized conservation areas; the Danum Valley, the Maliau Basin and Imbak Canyon, which together encompass 132,280ha of irreplaceable tropical forest. The project will lead to increased viability within the project site of globally threatened species such as orang-utan, proboscis monkey, sun bear, pygmy elephant and others. Threats to the globally-significant biodiversity of the area will be reduced in the following ways: (i) increased resilience of ecosystems through enhanced connectivity and reduced risk of forest fires (the threat of which is expected to increase with climate change);⁹ (ii) conservation of habitat and constituent biodiversity within landscape areas connecting PAs; (iii) reduced threats to BD in PAs that arise outside their boundaries, such as the loss of vital animal migration routes; (iv) expansion of PAs, which would bring c. 50,000 ha. under enhanced protection, and; (v) enhanced management effectiveness, linked to a combination of increased financial resources and improved cost effectiveness of spending. Additional global benefits will be generated by a demonstration effect through which financial and management models developed were disseminated and adopted in other parts of the Heart of Borneo.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL/REGIONAL PRIORITIES/PLANS:

- 17. The proposed Project is consistent with Malaysia's National Policy on Biological Diversity (1998), particularly Strategy 15: Establish Funding Mechanisms; Strategy 4: Strengthen the Institutional Framework for Biological Diversity Management; and Strategy 6: Integrate Biological Diversity Considerations into Sectoral Planning Strategies. The proposed Project is also anchored on Sabah's policies. The Outline Perspective Plan (OPPS), covering the period 1995-2010, aims to create a socially and politically stable environment through efficient management of the State's economy. Item 4.6 of this Plan highlights the State's intention to ensure reliable and sustainable raw material supply, implying the formulation of sensible and effective conservation strategies for natural resources such as forests, land and marine life. In pursuance of these policies and plans, the State has set aside about 3.6 million ha or 48.14% of Sabah's total land area as Permanent Reserved Forests (PRF). In order to achieve the dual objectives of economic utilization and environmental conservation, the PRF are further designated into seven classes of forest reserves, i.e., protection, production, domestic, amenity, mangrove, virgin jungle and wildlife forest.
- 18. The drive for SFM in Sabah followed from its successful implementation in Deramakot FR which was awarded an internationally recognized "well-managed forest" certificate by the Forest Stewardship Council (FSC) in 1997. The recognition provided the impetus for the State to replicate the Deramakot model in all Class II commercial forest reserves covering approximately 2.67 million ha. It has now directed all concessions to obtain certification from any credible internationally-accepted schemes by 2014. Moreover, the practice of Reduced Impact Logging (RIL) is being targeted for full implementation by 2010.
- 19. With Sabah as one of the key areas for the trilateral Heart of Borneo Initiative, the project will support the enhancement of the State's strategy for this initiative and will thereby contribute to Malaysia's strategy as a whole. The project area is considered an important component of the Heart of Borneo (HoB) initiative which focuses on the following three priorities: (i) maintenance of forest connectivity through the strengthening of the Protected Area Network; (ii) establishment of sustainably managed forested corridors connecting these areas; and (iii) the opportunity for enhanced transboundary co-operation. Through the HoB initiative, the project will coordinate closely with the Sustainable Forest and Biodiversity Management in (the Indonesian

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⁹ There is evidence pointing to the added risks of forest fires in small forest patches.

side of) Borneo, a project concept for Indonesia that was recently approved by GEF Council with ADB as the lead agency.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

- 20. The Project is designed to respond primarily to the GEF Strategic Objective BD-SO1, which is *To Catalyze the Sustainability of Protected Areas*. Within this Strategic objective the project is designed to support the following biodiversity strategic programs: SP3 Strengthening Terrestrial PA Networks; and SP1 Sustainability Financing of PA Systems at the National Level. Through biodiversity mapping in the demonstration forest landscape, the Project will work to create biodiversity corridors and, if necessary, additional protected areas, in order to strengthen the system of PAs in the State of Sabah. The resulting improved ecological integrity of the PAs will contribute to the objectives of BD-SP3. Component 3 outputs on Sustainable Financing are consistent with BD-SP1. These will create sufficient and predictable revenue flows in the State with the approaches having the potential for replication in other PAs in the State and nationally to address system-wide concerns.
- 21. The Project will also ensure that biodiversity conservation will be incorporated into broader forest policy and regulatory frameworks in the proposed demonstration forest landscape. The outcome and outputs specified in Component 2: Multiple-use Forest Landscape Planning and Management are consistent with SP4: Strengthening the Policy and Regulatory Framework for Mainstreaming Biodiversity, which falls within GEF Biodiversity Strategic Objective BD-SO2, *To Mainstream Biodiversity in Production Landscapes/Seascapes and Sectors*.
- 22. While not drawing funds from GEF's SFM program, the proposed Project is consistent with this program. The Borneo forests have been identified as one of the regional priority sites for the SFM program. Of relevance is SP-4: Supporting Sustainable Forest Management in Production Landscape through the strengthening of the policy and institutional environment for managing forest resources and biodiversity in the wider landscape.

D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES:

23. GEF resources are being provided entirely in the form of Technical Assistance grants to address the threats and barriers to biodiversity conservation in the wider forest landscape in the proposed Project site.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

- 24. As mentioned above, through the HoB initiative, the Project will coordinate closely with the Sustainable Forest and Biodiversity Management in (the Indonesian side of) Borneo, a project concept for Indonesia that was recently approved by GEF Council with ADB as the lead agency. In addition, this Project will also coordinate with other relevant projects in GEF's Biodiversity and SFM portfolio, particularly those implemented by UNDP.
- 25. The Project will collaborate with other ongoing forest management related initiatives within and adjacent to the Project site. The first is the Innoprise IKEA Forest Rehabilitation Project (INIKEA), which started in 1998; the project is aimed at assisting forest recovery in a degraded part of the Kalabakan Forest Reserve totaling 18,500 ha. The Sow-A-Seed Foundation is formed by IKEA, Sweden which contributes some of the financial assistance while ICSB manages and implements the project. The second is the RBJ/SUAS Project which began in 1990 undertook operational experiments on directional felling and pre-felling climber cutting as a means of reducing damage to the residual forest stand during harvesting. The experimental plots have been measured every two years since the project started. The third is the RBJ/NEP RIL Project which commenced in 1992 is an investment project in the planning of skid trails, directional marking and felling of trees so as to reduce damage and soil disturbance to a minimum. It is meant to offset CO2 emissions from (New England Power) NEP's coal-fired power stations.
- 26. The Project will also work with the biodiversity conservation-related initiatives such as those in the Maliau Basin Conservation Area (MBCA), Danum Valley Conservation Area (DVCA), virgin jungle reserves, saltlick reserves, wildlife corridors linking the conservation areas and the forest reserves managed under NFM.

F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING:

- 27. Under the baseline scenario, financing for natural resource management, including PA management in Sabah would continue to depend largely on revenues generated by large-scale forest conversion for agroindustrial uses such as oil palm, along with revenues from Reduced Impact Logging (RIL). This would result in the progressive loss or degradation of much of the remaining high-value tropical forest landscapes, including a significant proportion of the Heart of Borneo. To the extent that innovative financing mechanisms were introduced, this would take place on an ad-hoc basis and benefits to PAs would not be optimized. Existing protected areas would be increasingly isolated within an ecologically fragmented landscape, with decreased prospects for viability of globally significant species. Under most likely climate change scenarios, PAs would lack the resilience to withstand stressors such as increased frequency and severity of wildfires and changes in habitat composition and species range. The long term outlook for valuable PAs such as Danum Valley CA would be bleak.
- 28. Under the alternative scenario described herein, innovative, conservation-oriented land uses will be encouraged and rationalized through a process of multiple-use forest landscape planning and management. Increased revenue generation from standing forests will sharply reduce the revenue gap between forest conversion and conservation, thus increasing the financial feasibility to the FD and the State of conserving large areas of globally-significant forest landscapes. A revised revenue generation and allocation model will help to ensure the long-term financial and ecological sustainability of the areas' PAs. Habitat and biodiversity within landscape areas will be better conserved. PA ecological sustainability will be enhanced though increased resilience associated with enhanced connectivity and reduced risk of forest fires, with particular benefits to migratory species. PAs will be expanded and their management effectiveness increased. In species terms, project efforts are expected to lead to increased viability within the project site of globally threatened species such as orang-utan, proboscis monkey, sun bear, pygmy elephant and others. An expected demonstration effect would result in financial and management models developed under the project being disseminated and adopted in other parts of the Heart of Borneo.

G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MITIGATION MEASURES THAT WILL BE TAKEN:

Risk	Risk rating	Risk Mitigation strategy
Conflicts between conservation and development in State planning. Support for multiple-use forest landscape management will be weak primarily from the private sector thereby increasing the possibility that more areas will be converted to non forest-based uses that will compromise	Med	The Project will collaborate closely with all stakeholders including the private sector from the start of Project preparation and implementation. The general approach will be participatory with defined roles and responsibilities of the partners. Key stakeholders will include the forest concessionaires, oil palm and rubber plantations, recreation sector, and beneficiaries of
Poor cooperation among government agencies will prevent the formulation of supporting policy reforms and institutional strengthening towards multiple-use forest landscape management.	Low	ecosystem services, among others. Consultations have been undertaken consultations among the key government stakeholders in the State and their endorsement has been secured. The dialogue will continue during Project design and implementation. Closer collaboration with the federal government will be sought to achieve the policy, financial and upscaling targets of the Project.
Climate change undermines the conservation objectives of the Project	Low	The Project will work to address the anticipated negative impacts of climate change by increasing resilience of the forest landscape. The adaptive management approach will ensure Project resilience to all changes (not limited to climate-related changes) that will occur in the future.
Low level of support for sustainable financing schemes. With global economic changes, the target sustainable financing schemes may not be delivered and will negatively affect the conservation objectives of the Project.	Low	The economic downturns are cyclical and it is expected that with the economy picking up again, ecotourism will gain some boost. With respect to the other schemes, the ongoing related initiatives which appear to be successful would support their replication. The Project will raise the level of awareness about the benefits from such schemes to maintain strong support.

H. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:

29. The project takes a landscape-level management and sustainable financing approach to addressing the challenge of PA ecological and financial sustainability. This contrasts with a more traditional, PA-centric approach which might have focused more narrowly on PA expansion, increased PA management effectiveness or PA financing. The opportunity for taking a landscape-level approach is based partly on the fact that a single managing entity, the Forest Department, is responsible for managing both PAs and surrounding landscapes. By integrating PA management within broader landscape level processes, the project enables a cost-effective approach to generating and allocating financial resources. On the revenue-generation side, opportunities for innovative mechanisms like REDD Plus can be pursued in the knowledge that benefits will help to support PAs, both directly via financial transfers as well as indirectly via reduced land conversion. This greatly expands the opportunities as compared with looking at PA financing opportunities within PAs only. Expanding geographically the zone within which revenue generation can help to support PA management greatly increases the likelihood that a sustainable combination of mechanisms can be identified, compared with a situation in which PA borders also represent the borders for financial innovation.

I. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY:

30. This Project will entail primarily technical assistance involving policy reform, capacity building and institutional strengthening, which are the areas of comparative advantage of UNDP.

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

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE

GOVERNMENT(S): (Please attach the <u>country endorsement letter(s)</u> or <u>regional endorsement letter(s)</u> with this template).

NAME	POSITION	MINISTRY	DATE (Month, day, year)
Dr. Lian Kok Fei	Undersecretary	MINISTRY OF ENVIRONMENT	APRIL 24, 2009
		AND NATURAL RESOURCES	

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
John Hough UNDP-GEF Deputy Executive Coordinator	J. Horgh	December 14, 2009	Joseph D'Cruz Regional Advisor, UNDP Regional Centre in Bangkok	+66 2288 2726	Joseph.dcruz @undp.org

Map 1: Current land-uses in the proposed Project site

