



## UNDP PROJECT DOCUMENT

Government of Malaysia

United Nations Development Programme

Global Environment Facility

### CONSERVATION OF BIOLOGICAL DIVERSITY THROUGH IMPROVED FOREST PLANNING TOOLS

This project will develop tools and generate knowledge needed to ensure that forestry production systems are planned and managed in a manner, which will contribute to biodiversity conservation or the sustainable use of its components against the baseline scenarios. These tools will be developed and disseminated for broader application to Strategic Priority #2 on Mainstreaming Biodiversity in Production Landscapes and Sectors.

The project will complement efforts to promote sustainable forest management. Although the tools it generates will be developed in a Malaysian context, they will be applicable to forests throughout Southeast Asia and in other tropical countries. To ensure that the global benefits of the research are maximized, the project will include a variety of training and dissemination activities. This is relevant to GEF's Strategic Priority Area IV on Generation and dissemination of Best Practices for addressing current and emerging biodiversity issues.

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## Acronyms

CIFOR	Center for International Forestry Research
DANIDA	Danish International Development Agency
DID	Drainage and Irrigation Department
EPU	Economic Planning Unit
FRIM	Forest Research Institute Malaysia
GEF	Global Environment Facility
Ha	Hectares
HCVF	High Conservation Value Forest
IAP	International Advisory Panel
IRPA	Intensified Research Priority Area
ITTO	International Tropical Timber Organisation
JIRCAS	Japan International Research Center for Agricultural Sciences
KPU	Ministry of Primary Industries
MNS	Malaysian Nature Society
MTCC	Malaysian Timber Certification Council
NGO	Non-government Organisation
NIES	National Institute for Environmental Studies
NRE	Ministry of Natural Resources and Environment
NSC	National Steering Committee
NTFP	Non-timber Forest Product
PDF	Project Development Fund
PITC	Perak Integrated Timber Complex
PRF	Permanent Reserved Forest
RIL	Reduced Impact Logging
SFO	State Forestry Offices
SRP	Scientific Review Panel
TWG	Technical Working Group
UKM	Universiti Kebangsaan Malaysia
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UCTA	University Putra Malaysia
VJR	Virgin Jungle Reserve
WWF	World Wide Fund for Nature

## SECTION I: ELABORATION OF THE NARRATIVE

### *Part I: Situation Analysis*

Tropical forests are the most complex and diverse ecosystems on earth. In addition to having extremely rich and diverse plant and animal life, these forests also play a significant role in the socio-economic development of the countries that harbour them. These countries also value the forests for their roles in the maintenance of soil and water resources, stabilizing climate and the conservation of biological diversity.

However, current forest management practices in many tropical countries tend to maximize timber production goals and are deficient in certain critical aspects that threaten sustainability and conservation of biological diversity. The procedures for identifying forest areas that should be protected within the permanent forest areas and within individual forest concessions do not give sufficient consideration for biodiversity conservation.

It is also now generally accepted that effective biodiversity conservation strategies must include not only a system of protected areas but also the integration of biodiversity considerations into the management of timber production forests—especially production forests that are adjacent to protected areas or include assemblages of species that are not well-represented elsewhere.

The baseline scenario for this project is that forest planning in tropical regions will continue to depend upon expensive, time and data intensive biodiversity assessment and valuation methods. As a consequence biodiversity values (including biodiversity of global significance) will not be incorporated into developmental decision-making in an efficient manner. Inadequate valuation of biodiversity in developmental decision-making will continue to result in inefficient (generally sub-optimal) allocation of forest resources to conservation.

At the site level the baseline scenario is that forest resources in Perak (particularly the PITC forest concession and nearby forest reserves such as Belum and Temenggor) will continue to be managed according to conventional forestry management practices in Malaysia. Biodiversity assessment activities are limited to the existing National Forest Inventory and concession-level timber surveys undertaken by timber concessionaires. Relatively little or no valuation analyses would be conducted, and as a result decision-making on allocation of forest areas to conservation versus production will be driven by subjective assessments and policy imperatives rather than formal, informed allocation mechanisms.

### *Stakeholder Analysis*

#### **Perak Integrated Timber Complex Sdn. Bhd.**

The Perak Integrated Timber Complex Sdn Bhd (PITC) is a subsidiary of the Perak State Government's economic arm called the State Economic Development Cooperation (SEDC) The concession area consist of rich and highly diverse tropical rain forest, although some parts of it has been logged in the past. As of 1st July 2002 Scientific Certification Systems (SCS) certified PITC under the FSC scheme.

The general management objectives of PITC include developing a sustainable vertically integrated timber-based industry, managing the concession for timber production and to ensure that all other uses, functions and services whether economic, ecological, or social are continuously improved and safeguarded, improving processing of timber resources and enhancing the value of downstream activities and promoting the export of high value added forest products.

PITC practices the Selective Management System (SMS), which allows for a more flexible timber-harvesting regime that is consistent with the need to safeguard the environment. The average sustainable yield for the 30-year harvesting cycle for PITC concession areas has been estimated at about 108m<sup>3</sup>/ha gross.

Several potential areas of High Conservation Value Forest (HCVF) include unique habitats harbouring rare or endemic plants, or known areas where the congregation of animals in search of food or minerals occurs. From the field audit carried out under the Forest Management Certification Evaluation in May 2001, it was felt that the forested areas around salt licks, which protect many large mammals, should be classified as HCVF. Groups of plants with economic potential as high quality timber or pharmaceutical resources should also be considered for protection so as to provide a source of generic material useful for future improvement through selective breeding. (Source: The Forest Management Certification Evaluation on the Forest Concession Area of Perak Integrated Timber Complex (Perak ITC), SCS, May 2002)

### **Indigenous Communities**

As for the legal and customary use-rights in PITC, there are no indigenous people communities in the PITC concession, except for about ten families, which have been employed by PITC to work in the logging operations within PITC. As of last year, PITC has allowed these indigenous communities to establish a village inside the concession area.

There are nine villages of indigenous communities scattered outside the concession area. These local communities around the concession consist of around 700 people. These local communities are traditionally dependent on the forest for their livelihood, with hunting and collection of non-timber forest products as the main activities.

The villagers continue to depend on the nearby forest for their livelihood, as not much agriculture land has been developed, besides small areas planted with hill paddy, maize, tapioca and yam. In addition, the Jahai community moves from place to place, unlike the other local communities, called the Temiar and Semai, which do practise some agriculture for subsistence. Around 50% of the villagers are involved in rattan harvesting or fruit harvesting from the forest. Harvesting rattan for cash income is the main income-generating economic activity of the villagers.

Under the project, activities have been planned to generate data necessary for comparing alternate methods of quantifying the amounts of non-timber forest products (NTFPs) collected by the indigenous households. It will also generate data necessary for constructing models that relate NTFP collection to household characteristics (age, income, education, proximity to markets and wage employment, etc.). This data will feed into the economic valuation models that will be developed.

### ***Stakeholder Participation in Project Design:***

In the formulation of this project during the PDF phase, due consultations with stakeholders were undertaken. Two consultations were undertaken one at the beginning of the PDF-b phase to introduce the project to stakeholders and obtain their input in the project formulation and one towards the end to present the formulated project for their comments and support. The First Stakeholders' Consultation for the Project was held in Ipoh, Perak on 26 April 2001. The Consultations began with a welcoming address and theme paper presentation by Y. Bhg. Dato' Dr. Abdul Razak Mohd. Ali, Chairman of the Project's National Steering Committee and Director General of FRIM. Subsequently, two other papers clarifying the background, scope and aim of the proposed project were presented at the Stakeholders' Consultation followed by three working group discussions between the stakeholders and finally a presentation and discussion of the working group outputs.

The Consultation was attended by a total of 51 participants from 26 agencies (Table2) representing government departments, non-governmental agencies, private sector, local communities, and universities. In addition, two representatives from United Nations Development Programme and three consultants from Harvard University, USA was also in attendance.

The stakeholders have shown support for the project and provided valuable information for its formulation. They have together identified all relevant stakeholders, their roles and activities as well as linkages with one another. At the same time they discussed amongst themselves and identified the actual and potential threats to biodiversity conservation in Malaysia and Perak. These discussions also provided information on the causes of these threats, their consequences and the management options to address these threats. This information was very valuable and was referred to during the Logical Framework Analysis (LFA) Workshop for the development of the problem tree and objective tree and subsequently the formulation of the planning matrix.

The Second Stakeholders' Consultations was held on 13 June 2002 Kuala Lumpur. All major stakeholders again attended it. A detailed presentation of the project activities and outputs were presented by FRIM to the stakeholders and very positive comments and feedback were obtained. The feedback and comments was subsequently used to improve the project proposal. Advice and directions were also given to ensure the project is implemented smoothly when it is realised.

In both consultations, the local indigenous communities were represented. It is useful to note during the field audit of the forest management certification evaluation on the forest concession area of PITC, conducted under the auspices of the SCS Forest Conservation Programme in 2001, it was found that there are no outstanding land claims by the indigenous community on the concession area and generally, harvesting on the PITC concession has been viewed as favourable as it allow better access for the harvest of rattan.

A representative of the indigenous community will be invited as a member of the National Steering Committee (NSC), to ensure that the views of the community are represented.

In course of the project submission, comments were received from the GEF Council on the LFA, which required substantive amount of time being undertaken by FRIM and various stakeholders to improve and strengthen the performance indicators and targets for the project. This, along with changes in personnel at the UNDP Country Office resulted in the delay in resubmitting the project document for final approval.

## ***Part II: Strategy***

The proposed targeted research project addresses these gaps in the baseline information by developing tools that will enable forest planners to assess the adequacy of existing protected areas for biodiversity conservation and, if there is a need to establish additional areas, to determine how large they should be and where they should be located.

The project highlights the immediate need to obtain information required to manage biodiversity more effectively. The three categories to be addressed are:

1. Information on the impacts of changes in total forest area and changes in the allocation of forests among different use categories (protection, production, etc.) on biodiversity;
2. Information on the direct and indirect economic benefits that result from enhanced biodiversity conservation;
3. Information on the costs of biodiversity conservation, in particular the opportunity cost associated with forgone logging activity.

In response to this, the project will develop the following, which correspond to both national and GEF strategies:

1. Improved tools for rapidly assessing the biodiversity in tropical rainforests;
2. Improved tools for estimating the economic value of goods and services associated with biodiversity in tropical rainforests;
3. Improved models for predicting the biodiversity impacts, and associated economic benefits and costs, of alternative allocations of forests among different use categories at a landscape level.

This project will respond to GEF Strategic Priority #4 on the Generation and Dissemination of Best Practices for Addressing Current and Emerging Biodiversity Issues. In addition, the tools developed under the project will be disseminated for broader application to Strategic Priority #2 on Mainstreaming Biodiversity in Production Landscapes and Sectors. The tools developed will be applicable to forestry departments throughout the region and in other tropical countries. The research activities will be conducted in Malaysia. The Perak Timber Integrated Complex (PITC) concession will act as a laboratory for the development of tools.

Malaysia is one of the signatories to the Convention on Biological Diversity as well as the United Nations Framework Convention on Climate Change at Rio, hence this project will complement the country's efforts in strengthening the conservation of biodiversity and ensuring the equitable sharing of benefits from the utilization of forest genetic resources. As a result, Malaysia has established a National Committee on the Convention of Biological Diversity; formulated a National Biological Diversity Strategy; and initiated action for an effective conservation and sustainable use of all natural ecosystems.

Forest research in Malaysia has produced substantial research material and has attracted international research support. FRIM has demonstrated its ability to successfully implement similar research projects in the past and with the support of Malaysian stakeholders such as the federal and state governments, environmental NGOs and the PITC concession.

The project will undertake a variety of dissemination and capacity building activities. There will be opportunities for cross-project learning among relevant GEF OP3 (Forestry) projects. The International Advisory Panel (IAP) will also ensure that the tools developed by the project are disseminated internationally. National capacities will be enhanced and strengthened as FRIM spearheads the assessment of biodiversity. This will include predicting impacts of management on biodiversity and developing models to predict biodiversity changes related to current management practices. The Forestry Department and PITC will also be able to utilize relevant methodologies developed to enhance its capacity to manage the forest in a manner that promote sustainability and facilitate the concession to be certified following the existing guidelines on the best forest management practices.

## ***Risks and Sustainability***

### **Project Risks**

There are several potential risks to project success, but none is perceived to be of such high probability as to endanger project implementation or continuation. Risks have been anticipated through the project's evolution, and measures have been taken to reduce their impact. The risk on the successful implementation of the project is considered low as it conforms to the national goals and aspirations in managing the forests on a sustainable basis. In this regard, the project has the support of the major stakeholders including the Forestry Department, PITC as well as other relevant government agencies and NGOs. The scope and activities of the project have been well defined, encompassing the logistic support from the host country and firm commitment from renowned experts both at local and international research institutions and universities.

Although developing a new assessment tool for biodiversity is associated with certain risk, additional data collected from other projects exists to support the building of the models. This includes the 50-ha demography plots in Pasoh and Lambir where complete enumeration of all vegetation, are available. The model is designed to provide good estimate with reasonable amount of existing data. In the present project, the data collected is minimised, as they will be generated by various small studies scattered at different locations. With this flexibility the model developed may be of practical use in the developing tropical countries where extensive data is still lacking. The accuracy of prediction will improve with increase in the extent and reliability of data collected. Therefore flexibility and greater sensitivity of the model to data inputs remains the key factor for positive outcomes of this project.

### **Sustainability:**

#### ***Institutional Sustainability***

FRIM is the national agency for forestry research in the country. It started as the Forest Research Institute under the Forestry Department as early as 1929. In 1985, the Malaysian Forestry Research and Development Board Act was passed which allowed the Institute to change its status to that of a statutory body called Forest Research Institute Malaysia (FRIM). This was to enable the Institute to serve a Malaysia-wide clientele and interact better in an international context. FRIM is now responsible to the Malaysian Forestry Research and Development Board (MFRDB), which in turn is responsible to the Ministry of Natural Resources and Environment (NRE). FRIM has extensive linkages with national & international agencies such the United Nations Development Programme (UNDP), Food and Agriculture Organisation (FAO), Institute of Plant and Genetic Research (IPGR), Overseas Development Aid (ODA), National Institute for Environmental Studies (NIES), Japan International Research Center for Agricultural Sciences (JIRCAS), Center for International Forestry Research (CIFOR), International Tropical Timber Organization (ITTO) and Danish International Development Agency (DANIDA).



FRIM today has the facilities and expertise to provide technical services to the industries in addition to the research and development activities that it was established to carry out. For the forest products industries, FRIM provides a range of testing, consultancy, advisory, training and technology diffusion services to assist in the manufacturing and utilization of wood and non-wood based products. Many of these laboratories and experimental plants are equipped with commercial size equipment and machines, some of which are not available elsewhere in Malaysia. These facilities are accessible to the wood users and entrepreneurs via various means, such as joint research, demonstrations, training and production trial runs.

FRIM has a commendable Library, Herbarium, and arboreta that often been an important source of reference for both local and international scientists. FRIM also has a strong workforce representing almost all fields expertise related to natural forest management, plantation forest management, forest environment and biodiversity, medicinal plant, timber technology, non-timber forest products, and economy. The total number of staff within FRIM amounts to 556, of which 151 are research officers. There are all together 64 research officers qualified with Masters Degrees and 56 with Doctorate in various fields. In addition another 11 and 28 officers are currently undergoing their Masters and Doctorate training programmes respectively.

Institutional sustainability will also be ensured by the linkages created between the project, FRIM and the State and Federal Forestry Departments. Although the “designated institution” for the project is FRIM, the Ministry of Natural Resources and Environment (NRE) will be the Executing Agency – assuming overall responsibility and accountability. The NRE is home to both FRIM and the Forest Department, providing a direct link between research and policy formulation that is based on existing government structures (thereby increasing sustainability). The Federal Forest Department also provides an institutional avenue to link the project research activities into the Perak State forestry planning processes.

In addition, the project test site, PITC, is a subsidiary of the Perak State Government's economic arm called the State Economic Development Cooperation (SEDC). Therefore it is the expectation that the SEDC will be constantly engaged in the project activities. The linkages with state level policy makers will be further strengthened by the fact that the Directors of the Perak State Forestry Department and the SEDC will be members of the National Steering Committee. Furthermore the Forest Department (Federal) will be the Chair of the Technical Working Group, which also includes the State Forestry Department.

#### Financial Sustainability

FRIM's research is mainly obtained from the Federal Government through the Intensive Research Priority Area (IRPA) grants, although it does get research grants from other local and international donors. In this respect the Institute is financially very stable. For the period 1996-1999 the funding (US\$ million) received are as follows:

Sources	(US\$ million)					
	1994	1995	1996	1997	1998	1999
<b>Operating</b>	4.11	4.74	5.76	4.76	4.74	5.03
<b>Development</b>	2.71	2.11	0.16	2.29	1.84	1.92
<b>IRPA</b>	1.05	1.0	.58	1.05	1.08	1.0
<b>Total</b>	<b>7.87</b>	<b>7.85</b>	<b>6.5</b>	<b>8.10</b>	<b>7.66</b>	<b>7.95</b>

### ***Part III: Management Arrangements***

The project will be implemented by the Forest Research Institute of Malaysia (FRIM). The Ministry of Natural Resources and Environment (NRE) will be the Executing Agency, assuming overall responsibility and accountability. The NRE is home to both FRIM and the Forest Department, providing a direct link between research and policy formulation that is based on existing government structures (thereby increasing sustainability). The Federal Forest Department also provides an institutional avenue to link the project research activities into the Perak State forestry planning processes. A National Steering Committee (NSC) will be established to govern the implementation of the project. The NSC will provide guidance on matters pertaining to the implementation of the project and ensure that the project is directed towards achieving its intended goals. It will enable the coordination of different agencies involved in the project.

The members of the National Steering Committee (NSC) will be as follows: Director-General, FRIM, Ministry of Natural Resources and Environment Malaysia, Economic Planning Unit, Forestry Department HQ Peninsular Malaysia, Forestry Department of the State of Perak, Perak State Economic and Development Corporation, representatives of the local communities and UNDP Malaysia.

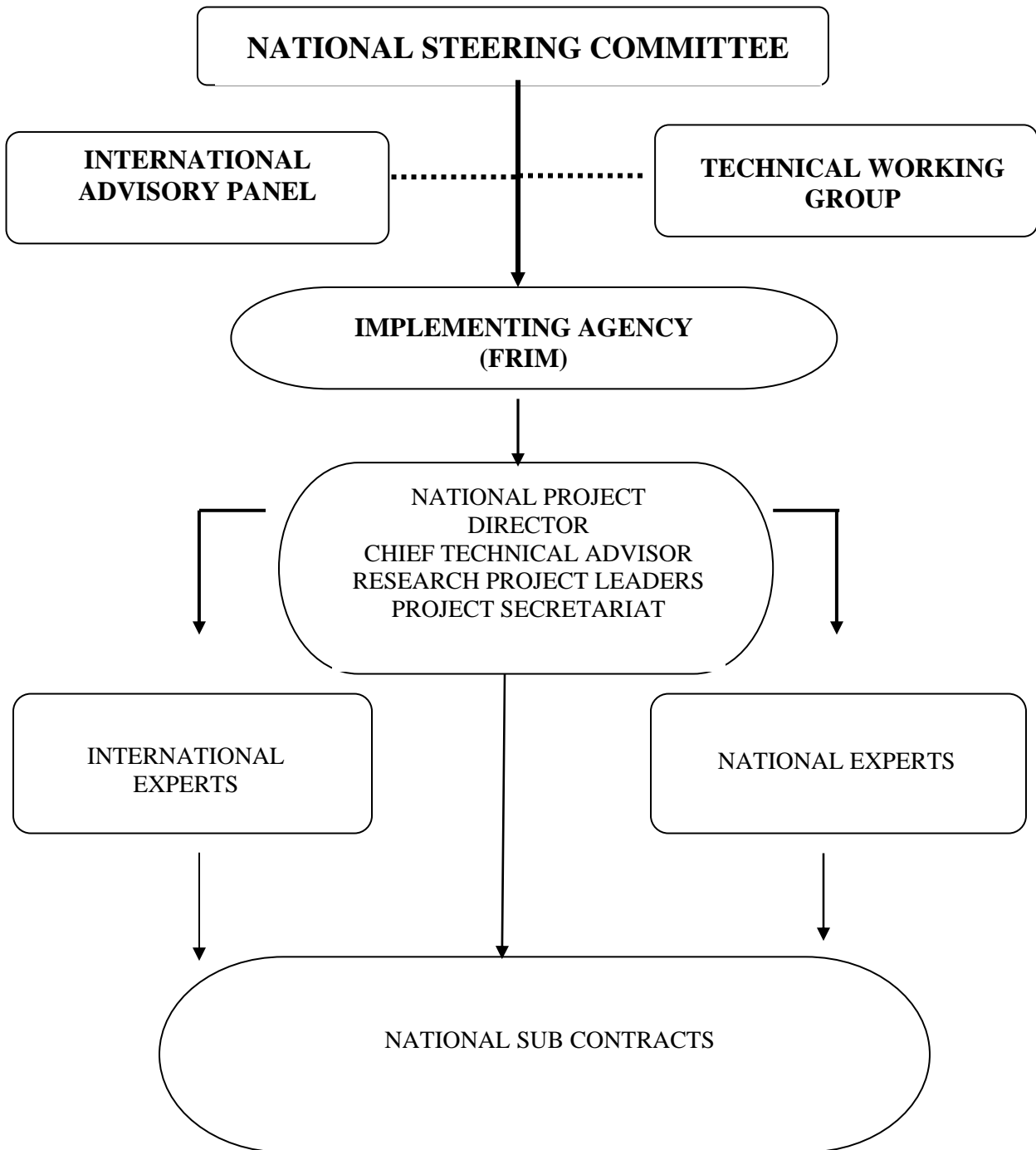
At the same time an International Advisory Panel (IAP) will also be established to give advice on technical matters and facilitate the dissemination and management of knowledge.

A national Technical Working Group (TWG) will be established to provide advice on technical issues as well as to provide the linkage with State Forestry Department decision-making processes.

The terms of references (TOR) for the NSC, TWG and IAP are enclosed as Annex I. Annex 1 includes also a list of indicative experts who will be able to sit in the IAP.

The organization structure of the project is shown in Figure 1.

**Figure 1 – Organizational Chart**



### ***Operations and Maintenance***

The initiation and subsequent implementation of the activities of the project will be contingent upon the timely provision by the Malaysian Government through the Implementing Agency, FRIM, of the adequate facilities and services, including secondment of staff, required for the effective operation of the project. The equipment, components and materials acquired for the project will be the responsibility of the Implementing Agency, FRIM, and will be inventoried in a manner that is consistent with FRIM regulations. The equipment and materials acquired with project funds will be disposed of upon completion of the project according to the UNDP Programming Manual.

In realizing the importance of the proposed targeted research project and the intensive work involved in the baseline studies, the Forest Research Institute Malaysia (FRIM) have agreed to contribute to the project funding via the use of the time and effort of its workforce. A total of twelve experienced multi-disciplined senior researchers will be assigned to assist in the implementation of the project and will be assisted by a team of eight researchers, a research assistant and a clerk. The group of researchers will collectively contribute 432 working months amounting to US\$1,227,800 in salaries and a group of household surveyors amounting to US\$250,000. The overall project will be managed by an ensemble of five administration support personnel, all of whom will be from existing FRIM workforce. This management group will be working full time on the project totalling in 210 working months amounting to US\$735,000. FRIM will also have the honour of housing the project centre in its campus thus directly contributing in office rentals throughout the lifespan of the project. Office rental totals are expected to amount to US\$94,200. Thus FRIM would be contributing a total amount of US\$2,307,000 in person working months and office rentals.

Apart from the UNDP logo, a GEF logo will also be included on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF will also accord proper acknowledgment to GEF. However, the [UNDP logo](#) should be placed more prominently and slightly separated from the [GEF logo](#) if possible as UN visibility is important for security purposes

## ***Part IV: Monitoring and Evaluation Plan and Budget***

Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from UNDP/GEF. The Logical Framework Matrix provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. These will form the basis on which the project's Monitoring and Evaluation system will be built.

The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

### ***Project Inception Phase***

A Project Inception Workshop will be conducted with the full project team, relevant government counterparts, co-financing partners, the UNDP-CO and representation from the UNDP/GEF Regional Coordinating Unit, as well as UNDP/GEF (HQs) as appropriate.

A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goals and objectives, as well as finalize preparation of the project's first annual work plan on the basis of the project's logical framework matrix. This will include reviewing the logframe (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise finalize the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

Additionally, the purpose and objective of the Inception Workshop (IW) will be to:

- (i) Introduce project staff with the UNDP/GEF expanded team which will support the project during its implementation, namely the CO and responsible Regional Coordinating Unit staff;
- (ii) Detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff vis à vis the project team;
- (iii) Provide a detailed overview of UNDP/GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), Tripartite Review Meetings, as well as mid-term and final evaluations. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget rephasings.

The Project Coordinator and the Project GEF Technical Advisor will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP-CO and assisted by the UNDP/GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan (AWP). Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

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

### ***Monitoring responsibilities and events***

A detailed schedule of project reviews meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report.

Such a schedule will include:

- (i) Tentative time frames for Tripartite Reviews, Steering Committee Meetings, (or relevant advisory and/or coordination mechanisms) and
- (ii) Project related Monitoring and Evaluation activities.

#### **(a) Day to Day Monitoring**

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

The Project Coordinator and the Project GEF Technical Advisor will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP-CO and assisted by the UNDP/GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan.

The local implementing agencies will also take part in the Inception Workshop in which a common vision of overall project goals will be established. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

Measurement of impact indicators related to global benefits will occur according to the schedules defined in the Inception Workshop. The measurement, of these will be undertaken through subcontracts or retainers with relevant institutions or through specific studies that are to form part of the projects activities or periodic sampling such as with sedimentation.

#### **(b) Periodic Monitoring**

Periodic monitoring of implementation progress will be undertaken by the UNDP-CO through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

UNDP Country Offices and UNDP/GEF RCUs as appropriate, will conduct yearly visits to projects that have field sites, or more often based on an agreed upon scheduled to be detailed in the project's Inception Report / Annual Work Plan to assess first hand project progress. Any other member of the Steering Committee can also accompany, as decided by the SC. A Field Visit Report will be prepared by the CO

and circulated no less than one month after the visit to the project team, all SC members, and UNDP/GEF.

Measurement of impact indicators related to global benefits will occur according to the schedules defined in the Inception Workshop. The measurement of these will include reviews by the International Advisory Panel (IAP) and external evaluators, as described below.

**(c) Tripartite Review (TPR)**

Annual Monitoring will occur through the Tripartite Review (TPR). This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to Tripartite Review (TPR) at least once every year. The first such meeting will be held within the first twelve months of the start of full implementation. The project proponent will prepare an Annual Project Report (APR) and submit it to UNDP-CO and the UNDP/GEF regional office at least two weeks prior to the TPR for review and comments.

The APR will be used as one of the basic documents for discussions in the TPR meeting. The project proponent will present the APR to the TPR, highlighting policy issues and recommendations for the decision of the TPR participants. The project proponent also informs the participants of any agreement reached by stakeholders during the APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary.

**(d) Terminal Tripartite Review (TTR)**

The terminal tripartite review is held in the last month of project operations. The project proponent is responsible for preparing the Terminal Report and submitting it to UNDP-CO and RBAP-GEF's Regional Coordinating Unit. It shall be prepared in draft at least two months in advance of the TTR in order to allow review, and will serve as the basis for discussions in the TTR. The terminal tripartite review considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation of formulation.

The TPR has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

***Project Monitoring Reporting***

The Project Coordinator in conjunction with the UNDP/GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process.

**(a) Inception Report (IR):**

A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year Work Plan divided in quarterly time frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan would include the dates of specific field visits, support missions from the UNDP-CO or the Regional

Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP/GEF's Regional Coordinating Unit will review the document.

### **(b) Annual Project Report (APR)**

The APR is a UNDP requirement and part of UNDP's Country Office central oversight, monitoring and project management. It is a self -assessment report by project management to the CO and provides input to the country office reporting process and the Result Oriented Annual Report (ROAR), as well as forming a key input to the Tripartite Project Review. An APR will be prepared on an annual basis prior to the Tripartite Project Review, to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work.

The format of the APR is flexible but should include the following:

- An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome
- The constraints experienced in the progress towards results and the reasons for these
- The three (at most) major constraints to achievement of results
- Annual Work Plan (AWP), Country Assistance Evaluation (CAE) and other expenditure reports (ERP generated)
- Lessons learned
- Clear recommendations for future orientation in addressing key problems in lack of progress

### **(c) Project Implementation Review (PIR)**

The PIR is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the project has been under implementation for a year, a Project Implementation Report must be completed by the CO together with the project team and every year thereafter. The PIR can be prepared any time during the year (July-June) and ideally prior to the TPR. The PIR should then be discussed in the TPR so that the result would be a PIR that has been agreed upon by the project, the executing agency, UNDP CO and the concerned RC.

The individual PIRs are collected, reviewed and analysed by the RCs prior to sending them to the focal area clusters at the UNDP/GEF headquarters. The focal area clusters supported by the UNDP/GEF M&E Unit analyse the PIRs by focal area, theme and region for common issues/results and lessons. The TAs and PTAs play a key role in this consolidating analysis.



The focal area PIRs are then discussed in the GEF Interagency Focal Area Task Forces in or around November each year and consolidated reports by focal area are collated by the GEF Independent M&E Unit based on the Task Force findings.

The GEF M&E Unit provides the scope and content of the PIR. In light of the similarities of both APR and PIR, UNDP/GEF has prepared a harmonized format for reference.

#### **(d) Quarterly Operational Report**

Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP/GEF regional office by the project team.

#### **(e) Periodic Thematic Reports**

As and when called for by UNDP, UNDP/GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

#### **(f) Project Terminal Report**

During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

#### **(g) International Advisory Panel (IAP)**

An International Advisory Panel will be established to provide technical advice to the project and to provide the linkage to the international forestry community. The IAP will ensure that the research will be relevant to global forestry practices and context. The IAP will review research methodology adopted and findings for each component and provide recommendations necessary to strengthen project implementation and the robustness of the research analysis

The IAP will work with the Technical Working Group (TWG) to review the methodology during the project inception period. It will also monitor the technical progress of the research and review the findings from each component. It will pay particular attention to the research team's success in publishing results in peer-reviewed international journals and other outlets that have a high degree of quality control. Peer review is the most important means of ensuring the quality of the research. The IAP shall meet at least three times within the lifetime of the project cycle, ideally prior to NSC meetings. This is to enable their recommendations to be considered by the NSC. These meetings shall occur in years one, three and five of the project timeline.

Outside of these meetings, consultation with the IAP will be conducted *via* telephone conferences, video conferences and/or electronic mail. The Terms of Reference for the IAP is included in Part II: Terms of References for Key Project Staff and Main Sub-Contracts (pp.46).

#### **(h) Technical Working Group (TWG)**

A Technical Working Group will be established to also provide technical advice to the project specifically with the purpose to ensure that the project remains relevant to the forestry planning processes both at the State and the Federal level. The TWG will also provide advice to the NSC and the project on the research which is consistent with local forestry practices. The TWG's review and technical advice will complement the work of the IAP in ensuring that the research will develop outputs that are pragmatic and are applicable at the local level. The Terms of Reference for the TWG is included in Part II: Terms of References for Key Project Staff and Main Sub-Contracts (pp.48).

#### **(i) Technical Reports**

Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. They will be important documents for the project, given that it is a targeted research project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

#### **(j) Project Publications**

Project Publications not only form a key method of crystallizing and disseminating the results and achievements of the project, but they also provide the most important means of quality control for a targeted research project such as this one. The project team will emphasize publication in refereed outlets, both local and international journals. The peer-review process for such journals will confirm the scientific validity and significance of the results of the research. Publication in high-quality, refereed outlets will provide UNDP and GEF with a verifiable, quantifiable indicator that the tools developed under the project—that is, the improved methods for assessing and valuing biodiversity and incorporating information generated by such methods into forest planning processes—are indeed improvements compared to existing tools.

#### ***Independent Evaluations***

The project will be subjected to at least two independent external evaluations as follows:

##### **(a) Mid-term Evaluation**

An independent Mid-Term Evaluation will be undertaken in the third year of implementation. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. The Mid-term Evaluation of a targeted research project will also evaluate the quantity and quality of the research output and the tangible, quantifiable evidence that the project is having a substantial research impact. The review will also

evaluate the conservation impacts of the project as per the Log-Frame Matrix. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document.

Where possible, the evaluation will be arranged that it will overlap with an IAP meeting to enable the evaluators to interview IAP members and members of the TWG and NSC. The input received from the IAP and TWG will provide the additional information to the evaluators on the progress of the project and the research. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP/GEF.

### **(b) Final Evaluation**

An independent Final Evaluation will take place three months prior to the terminal tripartite review meeting, and will focus on the same issues as the mid-term evaluation. The Final Evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation will also evaluate the impact of the research based on the quantity and quality of the research output as per the Log-Frame Matrix. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP/GEF.

### ***Scientific Review Panel (SRP)***

A scientific review panel with representation from international forestry organisation (eg. ITTO, CIFOR) will be established to endorse the methods developed by the project as having removed scientific barriers to mainstreaming biodiversity in tropical forest management decision-making. The Terms of Reference for this review panel will be prepared by the project based on guidance from the IAP, UNDP CO, Regional Coordinating Unit and UNDP/GEF.

### ***Learning and Knowledge Sharing***

Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. In addition:

- The project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics. UNDP/GEF shall establish a number of networks, such as Integrated Ecosystem Management, eco-tourism, co-management, etc, that will largely function on the basis of an electronic platform.
- The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned.

The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identifying and analyzing lessons learned is an on-going process, and the need to communicate such lessons, as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned. To this end a percentage of project resources will need to be allocated for these activities.

### ***Monitoring and Evaluation Budget***

A total of USD 50,000 has been budgeted for the independent project evaluation, which will include an independent mid-term evaluation and the final evaluation. The evaluations will focus on progress in meeting the indicators for measuring the impact (i.e. the success of the project in achieving lasting, sustainable conservation of globally significant biodiversity). They will be expected to also report on stakeholder participation and satisfaction, in addition to the usual evaluation parameters.

A separate budget of about USD 62,331 has also been allocated to facilitate the International Advisory Panel meetings and the Scientific Review Panel. (For further details on project budget please refer to pp. 36 to 39 of this project document.)

#### **(a) Budget Revisions**

Project Budgets Revisions are approved by the Resident Representative or Officer-in-Charge. An annual revision is mandatory and must be completed by 10 June. This is to reflect the final expenditures for the preceding year and to enable the preparation of a realistic plan for the provision of inputs for the current year. Other budget revisions may be undertaken as necessary during the course of the project. It is expected that material revisions will be cleared with the UNDP/GEF Regional Coordinator for consistency with the GEF principle of incrementality and GEF eligibility criteria before being approved.

#### ***(GEF) Secretariat Managed Project Review (SMPR)***

The GEF has recently commenced a program of reviewing projects to assess progress towards the delivery of expected global environment benefits. These reviews may be desk-based or field-based. They are undertaken by a team of representatives from the GEF Secretariat, GEF Agencies (UNEP, World Bank and GEF Executing Agencies such as AsDB) and an observer from UNDP/GEF. SMPRs are normally designed to coincide with projects' mid-term evaluations.

### ***Part V Legal Context***

This project document shall be the instrument envisaged in the Supplemental Provisions to the Project Document, attached hereto. The Supplemental Provisions to the Project Document is a standard annex to project documents that is used in countries which are not parties to the Standard Basic Assistance Agreement (SBAA). The Supplemental Provisions outlines the specific basic conditions under which UNDP assists the Government in carrying its development programmes. It specifies the UNDP privileges and immunities, the forms of assistance, the management arrangements, the role of the Government and the executing agency, resources, costs and general provisions. The host country-implementing agency shall for the purpose of the Supplemental Provisions to the Project Document, refer to the Government Cooperating agency described in the Supplemental Provisions.

All activities stipulated in the Project Document shall be implemented accordingly. However, should there be a need to make changes/modifications to any of the agreed activities; all signatories of the Project Document must concur, before such changes are made.

The following types of revisions may be made to this project document with the signature of the UNDP principal project representative and the Government of Malaysia, provided he or she is assured that the other signatories of the project document have no objection to the proposed changes:

1. Revisions in, or addition of, any of the annexes of the project document [with the exception of the Standard Legal Text for non-SBAA countries which may not be altered and the agreement to which is a pre-condition for UNDP assistance].
2. Revisions which do not involve significant changes in the immediate objectives, outputs or activities of a project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation; and
3. Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or to take into account agency expenditure flexibility.”

### ***Audit Requirements***

As with all nationally executed projects, the project must be audited periodically. The objective of the audit is to provide the UNDP Administrator with the assurances that UNDP resources are being managed in accordance with:

1. The financial regulations, rules, practices and procedures prescribed for the project;
2. The project document and work plans, including activities, management and the project implementation arrangements, monitoring, evaluation, and reporting provisions;
3. The requirements for execution in the areas of management, administration and finance.

While the Government is responsible for ensuring that the audit requirements are met, the project may also be subject to audit by the auditors of UNDP, and UNDP shall have right of access to the relevant records.

UNDP will assist the Government Auditors, subject to written request, to provide the relevant vouchers on direct payment and other documents related to cash advances, provided always that these specific documents are not available from the implementing agency. The final Combined Delivery Report (CDR) will be provided by UNDP by 15 March of each year.

The Government must ensure that the audit is performed in accordance with the generally accepted standards and ensure that the audit report is duly reviewed and will reach UNDP Headquarters via the UNDP Malaysia office by 30 April of each year.

### ***Confidentiality***

The Parties shall undertake that neither Party shall disclose or distribute any confidential information, documents or data received or supplied to the other Party in the course of the implementation of this Project Document and any other agreements made pursuant to this Project Document, to any third party except to the extent as authorised in writing to do so by the other Party.

Both the Parties agree that the provisions of this Article shall continue to be binding between the Parties notwithstanding the expiry or termination of this Project Document.

### ***Suspension***

Each Party reserves the right for reasons of national security, national interest, public order or public health to suspend temporarily, either in whole or in part, the implementation of this Project Document which suspension shall take effect immediately after notification has been given to the other Party in writing.

### ***Revision, Modification and Amendment***

Any Party may request in writing a revision, modification or amendment of all or any part of this Project Document. Any revision, modification or amendment agreed to by the Parties shall be reduced into writing and shall form part of this Project Document. Such revision, modification or amendment shall come into force on such date as may be determined by the Parties. Any revision, modification or amendment shall not prejudice the rights and obligations arising from or based on this a Project Document prior or up to the date of such revision, modification or amendment.

### ***Arbitration***

Any dispute, which cannot be resolved amicably, shall be settled by arbitration in accordance with the Arbitration Act 1952 [Act 93] and the rules of arbitration as adopted by the Regional Centre for Arbitration at Kuala Lumpur.

The number of arbitrators shall be three (3), with one (1) arbitrator to be appointed by UNDP and one (1) arbitrator by the Government and the third to be agreed between the two (2) nominated arbitrators. If the two (2) arbitrators fails to agree on the person to be nominated, on the application of either Party hereto the same shall be appointed by the Director of the Regional Centre of Arbitration in Kuala Lumpur.

Any such reference to arbitration shall be deemed to be a submission to arbitration within the meaning of the Arbitration Act 1952.

The decision of the panel of arbitrators shall be final and binding on both Parties.

The arbitrator shall have the power to order specific performance of any obligation under this Project Document.

### ***Entry into Force, Duration and Termination***

This Project Document shall enter into force on the Starting Date and shall remain in force until the Completion Date unless on of the Parties notify the other Party of its intention to terminate this Project Document by a notice in writing, at least six (6) months prior to the date of the intended termination.

The termination of the Project Document shall not affect the implementation of on going activities/programmes, which have been agreed upon prior to the date of the termination of this Project Document.

### ***Protection of Intellectual Property Rights***

The protection of intellectual property rights shall be enforced in conformity with the national laws and regulations of Malaysia and with other international agreements signed by the Parties.

The use of the name, logo and/or official emblem of any of the Parties on any publication, document and/or paper is prohibited without the prior written approval of Party concerned.

Notwithstanding anything in paragraph 1 above, the intellectual property rights in respect of any technological development, products and services development, carried out:

1. Jointly by the Parties or the research results obtained through the joint effort of the Parties, shall be owned by the Parties in accordance with the terms to be mutually agreed upon; or

2. Solely and separately by the Party or the research results obtained through the sole and separate effort of the Party, shall be solely owned by the Party concerned.

## **SECTION II: STRATEGIC RESULTS FRAMEWORK AND GEF INCREMENT**

### ***Part I: Incremental Cost Analysis***

For further details please refer to pp. 16-28 of the Project Brief in Annex 1 and pp. 20-28 of the Project Executive Summary in Annex II



## Part II: Logical Framework Analysis

Project Strategy	Objectively Viable Indicators
Goal	To conserve forest biodiversity in production landscapes

Result	Indicator	Baseline value	Target (End of Project)	Means of verification	Assumptions
<p><b>Objective:</b> To remove scientific barriers to mainstreaming biodiversity conservation into tropical forest management decision-making.</p>	<p>1. Adoption of the suite of tools developed by the project to measure biodiversity, assess full valuation of goods and services, and integrate this information into decision making.</p>	<p>1. Forest departments do not generally base decisions on accurate measures of biodiversity or full valuation of goods and services, and therefore do not estimate trade-offs between timber production and biodiversity conservation in forest planning</p>	<p>1.1 By the fourth year, the project will have generated methods to measure biodiversity with increased precision at comparable costs (Outcome 1), models for full valuation of goods and services (Outcome 2), and methods to calculate tradeoffs of between biodiversity conservation and timber values (Outcome 3). During the next forest planning cycle, which will determine the AAC for 2011-16, Perak SFO and at least two other SFOs in Malaysia, utilize these tools developed by the project, quantify increases in biodiversity conservation by comparing their submitted plans with “business as usual scenarios”</p>	<p>i. Field research (supported by published reports for the definition of the baseline)</p> <p>ii. SFO planning documents</p>	<p>i. Methods developed under Output 1.1 are effective in measuring changes simply and easily.</p> <p>ii. Capacity to implement new prescriptions is effectively developed.</p>

Result	Indicator	Baseline value	Target (End of Project)	Means of verification	Assumptions
	2. Endorsement of methods developed by the project	2. International acceptance that scientific barriers exist	2.1 A scientific review panel with representation from international forestry organisation (eg. ITTO, CIFOR) will be established to endorse the methods developed by the project as having removed scientific barriers to mainstreaming biodiversity in tropical forest management decision-making.	i. Interviews/panel reports	i. Research conducted in Malaysia will generate methods that are applicable in other humid tropical Asian countries.
<b>Outcome 1:</b> Forest planners in Perak incorporate tools to measure impacts on biodiversity in their forest management planning	1. Adoption of tools developed by the project to measure impacts on biodiversity.	1. Perak SFO would continue to use current rough methods	1.1 In determining AAC for 2011-16, Perak SFO utilize tools and methods developed by the project	i. Perak SFO planning documents	i. Perak SFO continues to be committed to the project Objective
<b>Output 1.1:</b> Efficient statistical methods for estimating biodiversity from small samples.	1.1 Availability of tools and methods to measure impacts on biodiversity efficiently.	1.1 Forest planning in Perak involves only rough measurements of biodiversity, with available data from pre-felling inventories providing a very imprecise indicator (a standard error of approximately 70%) (See note below)	1.1.1 By the end of the project, methods are available which measure alpha diversity with a standard error of only 50% and do not increase the cost of pre-felling inventories; with other methods yielding estimates with standard errors of 30% or below at no more than twice the cost of conventional pre-felling inventories.	i. Project reports.	i. Tools and methods developed by the project are effective in assessing biodiversity within economically acceptable cost thresholds. ii. Research conducted in Malaysia will generate methods that are applicable in other humid tropical Asian countries.

Result	Indicator	Baseline value	Target (End of Project)	Means of verification	Assumptions
<b>Output 1.2:</b> Logging prescriptions that reduce impact on biodiversity	1.2 Cost and biodiversity impact of modified harvesting systems, which improve biodiversity conservation.	1.2 Application of existing logging protocols result in changes in measures of biodiversity in the humid tropical forests of Peninsular Malaysia one year after logging. (See note below)	1.2.1 In Year 5, PITC applies modified logging protocols that increase logging costs per cubic meter by no more than 10% compared to existing protocols and result (one year after logging) in: <ul style="list-style-type: none"> <li>a. Species richness increases by 0.5x%</li> <li>b. Simpson's diversity index shows no statistically significant change</li> <li>c. Standard deviation of CCA scores shows no statistically significant change</li> </ul>	i. Project reports; PITC documents, including copies of protocols for modified harvesting systems for biodiversity conservation.	i. Perak SFO authorizes experimental deviations from SMS protocols
<b>Output 1.3:</b> Manuals and software that provide assistance and guidance in implementing biodiversity-friendly forest planning and harvesting.	1.3 The use of manuals and software by GEF OP3/BD2 projects, PITC, and states within Malaysia.	1.3 Manuals for assessment of specific groups exists (i.e. pre-felling inventory) but not for ecological assessment for overall biodiversity.	1.3.1 By the end of the project, Perak SFO and at least 1 other SFO in Malaysia are using the manuals and software in their planning procedures.	i. Software and manuals; PIR reports; correspondence from Perak SFO and other SFOs	i. Manuals are used to guide decision making by State Authorities ii. GEF OP3/BD2 and state project teams demonstrate a willingness to collaborate

Result	Indicator	Baseline value	Target (End of Project)	Means of verification	Assumptions
<b>Output1.4:</b> Staff of Perak SFO and at least one other SFO trained in application of methods to measure biodiversity and in implementation of biodiversity-friendly forest planning and harvesting	1.4 Number of staff trained	1.4 No staff trained	1.4.1 By the end of Year 4, managers and planners of Perak SFO and at least two other SFOs trained in use of tools and methods developed by the project	i. Project reports, training reports	i. Continued willingness of Perak SFO to cooperate; low staff turnover in Perak SFO.
<b>Outcome 2:</b> Forest planners in Perak utilize tools for full valuation of goods and services in their forest management planning and operations	ii. Adoption of tools and models for full valuation of goods and services.	2. Forest planning takes account only of direct economic value of timber	2.1 In determining AAC for 2011-16, Perak SFO utilizes methods developed by the project so as to maximize non-timber values, while still achieving timber harvest objectives.	i. Perak SFO planning documents	i. Perak SFO continues to be committed to the project Objective
<b>Output 2.1:</b> Feasible methods for estimating non-extractive values of tropical rainforests.	2.1 Use of methods for estimating non-extractive values of tropical rainforests	2.1 Forest valuation in developing countries have tended to focus on NTFPs collected by local communities at specific sites, not on the broader set of values related to biologically rich forests at a landscape scale.	2.1.1 By the end of Year 3, “benchmark” models relating non-extractive values to forest characteristics and socioeconomic conditions are developed  2.1.2 By the end of Year 4, a range of simpler models that require less data, but whose precision vs. cost tradeoff is well understood, are developed.	i. Project reports, Perak SFO documents.	i. Research conducted in Malaysia will generate methods that are applicable in other humid tropical Asian countries.  ii. SFOs in other Malaysian states will have the funds and interest to test these methods.

Result	Indicator	Baseline value	Target (End of Project)	Means of verification	Assumptions
<b>Output 2.2:</b> Manuals and software that provide assistance and guidance in full valuation of goods and services	2.2 Use of software and manuals.	2.2 Tools for full valuation not used in forest planning in humid tropical forests.	2.2.1 By the end of the project, Perak SFO and at least 2 other states in Malaysia use manuals and software developed by the project, as well as PITC	i. Software and manuals; project reports; PIRs.	i. Manuals are considered in guiding decision making by State Authorities. ii. Capacity and willingness of GEF OP3 and state project teams to use the data format, in accordance to their specific needs.
<b>Output 2.3:</b> Staff of Perak SFO and at least one other SFO trained in full valuation of goods and services	2.3 Number of staff trained	2.3 No staff trained	2.3.1 By the end of Year 4, managers and planners of Perak SFO and at least two other SFOs trained in use of tools and methods developed by the project	i. Project reports, training reports	i. Continued willingness of Perak SFO to cooperate; low staff turnover in Perak SFO.
<b>Outcome 3:</b> Forest planners in Perak integrate ecological and economic tools in forest planning decisions at a landscape level	3. Adoption of tools to assess trade-off between biodiversity conservation and timber values	3. Timber value/ha for Perak during 2006-2010 and diversity of habitat units represented in set-asides (See note below)	3.1 The timber harvesting plans for Perak during 2011-16 anticipate timber values per hectare of at least 95% of the baseline value, whilst the extent and distribution of set-asides ensures that the diversity of habitat units represented in them is at least 1.5x	i. Project reports, Perak SFO documents	i. Perak SFO continues to be committed to the project Objective

Result	Indicator	Baseline value	Target (End of Project)	Means of verification	Assumptions
<b>Output 3.1:</b> Models for predicting biodiversity within and between forest community types, taking into account logging status and location	3.1 Use of models that predict the spatial pattern of forest community types and the biodiversity they contain.	3.1 Forest planning and operations in humid tropical forests does not take account of landscape level changes in biodiversity	3.1.1 By the end of Year 4, a model that predicts the regeneration of forests, and changes in biodiversity after logging is developed for major forest types in Perak.  3.1.2 By the end of Year 5, this model is applied by Perak SFO and has been adapted and used by at least 2 other Malaysian states.	i. Project reports, SFO reports.	i. Perak SFO will be receptive to pilot-testing and using models.  ii. SFOs in other Malaysian states will have the funds and interest to adapt and apply the models.
<b>Output 3.2:</b> Models for predicting impacts on biodiversity and associated economic costs and benefits	3.2 Use of models that predict the biodiversity-maximizing spatial allocation of forestland, subject to timber-related constraints.	3.2 No models are used.	3.2.1 By the end of Year 4, a “benchmark” version of model developed.  3.2.2 By the end of Year 5, a simpler version is used by Perak SFO on trial basis and has been being adapted and is being used by at least 2 other Malaysian states.	i. Project reports, SFO reports	i. Perak SFO will be receptive to pilot-testing and using model.  ii. SFOs in other Malaysian states will have the funds and interest to adapt and apply the model.
<b>Output 3.3:</b> Staff of Perak SFO trained in application of models that integrate ecological and economic tools in forest planning decisions at a landscape level	3.3 Number of staff trained	3.3 No staff trained	3.3.1 By the end of Year 4, managers and planners of Perak SFO trained in use of tools and methods developed by the project	i. Project reports, training reports	i. Continued willingness of Perak SFO to cooperate; low staff turnover in PITC.

Result	Indicator	Baseline value	Target (End of Project)	Means of verification	Assumptions
<b>Outcome 4:</b> Capacity exists to apply methods developed by the project in tropical forest management operations.	4. National and international processes replicate experiences gained in Perak	4. No replication	4.1 By the end of the project, at least two other SFOs in Malaysia and two in other countries are using tools and methods developed through the project.	i. Project reports and correspondence with Forest Departments in Malaysia and elsewhere	i. Tools and methods generated in Perak are relevant, and/or can be easily adapted to be relevant in other humid tropical forests
<b>Output 4.1:</b> Revised Malaysian criteria and indicators of sustainable forest management incorporate procedures developed by the project as standard requirements	4.1 Approval of revised criteria and indicators	4.1 Current criteria and indicators address biodiversity in only very general ways	4.1.1 By the end of the project the Malaysian Timber Certification Council (MTCC) has revised, or is in the process of revising Malaysian criteria and indicators which incorporate tools and methods developed through the project in the assessment of sustainable forest management	i. Project reports, reports of the MTCC ii. Survey of Committee members	4.1 Project team establishes effective links to the MTCC.
<b>Output 4.2:</b> ITTO criteria and indicators incorporate procedures developed by the project as standard requirements	4.2 Approval of revised criteria and indicators	4.2 ITTO Criterion 5 includes only three indicators of species diversity, one indicator of genetic diversity, three management guidelines and one M&E guideline, providing only general information (see Annex)	4.2.1 By the end of the project, ITTO has revised, or is in the process of revising indicators for Criterion 5 which incorporate tools and methods developed through the project in the assessment of conservation of biodiversity in sustainable forest management	i. Project reports, ITTO documents	i. ITTO incorporates best practice into revisions to criteria and indicators

Note: Indicators for Outputs 1.1 and 1.2 and for Outcome 3 will be based on control-and-treatment comparisons. Therefore, the baseline values against which the results will be measured will be generated in the course of experimentation.

## SECTION III: TOTAL BUDGET AND WORKPLAN

### *Part I: Total Project Workplan and Budget under GEF Financing*

TOTAL PROJECT WORKPLAN AND BUDGET (to be read in conjunction with Advisory Note on Atlas and Total Workplan and Budget Terminology)												
Award ID: tbd												
Project Title: Conservation of Biological Diversity through Improved Forest Planning Tools												
	GEF Outcome/Atlas Activity	Responsible Party	Source of Funds	Atlas Code	ERP/ATLAS Budget Description/ Input	Amount (USD) Year 1	Amount (USD) Year 2	Amount (USD) Year 3	Amount (USD) Year 4	Amount (USD) Year 5	Total (USD)	Total (USD)
1	(Outcome 1) Forest planners in Perak incorporate tools to measure impacts on biodiversity in their forest management planning	FRIM	GEF	71200	International consultants	23,110.00	5,960.00	0.00	49,870.00	0.00	78,940.00	
				71300	Local consultants	0.00	0.00	17,200.00	199,200.00	74,400.00	290,800.00	
				71600	Travel (local)	3,300.00	2,450.00	1,900.00	7,450.00	18,920.00	34,020.00	
				71600	Travel (DSA & Mission Cost)	26,640.00	7,880.00	10,210.00	18,000.00	0.00	62,730.00	
				72800	Information Technology Equipmt (Includes: hardware, software, handheld computer, GPS unit.)	35,100.00	8,050.00	0.00	0.00	0.00	43,150.00	
					<b>Sub-total</b>							
2	(Outcome 2) Forest planners in Perak utilise tools for full valuation of goods and services in their forest management planning and operations	FRIM	GEF	71200	International consultants	0.00	84,000.00	95,500.00	118,000.00	0.00	297,500.00	
				71300	Local consultants	0.00	0.00	69,600.00	0.00	0.00	69,600.00	
				71600	Travel (local)	1,650.00	2,150.00	1,100.00	0.00	0.00	4,900.00	
				71600	Travel (DSA & Mission Cost)	0.00	18,000.00	30,000.00	31,500.00	0.00	79,500.00	
				72500	Supplies	0.00	0.00	3,170.00	3,170.00	0.00	6,340.00	
					<b>Sub-total</b>							



	GEF Outcome/Atlas Activity	Responsible Party	Source of Funds	Atlas Code	ERP/ATLAS Budget Description/ Input	Amount (USD) Year 1	Amount (USD) Year 2	Amount (USD) Year 3	Amount (USD) Year 4	Amount (USD) Year 5	Total (USD)	Total (USD)
3	(Outcome 3) Forest planners in Perak integrate ecological and economic tools in forest planning decisions at a landscape level.	FRIM	GEF	71200	International consultants	0.00	0.00	10,250.00	88,160.00	194,700.00	293,110.00	
				71600	Travel (local)	0.00	0.00	0.00	1,350.00	4,100.00	5,450.00	
				71600	Travel (DSA & Mission Cost)	0.00	0.00	6,000.00	30,000.00	48,000.00	84,000.00	
					<b>Sub-total</b>						<b>382,560.00</b>	
4	(Outcome 4) Capacity exists to apply methods developed by the project in tropical forest management operations.	FRIM	GEF	74100	Professional Services (IAP support)	12,644.20	12,644.20	12,644.20	12,644.20	12,644.20	63,221.00	
				74500	Miscellaneous Expenses (Independent evaluations)				25,000.00	25,000.00	50,000.00	
				71400	Contractual services - individ (CTA @ 12mths/yr)	54,999.96	54,999.96	54,999.96	54,999.96	54,999.96	274,999.80	
				71400	Contractual services - individ (Admin Asst. @ 12mths/yr)	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00	75,000.00	
				71400	Contractual services - individ (Finance Asst. @ 12mths/yr)	19,999.92	19,999.92	19,999.92	19,999.92	19,999.92	99,999.60	
				71600	Travel (Research Fellowships, site visits and study tours)	2,000.00	27,000.00	77,000.00	52,000.00	52,000.00	210,000.00	
				74500	Miscellaneous Expenses (Workshop, research seminar, sundries and reporting costs)	21,598.00	11,348.00	1,598.00	51,598.00	51,598.00	137,740.00	
					<b>Sub-total</b>						<b>910,960.40</b>	
<b>GRAND TOTAL</b>											<b>2,261,000.40</b>	

**Part II: Total Project Workplan and Budget under Other Co-financing sources.**

TOTAL PROJECT WORKPLAN AND BUDGET (to be read in conjunction with Advisory Note on Atlas and Total Workplan and Budget Terminology)										
Award ID: tbd										
<b>1</b>	<b>Project Title: Conservation of Biological Diversity through Improved Forest Planning Tools</b>									
	GEF Outcome/Atlas Activity	Responsible Party	Source of Funds	Atlas Code	ERP/ATLAS Budget Description/Input	Total (USD)	Total (USD)			
1	(Outcome 1) Forest planners in Perak incorporate tools to measure impacts on biodiversity in their forest management planning	FRIM	FRIM	71300	Local consultants	723,800.00				
				71400	Contractual services - individ	8,750.00				
					<b>Sub-total</b>	<b>732,550.00</b>				
			ITTO	71200	International consultants	72,380.00				
				71300	Local consultants	144,800.00				
				71600	Local travel	16,750.00				
				71600	Travel (DSA & Mission Cost)	36,750.00				
				<b>Sub-total</b>	<b>270,680.00</b>					
			NGO	71200	International consultants	180,480.00				
		71600		Travel (DSA & Mission Cost)	8,520.00					
				<b>Sub-total</b>	<b>189,000.00</b>					
			<b>TOTAL</b>						<b>1,192,230.00</b>	
		2	(Outcome 2) Forest planners in Perak utilise tools for full valuation of goods and services in their forest management planning and operations	FRIM	FRIM	71300		Local consultants	521,810.00	
71400	Contractual services - individ					79,200.00				
	<b>Sub-total</b>					<b>601,010.00</b>				
NGO	71200			International consultants	154,000.00					
				<b>Sub-total</b>	<b>154,000.00</b>					
	<b>TOTAL</b>						<b>755,010.00</b>			

	GEF Outcome/Atlas Activity	Responsible Party	Source of Funds	Atlas Code	ERP/ATLAS Budget Description/Input	Total (USD)	Total (USD)				
3	(Outcome 3) Forest planners in Perak integrate ecological and economic tools in forest planning decisions at a landscape level.	FRIM	FRIM	71300	Local consultants	144,260.00					
					<b>Sub-total</b>	<b>144,260.00</b>					
			ITTO	71200	International consultants	38,390.00					
				71600	Local travel	10,950.00					
				71600	Travel (DSA & Mission Cost)	24,000.00					
				72500	Supplies	700.00					
					<b>Sub-total</b>	<b>74,040.00</b>					
			NGO	71200	International consultants	148,000.00					
					<b>Sub-total</b>	<b>148,000.00</b>					
			<b>TOTAL</b>							<b>366,300.00</b>	
4	(Outcome 4) Capacity exists to apply methods developed by the project in tropical forest management operations.	FRIM	FRIM	71300	Local consultants	315,000.00					
				71400	Contractual services - individ	420,000.00					
				73100	Rental & Maintenance - Premises	94,200.00					
					<b>Sub-total</b>	<b>829,200.00</b>					
			ITTO	74500	Miscellaneous Expenses (in-house training workshop)	10,570.80					
				71400	Contractual services - individ (webmaster)	6,000.00					
				71600	Travel (Conference and research seminar)	55,000.00					
				71200	International consultants (M&E)	110,110.00					
					<b>Sub-total</b>	<b>181,680.80</b>					
			NGO	74500	Miscellaneous Expenses (workshop)	39,000.00					
					<b>Sub-total</b>	<b>39,000.00</b>					
			<b>TOTAL</b>							<b>1,049,880.80</b>	
			<b>GRAND TOTAL</b>							<b>3,363,420.80</b>	

**SECTION IV: ADDITIONAL INFORMATION**

*Part I: Other agreements*



**KEMENTERIAN SUMBER ASLI DAN ALAM SEKITAR**  
 (Ministry of Natural Resources and Environment)  
**MALAYSIA**  
 Bahagian Perhutanan  
 Tingkat 17, Bangunan KUB.com  
 No. 12, Jalan Yap Kwan Seng  
 50450 KUALA LUMPUR

Tel : 03-2171 1701  
 Faks : 03-2171 1720

Ruj. Kami: NRE 63/562/409/1 (5)  
 Tarikh : 28 September 2004

The Resident Representative  
 United Nations Development Programme  
 Wisma UN Block C  
 Kompleks Pejabat Damansara  
 Jalan Dungun, Damansara Heights  
 50490 Kuala Lumpur  
**(Att: Mr. Thiyagarajan Velumail)**

Dear Sir,

**MAL/04/G31: Conservation of Biological Diversity Through Improved Forest Planning Tools - Local Appraisal Meeting**

I would like to express our appreciation to you for inviting our Ministry to the above-mentioned Local Appraisal Meeting that was held at your office on 20<sup>th</sup> September 2004. Following the Local Appraisal Meeting I am pleased that UNDP has agreed to recommend the Project to the GEF Council and hope that the project will be implemented soonest.

2. In relation to the comments raised by GEF concerning the Malaysian Government's contribution to the project, I wish to reconfirm that the government is committed to fulfill our obligation as stated in the Project Document. I would also wish to explain that the amount budgeted for researcher salaries may seem high due to these considerations:

- The salaries need to also consider benefits for government staff such as bonuses, housing loans, car loans, medical, pension, etc.
- In the course of the project implementation, some of the staff involved in the project may be promoted but he/she will continue to be involved in the project.
- Salaries revision and promotion, fieldwork claims and allowances due to changes and improvement in the remuneration structure.

Thank you and best regards.

Sincerely Yours,

**(AZIYAH MOHAMED)**  
 For Secretary General,  
 Ministry of Natural Resources and Environment  
 Malaysia  
Bulet undpwny.doc, Folder Bc2uzm



ITTO

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

2 December 2003  
L.03-0521

By mail and fax  
(60-3-6299-7857)

Dear Sir,

**Project PD 165 Rev.3 (F): Conservation of Biological Diversity  
Through Sustainable Forest Management Practices**

In response to your letter of 27 November 2003 on the above project we are pleased to inform you that the Project, PD 165 Rev.3 (F), had been approved during the Thirty-fifth Council Session and a total amount of US\$ 526,401.00 (US dollar: five hundred twenty six thousand and four hundred one only) was pledged by the donors for its immediate implementation.

We understand that the Project is a component of the larger proposal you submitted to the Global Environment Facility (GEF) for which a total GEF grant of US\$ 2.261 million had been approved over the project duration of five years. We therefore look forward to having close collaborations with your agency as well as the GEF for a successful project implementation.

Yours sincerely,

Manoel Sobral Filho  
Executive Director

Director General  
Forest Research Institute Malaysia  
52109 Kepong, Kuala Lumpur  
Malaysia

## UNIVERSITY OF CALIFORNIA, SAN DIEGO

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SANTA BARBARA • SANTA CRUZ

INSTITUTE ON GLOBAL CONFLICT  
AND COOPERATIONPeter F. Cowhey  
DirectorUNIVERSITY OF CALIFORNIA, SAN DIEGO  
9500 GILMAN DRIVE  
ROBINSON BLDG. COMPLEX  
LA JOLLA, CALIFORNIA, 92093-0518  
(858) 534-5728, FAX (858) 534-7655  
e-mail: pcowhey@ucsd.edu  
http://www-igcc.ucsd.edu

May 14, 2003

Memorandum

**TO:** Dato' Dr. Abdul Razak Mohd. Ali (Director-General, FRIM)

**FROM:** Peter Cowhey (Director, IGCC) *P. Cowhey*

**RE:** Commitment by IGCC to provide in-kind co-financing of proposed GEF targeted research project

IGCC remains strongly interested in assisting FRIM with the implementation of the targeted research project proposed to the GEF, "Conservation of Biological Diversity through Improved Forest Planning and Management Procedures."

Specifically, IGCC can provide the researchers needed to fill all of the senior economist and senior anthropologist positions in the international consultant category under Activities 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.2.1, and 3.2.1. IGCC can also provide the researchers needed to fill some of the programmer and senior ecologist positions in the international consultant category under Activities 1.1.1, 1.1.2, 1.1.3, 1.2.1, 1.2.2, 1.3.3, 3.1.1, 3.1.2, and 3.2.1. IGCC's provision of researchers for the programmer and senior ecologist positions would not duplicate the provision of such researchers by Harvard University, with which IGCC is coordinating its proposal to assist FRIM.

If the full set of activities described in FRIM's proposal to GEF is implemented according to the proposed schedule and at the proposed level of effort, and if FRIM executes a mutually acceptable subcontract with IGCC for the provision of the research services described in the preceding paragraph, then as a contribution toward co-financing the project IGCC will not charge FRIM for time spent by IGCC researchers on the project when they are receiving their regular academic year salaries. The value of this cost-shared amount is \$274,360. This amount includes only the salaries, benefits, and indirect costs (overhead) associated with the time donated by IGCC researchers to the project. It does not include expenditures on travel, supplies, communications, or any other items unrelated to IGCC researchers' time spent on the project.

MAXWELL DWORKIN  
HARVARD UNIVERSITY  
DIVISION OF ENGINEERING AND APPLIED SCIENCES  
33 OXFORD STREET, CAMBRIDGE, MASSACHUSETTS 02138-2901



May 20, 2003

**Memorandum**

**TO:** Dato' Dr. Abdul Razak (Director-General, FRIM)  
**FROM:** William H. Bossert (Professor, Harvard University)  
**RE:** Commitment of the Harvard University tropical forest research team to the co-financing of targeted research project proposed by FRIM to the Global Environment Facility (GEF)

The Harvard University tropical forest research team consists of Professor Peter Ashton (Charles Bullard Research Professor of Forestry), Professor William Bossert (David B. Arnold Professor of Science), Dr. Stuart Davies (Senior Research Associate) and Dr. Joshua Plotkin (Junior Fellow in the Society of Fellows).

Provided that:

- (i) GEF funds the targeted research project proposed by FRIM in a timely manner;
- (ii) the full set of activities described in the proposal is implemented according to the proposed schedule and at the proposed level of effort; and
- (iii) FRIM selects Harvard University as its subcontractor for the agreed-upon activities;

we agree to match the salaries and benefits awarded in the subcontract by funds from Harvard and personal sources, up to a level of US\$ 280550. In addition, the team agrees to seek to keep round-trip US-Malaysia airfares at the US\$ 1500 level per trip, which constitutes a total US\$ 78000 savings from the budgeted amount.

William H. Bossert  
Arnold Professor of Science





# Perak ITC Sdn Bhd (Co.No. 473712-W)

No. 8 Lebuah Lasam, 30350 Ipoh, Perak, Malaysia.  
Tel No. : 05 - 243 2022 Fax No. : 05 - 243 2026 Email No. : perito@po.jaring.my

Our ref. : PITC/FRIM/071/03

PEJABAT KETUA PENGARAH

Salinaq telah diadakan pada

27 November 2003

15 DEC 2003

Director General  
Forest Research Institute Malaysia  
52109 Kepong  
Kuala Lumpur  
Malaysia

Fax: +6 03 6279 7857

PEJABAT KETUA PENGARAH FRIM	
Tarikh	3 DEC 2003
<input checked="" type="checkbox"/> Untuk Tindakan	PCH
segers/sebatum	
<input type="checkbox"/> Untuk maklaman	
<input type="checkbox"/> Untuk simpanan	
<input type="checkbox"/> Maklum kod, Ketua Pengarah	
agara/sebatum	
<input type="checkbox"/>	

Dear Sir,

Congratulations on the confirmation of your proposed targeted research project, "Conservation of Biological Diversity through Improved Forest Planning Planning Tools", has been approved for funding by the Global Environmental Facility (GEF). I am extremely excited about this project, as I firmly believe that it will provide important new tools for the conservation of biodiversity and the improvement of forest management practices. As agreed in my letter dated March 19, 2003 (Ref. No: PITC/FRIM/024/03), PITC, with the support and approval of relevant authorities, will allow the research team to establish biodiversity assessment plots within selected areas of the concession before and after logging. PITC will also consider the experimental implementation of new cutting regimes and work with the study team to estimate the cost impacts of such changes in the logging systems. We estimate that US\$ 46, 849 will be incurred by PITC to allow the above-mentioned activities. PITC will absorb the costs as part of our contribution to the project funding.

We look forward to working with you in realising the project goals.

Sincerely yours,

Tan Chin Tong  
Chief Executive Officer

## ***Part II: Terms of References for key project staff and main sub-contracts***

### ***Terms of Reference for the National Steering Committee***

It has been stated in the Project Document for the GEF Project on "Conservation of Biological Diversity Through Improved Planning and Management Procedures" that a National Steering Committee (NSC) will be established to provide the overall guidance to the implementation of the project. The Chairman of the Project Steering Committee will be the Secretary General of the Ministry of Natural Resources and Environment (NRE) Malaysia and co-chaired by the Director General of FRIM. Its members will consists of representatives of relevant agencies in Peninsular Malaysia, and UNDP as the implementation agency for the GEF. The Director of Natural Forest Division of FRIM as the overall coordinator for the Project will be secretary of the NSC. The NSC will consist of members of the following agencies/institutions:

1. Secretary General - Chairperson  
Ministry of Natural Resources and Environment (NRE) Malaysia
2. Director General - Co-Chairperson  
Forest Research Institute Malaysia
3. Director General  
Economic Planning Unit  
Prime Minister's Department
4. Secretary General  
Ministry of Science, Technology and Environment
5. Director General  
Forestry Department Headquarters Peninsular Malaysia
6. Director  
Perak State Forestry Department
7. Director  
State Economic Development Cooperation of Perak
1. Representative  
Orang Asli Association (local communities)
9. Resident Representative  
United Nations Development Programme  
Kuala Lumpur

The NSC will meet regularly to oversee the implementation of the Project. They will meet at least twice a year and have the following responsibilities:

1. Provide Policy guidance on matters pertaining to the implementation of the project
2. Monitor and evaluate the implementation of the project towards fulfilment of the objectives stated in the project document
3. Coordinate and manage overall project activities and budget
4. Review and comment on each years proposed work plan and budget
5. Initiate remedial actions to overcome all constraints in progress of the project
6. Review and approve relevant changes to the project design
7. Coordinate the roles of the various organisations involved in the execution of the project and ensure harmony with related activities.
8. Review and approve progress and technical reports
9. Establish a Technical Committee to oversee technical details related to the project
10. The NSC operates and makes decision by consensus.

### ***Establishment of an International Advisory Panel (IAP)***

In view that the project involves aspects in the development of state-of-the-art methodologies and techniques related good management and conservation of forest resources, an International Advisory Panel will be established.

The Chair and the other members of the IAP will be identified during the formulation of the UNDP project document.

The Chair of the IAP may invite additional experts to attend the meeting sessions of the IAP, where their technical inputs will be beneficial to the successful implementation of the project. The IAP will meet at least one each year and will have the following responsibilities:

1. Assist the project staff and consultants in the implementation of the Project's activities and ensure that related activities remain directed towards the project's goal and objectives;
2. Promote effective collaboration and support from relevant international agencies and individuals to ensure smooth implementation of the project activities at the technical level;
3. Provide technical input and advice to the project staff and ensure that outputs are relevant in solving practical problems and contribute to the project implementation; and
4. Ensure that knowledge management and dissemination activities reach a global audience, including advocating project outputs and outcomes to appropriate forest managers and policy decision makers.

A proposed list of experts that had indicated interest in providing inputs as part of the IAP is listed below:

<b>Proposed Candidate</b>	<b>Affiliation</b>	<b>Expertise</b>	<b>Indication of Interest</b>
1. Dr. Karl-Goran Maler	Beijer Institute of Ecological Economics, Stockholm, Sweden.	Economics	Yes
2. Dr. David Kaimowitz	Director General of CIFOR	Economics	Pending
3. Dr. Salleh Mohd Noor	President, Malaysian Nature Society	Forest Management and Ecology	Yes
4. Prof. Dr. Mohd Shahwahid Haji Othman	Director, Research Management Centre, Universiti Putra Malaysia	Forest Economics and forest policies	Yes
5. Dr. Tim Boyle	Former GEF, New York	Ecology	Yes
6. Dr. Steve Hubbell	Professor, University of Georgia, USA	Ecology	Pending

<b>Proposed Candidate</b>	<b>Affiliation</b>	<b>Expertise</b>	<b>Indication of Interest</b>
7. David Cassel	Senior Environmental Specialist, World Bank	Environmental Science	Pending
8. Tom Lovejoy	Senior Biodiversity Advisor, World Bank	Ecology and biodiversity	Pending
9. Dr. Lim Boo Liat	Retired. Former staff of the institute of Institute of Medical Research and Consultant to Wildlife Department Peninsular Malaysia	Ecology/Zoology	Yes
10. Dr. Shigeo Kobayashi	CIFOR/ Scientist, Forestry and Forest Products Research Institute at Tsukuba, Japan	Silviculture and forest rehabilitation	Pending
11. Prof. Dr. Abdul Latiff Mohamad	Dean, Faculty of Science and Technology, Universiti Kebangsaan Malaysia	Plant systematics and ethnobotany	Yes
12. Dr. Raman Sukumar	Hon. Director, Asian Elephant Research and Conservation Centre Chairman, IUCN/SSC Asian Elephant Specialist Group	Zoology	Yes
13. Dr. Kanehiro Kitayama	Professor, Ecology, Centre for Ecological Research, Kyoto University	Ecology	Pending
14. Mr. Emmanuel Ze Meka	Assistant Director, Division of Reforestation and Forest Management, International Tropical Timber Organisation (ITTO)	Forest Management	Pending
15. Dr. Gonzalo Castro	Head of Biodiversity GEF Secretariat, Washington	Biodiversity and Ecology	Pending

### ***Establishment of a Technical Working Group (TWG)***

A national level Technical Working Group (TWG) will be established to assist the NSC in monitoring and controlling the technical implementation of the project and the activities. The TWG will act as the technical advisors to the NSC, and ensure that the project work will link into State and Federal forestry planning processes.

The tentative members of the TWG are as follows. This will be confirmed in the first National Steering Committee meeting.

Federal Forestry Department (Chair)  
Perak Integrated Timber Complex  
Forestry Department HQ Peninsular Malaysia  
State Forestry Department, Perak  
Wildlife Dept. & National Parks  
University Putra Malaysia  
University Kebangsaan Malaysia  
Aborigines Affairs Department  
Malaysian Nature Society  
Worldwide Fund for Nature (WWF)

Responsibilities of the TWG include:

1. Reporting to the NSC on the technical progress of the Project and research activities in the project area;
2. Advising the NSC on the technical aspects of the implementation of the project;
3. Reviewing and reconciling all relevant technical reports and information produced by the project; and
4. Ensuring that the research remains relevant to State and National forestry planning processes.

## ***Terms of Reference for National Project Director***

*Duration: 60 months*

### **Introduction:**

In addition to having extremely rich and diverse plant and animal life, tropical forests also play a significant role in the socio-economic development of the countries that harbour them. These countries also value the forests for their roles in the maintenance of soil and water resources, stabilizing climate and the conservation of biological diversity. However, current forest management practices in many tropical countries tend to maximize timber production goals and are deficient in certain critical aspects that threaten sustainability and conservation of biological diversity. The procedures for identifying forest areas that should be protected within the permanent forest areas and within individual forest concessions do not give sufficient consideration for biodiversity conservation. Effective biodiversity conservation strategies must include not only a system of protected areas but also the integration of biodiversity considerations into the management of timber production forests—especially production forests that are adjacent to protected areas or include assemblages of species that are not well-represented elsewhere. This project addresses these issues by developing tools that will enable forest planners to assess the adequacy of existing protected areas for biodiversity conservation and, if there is a need to establish additional areas, to determine how large they should be and where they should be located.

To implement the project, three Research Project Leaders will be selected to ensure activities related to the three major components of the project; ecology, forestry and economic valuation are undertaken smoothly. The Chief Technical Advisor will be responsible for coordinating the efforts of the Research Project Leaders, the participating national agencies and the national and international experts, as well as for facilitating coordination and cooperation among all components of the project.

The Government shall appoint a National Project Director to be responsible, on behalf of the government, for the project. It is likely that the NPD will be a senior official from the executing agency. The NPD will be supported by the Chief Technical Advisor (CTA) and will work closely with the Project Support Unit, National Steering Committee (NSC), Technical Working Group (TWG), relevant agencies as well as local and international experts. The NPD will be responsible for:

- Assuring the Government inputs to the project are forthcoming in a timely and effective manner
- Assuring the project stays in line with national programs, strategies, and objectives and full achievements of the immediate objectives and outputs
- Overseeing project implementation and the timely undertaking of all activities

The NPD shall also:

1. Work closely with the Chief Technical Advisor (CTA) in overseeing the establishment of the Project Support Unit, with systems put in place for sound management of all project subcontracts and financial disbursements.
2. Prepare detailed draft work plan and inception report for all project objectives and identify resource requirements, responsibilities, task outlines, performance evaluation criteria and work plans/schedules.
3. Assume duties as Secretary to the NSC and TWG.
4. Coordinate national and international experts and advise on planned training and workshops.
5. Submit, as required, Annual Project Report (APR) to tripartite (TPR) review meetings.
6. Approve detailed terms of reference and qualifications for each subcontract.
7. Direct and supervise the establishment of project administration procedures for all staff, subcontractors, and participating agencies.
8. Approve quarterly status and financial reports for comment and approval of the Project Steering Committee.
9. Approve budget revisions and requests as and when required for approval of the National Steering Committee.



## ***Terms of Reference for Chief Technical Advisor (CTA)***

*Duration: 60 months*

### **Introduction:**

In addition to having extremely rich and diverse plant and animal life, tropical forests also play a significant role in the socio-economic development of the countries that harbour them. These countries also value the forests for their roles in the maintenance of soil and water resources, stabilizing climate and the conservation of biological diversity. However, current forest management practices in many tropical countries tend to maximize timber production goals and are deficient in certain critical aspects that threaten sustainability and conservation of biological diversity. The procedures for identifying forest areas that should be protected within the permanent forest areas and within individual forest concessions do not give sufficient consideration for biodiversity conservation. Effective biodiversity conservation strategies must include not only a system of protected areas but also the integration of biodiversity considerations into the management of timber production forests—especially production forests that are adjacent to protected areas or include assemblages of species that are not well-represented elsewhere. This project addresses these issues by developing tools that will enable forest planners to assess the adequacy of existing protected areas for biodiversity conservation and, if there is a need to establish additional areas, to determine how large they should be and where they should be located.

To implement the project, three Research Project Leaders will be selected to ensure activities related to the three major components of the project; ecology, forestry and economic valuation are undertaken smoothly. The Chief Technical Advisor will be responsible for coordinating the efforts of the Research Project Leaders, the participating national agencies and the national and international experts, as well as for facilitating coordination and cooperation among all components of the project.

### **Qualifications:**

- Postgraduate degree in forestry, ecology or environmental science
- 10 – 15 years experience in forestry, forest ecology, methodologies, modelling, etc. in Malaysia and the world
- Sound policy understanding of the global concerns and discussion on forest management
- Extensive business and information exchange contacts with national and international agencies involved in the study
- Strong publications record
- Proven track record of project management

### **Language:**

- English

**Duties:**

Reporting to the NPD, the CTA will perform the following duties:

1. Work closely with the NPD in coordinating and facilitating inputs of government agencies and research institutions, subcontractors, and experts in a timely and effective manner
2. Report to the National Steering Committee and Technical Working Group on the progress in project results and achievements. Report back to participating agencies and individuals on the committee's comments, recommendations and concerns.
3. Take the lead in preparation of project reports and information releases to be produced by the project management office, while keeping an updated record of information on the project.
4. Take the lead in preparation of monitoring and review reports required by GEF (i.e. Tripartite Review, Annual Project Report, Project Implementation Review).
5. Assumes overall responsibility for the successful execution and implementation of the project towards achieving outcomes and outputs.
6. Provide assistance to the NPD and the NSC to ensure that the project activities conform to the agreed project document
7. Provide overall leadership, guidance and coordination with sub-contracts, consultants and participating agencies
8. Review consultants' reports, project budget revisions, administrative arrangements as required by UNDP procedures
9. Support the NPD in TWG meeting
10. Submit regular progress reports to the local executing agency and UNDP.
11. Work closely with the NPD in overseeing the establishment of the Project Support Unit, with systems put in place for sound management of all project subcontracts and financial disbursements.

#### ***Part IV: Stakeholder Involvement Plan***

In the formulation of this project during the PDF phase, extensive consultations with stakeholders were undertaken. Two stakeholders' consultations were held, one at the beginning of the PDF-B phase to get the feedback and general agreement on the objectives and approach of the project and one at the end of the project development phase to get feedback of stakeholders on the contents of the project proposal. The First Stakeholders' Consultation for the Project was held in Ipoh, Perak on 26 April 2001 and was attended by a total of 51 participants from 26 representing government departments, non-governmental agencies, private sector, local communities, and universities. In addition, two representatives from United Nations Development Programme and three consultants from Harvard University, USA were also in attendance. The stakeholders have shown support for the project and provided valuable information for its formulation. They have together identified all relevant stakeholders, their roles and activities as well as linkages with one another. At the same time they discussed amongst themselves and identified the actual and potential threats to biodiversity conservation in Malaysia and Perak. The Second Stakeholders' Consultation was held in Kuala Lumpur on 13 June 2002. During the consultation major stakeholders provided valuable feedback to further improve the proposal presented to them and had also commented on strategies for its effective implementation. The project proposal in principle was well supported and stakeholders were looking forward to its realisation. The implementation of the project will involve FRIM in collaboration with several agencies in the public and private sector, NGO's and universities. In fact private sector participation is high as the field data collection for the research will be undertaken in a timber concession (PITC) in Perak, Peninsular Malaysia.

**SIGNATURE PAGE**

Country: **MALAYSIA**

UNDAF Outcome(s)/Indicator(s):  
*(Link to UNDAF outcome., If no UNDAF, leave blank)*

Expected Outcome(s)/Indicator (s):  
*(CP outcomes linked t the SRF/MYFF goal and service line)*

Expected Output(s)/Indicator(s):  
*(CP outcomes linked t the SRF/MYFF goal and service line)*

Implementing partner:  
*(Designated institution/Executing agency)*

Other Partners:

\_\_\_\_\_

Environmental and energy sustainability objectives integrated in macroeconomic and sector policies

Goal 3: Energy and Environment for Sustainable Development  
SL 3.5L Conservation and sustainable use of biodiversity

Ministry of Natural Resources and Environment

Forest Research Institute of Malaysia

**UNDP & Cost-Sharing Financing (in USD)**

**Total budget:** **USD 5,867,620**

Allocated resources:

- Government of Malaysia (in-kind): 2,307,020
- UNDP/GEF (Proj.): 2,261,000
- Other:
  - UNDP/GEF (PDF-B): 196,350
  - ITTO: 526,401
  - Private sector (PITC) (in-kind): 46,849
  - Universities (in-kind): 530,000

Programme Period: 2005 - 2009  
 Programme Component: MYFF Goal 3  
 Project Title: Conservation of Biological Diversity Through Improved Forest Planning Tools  
 Project ID: MAL/04/G31 (PIMS# 1370)  
 Project Duration: 5 years  
 Management Arrangement: National Execution

**Agreed by Economic Planning Unit, Prime Minister’s Department (on behalf of the government of Malaysia):** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Agreed by Ministry of Natural Resources and Environment (Implementing partner):** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Agreed by (UNDP):** \_\_\_\_\_ **Date:** \_\_\_\_\_

## Notes:

### UNDAF Outcome and Indicator(s)

The signature page details the UNDAF outcome(s) as well as the Outcome(s) and Output(s) related to the project. If the UNDAF lists outcomes, they should be included in the signature page. When UNDAF outcomes are not clearly articulated, country teams may decide to either revisit the UNDAF to clarify the outcomes or leave the field blank.

UNDAF Outcome indicators should be listed here.

### Expected Outcome(s) and Indicator(s)

Expected Outcomes are Country Programme (CP) outcomes. They should reflect MYFF/SRF outcomes and ACC sector, which will be in the ERP).

Outcome indicator(s) should be listed here.

### Expected Output(s) and Indicator(s)

Expected Outputs are Country Programme outputs. They should reflect MYFF/SRF outputs.

Output indicator(s) should be listed here.

### Implementing partner:

Same as designated institution in the simplified project document – name of institution responsible for managing the programme or project (formerly referred to as executing agency). Implementing partners include Government, UN agencies, UNDP (see restrictions in Programming Manual Chapter 6) or NGOs.

### Other partners:

Formerly referred to as implementing agencies in the simplified project document—partners that have agreed to carry out activities within a nationally executed project. This would include UNDP when it provides Country Office Support to national execution. Private sector companies and NGOs hired as contractors would generally not be included. The agency (i.e. Government, UN agency) that contracts with the private sector company and/or NGO is the responsible party. ‘Other partners’ can also apply to other execution modalities.

When an NGO contributes to an output, it can be noted along with the responsible party with which it contracts (e.g., UNDP/NGO, Govt/NGO). Consistent with current practice the rationale for selecting an NGO as a contractor must be documented.

Programme period: Refers to the Country Programme period

Programme component: MYFF Goal

Project title, project code, project duration (self explanatory)

Management arrangement: Indicate NEX, AGEX, NGO Execution, DEX

Budget: Total budget minus the General Management Services Fees

General Management Services Fees: This was formerly COA (Country Office Administrative fee) for cost sharing and UNDP Administrative Fee for Trust Funds.

Total budget: Includes the budget and General Management Services Fees. In-kind contributions can be listed under 'other' resources. Unfunded amounts cannot be committed until funds are available.

Signatures:

The Implementing partner is the institution responsible for managing the programme or project. (The institution now commonly referred to as the “executing agency” but will now be referred to as the “implementing partner”)

UNDP is the UNDP Resident Representative.

The Government counterpart is the government coordinating authority.