CONSERVATION & SUSTAINABLE USE OF TROPICAL PSF & ASSOCIATED WETLAND ECOSYSTEMS

MAL/99/G31

UNDP/GEF MID-TERM REVIEW

DRAFT

UNITED NATIONS DEVELOPMENT PROGRAMME

GLOBAL ENVIRONMENT FACILITY

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Contents

Project identification

Title	**Conservation and Sustainable Use of Tropical Peat Swamp Forests and Associated Wetland Ecosystems**
Project number	MAL/99/G31
Executing Agency	Ministry of Natural Resources and Environment Government of Malaysia
Implementing Agency	Forestry Research Institute Malaysia (FRIM)
GEF Implementing Agency	United Nations Development Programme (UNDP)
Duration Effective starting Expected end	5 years 11 June 2002 May 2007
Project sites	Southeast Pahang Peat Swamp Forest, Pahang Loagan Bunut National Park, Sarawak Klias Peninsula, Sabah
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UNDP/GEF:	USD 5,985,000
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Danida:	USD 1,600,000
Netherlands:	USD 800,000
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Acronyms & Terms

CPP	Community Participation Plan
CTA	Chief Technical Advisor
Danida	Danish International Development Assistance
EIA	Environmental Impact Assessment
FD	Forestry Department
FR	Forest Reserve
FRIM	Forestry Research Institute Malaysia
GEF	Global Environment Facility
HCVF	High Conservation Value Forest
IMP	Integrated Management Plan
IR	Inception Report
LBNP	Loagan Bunut National Park
M&E	Monitoring & Evaluation
MNRE	Ministry of Natural Resources and Environment
MOSTE	Ministry of Science, Technology and Environment
MPCT	Management Plan Core Team
MPI	Ministry of Primary Industries
MTR	Mid-Term Review
NE	National Expert
NFP	National Forestry Policy
NGO	Non-Governmental Organisation
NP	National Park
NPBD	National Policy on Biological Diversity
NPD	National Project Director
NREB	Natural Resources and Environment Board (Sarawak)
NSC	National Steering Committee
OP	Operational Programme
PRA	Participatory Rural Appraisal
PSF	Peat Swamp Forest
PSU	Project Support Unit
RCFM	Regional Centre for Forest Management
R&D	Research & Development
SEPPSF	South-East Pahang Peat Swamp Forest
SFC	Sarawak Forestry Corporation
SPC	Special Park Committee
SPSC	State Project Steering Committee
SSC	State Steering Committee
TOR	Terms of Reference
UNDP	United Nations Development Programme
WMC	Wetland Management Committee

Executive summary

Aim of MTR

The aim of the Mid-term Review (MTR) is to examine the performance of the project since implementation began on the 11th June 2002. The MTR is to measure actual progress against planned outputs and activities, as set in the original Project Document (2000) and the Inception Report (2002). The MTR is also to highlight initial and potential impacts of the project, and address underlying causes and issues contributing to targets not adequately achieved. The MTR is intended to identify weaknesses and strengths of project design and to come up with recommendations for any necessary changes in overall design and orientation of the project. It is to do this by evaluating the adequacy, efficiency, and effectiveness of its implementation, as well as assessing project outputs and achievements to date. Lastly, the MTR is to identify lessons learnt and best practices, which could be applied to future and other on-going projects.

Overall MTR assessment

Overall, the project is regarded by the MTR team as being effective in contributing to the goal of conservation and sustainable use of globally significant peat swamp forest (PSF) biodiversity. As such, the project supports Malaysia's National Policy on Biological Diversity and the National Forestry Policy. It also helps meet the country's obligations to the Convention on Biological Diversity (CBD) and the Ramsar Convention.

Design

The project design is adequate at a macro (output) level, but there are some shortcomings in the design at a more detailed (activity) level:

- The location of hydrological studies carried out under the Danida project do not fully overlap with the present project sites; as a result additional hydrological studies are being implemented, which is a waste of scarce resources.
- Project verifiers (i.e. indicators of achievement) have not been properly formulated or identified in a number of cases, and as a result, the project cannot be easily monitored. Examples include: i) rehabilitation of forests (no timing provided or target area to be restored), ii) implementation of hydrological solutions (no verifier provided) and iii) coordinated enforcement (establishment of Special Park Committee only – i.e. an entity, not an action). Technical reports are at times listed as verifiers, which is incorrect as reports are where you can read if targets have been achieved, whereas a verifier must provide a measurable target.
- Ecological studies carried out in specific localities by consultants do not provide the overall coverage or level of detail required by the project in order to manage biodiversity, justify zonation or prepare detailed biodiversity monitoring programmes. Also, if studies are carried out by consultants, local staff of the forestry and other technical departments will have fewer opportunities to learn the necessary steps in planning for sustainable resource utilisation and biodiversity conservation in peat swamp forests. One of the objectives of the project is to build local capacity so as to contribute to institutional strengthening or to the enhancement of technical capacities within institutions that will have the task of ensuring the sustainability of the work initiated by this project.
- Alternative livelihoods strategies are to be implemented under Output 3, but this first needs to be designed under Output 2 – at Klias, this has been omitted.

- Most importantly, Integrated Management Plans (IMP) are developed under Output 2, but there is no provision in the design for their implementation in Output 3. Conceivably, some of the specific action plans may form part of the IMPs.

Project results

Loagan Bunut NP (LBNP)

Output 1: Data collection is still in progress. Monitoring of water levels and quality in the lake and major rivers is on going. Issues: i) while a considerable amount of biodiversity, environmental and ecological data have been accumulated, the data had not been collected following a systematic sampling design to enable reasonable determination of baseline levels of key biological populations and their distribution over the entire Loagan Bunut area; ii) it is essential that baseline conditions be established prior to the implementation of the management plan so as to be able to gauge the effectiveness of the plans in future.
Output 2: A management plan is in the process of being developed. The plan aims to set realistic management goals with indicators and monitoring procedures, and a way of evaluating the performance of the plan. Issues: i) the proposed monitoring programme is ambitious and does not appear to match the availability and expertise of park staff.
Output 3: Park and ecotourism infrastructure has been established on time, along with park interpretation materials. At the same time, community members have received training in the fields of boating and handicraft production. Issues: i) park staff presence and budget have been significantly reduced by the Sarawak Forestry Corporation (SFC); ii) there is little or no progress in implementing specific action plans (e.g. fisheries management, ecological monitoring), some of which have yet to be drafted (e.g. business plan, ecotourism plan, community participation plan/CPP); this is especially worrisome with regard to the CPP, as development of the plan alone is expected to take more than two years; iii) few tourists (50/month) visit the area, and there is a risk of disappointment (no marketing by SFC).
Output 4: A State Project Steering Committee (SPSC)/Wetland Management Committee (WMC) has been established and has met regularly to deal with issues at LBNP, but also to discuss the Kuching wetlands, Sarawak's proposed first Ramsar site. A Management Plant Core Team (MPCT) has met six times to prepare the Integrated Management Plan (IMP), while at the same time, training of community members has been coordinated at the state level. Issues: i) The MPCT has limited membership, consisting of SFC, Forestry Department and Natural Resources and Environment Board (NREB) only; ii) attempts at changing *modus operandi* of oil palm companies in the LBNP catchment have not been very effective in reducing impacts on silt load.
Output 5: An impressive range of awareness activities have been carried out including well-prepared materials especially targeting local communities and relevant agencies. There has been an effective use of the media. Issues: i) the plantation companies and management are not adequately convinced of addressing the silting and sustainable use of forest resources; ii) infrastructure inadequacies such as a good road and transport system is preventing the public from Miri and tourists in visiting lake and utilising park facilities, and iii) lack of an effective strategy in reaching high level decision makers.
Output 6: The study tour organised has provided some input to local community leaders. In addition the short training in basis statistical package is useful. Issues: i) a training specialist has not been identified nor has the training needs analysis been undertaken; and ii) addition training materials have not been prepared, which will be difficult due to inadequacy of time to be tested.

Klias Forest Reserve (FR)

Output 1: Data collection and management is progressing well and conservation targets and biodiversity indicators have been established. A second draft of the Klias Conservation Plan has been produced. The digital database and maps have been prepared and are in the process of being incorporated into the information management system. Issues: i) solutions to the hydrological issues related to water levels in the drainage canals have yet to be developed; ii) as with the other sites, information about the baseline levels of biodiversity necessary for the purposes of monitoring the effectiveness of the management plan in biodiversity and resource conservation is not yet available.

Output 2: Drafting of the Klias Forest Reserve Conservation Plan that forms part of the IMP is at an advanced stage and consensus has been achieved on the site-specific conservation targets. Milestones for biodiversity monitoring, monitoring tasks, management zones and a scheduled monitoring programme have been agreed. The approach to management is very practical and participatory at the government agency and local community levels.

Output 3: The Conservation Plan has been completed and (part of) the species/ecosystem management and protection plan is being implemented. In addition, rehabilitation of burnt areas has been initiated and alternative sources of livelihood identified (e.g. ecotourism). Issues: i) FR management presence remains unclear (IR states that 'park management to be in place', but the area is to be managed by FD, not Sabah Parks); ii) 'hydrological solutions' for Klias remain vague; there are plans for blocking a canal later in 2005, which while good, this will at best represent a modest start to implementation of hydrological solutions.

Output 4: The SPSC has been established and has convened regularly to discuss issues at Klias FR, and in the Klias Peninsula in general. At state level, institutional linkages have been firmly established by means of both the SPSC and the MPCT. Issues: i) the SPSC has not yet been formalised as a WMC, but there are plans for institutionalising it in the near future.

Output 5: Awareness materials and an Environment Education Programme have been produced. Issues: i) awareness activities aimed at the private sector have so far been inadequate, and may not make a lasting impact for change.

Output 6: Training needs analysis has been undertaken and a programme has been directed at the district level to train implementers. This is an important development in capacity building. Issues: i) training workshops and programmes need to be expanded, and ii) training materials have not yet been prepared; this may have negative impact on project sustainability beyond the project phase.

Pahang FR

Output 1: There have been numerous data collection activities in the SEPPSF site. Virgin Jungle Reserve monitoring plots have been established but the focus of monitoring in these areas will be solely on the flora within the plots. Issues: i) the locations of hydrological monitoring stations for long-term monitoring of the hydrology of the area have not been determined; ii) the proposed approach for monitoring biodiversity is available but as with the other sites baseline data for biodiversity monitoring is not available for the entire site; without these baseline it will not be possible to evaluate the effectiveness of the proposed management plan in enhancing the conservation of biodiversity in the area; iii) baseline levels of biodiversity for the entire area have not been determined.

Output 2: The preparation of the management plan for the SEPPSF is progressing well. It would appear that the departments represented by the Core Team Members have taken ownership of the draft plan. This is a positive sign towards the possibility of the plan being implemented after the end of the project.

Output 3: Forest rehabilitation trials have been carried out, and optimum harvest model development by FRIM has been started. An HCVF report has been produced for Pahang FR that provides a framework for biodiversity conservation. In addition, trial canal blocking has been carried out as part of the Danida project in 2004. Issues: i) the optimum harvesting model is well behind schedule; ii) the species/ecosystem management and protection plan has yet to be developed and implemented; iii) hydrological solutions need to be incorporated into a comprehensive plan, with key elements implemented or scheduled for implementation.
Output 4: A multi-agency SPSC has been established and has convened regularly to discuss issues; in addition there have been regular inter-agency technical meetings. Issues: i) the SPSC does not yet constitute a WMC, although it already functions as one, as it is the same group that deals with issues at Tasek Bera (Malaysia's first Ramsar site/ wetland of international importance).
Output 5: An impressive range of materials has been produced, and a significant package of awareness raising has been targeted at local communities. Issues: i) workshops and seminars have not adequately targeted potential logging contractors; and ii) there is a need to target the Department of Orang Asli Affairs, recognising the potential of the project for the empowerment of the local communities.
Output 6: Training analysis has been undertaken including the execution of a number of training activities with specific sessions in fire prevention and use of IDMS. Danida guideline material for sustainable timber harvesting has been circulated. Issues: i) training analysis has not been completed; ii) training materials and modules have not been written and tested targeting specific groups; iii) specific seminars and workshops for logging contractors have not been organised; iv) capacity building of officials from the Department of Orang Asli Affairs similar to that which has been undertaken by Forest Department Officials is an important aspect for long term sustainability.

Timing

The main shortcoming of the project has been slippage in the timing, which has been evident and in some cases (Loagan Bunut) significant. As a result, the overall project delivery rate currently stands at about 70% when measured in financial terms (i.e. actual versus planned expenditures).

There are various reasons for the delays. The project has actively included a wide array of government stakeholders on the Management Plan Core Teams, but achieving this degree of participation has proven to be very time consuming. Also, changes in the institutional landscape have hampered implementation, especially in Sarawak where forestry management responsibilities were taken over early in 2004 from the Forestry Department by the Sarawak Forestry Corporation. However, the delivery rate is increasing and it is expected that much of the lost ground will be recovered during the remaining two years, at least at Klias and Pahang FRs. Nonetheless, it is expected that two years will be insufficient for implementing some outstanding activities and achieving the expected outputs.

Project Management

Project management has been effective, and has proven to be able to adapt to changes and to meet new challenges. Project management structures such as SPSCs and MPCTs have facilitated inter-agency cooperation, proven their worth, and are in the process of being institutionalised (as WMCs). Some issues remain:

- Stakeholder involvement in the project appears to be largely limited to government agencies, and this is an opportunity lost, as while closer involvement of local NGOs,

communities and private sector may be difficult during formulation of IMPs, their involvement will be beneficial and more effective during IMP implementation.

- Project management staff (CTA and NEs) have backgrounds in forestry, but not in biodiversity conservation or biology. This has been good for dealing with forestry issues, but this also has its disadvantages, such as an incomplete understanding of what is required for biodiversity conservation. Examples are the biodiversity monitoring plan for Klias FR (what was developed is a monitoring framework), and the biodiversity conservation strategy for Pahang (what was developed is an HCVF report).

Recommendations

Management planning

1. Stakeholder involvement on the MPCTs should be broadened to include non-governmental entities such as NGOs, local community representatives and private sector. In addition, the MPCT at LBNP should be expanded as soon as possible to include more agencies than at present; MPCT composition should be more in line with what has been achieved at the other two sites.
2. Integrated Management Plans developed for all three sites need to be implemented to some degree during the remaining project period, and this should be reflected in IMP implementation schedules.
3. A well-formulated site IMP should include suggestions for efficient tracking of progress towards implementation of the recommendations of the plans. Clear achievable targets should be set with specific datelines for achievement.

Implementation issues

4. A baseline data collection design that is aimed at gathering biodiversity, hydrological, ecological and other data that is representative for each of the entire project areas should be developed immediately at all three sites.
5. More attention should be paid to the development of the IMS and the integrated database system. Subject matter specialists and potential end-users should be involved in its design from an early stage so that the system is responsive to field conditions in the project areas as well as the anticipated demand of users of the database for the management of those areas. Design of the IMS should be flexible to enable it to be adapted to potential future changes in resource and data availability.
6. A minimum number of staff who will be directly involved in area management should be trained in the gathering of biodiversity, hydrological, ecological and other data.
7. Detailed information should be available for key management parameters identified in the site management plans. Where such information is not yet available studies should be commissioned immediately to obtain the data.
8. LBNP needs to accelerate formulation and implementation of specific action plans, as this is severely lagging behind schedule. This includes the fisheries management and ecological monitoring plans (both of which are still being drafted), and the business plan, ecotourism plan and Community Participation Plan (which have yet to be drafted).
9. SFC needs to promote LBNP as soon as possible, and urge state government to improve the access road, otherwise investments in tourism infrastructure, park interpretation and training of community members will not be fully utilised.
10. Specific issues with communities at LBNP need to be addressed as soon as possible, especially the status of Loagan Bunut village (in the LBNP), and the access right of villagers from Long Maligam to their rubber plantation located in the park.

11. At SEPPSF, the species/ecosystem management/protection plan needs to be developed and implemented as soon as possible.
12. Development of the optimum harvest model (SEPPSF) by FRIM needs to be accelerated, as this should have been ready by early 2004, but trial felling has yet to be initiated.
13. The SPSCs at Klias FR and SEPPSF need to be transformed into WMCs within the remaining two years of the project, to ensure that integrated wetland management is institutionalised in each state.

Awareness & training

14. There is a need to intensify awareness programmes targeting private sector plantation and logging companies through specific sessions with the owners and senior management of the companies operating at project locations.
15. Preparation of specific awareness materials for the private sector is needed. This should focus on how the short-term business goals for quick profits does damage to long-term interest of the business companies.
16. Awareness material should be developed for politicians at various levels. This material should be brief and not too technical, but sufficient for those in policy formulation and decision making to have a clear appreciation of the issues and concerns of conservation and sustainability.
17. Human capacity development should be more formalised, and include the preparation of appropriate training materials and modules on a cross section of areas for project sustainability. An area for key skills development is on how to work effectively with differing groups in a participatory way especially for civil servants and private sector on effective management of local issues and concerns in a 'win-win formula'. Formal training sessions for relevant agencies especially middle level staff are highly important. In addition, existing training programmes for forest officials, rural community workers, Department of Orang Asli Affairs, should be reviewed.
18. A course should be developed to enhance competency of site management staff on conservation and sustainable management of PSF resources. It should incorporate the components of biodiversity conservation, forest management, fire prevention and community development.
19. A training specialist must be recruited as soon as possible for LBNP for the identification of training needs and provision of training. In addition there is a need for specific training workshops in Klias, and introducing a training package for timber industry personal in Pekan.

Project management

20. Verifiers (indicators of achievement) need to be formulated for the remaining project period, for forest rehabilitation and implementing hydrological solutions at Klias and SEPPSF.
21. The project should be granted a budget-neutral extension of six months, so that outstanding activities can be successfully implemented.

CHAPTER 1 Project Concept and Design Summary

1.1 PROJECT CONTEXT

The largest tracts of the world's tropical Peat Swamp Forests (PSFs) are found in Southeast Asia – predominantly in Malaysia and Indonesia – where they support many specialised flora and fauna species and are often the last refuge for lowland species. Apart from being ecologically important, they are also of economic significance as they harbour high quality timber species, provide many non-timber forest species for local use, support fisheries, provide drinking water, mitigate floodwaters and help maintain water levels in rivers and streams. Increasingly, they are also becoming important for ecotourism, recreation and as objects of study.

Over the past two decades, however, peat swamp forest ecosystems have increasingly been threatened by development pressures that picked up momentum as dry lowland ecosystems were depleted and were no longer adequate for meeting human demands for land and livelihoods. The major threats to PSFs are drainage, timber extraction, land conversion, fires and poaching of wildlife. Often these threats occur simultaneously, as an area is often drained to facilitate timber extraction and land conversion. The draining leads to lowering of groundwater levels and irreversible drying out of peat. In combination with large amounts of combustible material left following logging operations, and the desiccation cause by opening of the canopy, these degraded peat areas become very susceptible to fires, and once burnt, lead to irreversible loss of PSF biodiversity. Large areas of PSF have already been lost due to these threats, and actions are urgently required to prevent them being lost altogether.

In response, the Government of Malaysia, with the assistance from the United Nations Development Programme and the Global Environment Facility (UNDP/GEF), is implementing the project on *Conservation and Sustainable Use of Tropical Peat Swamp Forests and Associated Wetland Ecosystems* to help safeguard the country's remaining tropical PSFs. The project's primary objective is to develop and implement plans that will strongly contribute to the conservation and sustainable use of these forests.

The approach taken by the project has been to develop plans promoting multi-sectoral, integrated PSF management at a number of demonstration sites. Three demonstration PSF sites have been chosen in Malaysian States harbouring the largest remaining areas of this habitat type in the country: the Loagan Bunut National Park (LBNP) in Sarawak, the Klias Peninsula in Sabah, and the South-East Pahang Peat Swamp Forest (SEPPSF) in Pahang.

1.2 EFFECTIVENESS OF PROJECT DESIGN

1.2.1 OVERALL DESIGN

The overall goal of the project is the conservation and sustainable use of globally significant peat swamp forest (PSF) biodiversity, but this is not stated in the project document or in the Inception Report (IR). Instead, these documents state that the Project's immediate objectives are to: i) develop and implement plans, and encourage processes that ensure conservation and sustainable use of PSF; and, ii) demonstrate a multi-sectoral approach in planning sustainable PSF management at three selected project sites. To achieve these immediate objectives, three immediate and expected outputs were formulated:

i. Demonstrate planning for biodiversity conservation:
   - Output 1: data collection and integrated database system
   - Output 2: formulation of site management plans

ii. Demonstrate the implementation of biodiversity conservation and sustainable resource utilization strategies:
   - Output 3: conservation and sustainable use demonstrated
   - Output 4: inter-agency network present at state level

iii. Strengthen institutional and human technical capabilities and awareness:
   - Output 5 : increased awareness of stakeholders
   - Output 6 : strengthened institutions and personnel

As a general model, this approach is a sound, coherent and appropriate approach for promoting conservation of biodiversity, and has been tried and tested on many projects elsewhere. Output 1 provides the baseline for planning and management, while Output 2 ensures that strategies and ideas for management are incorporated into a balanced plan. Output 3 provides for implementation of the plan, while Output 4 ensures that prerequisite institutional structures are available. Output 5 ensures that all relevant parties know why they are involved and why the project's objectives are important, while Output 6 equips relevant stakeholder agencies with the tools and capacity to effectively implement sustainable PSF management.

The project approach using three demonstration sites in three States is particularly relevant in the Malaysian context, where natural resource management and conservation is largely dealt with and controlled at state level. Although the project was formulated in 1997-99, the underlying assumptions [lack of: i) basic information, ii) integrated site plans, iii) conservation & sustainable use of resources at PSF sites, iv) inter-agency communication, v) awareness, and vi) capacity] remained fully valid at the onset of project execution. Since then, progress has been made on all fronts, although this needs to be consolidated and made sustainable in the time that remains.

When the project was designed in the late 1990s it was incorporated under GEF's OP2 on *Coastal, Marine and Freshwater Ecosystems* of the biodiversity focal area. In retrospect, it would have been more appropriate under OP12 on *Integrated Ecosystem Management*, as these peat swamp forest habitats are very much affected by activities in surrounding areas – more so than other lowland tropical ecosystems. This is especially the case if the areas designated as Forest Reserves or protected areas do not incorporate an entire peat dome, but where outlying parts of the dome have been cleared of forest and converted to agriculture,

such as is the case in SEPPSF and Klias. However, OP12 was not made operational until April 2000, which was well after the project had already been formulated. Fortunately, project design left enough room for making adjustments, and project management has included integrated ecosystem management approaches into site IMPs, in an attempt to ensure that land use in these areas is compatible with conservation and sustainable use of PSF resources.

1.2.2 PROJECT DESIGN AT POLICY LEVEL

The project design was guided by two main policies that provide the framework for PSF management and conservation in Malaysia, namely the *National Policy on Biological Diversity* (NPBD, 1998) and the *National Forestry Policy* (NFP, 1978, revised 1992).

In a nutshell, the NPBD aims to "conserve Malaysia's biological diversity and to ensure that its components are utilised in a sustainable manner for the continued progress and socio-economic development of the nation." Further principles are outlined in the PDF-B proposal accepted and signed by the Government of Malaysia in 2001. Targeting conservation *and* sustainable use of PSF resources, the project design is fully compatible with, and supportive of the principles of the NPBD.

In its revised form, the NFP is built upon two key objectives, namely i) to conserve and manage the nation's forest based on the principles of sustainable management; and ii) to protect the environment as well as to conserve biological diversity, genetic resources, and to enhance research and education. This agrees with the principles outlined in the NPBD, and is therefore also fully supported by the approach taken by the Project.

1.2.3 PROJECT DESIGN AT MANAGEMENT LEVEL

The project proposal was initially developed in 1997-1998 under a PDF-B grant provided to the Ministry of Science, Technology and Environment (MOSTE). After various revisions, the Project Document was approved and signed early in 2001, with the Ministry of Primary Industries (MPI) as Executing Agency and the Regional Centre for Forest Management (RCFM) as Implementing Agency. However, the project did not get underway until 11 June 2002, following various institutional changes: the Forestry Department now resides under the Ministry of Natural Resources and Environment (MNRE), which then became the Executing Agency, while RCFM became defunct and the Forestry Research Institute Malaysia (FRIM) was became the designated Implementing Agency instead.

Management wise, the project is designed to be overseen by a National Steering Committee (NSC) chaired by MNRE, with representatives from FRIM and various other federal agencies. The project has a Project Support Unit (PSU) based at FRIM, headed by a Chief Technical Advisor (CTA), assisted by several support staff, and working in close cooperation with three National Experts (NEs) who are responsible for project activities at State level.

The project reports directly to the National Project Director (FRIM), who supervises the CTA and activities of the PSU. In each State there is a State Steering Committee (SSC), along with a State Coordinator/Local Counterpart (for the project). At State level, the project is run by the NE, who heads a small team and works closely with the SSC and State Coordinator; the

NE and SSC are in turn assisted by technical committees (in coordination with the Danida project). The SSC is also to be a Wetland Management Committee that will remain responsible for wetland management issues after the life of the project.

On the whole, the design of project management is sensible and logical, providing useful guidance both at a national and state level, while also ensuring a good coordination between state and federal level, as implementing agencies at state level are also members of the SSC. There are a few minor weaknesses in the design, however:

- Danida was included in the NSC and in the technical committee(s), but not at SSC level;
- Government agencies comprise the bulk of SSC membership, but NGOs and the private sector are not or only poorly represented.

1.2.4 PROJECT DESIGN AT ACTIVITY LEVEL

Output 1: Data collection and integrated database system

Hydrological studies (conducted in the Danida component of the Project) in the Southeast Pahang Peat Swamp Forest (SEPPSF) are confined to the Pekan Forest Reserve. It did not include studies of the hydrology of the other Forest Reserve (FR) areas within the SEPPSF complex viz. the Kedondong, Nenasi and Resak FR.

The management of water is a key element in the conservation and sustainable use of the peat swamp forests and its associated wetlands. The maintenance of hydrological connectivity between the reserves, where such reserves are fragmented is also a key requirement for sustainable management of the reserves in the long-term. Buffer and other zones outside the SEPPSF is equally important from a hydrological point of view as activities surrounding the SEPPSF will affect its hydrology.

The design of the hydrological studies in the Project is mostly confined to specific areas e.g. the Pekan Forest Reserve area or the northern portion of the Klias FR. This approach has limited the ability of the hydrology studies to adequately provide management related options for the entire area of each Project.

The design of ecological studies has also not considered the area in its entirety. Ecological information has been generated through independent studies by consultants and these tended to focus on the ecology of the forest. Scientific expeditions can contribute to understanding of elements of the local ecology but this is usually confined to a small area of the forest reserve. There has also been no attempt to assess the linkages between the hydrology and ecology of the forest reserves studied. These aspects are interlinked and the seasonal interplay between the hydrology and ecology of all the forest reserves in the Project has a strong bearing on the best management practices that could be adopted for any particular area.

With the wide use of consultants to characterise the project areas, and involving scientific expeditions from local universities to inventorise the biodiversity of the project areas, local staff of the forestry and other technical departments will have fewer opportunities to learn the necessary steps in planning for sustainable resource utilization and biodiversity conservation in peat swamp forests. One of the objectives of the Project is to build local

capacity so as to contribute to institutional strengthening or to the enhancement of technical capacities within institutions that will have the task of ensuring the sustainability of the work initiated by this project.

Output 2: Formulation of site management plans

The preparation of well-formulated site management plans is contingent upon the availability of a sound and comprehensive data on biodiversity, ecological status and the use of the resources in the area by local communities. The multi-disciplinary assessments commissioned early in the project were a good entry point for introduction to the broad cross-sectoral knowledge necessary for the preparation of the management plans. However the MDA assessments may not be comprehensive in coverage and be of sufficient depth. Where this shortcoming is recognised, project management has the flexibility of commissioning more detailed studies and assessments to fill information gaps. This is a positive aspect of the project design that can ensure a well-formulated site management plan.

The participatory approach in preparing the management plans, engaging at the initial stage key government stakeholders (the Core Team – CT) seems to be working well. The degree of participation of the CT may be variable. The practice of seeking input from the broader stakeholders as soon as the CT has come close to a final decision on any particular management issue in SEPPSF and Klias Peninsula, provides input from the wider community including non-governmental organizations, commercial interests such as plantation owners, and local communities even when they do not participate directly in the formulation of the management plans. The approach enables the capture of a broader view for incorporation into the management plans than would otherwise be possible. This approach is not adopted in Loagan Bunut.

Output 3: Conservation & sustainable use demonstrated

The activities listed under output three in the Inception Report and in the original proposal appear *ad hoc* and are somewhat illogical. Also, proper verifiers are often lacking. "Technical reports" are often listed as verifiers, which is incorrect as reports are where you can read if targets have been achieved, whereas a verifier must provide a measurable target. The main design flaws are:

- Under Output 2, IMPs are developed for all three project sites. Logically, Output 3 should focus on implementation of the IMPs, but this is not the case at any of the sites.
- Instead, Output 3 involves implementation of specific action plans for LBNP and Klias (that are not specified in the IR). However, it would have been better if these had been specified. At LBNP, for example, a lot has been invested in ecotourism infrastructure and in training local community members for ecotourism (handicrafts & boating), but the number of visitors remains disappointingly low. If a business plan and tourism development plan had been prepared parallel to this, disappointments may have been avoided.
- At Klias, an alternative livelihoods strategy is to be implemented under Output 3, but this should first have been designed as part of Output 2. This has been noted by the project, as the Status Report (July 2005) notes under Output 3 that an 'initial study was undertaken … to identify … livelihood strategies'. However, there has not been any progress regarding actual implementation.

- At Pahang and Klias, 'hydrological solutions' are to be implemented, but proper verifiers are lacking. A few small trials have been carried out at Pahang (infilling) and will be tried at Klias, but these are small, piecemeal, and do not seem to fit into the implementation of a comprehensive water management strategy, which should be the ultimate aim.
- At Klias, and Pahang, forest rehabilitation is to be carried out, but the verifiers do not provide any targets. As small trials (of a few hectares, with mixed rate of success) have been carried out, the activity can be regarded as 'on time' and 'been implemented', but there is no indication of the magnitude of the issue (how much needs to be rehabilitated, which percentage has been taken care of, who will conduct this in the future?). At Pahang, initial trials were carried out but this has stopped now, and forestry-based activities now focus on developing an optimum-harvesting model.

Output 4: inter-agency network present at state level

Output 4 seems somewhat inconsistently designed, although not basically flawed:

- According to the project design, a Wetland Management Committee/State Project Steering Committee is to be established and supported at Klias and Pahang, but not at LBNP, where instead mention is made of establishing a Special Park Committee. In practice, an SPSC/WMC has been established at LBNP, along with an SPC.
- At LBNP, 'coordinated enforcement' (4.1.1) is listed as an activity, but there is no proper verifier for this – the IR lists only establishing of the SPC and 'minutes of technical meetings'. A better indicator would have been 'joint actions undertaken by members of the SPC (or WMC/SPSC) to manage land use activities in and around LBNP, to ensure compliance with park regulations and with sustainable use practices.'
- LBNP includes an activity on 'coordinated alternative livelihood options' – why is this not included for Klias as well? At the latter site, alternative livelihoods are to be developed, so this should be done in a coordinated way as well.

Output 5 : Increased awareness of stakeholders

It is recognized from the very outset that awareness in the value of wetlands in general and PSF in particular is an integral dimension of conservation. Furthermore it is noted that effective and specific targeted public awareness is fundamental for the survival of critical biodiversity within Malaysian PSF.

Three target groups are identified as essential namely decision makers, local communities and thirdly, wider stakeholders which includes civil society and the private sector. This is to be done through the design and implementation of awareness campaigns including conducting of seminars and field trips.

The project design rightly recognizes the very essential dimension of awareness creation as the foundation to sustainability. It has also noted the multi-dimensional nature of the target group and the varied of approaches required to reach each specific group.

Output 6: Strengthened institutions and personnel

Output 6 recognises that institutional and human capacities must be strengthened for conservation and sustainable management through effective training programmes. Output 6 moves beyond awareness raising (output 5) to empowerment and enablement of stakeholders. This aspect is of utmost importance as the long-term sustainability of the

project is dependent upon people who have acquired the relevant knowledge and competencies in conservation, forest and people management.

1.2.5 M & E DESIGN

The basic design of the project's Monitoring and Evaluation (M&E) appears fine:

- there is internal project monitoring twice each year by means of PSU meetings between NPD, CTA and NEs;
- annual tripartite reviews and Annual Project Reports;
- a Mid-Term Review; and
- a Terminal Tripartite Review.

Under normal circumstances, this should provide adequate mechanisms for monitoring results and evaluating if the project's rate of achievement is on par with the original design, and what is intended.

However, given that proper verifiable indicators of achievement are often lacking (see 1.2.4), M&E becomes a difficult task, as the evaluator will be left guessing whether a particular activity has been successfully implemented or not. For example, forest rehabilitation at Klias (3.2.3) and Pahang (3.3.3) does not list any area to be rehabilitated under the verifiers (see p. 35 of IR). Hence, the activity can be considered as 'carried out', even if only a dozen trees had been replanted. A proper verifier would, for example, have been: 10 ha successfully replanted by the end of year-3 and 30 ha by the end of year-5. The Annual Project Report could then list which percentage of the target had been achieved, which greatly simplifies M&E, and makes the project more manageable.

1.3 FLEXIBILITY OF DESIGN

There is adequate flexibility in the Project design to enable it to be managed adaptively. Project managers respond to changes in the Project environment and can take advantage of opportunities as they emerge. A case in point is the study tour undertaken by the Core Group of two villages in the Klias Peninsula to Peninsular Malaysia to observe examples of nature tourism projects they may want to emulate in their villages. Generally, proposed major changes in any particular physical area, project scope and terms of reference, will be first discussed amongst the National Expert, the Project CTA and the National Programme Director prior to implementation.

There appear to be a strong desire to sufficiently test the Integrated Management Plan for the SEPPSF and the Klias Forest Reserve. In Loagan Bunut National Park, work is considerably delayed and it is unclear whether there will be sufficient time to test the management plan prior to its adoption. However it should be noted that the process of developing a management regime for such a park needs to be adaptive, subject to continual review and enhancements. The urgency to do so is clearly demonstrated in the SEPPSF and Klias. Early testing of the proposed IMP will enable its design to be adjusted to suit local implementing conditions. This flexibility can ensure that recommendations of the IMP are actually feasible.

CHAPTER 2 Project Results

This chapter described project results, first at the site and activity level (2.1), then at the overall project level (2.2). Part 2.1 summarises the activities assessed in Annex 4, and lists the main shortcomings. Recommendations on how to address the shortcomings are provided in chapter 4.

2.1 RESULTS AT SITE & ACTIVITY LEVEL

2.1.1 OUTPUT 1: DATA COLLECTION AND INTEGRATED DATABASE SYSTEM

Initial data collection in Loagan Bunut was conducted in conjunction with the Multi-disciplinary Assessment (MDA) of the area. The MDAs provided rapid ecological assessments, identified threats and documented problems affecting the project sites. The MDA would assist in the development of an Action Plan and a monitoring system at the sites. At the same time they were meant provide opportunities for the training of Forestry Department staff in implementing the Action Plan. Additional data were also collected by the UNIMAS-lead scientific expedition into the area. Surveys of special animal groups (e.g. herpetofauna; birds) are still in progress. Much of the hydrological and water quality data is still being collected. A base map has been prepared and updated. The participation of the local communities in planning the management of fishery resources has been made possible by the establishment of a Fishery Management Committee. Other means of providing livelihoods to the local communities are being explored. A consultant is developing the database and IMS. There was no information available about the design of the database and IMS. A monitoring programme has not been conceived and designed. The Core Team consisting of representatives from key state level government agencies is actively engaged in the preparation of the IMP for Loagan Bunut.

The status of work at the Klias Peninsula FR is more advanced than at Loagan Bunut. Most of the data collection activities have been completed and its integrated management plan (IMP) is at an advanced stage of production. An ecological monitoring programme has been designed and permanent monitoring plots will soon be established. Similarly, the hydrological assessment of the area has been completed. Data on land-use, demographic and socio-economic characteristics of the Peninsula has been synthesised and a policy-relevant publication on peatland management and conservation in the Klias Peninsula has been produced. As with Loagan Bunut, the database and IMS are being developed by a consultant. A monitoring framework has been suggested but a monitoring programme/plan has not been designed.

Data collection for the MDA at the SEPPSF has also been completed and the ecology of the area has been assessed. The IMP for the area is also at an advanced stage of development. Further refinements to the internal zonation are being made. An overall ecological monitoring programme has yet to be designed. Results of the Danida hydrological study are in the process of being incorporated into the IMP. A timber resource assessment study for the area is still on-going. The appraisal of the local communities have been completed and a PRA study on the Asli Jakun of Kg Simpai has been completed. Plans for alternative and additional livelihoods have been activated. A monitoring and evaluation plan has yet to be developed.

In summary the main shortcoming of the data collection and monitoring programme development is the absence of a strong baseline data for levels of biodiversity, status of ecology and physical functions of the ecosystem and in the resource base at the project sites.

2.1.2 OUTPUT 2: FORMULATION OF SITE MANAGEMENT PLANS

The preparation of the integrated site management plans at all sites are in general delayed. The degree of delay is quite serious in Loagan Bunut but in Klias and Pahang the preparation of the plan is only slightly delayed. The management plans should be careful enough so as not to overlook the primary purposes of their preparation viz. to conserve biological diversity, maintain physical functions and promote sustainable use of peat swamp resources. This being so, it is of vital importance that monitoring and evaluation of the biodiversity, status of physical functions and ecological integrity, and sustainable use of the resources in peat swamp forests is based on good baseline data. It is not clear whether such data is already available or are still in the process of being collected.

In general the MDAs has been an effective way of providing the initial multidisciplinary outlook for the development of further activities and the IMP for each project site. However, the results of studies conducted as part of the MDA may not have the depth nor the breadth necessary for the development of a well-formulated management plan that takes into account biodiversity, physical functions and sustainable use of the peat swamp forest resources. Delivery rate has been variable between projects and because the success of the project is dependent on continuous monitoring, the IMP should also highlight the ways in which monitoring and evaluation of the project sites will be continued after the end of the project.

2.1.3 OUTPUT 3: CONSERVATION AND SUSTAINABLE USE DEMONSTRATED

Loagan Bunut NP

Progress has been significantly delayed at LBNP, and this seems to be at least partly attributable to the transition of authority from the Forestry Department to the Sarawak Forestry Corporation (SFC). Infrastructure for park management and ecotourism have been established in a timely manner, but staff numbers were reduced from nine to just three on contract (warden, ranger, customer service assistant) and three outsourced (garbage disposal staff & two grass cutters). In addition, the budget for park operations was cut by 25%, both in 2004 and 2005. Project progress in the implementation of specific action plans has been slow, with some initial steps undertaken regarding pollution and sedimentation issues (e.g. with NREB, addressing oil palm estate compliance with EIA). There has not been

any progress regarding implementation of the fisheries management and ecological monitoring plans (both of which are still being drafted), and the business plan and Community Participation Plan (CPP, the drafting of both has yet to be initiated). Although well underway, the IMP is still being drafted by the eight core team members and the IMP coordinator and is still a working draft. It is worrisome that drafting of the CPP has yet to be initiated, as the time line provided in the Inception Report indicated that more than two years would be required for drafting and testing. Progress on ecotourism infrastructure and facilities has been on time, but visitor numbers have been disappointingly low (average 50/month). This is also at least partly because of the change in institutional setting, as SFC has not investing in marketing of the area. Several issues need to urgently be resolved with the local communities as these threaten future implememention of the IMP and action plans, and overall LBNP management; these are summarised in the recommendations (chapter 4).

Klias FR

Progress has been reasonably good at Klias FR, with the completion of a Conservation Plan and the implementation of the monitoring programme. It would have been better if the verifiers (as indicated in the Inception report) had included implementation of (parts of) the Conservation Plan, but this is not the case. The Inception Report lists "Park Management System in place" as one of the impacts of implementation of 3.2, but this cannot be the case. Firstly, the area will be managed as a Forest Reserve (under Forestry Department) and not as a Park (under Sabah Parks). Secondly, FD will manage the area from the regional office in Kimanis, as the field station established in the area is primarily meant for R&D and environmental education. Activities with local communities have been good, and alternative livelihood sources have been identified (e.g. ecotourism), although these have yet to be implemented. Rehabilitation of burnt areas has been initiated, but this is still at a trial level (several hectares). Hydrological solutions have not yet been undertaken, although there are plans for blocking a canal later in 2005 – at most, this will represent a start.

Pahang FR

Progress has been reasonable at Pahang FR, although there has been a significant delay in the development of the optimum harvest model by FRIM – this should have been developed by early 2004 but trial felling has yet to be initiated. Another delay is the implementation of the species/ecosystem management/protection plan: a HCVF report has been produced for Pahang FR, but this is not the same thing. The latter is very generic, while a species/ecosystem management/protection plan is highly specific and requires a detailed baseline, which at present appears to be lacking. Trial rehabilitation planting was carried out by FRIM (with Danida cooperation) in 2004, but this does not appear to receiving adequate follow-up, as FRIM's attention at Pahang is now focused on the optimum harvesting trials. Trial canal blocking was carried out under the Danida project in 2004; results indicate that this is feasible for small roadside canals, but prohibitably expensive for the larger log extraction canals. The results have yet to be incorporated into site management.

2.1.4 OUTPUT 4: INTER-AGENCY NETWORK PRESENT AT STATE LEVEL

Loagan Bunut NP

Progress at LBNP regarding output 4 has been reasonable. A Wetland Management Committee (WMC) has been established and has met several times to discuss issues at LBNP, and discuss the recognition of the Kuching wetlands as Sarawak's firest Ramsar site. In addition, a Special Park Committee has been established at LBNP, as is stipulated in the park's regulations. The Core Team producing the IMP is small, and includes FD and FSC staff, along with NREB; other sectoral agencies do not appear to be involved. As a result, inter-agency linkages are not as strong as in the other project sites. Local community members have received training (boatsmen, handicrafts) so that they may receive additional income from ecotourism; these training initiatives have been coordinated at state level. A modest start has been made regarding mitigation of the sedimentation problem (NREB has reprimanded the company involved). However, the impacts of these activities has been modest so far. Tourist numbers have remained disappointingly low (average 50/month), and are unlikely to change in the near future. However, this may improve in the medium term once a business plan is made and SFC begins to promote LBNP. Changes in *modus operandi* for oil palm estate development have yet to be made operational, but this may be more significant once the training programme for oil palm estates is launched. The issue of elevated lead levels in lake sediments has not been addressed to date.

Klias FR

In terms of establishing inter-agency networks and linkages, Klias seems to be doing well. The State Steering Committee has been established and has convened regularly to discuss issues at Klias FR and in the Klias Peninsula in general. This SSC has not yet been formalised as a WMC, but it may become one in the near future. In any case, the SSC appears to be effective in coordinating issues at Klias FR. At state level, institutional linkages are firmly established by means of both the SSC and the MPCT. In addition, workshops and technical meetings at state level have strengthened linkages. Wetland issues in the greater Klias region (Klias Peninsula) have been discussed by the SSC, so in terms of coordination the institutional setting seems to be working well.

Pahang FR

Progress at Pahang FR has also been good in terms of establishing inter-agency networks and linkages: a multi-agency SSC has been established and has convened regularly to discuss issues, and in addition there have been regular inter-agency technical meetings. The SSC does not yet constitute a WMC, but it in fact already functions as one, as it is the same group that deals with issues at Tasek Bera (Malaysia's first Ramsar site/ wetland of international importance).

2.1.5 OUTPUT 5: INCREASED AWARENESS OF STAKEHOLDERS

A total of 62 sub activities have been carried out at the three project sites including at the national level. The effective use of the media including the print and electronic media has created a national awareness on the project. In addition a majority of the relevant stakeholders have been brought into the basic framework of understanding the essence of the concerns.

The Logan Bunut team has managed to be on time with its activities inclusing the publication of relevant materials. The activities are also comprehensive enough. However there is a need for further intensification of awareness among the private sector plantation owners and workers.

In the case of Klias, in comparison to Logan Bunut and Pahang it seems very weak in terms of organized awareness programmes. No mention is made of awareness raising with decision makers or the private sector. Nonetheless, Klias has prepared information materials including the engagement of a professional photographer. It is imperative that Klias intensifies its awareness programmes with relevant stakeholders in line with the expectations indicated in the Project Document

The Pahang team has undertaken an aggressive package being on a fast track with regards to awareness raising among all relevant players especially the local communities. It is intensive covering a wide cross section of target groups. This is indeed a commendable effort by the Pahang team through intensive re-targeting of key stakeholders. One area that Pahang has neglected is conducting seminars and field visits to educated potential logging contractors as indicated in Project Document.

2.1.6 OUTPUT 6: STRENGTHENED INSTITUTIONS AND PERSONNEL

Two major type of activity categories are indicated namely training needs analysis and second implementation of training packages. A total of 20 sub-activities have been organized by the three project teams including the national team. The total number is low in comparison to awareness activities undertaken. On the whole output 6 is categorised as slow performance.

In the case of training needs analysis, Logan Bunut team is yet to identify a specialist however in the case of Klias and Pahang this aspect is underway. Even in the case of the National team this aspect has been neglected namely the formulation of training manual and modules although some initial work through study tour had been organized.

In the aspect of training workshops and porgammes Logan Bunut and Klias has been slower in comparison to Pahang has an impressive list of activities raining from fire prevention course to IMs and Remote Sensing Training. However, Pahang has neglected the capacity development of the officers of the Department of Orang Asli Affairs (JOEA) in contrast to how the project team is working with forest officials. Having said this it is necessary to state that the Forestry Department has readily accepted a ‘people centered approach’ where else JOEA is still using the ‘top down framework’ which is antithesis to community and social development work among the rural poor.

2.2 RESULTS AT OVERALL PROJECT LEVEL

The (unstated) overall goal of the project is the conservation and sustainable use of globally significant PSF biodiversity, while the project's immediate objectives are to i) develop and implement plans, encourage processes that ensure conservation and sustainable use of PSF; and ii) demonstrate a multi-sectoral approach in planning sustainable PSF management at three selected project sites.

Overall, the project has made and is making significant strides towards achieving the immediate objectives, and towards meeting the overall goal of conservation of globally significant PSF biodiversity. It is therefore contributing to the meeting of Malaysia's obligations to the Convention on Biological Diversity (CBD), and to obligations under the Ramsar Convention (wise use of wetlands).

The three project sites have been put on the map – both literally and as a manner of speech – and both state and national agencies and officials are aware of the significance of their conservation values. Importantly, process that are leading to the decline of PSF biodiversity at the three project sites have been slowed or halted, and mechanisms for addressing the issues at hand have been developed. Most important among these is the multi-sectoral/inter-agency approach (by means of the SSCs and the MPCTs), and the regional planning approach undertaken by the project. These ensure that the areas are firmly embedded in a regional strategy for development (and conservation), and ensure that a lasting institutional setting is created to implement plans and strategies and address future challenges. Tellingly, there is outside interest in the inter-agency approach taken by the project, and a 'road show' promoting this is planned for 2006.

The project has been effective given the relatively small project team (PSU, NEs and some support staff), as this has been strongly supported by government agencies (notably the counterpart agencies, SPSC members and MPCT members), along with limited input by outside consultants or service providers (e.g. Wetlands International). To some extent, the latter has a down side as well, as there is a lack of institutional memory on the project (as consultants come and go). However, this is more than compensated for by the fact that key government agencies have a strong sense of ownership instilled in them, and for sustainability this is the key factor.

For several reasons, the project has had a slow delivery rate, and this now stand at about 70% overall (>40% of the budget has been spent, but this should be at about 60% at present). Firstly, this is because of the close involvement of many government agencies at various levels: this takes time to nurture, as agencies need to perceive a need (awareness of the issues), capacities need to be developed, and trust needs to be gained. Secondly, there have been a number of institutional changes that slowed progress, the most notable of which has been the establishment of the Sarawak Forestry Corporation, which took over forest management responsibilities from the Sarawak Forestry Department in 2004. Nevertheless, the rate of delivery is gaining momentum, though still behind schedule. It is therefore anticipated that the project will not be completed on schedule, and is likely to require a (budget neutral) extension of (at least) six months.

It is impossible to gauge at present what the impact will be of the project on sustainable forest management, other than conservation, as activities (undertaken by FRIM) aimed at developing a simulation model for optimum harvesting are well behind schedule, and are unlikely to be available by the end of the project. Other strategies aimed at wise use of PSF resources (such as ecotourism, NTFPs, herbal gardens) are likely to be successful in the medium to long-term.

While there has been considerable activity to collect data relevant to the preparation of the IMPs for the individual project sites, an overall data gathering framework that coordinates and harmonises the data gathering and formatting process is not available. Such harmonization can help establish standard monitoring and evaluation frameworks to enable comparisons between sites and produce a national level outlook of the direction of long-term changes in biodiversity, ecological, hydrological and resource stocks in the peat swamp forest.

The design of the proposed databases and related IMS would play a crucial part in ensuring such harmonization. It is essential to ensure that the IMS has the capacity to respond to pertinent questions about biodiversity management, ecological integrity maintenance and sustainable use of the peat swamp forest resources. This is especially crucial for the SEPPF site because the area is intended to be maintained as a Productive Forest. At the other sites the emphasis will need to be towards restoring and rehabilitating a degraded forest ecosystem. Design of the database and IMS must involve subject matter specialists as well as decision-makers to jointly produce a system that will be useful and easy to maintain and service.

The preparation of well-formulated management plans require active participation and thorough consideration of all options with regard to management operations within each area. A participatory mechanism involving the main government stakeholders have been established. Stakeholders from the SEPPSF and Klias Peninsula projects appear to be more actively involved in the preparation of the IMP than those of the Loagan Bunut project. Although in all areas, the broader stakeholder group include local communities and the private sector, input from these groups appear to have been kept at a minimum. Well formulated plans must include the interests of all stakeholders who are kept informed of the reasons for the choices made.

The project as a whole has been effective in bringing sectoral government agencies involved in the utilization and management of peat swamp forests and associated areas in a multidisciplinary planning process that requires their active engagement in the decisions regarding proposed management. This process has been more successful in SEPPSF Pahang and in Klias Peninsula than in Loagan Bunut. A new management agency for forests in Sarawak, the Sarawak Forestry Corporation, is still in the process of adapting to their new role and resource allocations.

The impact of the project as a whole on views about resource use in peat swamp forests has been quite notable. Many government agencies are together involved in preparing management plans aimed at ensuring sustainable use and conservation of these forests. The delivery rate has not been as had been planned but any delays with the SEPPSF and Klias Peninsula projects are expected to be overcome in the forthcoming phases of the project.

Some delays in the Loagan Bunut project are a cause for concern as there may not be sufficient time to test the feasibility of implementation of the plans.

Sustainability of the projects as a whole is also a cause of concern, especially when management agencies do not have sufficient staff strength to carry out monitoring and evaluation studies on a regular basis. All projects seem to have not considered in sufficient detail the responsibilities that they will have to bear after the end of the Project with regard to monitoring and evaluation.

The National team has undertaken an aggressive awareness campaign. These efforts have complemented and supported the direct activities of the three project teams. Most significat of these are the preparation of materials, comprehensive media coverage including newspapers and TV, website creation and national awareness workshops. On the whole there has been a very conscious effort by the project team to enhance public awareness on the project but much more on conservation of PSF. An area which will require further intensive work is at the level of top policy makers at the Federal and State level. One effective way at the federal level is to brief the Back Benchers Club. At the State level there is a need to host a special awareness programme for State assemblymen. These are the key decision makers. At the local level some targeting is necessary to identify the appointed leaders in local government. While the project has effectively reached out to civil servants and comparable effort is necessary to reach out to politicians who ultimately make the decisions which are executed by the civil service.

The training programmes seem to be 'ah hoc' and informal on the whole. A clear distinction must be made between awareness initiatives to that of training. In training specific competencies are developed based on basic knowledge and skills.

Study tours and workshops are helpful but the project would be greatly enhanced if specific training packages can be noted on technical aspects of forest conservation and management together with a training kit, manual and full curriculum. It could be developed in more structured ways such as a day course or week end course or even a short week or two weeks course. Curriculum development seems to be weak and one concern will be after the project phase informally coordinated sessions might fade away especially when a more structure and tested training module is not developed.

In addition, it might be necessary to review existing training modules of all the related agencies such as forest rangers training where community forestry, community & social development dimensions and local people management could be further enhanced. Competency based training enabling local people to be better equipped could be developed.

In summary one of the shortcomings at the overall project level relates to the relative different levels of engagement and participation of stakeholders in the preparation of the IMP. The preparation of a well formulated management plan addressing the issue of biodiversity, physical functions and sustainable use require the participation of not only specialists in a variety of subjects but also managers and end-users who are currently not involved in the preparation of the plans.

CHAPTER 3 Project Management

3.1 OVERALL PROJECT MANAGEMENT

3.1.1 PROJECT IMPLEMENTING AGENCIES

Overall project management has been good: the organisational structure for project management has proven to be a good model, and various details worked out at state level have proven to be highly effective. In all cases, the project operates at state level out of the premises of the counterpart agency, which promotes a good coordination and a high level of ownership. The S(P)SCs in the three states are all working well, meetings on a regular basis and providing a forum for discussing and resolving issues; in all states the S(P)SC either works as a Wetlands Management Committee (Pahang, Sabah), or has already formalised itself as an WMC. These structures are likely to remain after the life of the project, and can be seen as sustainable.

Integrated Management Planning (IMP) has been carried out in each State by a Management Plan Core Team (MPCT), comprised of representatives from the various state government agencies, and headed by a IMP facilitator/coordinator contracted by the project. The emphasis has been both on process and content, as the final IMP is to be a document endorsed by all agencies involved, and this approach seems to be working well in most cases. This model of inter-agency cooperation – both using S(P)SCs and MPCTs – works well, and could well be used for other sites, issues and in other states. The project aims to promote the model in a 'road show' planned for next year (2006)

Coordination between National Project Director and CTA is good, as is that between CTA and NEs. The NEs meet each other regularly for coordination meetings, and they all liaise closely with the State Coordinators. There appears to be a good sharing of information (and consultants) between the various project sites.

Some issues remain, however:

- Stakeholder involvement in the project appears to be largely limited to government agencies (e.g. on the S(P)SC and MPCTs), while others are to be involved during broader stakeholder consultation meetings that are largely designed to inform, rather than to involve. To some extent this is an opportunity lost, as while closer involvement of local NGOs, communities and the private sector may be difficult during IMP formulation, it may be much more effective during IMP implementation. This is particularly true for the involvement of oil palm estates to the west of the SEPPSF (Pahang FR), and for local communities in and around Loagan Bunut NP.

- Project teams are small, and most specialist activities such as baseline studies, ecological surveys, and (some) awareness activities have been subcontrated to outside agencies or companies. As a result, not all information generated by the project is absorbed or fully utilised by the permanent project team.
- The MPCT in Sarawak does not appear to be as inclusive as in Pahang or Sabah. The latter include many agencies and up to 18 members, while the Sarawak MPCT includes eight members only, from FD, SFC and NREB.
- Project management staff (CTA and NEs) have backgrounds in forestry, but not in biodiversity conservation or biology. This has had many advantages, for example, in establishing good working relationships with the Forestry Department, FRIM and SFC, and in understanding forestry sustainable use issues. However, there have also been disadvantages, as some of the delays identified in implementing certain activities may be attributable to an incomplete understanding of what was required. For example, a monitoring plan was to be developed for Klias FR, but what has been developed is a framework for monitoring, which is not the same, and hence the activity has been assessed as 'delayed'. Someone with a biodiversity management background may have avoided this by drafting a clearer TOR.

3.1.2 GEF IMPLEMENTING AGENCY: UNDP

UNDP was strongly involved in the project formulation stage, but after the PDF-B proposal had been endorsed by GEF and the Government of Malaysia, the level of involvement has largely primarily to financial administration and approval of (sub-)contracts. This through no fault of UNDP, as the technical capacity of the local office is limited. However, some kind of technical backstopping would have been appreciated at times by the other implementing agencies. The latter have not always been satisfied with UNDP's financial administration, which has been slow in disbursing funds. As a result FRIM has had to provide advances out of its own funds for the financing of project-related activities.

3.2 IMPLEMENTATION CHALLENGES

Changes in Project Organization

The Implementing Agency for the Project had to be changed from the agency designated in the original project document, the Regional Centre for Forestry Management (RCFM) to the Forestry Research Institute of Malaysia (FRIM). The change was effected successfully during the inception phase of the project. Also during this phase, the reorganization of the Ministry of Primary Industries (MPI), the Executing Agency for the project, took place and the project was placed under the new Ministry of Natural Reseources and Environment (MNRE). Fortunately, these changes did not affect the management of the project to any great extent as the transition to the new ministry was smooth and well organised.

In Sarawak, the establishment of the Sarawak Forestry Corporation as the operational arm of forestry management in the state caused considerable delays in the implementation of the project. The establishment of the Corporation resulted in the downsizing of the original National Parks and Wildlife Office of the Sarawak Forestry Department and the number of SFC staff at the Loagan Bunut National Park Headquarters has been reduced to three from the original level of eight. This has seriously challenged the ability of the staff to engage in

key data gathering and management activities in the Park. The ability of the Park staff to engage in the monitoring activities after the end of the project is also in question.

Maintaining Interest and Commitment

Maintaining interest and commitment of all stakeholders in the aims and objectives of the project in the long-term will be a major challenge. Assuming there is adequate and inclusive buy-in from the majority of stakeholders, competing demand for time and resources in future projects can lead to loss of momentum and interest in ensuring the sustainability of the initiative. Commitment by the state and federal authorities must also be accompanied by the allocation of adequate financial resources to sustain the monitoring and evaluation of the levels of biodiversity, the integrity of ecological functions and sustainable use of the PSF areas.

Monitoring and Evaluation

A major implementation challenge is the continuation of monitoring for biodiversity, ecological, and sustainable use of the resources of each peat swamp forest site. Monitoring would have to be conducted and managed by those responsible for the management of the PSF and be relevant to the management objectives stated in the management plans of the respective sites. Monitoring must be comprehensive and for the entire area of the forest reserve. It must not be confined to a particular area with the results extrapolated over a wider area.

Continuing inter-agency collaboration

Inter-agency cooperation and collaboration during the project period is governed by the need to jointly produce a management plan that takes into consideration all of the concerns of the agencies involved. At the end of the project, other than the management of the particular site by the agency with the appropriate authority, the involvement of the other government stakeholders will take on a different perspective. Towards this end, the maintenance of inter-agency collaboration is a major challenge. It may be crucial to establish a permanent institutional structure, such as a State Wetlands Committee to ensure long-term sustainability of the aims and purposes of the project.

3.3 FINANCIAL MANAGEMENT

Financial management on the project is clear and transparent, and are clearly outlined in a document prepared by the PSU on "Financial References". Government of Malaysia contributions to the project have been forthcoming and timely, as have inputs from other co-funding agencies (Danida and the Government of the Netherlands).

The Project's delivery rate up to now has been slow, and this now stand at about 70% overall, as just over 40% of the budget has been spent over three project years. This should have been about 60% of the budget, so the deliver rate stands at about 70%, which is worrisome. However, the delivery rate is gaining momentum, although it is unlikely that this will be sufficient to make up for lost time. Instead, a budget neutral extension of six months will be required (and is recommended) to ensure completion of project activities and full utilisation of project funds.

As mentioned in 3.1.2, there has been some dissatisfaction with UNDP′s financial administration, which has been slow in disbursing funds. As a result FRIM has had to provide advances out of its own funds for the financing of project-related activities. Whether this can be resolved is unlikely, as this seems to be at least partly caused by UNDP′s internal financial operating system.

3.4 FUNCTIONING OF CORE TEAMS

Core teams have been established at the three project sites. They comprise of all the relevant government agencies. The participatory approach adopted by the project is enabling all the relevant agencies take owners for the conservation. This interagency, multi sectoral and multi disciplinary approach is a major contribution to effective cooperation and networking among the agencies for policy formulation as well as service delivery.

All the three core team have been meeting regularly. In the case of Sarawak there are _ members and they have met __ times, in Sabah there are 8 members and they have met 16 times. The Pahang team has 14 members and they have had 11 meetings. These core group meeting has enabled team formation as well as the teams have been working on the management plan and also addressing inter-agency concerns on the project.

All the core teams agency representatives have been assigned to this work and therefore there is some continuity. The representatives take maters to their relevant heads for formal approvals. This consultative process while it takes time is a necessary process for joint ownership and sustained effort in conservation and related matters.

There are cases where the consultative process has not resulted in speedy decision making and therefore appropriate action and intervention has been delayed. (need clarification to cite the example- case of Sarawak)

It is imperative that at the State and District levels there core teams must be formalized for long term continuity. The State Executive Council could make a decision to formalize these into a Taskforce to advise the state policy makes, supervise implementation and monitor its outcomes.

Capacity development of all key members is important and there is a necessity to incorporate more than one official from each department to ensure if any one retires or is transferred another person is ready to fill the gap.

In additional while it might seem to be beyond the scope of the project it is imperative that some sections of government agencies must be more targeted for a change in mindset and approach in working with local community especially in the case of the Department of Orang Asli Affairs in the case of Pahang.

What impressed the Mid Term Reviewers was the participatory approach adopted by the forestry department especially in Sabah with the establishment of a community development section which seeks to engage with local communities as a positive force for forest conservation and sustainability. This example can serve as an effective role model for other agencies to inform the delivery of services.

It is further necessary to note that in the case of people development and sourcing funding the cooperation of some agencies such as Rural Development Department, Social Welfare Department and the Amanah Ikhtiar Malaysia can be enhanced to assist rural communities associated with the current project.

3.5 COOPERATION WITH THE DANIDA PROJECT

This project started three months later than the Danida project. However, the duration of the Danida project was much shorter and the project officially ended in March 2005 wheres this project has another two years to run. In the KLIAS FR, the Sabah Forestry Department provided one full-time project counterpart, the State Project Officer, for the duration of the Danida project. Other counterparts were provided as required. The State Steering Committee was also active and very involved in ensuring the success of the hydrology studies conducted under the Danida project. Both in Sabah and in Pahang, the Forestry Department staff were heavily engaged in installing the hydrological monitoring recording instruments. Other than that, the Danida project ran independent of the GEF project.

The scope of coverage of the Danida project was not as broad as this project. Hence hydrological studies in Pahang were confined to the Pekan FR only and no data are available from the Danida project for the other three FRs in the SEPPSF complex. Similarly in Sabah, hydrological studies were confined to the northern end of the Klias FR. As in Pahang no hydrological measurements were made to the south and in areas associated with the peat swamp forests.

Cooperation with the Danida project was also limited by the lack of engagement of its CTA at the level of the State Steering Committee. At the State the CTA participated at the level of the technical committee and hence could not influence decisions at the higher policy level.

3.6 INTEGRATION OF INPUTS FROM OTHER PROJECTS

Integration of inputs from other related projects to this project seems to be at a minimum. Although the RT was aware of the existence of a ramin project funded by the Government of the Netherlands, there was no mention of its results by any party nor the use of the results from that project in this or any other project.

Lessons learnt from the management of Tasik Bera in a multisectoral setting that is managed by the office of the local authority, the District Office, was also not visibly considered in developing the IMP of the SEPPSF and associted areas.

3.7 STAKEHOLDER INVOLVEMENT

The wider stakeholder community has been effective identified as indicated in the Multi-Disciplinary Assessment Reports and Participatory Appraisal undertaken. The project team and core team members have recognized that conservation and sustainability is a team effort of all parties including local communities, civil society and the private sector.

Project team members have initiated a participatory approach in 'working along side and with' local communities placing great emphasis to respect of local knowledge. Building

effective rapport and winning the confidence and trust of local people has been at the part of the project teams efforts. In so doing they have been able to identify local heritage such as traditional music in Logan Bunut long house people and traditional medicinal herbal plants in Pahang.

A major threat for local community participation is the unresolved land issues. In the case of the Longan Bunut long house community which has rights to fishing they have been officially informed by the Forestry Department that the building of a long house within the Park Reserve is unacceptable. The local people claim that they have a legal standing based on their Native Customary Rights as indicated in the National Parks and Nature Reserve Ordinance, 1998. If unresolved soon, there might be local resistance to Park official impacting the sustainability of the conservation efforts. While an advocacy orientated approach might be difficult by project officials, the intervention of the state officials is urgent to resource unsettled local issues.

While there is active involvement of government agencies at the State, District and Local levels an area that requires further enhancement is with policy makers who are elected or appointed politicians. While civil servants are the implementers, the real decision makers at the State and local authority levels are politicians. They have not been effectively targeted. While Phang had the opportunity of briefing the State Exco/cabinet, more efforts are needed to brief political appointees at the District Authority level. They inpact local level decision making at the local government levels.

Private sector involvement is weak especially that of plantation owners and loggers who are interested in ensuring maximum profits. Greater efforts must be made through the office of the Ministry of Natural Resources and the Chief Minister's office to ensure close cooperation and adherence to current guidelines. Effective enforcement is necessary by the Department of Environment on this matter. However a direct confrontation approach might not serve long term interest, therefore greater efforts must be made to ensure greater awareness and understanding by the private sector of the critical issues, concerns and remedies.

3.8 PUBLIC PARTICIPATION

General level public participation can be noted with the involvement of young people whether students at the primary and secondary levels at awareness field visits or those from local universities undertaking some scientific study. The well prepared awareness materials whether by way of newsletters or booklets or even web based has drown people towards some understanding of Peat Swam Forest and its relevance to human life and future existence.

Wider visitation to project locations is limited due to inadequate infrastructure provisions. In Pahang there are no facilities to welcome visitors. There is no permanent structure at the Sungai Bebar, Pekan expectation trail. The route has not permanent guide post nor locally trained people to act as guides. While Logan Bunut has a resort sort facilities the access road from Miri is not developed. Further more the lake route and river trail has not been fully developed for the general public to be better exposed. The situation is similar at Klias where the research station at the entrance of the forest reserve is being buit.

However the possibilities opened up by this project is tremendous and with the next 12 months can see the greater active involvement of the public through direct hand on experience at the project locations. Additional request can still be made through the Ninth Malaysian Plan if the relevant Cabinet ministers can be convinced for additional infrastructure resources to enhance public involvement with the forest and its heritage.

CHAPTER 4 Recommendations

Overall Project Management

1. Stakeholder involvement on the MPCTs should be broadened to include non-governmental entitities such as NGOs, local community representatives and the private sector. Specifically, this should involve:
   a. Representatives of the oil palm estates to the west of the SEPPSF (Pahang FR) being involved in the MPCT for SEPPSF, and
   b. Local community representatives in and around Loagan Bunut NP are to be involved in the MPCT, especially representatives from Loagan Bunut, Long Teru, Mulong, Sungai Lait, Long Ajoi, Kuala Bok, and Long Maligam villages.

Output 1: Data collection, monitoring programmes & IMS

1. A baseline data collection design that is aimed at gathering biodiversity, hydrological, ecological and other data that is representative for each of the entire project areas should be developed immediately at all three sites. The data collection design should include data gathering for the monitoring of resource use within the reserve areas by local communities. At present data are not gathered systematically across the entire project area so as to be adequately representative of the area. A set of baseline data that is representative of the project area is desirable for the establishment of a comprehensive and meaningful monitoring programme.
2. More attention should be paid to the development of the IMS and the integrated database system. Subject matter specialists and potential end-users should be involved in its design from an early stage so that the system is responsive to field conditions in the project areas as well as the anticipated demand of users of the database for the management of those areas. Design of the IMS should be flexible to enable it to be adapted to potential future changes in resource and data availability.
3. A minimum number of staff who will be directly involved in the management of the area should be trained in the gathering of biodiversity, hydrological, ecological and other data. This is essential if the monitoring programme for each project area is to be run successfully. They should also be trained in the maintenance and up-date of the information management system.

Output 2: Well-formulated site management plans

1. Detailed information should be available for key management variables identified in the site management plans. Where such information is not yet available studies should be commissioned immediately to obtain the data.
2. The preparation of the site management plans should benefit from a broad range of stakeholder participation. Where stakeholder participation has been limited, a broad

stakeholder participatory workshop should be held to obtain stakeholder feedback on the management plans.

3. A well-formulated site management plan should include suggestions for efficient tracking of progress towards implementation of the recommendations of the plans. Clear achievable targets should be set with specific datelines for achievement.

Output 3: Implementation & demonstration of conservation & sustainable use

1. Verifiers (indicators of achievment) need to be formulated for the remaining project period, for forest rehabilitation and implementing hydrological solutions at Klias and SEPPSF. This should refer to targeted areas (in ha) to be rehabilitated by a certain date, and developing/implementing a concrete plan for managing water resources.
2. The Integrated Management Plans developed for all three sites need to be implemented to some degree during the remaining project period. At present there is no provision for this in Output 3, which is an oversight that needs to be corrected.
3. The formulation and implementation of specific action plans at Loagan Bunut needs to be accelerated, as the project is severely lagging behind in this area. This includes the fisheries management and ecological monitoring plans (both of which are still being drafted), and the business plan and Community Participation Plan (CPP, the drafting of both has yet to be initiated).
4. FSC/the project needs to develop a tourism plan for LBNP as soon as possible, and initiate a marketing strategy, as visitor numbers remain low, in spite of excellent facilities and training provided to local community members. State government needs to be encouraged to upgrade the road.
5. Several issues need to urgently be resolved with the local communities at LBNP, as these threaten future implemementation of the IMP and action plans, and overall LBNP management; these are:
   a. The status of Loagan Bunut village. This longhouse village was established in 2003 (following a fire in the original longhouse at Long Teru) in a dryland area a few kilometres southwest of park headquarters, well within the park boundaries. This Berawan community seems to have a legitimate claim, but this has been disputed in writing by SFC, and as a result their status remains in limbo. The village head is a strong supporter of LBNP at present, but this could well change if their access rights are not adequately addressed.
   b. The status of Long Maligam, a Penan longhouse village along the Tinjar River. These villagers have traditionally had rubber tree gardens to the east of the Tinjar River, which are now located within the park boundaries. So far this claim has not been recognised or approved by either FD or SFC and the villagers remain in uncertainty. Given the poor economic status of Maligam, this needs to be rectified as soon as possible.
6. At SEPPEF, the species/ecosystem management/protection plan needs to be devloped and implemented as soon as possible. A HCVF report has been produced, but this does not substitute for what is required. The HCVF report is very generic, while a species/ecosystem management/protection plan is highly specific and requires a detailed baseline, which at present appears to be lacking.
7. Development of the optimum harvest model by FRIM needs to be accelerated, as this should have been ready by early 2004, but trial felling has yet to be initiated.

Output 4: Inter-agency networks at state level

1. The SPSCs at Klias FR and SEPPSF need to be transformed into WMCs within the remaining two years of the project, to ensure that integrated wetland management is institutionalised in each state <this has already happened in Sarawak>. This should be actively supported by the project, but is the responsibility of the State Coordinators and Chairpersons of the SPSCs.
2. The MPCT at LBNP should be expanded as soon as possible to include more agencies than at present; MPCT composition should be more in line with what has been achieved at the other two sites.
3. The training programme for oil palm estate mangement at LBNP by NREB should receive project support in its development and initial implementation. However, this should be coupled to an enhanced enforcement programme.
4. Coordination/enforcement at high state level is required to force oil palm estates in LBNP catchment to change their *modus operandi* , in order to reduce erosion/sediment load entering the lake.

Output 5: Awareness of decision makers, communities & other stakeholders

1. There is a need to intensify awareness programmes among private sector plantation and logging companies through specific session with the owners and senior management of the companies operating at the project location. This is applicable to all three project sites.
2. Preparation of specific materials for the private sector is needed. This could focus on how the short term business goals for quick profits does damage to long term interest of the business companies. This could be coordinated by the National project office and applicable for all these project locations.
3. Specific awareness programmes for elected and appointed politicians who are in the policy formulation and decision making process at the State Assembly as well as those at the District council of the local government.
4. Current awareness material could be rewritten for those holding political office at the Federal, State and local government levels. These write-ups should be brief and not too technical but sufficient for those in policy formulation and decision making to have a clear appreciation of the issues and concerns of conservation and sustainability. This could be coordinated by the National project office and applicable for all these project locations.

Output 6: Institutional strengthening

1. Human capacity development in a more formal nature should be developed. This includes the preparation of appropriate training materials and modules on a cross section of areas for project sustainability. The attempt is to move beyond awareness raising to developing specific competencies relevant for conservation, sustainability and management is necessary.
2. An area for key skills development is on how to work effectively with differing groups in a participatory way especially for civil servants and private sector on effective management of local issues and concerns in a 'win-win formula'. Introduction of community and social development dimension is necessary with technical input of forest management. This should incorporate conflict resolution - to management conflict especially in the case of an agencies decision or action receiving negative response from local communities.
3. The organizing of formal training sessions for relevant agencies especially middle level staff in a two to five day course format is of utmost importance. At all three project site at

least 50% of staff from the core team agencies should have undergone a basic course on a relevant training area in conservation and sustainability. This is necessary to ensure that officials from within the core agencies are well trained in critical areas.

4. In addition a review of existing training programmes for forest officials such as rangers, foresters, rural community workers in Kemas, the Department of Orang Asli Affairs including agricultural officials such have a component of forest conservation and sustainability. This could be coordinated by the national office at it could require some discussions with the training sessions of relevant agencies.
5. The national office could explore the development of a competency based course in conservation and sustainable management of the environment. It could incorporate the components of forest management, fire prevention and community development. This could have a long term positive effect as young people might explore a full time career in this area.
6. For specific mention is the immediate recruitment of a training specialist for Logan Bunut and the identification of training needs. In addition there is a need for specific targeting of training workshops in Klias and introduction of training package for timber industry personal in Pekan.

CHAPTER 5 Lessons Learnt

Project management

1. The Core Team approach has worked well in terms of forging inter-agency linkages on the project, and in dealing with complex resource management issues. As a model it should therefore be promoted in other areas (projects, states). <this is scheduled to take place in 2006>
2. In retrospect, it would have been better to include a biodiversity expert on the permanent project team (e.g. the CTA or one of the NEs), as some of the delays seem to have been caused by an incomplete understanding of what was required (e.g. for biodiversity monitoring).

Project design

1. The project design has a number of weaknesses, especially related to the link between development of management plans/actions (Output 2), and the implementation of such plans and actions (Output 3). In some instances, plans are developed but not scheduled for implementation (e.g. the IMPs), in other instances, action plans have to be implemented, but there is no provision for their development (e.g. alternative livelihood strategies at Klias). Project designs should be more carefully screened (e.g. during Inception Phase) to ensure that such inconsistencies are eliminated.
2. Proper indicators of achievement (verifiers) need to be provided in order to monitor the progress of the project. They need to be verifiable and where possible also quantifiable. In the project design, minutes, reports and workshops are listed as verifiers, but this is inadequate. Better is to provide a concrete target (e.g. 1: plan developed and accepted by a certain date, or e.g. 2: XX hectare of forest rehabilitated by a certain date).

Project implementation

Effective Use of the Public Media

1. There is much potential in utilizing existing channels for awareness raising especially through targeting the media and providing them with the relevant resources in a less technical way. The global environment crisis has opened up ordinary peoples desire to know more and the interrelated nature of the world that we live in. The extensive use of the media especially when there were key feature articles with good photographs has made an impact.

2. These efforts can be further enhanced by convincing the media to have a regular column. In addition attempts could be made to get radio talk shows to undertake a series of discussions on the value of peat swam forest.

Tapping the Potential of Local Communities

1. The project has recognized the importance of local community involvement. Through the awareness programmes undertaken at the local level or in enabling local leaders to visit other project site, it has made it possible for local people to have a great involvement not only in the project but also in the future of the forest they are familiar with.
2. Approaches adopted have not been top down but participatory, enabling local people to have a voice and share in the project. This approach provides valuable lessons to other Government agencies in the approaches they should adopt in winning 'the hearts and minds' of ordinary people.
3. Working with people requires time and often agencies tend to bulldoze the project and very frequently it fails because it does not have the wholehearted support of the people. Working on a relational level has tremendous potential but at the same time people expect consultation and opportunity to interact which can slow done the project. However in the .long run it has tremendous net gains.
4. Field staff including policy makers must posses' soft skills, in addition to the technical knowledge in forest conservation and sustainability. The training programmes undertaken have set in motion an alternative approach of not only working in an inter-agency fashion but also in an integrated way.

ANNEX 1 Terms of Reference

United Nations Development Programme /
Global Environment Facility Funded Project

"Conservation and Sustainable Use of Tropical Peat Swamp Forests and Associated Wetland Ecosystems"

UNDP/GEF PROJECT MID-TERM REVIEW MAL/99/G31

1. PROJECT BACKGROUND

Tropical Peat Swamp Forests (PSFs) are the hidden backbone to our world's important ecosystems. Peat swamps support many specialised flora and fauna species which are often endemic or rare. These forests are significant for both economic and ecological reasons. High-quality timber species are selectively extracted, while local communities depend on the forest and non-forest products for food and other household needs. PSFs often fringe the intricate network of canals and rivers serving as waterways to inland areas and providing access to fishing and wildlife sanctuaries. The ecological role of these forests and their associated ecosystems as a hydrological buffer is of paramount importance to serve agricultural land.

The Government of Malaysia, with the assistance from the United Nations Development Programme and the Global Environment Facility (UNDP/GEF), is implementing a project to promote the conservation and sustainable use of these tropical PSFs. The project's primary objective is to develop and implement plans, which encourage processes to ensure the conservation and sustainable use of globally significant genetic, species, and ecosystem diversity within these forests. It will ensure the conservation and sustainable use of these forests in Sarawak, Sabah and Pahang, by demonstrating what is required in the adoption of a multi-sectoral approach to the PSF management.

The demonstration sites - the Loagan Bunut National Park (LBNP) in Sarawak, the Klias Peninsula in Sabah, and the South-East Pahang Peat Swamp Forest (SEPPSF) in Pahang – were selected based on the importance of their diverse and threatened species. The three sites also serve as representative examples of Malaysian PSFs, and collectively, they support at least 60 globally significant species of plants and animals.

The major threats to this fragile ecosystems are a) land conversion to other uses such as agricultural and industrial development projects; b) drainage, which is necessary to convert PSF to other uses such as for timber extraction, often resulting in irreversible lowering of groundwater tables and drying-out of peat substrate; c) timber extraction, contributing to the loss of biodiversity and soil compaction, leading to severe damage of the habitat, which in turn leaves little chance for regeneration; and d) hunting, contributing to the increasing rate of depletion of certain species with some facing an immediate threat of extinction.

2. PROJECT OBJECTIVES AND EXPECTED OUTPUTS

The Project's primary objective is to:

- Develop and implement plans, encourage processes which ensure conservation and sustainable use of PSF; and
- Demonstrate a multi-sectoral approach in planning sustainable PSF management at three selected project sites.

This will contribute to the implementation of both the Biodiversity Action Plan and the National Wetlands Plan by providing demonstrations of conservation and sustainable management of PSFs in Malaysia.

The Project's three immediate objectives and expected outputs are as follows:

i. Demonstrate planning for biodiversity conservation:
   - Output 1: data collection and integrated database system
   - Output 2: formulation of site management plans

ii. Demonstrate the implementation of biodiversity conservation and sustainable resource utilization strategies:
   - Output 3: conservation and sustainable use demonstrated
   - Output 4: inter-agency network at the state level

iii. Strengthen institutional and human technical capabilities and awareness:
   - Output 5 : awareness of stakeholders
   - Output 6 : strengthened institutions and personnel

The project will demonstrate the steps required in the planning for the conservation and sustainable use of the PSFs and associated wetland ecosystems. The first step includes planning of the individual protected areas as well as the integrated planning of areas that remain hydrological inter-connected to the protected areas. Outputs under the first objective will focus on information gathering, analysis and targeted research followed by the preparation of site management plans, incorporating the Danida hydrological inputs. For effective planning, detailed ecological assessments of the sites, monitoring, and appraisal programmes are required to gather the necessary data and information. The collection of demographic and socio-economic data is also crucial to the development of the evaluation indicators. Data collection by the Project and its partner,

Danida, and monitoring information management systems developed will be utilised to facilitate decision-making and management.

Having obtained sufficient information and prepared the plans, the project will focus on its implementation at each project site, which is necessary to demonstrate that biodiversity is being conserved and resources sustainably used. Therefore, activities under this second objective are aimed towards demonstrating the process of inter-sectoral coordination. Both the state and federal governments will have clear responsibility of ensuring the changes, in relation to land and water use in areas surrounding the PSF required for the conservation and sustainable use of the PSF areas, will take place. This process will be supported technically by management experts, who will facilitate the design and implement of the conservation and sustainable use plans, and awareness activities under the third objective.

Awareness of the important values of PSFs and associated wetlands is vital to ensuring their conservation. Therefore, effective and carefully targeted public awareness efforts will be undertaken, focusing on the project findings. With increased awareness and greater appreciation of the importance of conserving these forests among the public and the decision-makers, the likelihood of the survival of the PSF will be greatly enhanced. Management tools such as biodiversity overlays and technical complexities associated with PSF management will also be incorporated into the skill base of the local PSF managers. Training activities including short courses, workshops, seminars, and field visits under this objective, which focus in particular on individuals involved with the management of the project sites, will be undertaken and the skills developed will be transferable to other forest and wetland sites.

3. MID-TERM REVIEW OBJECTIVES

The purpose of the Mid-term Review is to examine the performance of the project since the beginning of its implementation. The Review will include both the evaluation of the progress in project implementation, measured against planned outputs set forth in the Project Document in accordance with rational budget allocations; and the assessment of features related the process involved in achieving those outputs, as well as the initial and potential impacts the project. The evaluation will also address the underlying causes and issues contributing to targets not adequately achieved.

The Mid-term Review is intended to identify weaknesses and strengths of the project design and to come up with recommendations for any necessary changes in the overall design and orientation of the project by evaluating the adequacy, efficiency, and effectiveness of its implementation, as well as assessing the project outputs and outcomes to date. Consequently, the Review mission is also expected to make detailed recommendations on the work plan for the remaining project period. It will

also provide an opportunity to assess early signs of the project success or failure and prompt necessary adjustments.

The Review mission will also identify lessons learnt and best practices from the Project which could be applied to future and other on-going projects.

4. SCOPE OF THE MID-TERM REVIEW

The Review will involve evaluation, both qualitative and quantitative assessments, at two levels – a) the site level and b) the overall project level.

The following shall be observed at the site level:

i. Evaluation of the project implementation in the LBNP (Sarawak), the Klias Peninsula (Sabah), and the SEPPSF (Pahang);
ii. Assessments of initial and potential impacts of the project implementation in the respective sites; and
iii. Observation on the integration process and inputs received from the relevant co-projects supported by other donors in particular Danida (Sabah and Pahang).

At the overall project level, the following shall be observed:

i. Assessments of planned activities against achievement of outputs, work in progress, as well as the processes involved in the implementation with reference to the Project Document, Project Inception Report, and the budget;
ii. Assessments of the effectiveness of communication and coordination among the different project sites and the Project Support Unit, as well as the project and the implementing agencies at the national & state levels to ensure cross-site interactions, and sharing of information, relevant issues, lessons learnt, best practices and outputs;
iii. Assessments of preliminary and potential impacts generated by the project;
iv. Adequacy of the project design, i.e., whether it allows flexibility in responding to internal and external changes of the project environment;
v. Assessment of implementation difficulties, i.e. whether unexpected constraints and obstacles identified were adequately dealt with, the approaches taken and solutions considered; and
vi. Strengths and weaknesses of the existing project organisational structure and management arrangements.

5. DETAILS OF THE REVIEW ASSIGNMENT

The Review will be conducted in line with UNDP/GEF Monitoring and Evaluation policies and procedures aiming to monitor and evaluate results and impacts, to provide basis for decision-making on necessary

amendments and improvements, to promote accountability in resource use, as well as to document, provide feedback and disseminate lessons learnt.

The Review Mission will cover in full the following assignments:

a. Project Design and Relevance:

- To assess the relevance of the Project Objectives and strategies in promoting / demonstrating the conservation of biodiversity in Malaysia, within the context of the sustainable development concept adopted by the country;
- To assess whether the overall design of the Project and the coherence of its three immediate objectives, planned activities, and the six expected main outputs, as well as provision for inputs are clear, logical and commensurate with the time and resources available;
- To assess the relevance of the adopted approaches in relation to meeting the Project Objectives and the extent to which the underlying assumptions remain valid.

b. Project Implementation, Progress, Effectiveness and Efficiency:

- To assess the project achievements and progress being made in each of the expected main outputs and their contribution towards the Project Objectives and intended situation defined in the Project Document;
- To analyse key challenges that have emerged in the course of implementation in meeting the Project Objectives and the likely implications to the delivery of particular outputs;
- To assess the overall institutional arrangements and organisational structure for the project implementation and the effectiveness of the project management in coordinating project work and exchanging information among the key stakeholders and similar initiatives in the country/region;
- To determine the ability of the Project as a whole to achieve its goals and in this view to recommend changes if necessary for future implementation;
- To analyse the adequacy of the project monitoring and evaluation indicators retro-fitted by the Project and the effectiveness of this approach as a tool in project monitoring;
- To describe and assess UNDP's efforts in supporting the project implementation;
- To review the execution arrangements and the appropriateness of the funding administration by the executing agency, and implementing bodies including FRIM, relevant state agencies, local authorities and the Danida Component in contributing to the effectiveness of project implementation; and
- To suggest means of improving the effectiveness of the working relationships and cooperation between and among key government stakeholders.

c. Project Impacts:

- To assess the initial and potential impacts thus far, enumerating positive influences resulted from the project implementation in terms of awareness of biodiversity conservation, inter-sectoral coordination, resources planning, decision-making process and attempts to reduce threats to the PSF and associated wetland ecosystems; and
- To determine the long-term project impacts on the sustainable forest management and wise use of biodiversity resources.

d. Project Sustainability:

- To assess the project ownership, attempts made to address this and recommend changes required to improve this;
- To asses the sustainability of the policies or strategies adopted by the Project;
- To assess whether the local institutional structures and enhanced capacity could be sustained the beyond the project lifespan; and
- To comment on the project's contribution to the country's sustainable development and its implementation of the Ramsar Convention and Convention on Biological Diversity.

6. REVIEW METHODOLOGY

The Mid-term Review will be conducted in a participatory manner working on the basis that its essential objective is to assess the project implementation and impacts in order to provide basis for improvement in the implementation and other decisions.

The Mission will start with a desk review of project documentation including but not limited to the Project Document, Project Inception Report, Minutes of all Steering Committee meetings including other relevant meetings, Project Implementation Report (PIR/APR), Project Status Reports, Quarterly Operational Reports, and other internal documents such as the consultant and financial reports as well as the project correspondences.

The exercise will include field visits to the project sites, interviews (by phone if necessary) with key individuals both within the project, the federal and state government offices, donor representatives, other key stakeholders, as well as implementing agency personnel including the National Project Director, the Chief Technical Advisor and the three National Experts. The Review Mission is also expected to view on-going activities first-hand and to meet consultants, local leaders, and local government officials. Among others, the Review team will participate in a stakeholder workshop to be organised by UNDP/GEF by the end of July 2005.

7. REVIEW TEAM

The Review Mission will consist of an independent international consultant specialising in natural resources management, and two national experts in biodiversity conservation and social/socio-economy. The international consultant will be designated as the team leader who will have the overall responsibility of organising and completing the review, and submitting the final report. All the consultants will review the relevant documents for a few days at their respective stations before carrying out field visits and meeting the stakeholders.

a. Qualifications of the Natural Resources Management Specialist (Team Leader):

- International/regional consultant with academic and/or professional background in natural resources management and extensive experience in wetland conservation and sustainable use. A minimum of 18 years' relevant experience is required.
- Significant experience in reviewing similar technical assistance projects, preferably those involving UNDP/GEF or other United Nations development agencies and major donors.
- Excellent English writing and communication skills. Demonstrated ability to assess complex situations in order to succinctly and clearly distill critical issues and draw forward-looking conclusions.
- An ability to assess the institutional capacity and incentives required.
- Understanding of political, economic and institutional issues associated with sustainable forestry management, as well as good environmental governance within tropical countries particularly in the context of Malaysia's development.
- Experience in leading multi-disciplinary and multi-national teams to deliver quality products in high stress and short deadline situations.
- Excellent in human relations, coordination, planning and team work.

b. Qualifications of the Biodiversity Conservation Specialist:

- National consultant with academic and professional background in protected areas and forest management, and extensive experience in biodiversity conservation and an understanding of the landscape ecology approach.
- A minimum of 15 years' relevant working experience is required.
- Experience in implementation of technical assistance projects.
- Skills in biodiversity assessment techniques.
- Knowledge and experience in terrestrial ecosystem planning.
- Experience and skills in biological diversity monitoring and information systems.
- Excellent English writing and communication skills.
- Excellent in human relations, coordination, planning and team work.

c. Qualifications of the Social/Socio-economic Specialist:

- National consultant with academic and professional background in social science or socio-economic studies, and extensive experience in dealing with issues of the livelihoods of local communities.
- Experience in implementation of technical assistance projects.
- A minimum of 15 years' relevant working experience is required.
- Skills in social survey techniques.
- Knowledge and experience in local community development.
- Excellent English writing and communication skills.
- Excellent in human relations, coordination, planning and team work

8. PROPOSED SCHEDULE

The Review will take place in July 2005 and it requires 4-day desk review, 12-day field visit to the three project sites and the Project Support Unit, another 3 days for consultations with various stakeholders. The draft Final Report should be submitted to UNDP/GEF for circulation to relevant agencies within 3 weeks after the completion of the review. The Review Team Leader will finalise the report within 2 weeks upon receiving comments and feedbacks from stakeholders compiled by UNDP/GEF. Detailed schedule will be prepared in due time by UNDP/GEF in consultation with the Executing and Implementing Agencies, and the Review Team.

9. DELIVERABLES

The Review Mission will produce the following deliverables to UNDP/GEF, the Ministry of Natural Resource and Environment and the project management:

- Review results, workshop outputs, and minutes of meetings with stakeholders;
- A proposal of revised impact indicators for the project, if necessary; and
- A detailed final Mid-term Review Report in accordance with the UNDP/GEF format of evaluation.

The final Mid-term Review Report (no more than 30 pages, excluding the Executive Summary and Annexes) should be in accordance with following the outlines:

(i) Acronyms and Terms

(ii) Executive Summary (no more than 4 pages)
The Executive Summary should briefly explain how the evaluation was conducted and provide the summary of contents of the report and its findings.

(iii) Project Concept and Design Summary
This section should begin with the context of the problems that the project is addressing. It should describe how effectively the project concept and design can deal with the situation.

(iv) Project Results
Progress towards attaining the project's regional and global environmental objectives, and achieving the project outcomes. It should also try to answer the question: What has happened and why? The performance indicators in the logframe matrix are crucial to completing this section.

(v) Project Management
This section covers the assessment of the project's adaptive management, partnerships, involvement of stakeholders, public participation, roles and responsibilities, monitoring plans, assistance from UNDP and IMO , etc.

(vi) Recommendations
Here, the evaluators should be as specific as possible. To whom are the recommendations addressed and what exactly should that party do? Recommendations might include sets of options and alternatives.

(vii) Lessons Learnt
This is a list of lessons that may be useful to other projects.

List of Annexes (Terms of Reference, Itinerary, Persons Interviewed)

10. ESTIMATED COSTS

The total cost for the Review Mission is estimated at USD 38,000, which includes consultant fees, their daily subsistence allowances, as well as international and domestic air fares.

ANNEX 2 Itinerary

Date	Itinerary	Notes
16 Sept. (Fri).	TL travels from the Netherlands to Malaysia	KL809, leaving AMS at 20:50
17 Sept. (Sat.)	Arrival of TL in Kuala Lumpur	Arrive at 14:45
18 Sept (Sun.)	Day off in KL	
19 Sept. (Mon.)	Briefing at UNDP; meeting of other team members; briefing at FRIM; meeting at Wetlands International–Malaysia	Briefing at UNDP by Hari Ramalu Ragavan; briefing at FRIM by Dr. Efransyah, project CTA, and Dr. Abdul Rahim Nik, National Project Director; meeting at WI with Dr. Sundari Ramakrishna, head of WI office.
20 Sept. (Tues.)	Meeting at Min. NRE; meeting at FRIM with socio-economics specialist, afternoon meeting with reps of Danida co-financed project; late afternoon flight to Kuantan.	NRE meeting with Dr. Puan Aziyah Mohammed, undersecretary and Director Forestry Development Division; FRIM meeting with Dr. Shahwahid (UPM) and Efransyah; Danida meeting with Soren Kristoffersen & Lily Hor. Stay at Vistana Hotel.
21 Sept. (Wed.)	Early morning meeting with Directors of State Economic Planning Unit and Forestry Department at UPEN office; briefing at project office at FD; meeting with core team members.	Directors SEPU: Dato' Abdul Rahman and Dato' Moktar; Vice Director of FD: Tuan Haji Zainudin; briefing at FD by NE Dr Khali Aziz Hamzah and Tuan Haji Zainudin; introduction to core team and IMP process by Mr. Kishokumar.
22 Sept. (Thur.)	Field trip: morning to Sg Bebar, in SEPPSF; lunch and afternoon discussion with members of Orang Asli village Kampung Simpai; later afternnon visit to Heritage Garden Project.	Sg. Bebar was the focus of the recent surveys by 40+ scientists, students and volunteers, resulting in 2 publications: a book of abstracts and one with brief papers. The HGP is to be funded by UNDP-EU per 1 Jan. 2006.
23 Sept. (Fri.)	Leave for Kuantan airport at 06:00; depart for KLIA at 07:00; depart for Kota Kinabalu at 09:30; arrive in KK at 12:40. Meet with Core Team and receive brief intro to subproject; meeting with Chair of SPSC from 15:00 – 16:30; continue meeting with Core Team until 18:30.	Chair of SPSC is Dato' Abdul Rahim Sidek; briefing by NE Rashid Abdul Samad; Core Team meeting at Hotel Pacific Sutera Harbour, where the MTR team is also staying.
24 Sept. (Sat.)	Field trip: morning (08:00) from KK to Klias Forest Reserve; visit newly completed Klias Base Camp (Forestry Department R&D centre), PSF replanting area; primary PSF; oil palm & pineapple plantation; afternoon: attend village core consultation group meeting in Kampung Suasa; visit burnt areas and rubber plantation in SW Klias.	Klias Base Camp is to serve for R&D, but also (in future) for eduication and awareness; better name would be Klias PSF Centre; meeting in Suasa also attended by villagers from Pulaimanang and Bukau. Arrive back in KK at 20:30.

25 Sept. (Sun.)	Spend morning writing report; check out at 13:00; late afterrnoon (16:05) flight to Sandakan.	Stay at Sabah Hotel, Sandakan.
26 Sept. (Mon.)	Morning meeting with the Local Coordinator/Counterpart from the Forestry Office in Sandakan; visit to Sipolok Forestry Research Centre and Orangutan Rehabilitation Centre; flight to Kota Kinabalu at 17:25; connecting flight to Kuching in KK, arrive Kuching at 21:00.	Dr. Fred Kugan is the Local coordinator from FD. Stay at Holiday Inn in Kuching.
27 Sept. (Tues.)	Morning meeting at Wisma Sumber Alam with SFC , the project NE, IMP coordinator and the vegetation expert. Lunch with Datuk Chong Ek Choon, head of Sarawak Forestry Department and the SFC. Afternoon meeting with State Planning Unit, followed by meeting with NREB. Dinner with NE and CT members at Holiday Inn.	SFC officials met: Haji Sapuan Ahmad (State Coordinator), Wilfred Landong (General Manager), Dick Cotter (Deputy Gen. Mgr.), Lim Chan Koon (Senior Manager Planning), Jack Liam (Chief Local Counterpart); Project NE is Alexander Sayok; IMP coordinator is Tungku Nazim; vegetation expert is Paul Chai. Met with Chong Ted Tsiung, Controller of Env. Quality, NREB Sarawak, plus several staff members.
28 Sept. (Wed.)	Morning flight (10:20) to Miri; lunch in Miri, then by road to Loagan Bunut NP headquarters. Join the Fisheries Management Committee meeting at NP headquarters. Presentation on awareness activities at LBNP by Annee (project staff).	Road journey is about 2.5 hours; section from Bakong to NP is unpaved. Cultural dances and music in evening.
29 Sept. (Thur.)	Breakfast at Loagan Bunut (Berawan) village; boat journey across lake to hydrological trail leading into PSF; by boat along Sg. Loagan Bunut, Sg. Teru, and back via the Sg. Batang Tinjar. Visit longhouse villages along the way: Long Teru, Awing, Long Ajoi (all Iban) and Long Maligam (Penan).	Met with local community members at all the longhouse villages; discussed basic issues with the village heads. Main issues are general resource access & staying rights at Loagan Bunut village, and access rights to rubber trees for villagers from Maligam.
30 Sept. (Fri.)	Visit Loagan Bunut (oil palm) Estate east of LBNP; visit the area being cleared and planted by Yayasan Melaka Incosetia. Travel by road back to Miri (stop 1 hour at Lambir Hills NP along the way); late afternoon flight (15:50) to Kuala Lumpur; arrive in KL at 18:00.	Met with deputy manager of the LB Estate. Enhanced erosion does not appear to be a major issue in the now well established (7 yr old) LBE, nor in the clear-felled areas, which are now thickly covered with secondary scrub. Erosion is a main problem in the Incosetia area, where oil palm is being planted on steep, erosive slopes that at cleared and landscaped prior to planting.
1 Oct. (Sat.)	Work on report at the UNDP office in Wisma UN, Jalan Dungan, Damasara.	

ANNEX 3 Persons interviewed

ANNEX 4 Overview of project results

PROJECT RESULTS TABLE

No.	Activity	Status & contribution to achieving outcome/performance indicator	Initial & potential impacts	Delivery rate*
1	Data collection & setting up of a monitoring programme & IMS to facilitate management and decision-making			
1.1	Loagan Bunut NP			
1.1.1	Conduct habitat/species distribution surveys (& MDA)	General landscape level evaluations have been completed. Initial habitat and species surveys and mapping conducted. Baseline data have been collected and documented through MDA activities; some studies on specific species are being undertaken; continuous study of water quality instituted; bird ringing on-going; fishery catch monitored; Detailed ecological assessment not yet undertaken; ideas of indicator bird species being explored. Sample plots for biodiversity monitoring have not been established.	Potential impact are related in the publication and distribution of materials relating to the unique features of peat swamp forest flora, fauna and ecosystem functions. The publication of these materials are still being awaited.	Delayed
1.1.2	Assess hydrological regime	Hydrology of LB has been assessed and water quality parameters are being monitored. A hydrological monitoring programme has yet to be developed; continuous monitoring equipment have been installed and manuals have been written to enable local staff to run the monitoring programme; water budget determined. However it is still not possible to identify the source of sedimentation in the lake although newly opened oil palm plantation areas can be a major source of such sediments.	Drew attention to the plantations around LB as a major source of sedimentt entering the lake. Closer monitoring of land coversion into oil palm estates in future would be a desirable condition.	Delayed

1.1.3	Design ecological monitoring programme	Hydrological, vegetation, ornithological and herpetofaunal evaluations are being undertaken with a view to providing the baseline for monitoring. The ecological monitoring programme	Better understanding of the interrelationships between the different components of the ecosystem including hydrological changes.	Delayed
1.1.4	Conduct local community PRAs	Local community PRA; participation plan have yet to be produced but local communities are already involved in the management of the park. There is a Special Park Committee (Gazetted in the Ordinance) and all 7 local community leaders are in the Committee.	Recognition of the rights of local communities and their livelihood options.	Delayed
1.1.5	Develop & implement M&E indicators	This has not been developed. A firmer idea of potential indicators is expected to emerge by year end (2005)	Required for long-term sustainability of the project.	Delayed
1.2	Klias			
1.2.1	Conduct ecological assessment (including MDAs)	Comprehensive assessment of the Klias FR and associiated areas have been concluded. Key activities include vegetation/flora and faunal surveys, vegetation mapping, demographic profile, connservation plan have been completed. Much data has been collected and the IMS is being developed. The IMP will follow the IMS preparations.	Impacts the production of the IMP.	On time
1.2.2	Design ecological monitoring programme	This has been designed and permanent monitoring plots will soon be established. Monitoring is crucial to biodiversity conservation and sustainable use of resources. Monitoring activities will also discourage illegal entry into forest reserve areas.	Enables progress of forest recovery to be monitored. Monitoring activities will also discourage illegal entry into forest reserve areas.	Slight delay

1.2.3	Conduct hydrological assessment	Danida conducted the hydrological assessment of the northern end of the Klias FR and prepared water management strategy report in July 2004. These suggestions have been incorporated into the Klias Conservation Plan prepared in August 2005.	Contributes to the preparation of the IMP for the area.	On time
1.2.4	Collect land-use information	This has been collected and integrated with the land-use information of the entire Klias Peninsula (225,800 ha). This information is vital for the preparation of the IMP.	This has contributed to integrated planning at the district level.	On time
1.2.5	Collect demographic and socio-economic information	These data have been collected by consultants assigned to the tasks The information is vital to the preparation of the IMP for Klias FR. Valuation of PSF resources will be determined.	Used in preparing policy analysis in the PSF General Series publication No. 1	On time
1.2.6	Develop & implement M&E indicators	Information useful for the M&E Indicators have been reviewed. Monitoring and evaluation framework are being developed for the Klias FR. Some patches of high diversity areas have been identified.	Essential for long-term sustainability of the area.	Delayed

1.3	Pahang			
1.3.1	Conduct ecological assessment (including MDAs)	Ten major data gathering activities have been conducted. Further surveys of mammals, herpetofauna, ornamental and medicinal plants and habitat mapping are upcoming activities. The multidisciplinary assessment (MDA) of the SEPPSF Project area has provided assessments of threats to the area, plans for zonation of proposed conservation areas, an interim action plan, assessment of knowledge gaps, recommendations for further research and proposed site monitoring regime. Work to develop the IMS is progressing. Base maps have been updated and the development of a GIS database have been completed.	Provides some data for database development. Base maps have been updated and the development of a GIS database have been completed.	On time
1.3.2	Design ecological monitoring programme	Base maps have been prepared and the composition of a proposed VJR for monitoring has been determined. An overall ecological monitoring programme has yet to be conceived	Influences the preparation of the IMP.	Delayed
1.3.3	Conduct hydrological assessment	Danida hydrological study ressults were finalised in early 2005. Water quality studies of Sg Bebar and Sg Merchong have been completetd. Understanding the hydrology of the area is critical to the preparation of the management plan for the SEPPSF areas.	Impacts on the design of core and buffer zones of the SEPPSF and associated areas.	On time

1.3.4	Conduct timber resource assessment	Timber resources have been assessed by the Danida project for the Pekan FR. Timber assessments in the Nenasi, Resak and Kedondong FR are being undertaken. The information is critical for the development of the IMP for SEPPSF because it has areas of the PFE that are under Production Forest. A sustainable management plan needs to be developed.	Crucial for the long-term sustainability of the area.	On time
1.3.5	Conduct local community PRAs	Detailed studies that contribute to the PRA have been completed. PRA report prepared.	Conceived the herbal garden as an alternative livelihoods project.	On time
1.3.6	Develop & implement M&E indicators	This has not been developed . A full monitoring programme will need discussion with the project core group, field testing and refinement.	Crucial for long-term management of the area	Delayed

* Delivery rate: Delayed or On time, relative to implementation schedule provided in the Inception Report.

No.	Activity	Status & contribution to achieving outcome/performance indicator	Initial & potential impacts	Delivery rate*
2	Well-formulated site management plans, addressing issues such as biodiversity, physical functions & sustainable use			
2.1	Loagan Bunut			
2.1.1	Determine zonation	Information from multiple sectors for the zonation has been gathered. Zonation maps are being prepared. Although Initial ideas of zones are avaiable these will need to be further examined in detail. Final zonation will be determined with the preparation of the IMP prepared.	The alarming rate of sedimentation in LB has been highlighted and the NREB has been directed to get plantations in the catchment areas to undertake appropriate mitigating measures.	Delayed
2.1.2	Develop action plans	A Draft Management Plan has been prepared. Interim action plans prepared for the MDA are being refined in the preparation of the IMP.	Will potentially determine the priorities for local communities	Delayed
2.1.3	Develop community participation plan	Participatory appraisal report completed in March 2005. Fishery Task Force established. Recommendations of the Plan will be incorporated into the IMP.	Impacts on planned activities of local communities.	Delayed
2.1.4	Develop alternative livelihood options	Yet to be undertaken but discussions involving other agencies (e.g. MPOB) have been held. Help provided on continual basis e.g for handicrafts, tourism guides and boat operations ; no single comprehensive document available or prepared. Critical to restoring the ecological system.	Plays a part in reducing the dependence of local communities on nature and natural resources.	Delayed
2.1.5	Develop comprehensive management plan	The IMP is being developed based on the information already generated by consultants and other reports. Will be prepared with IMP.	Critical for sustainable management of the LBNP.	Delayed

2.2	Klias			
2.2.1	Formulate action plans	An advanced draft of the IMP for the Klias Forest Reserve has been prepared. The IMP, the Klias Ecosystem Protection plan, and Biodiversity Conservation Master Plan are being prepared.	Elements of the Klias FR IMP is anticipated to be incorporated into the larger Klias Peninsula Land-use Plan. There is the potential to expand the original project area so as to include the riverine and mangrove habitats of the Nabahan FR, the Kg Hundian FR and the Bukau Api-api land mosaic.	Slight delay
2.2.2	Prepare Integrated Management Plan	Klias Conservation Plan completed. The conservation plan is a significant part of the IMP.	Has led to the proposal to enlarge the Klias FR to include adjacent wetland systems.	Slight delay
2.2.3	Create biodiversity overlays	No biodiversity map overlays have been prepared. Biodiversity information has been incorporated into the preparation of the site conservation plans of the IMP.	Essential for management planning	Delayed
2.2.4	Formulate water management strategies	A water resources management strategy report has been prepared under the Danida component of the Project. The findings are being incorporated into the IMP. Additional work by DID would be needed for detailed measures to be designed to raise the level of water and reduce fire hazard from dried peat soil.	Reduce fire hazard in the forest reserve and surrounding areas.	On time
2.2.5	Implement public participation & feedback structure	The public participation and feedback structure has been implemented in three villages around the Klias Peninsula forest reserve.	Enables programming of awareness programmes.	On time

2.3	Pahang			
2.3.1	Determine zonation	An early draft of the IMP for the SEPPSF has been prepared. Preliminary external zones for management has been identified and preliminary maps of the habitat mosaics within te SEPPSF has been produced. These are confined to the Pekan Forest Reserve only and further work is needed to extend the zones to the other FRs. The environmentally sensitive area classification will be adopted for the SEPPSF gazetted FR.	There has been several interactions of the Project with high-level state government officials and members of the State Executive Council including the Chief Minister.	Delayed
2.3.2	Prepare biodiversity overlays	Some biodiversity information has been generated and mentioned in reports and publications (birds, . Floristic diversity is high and 221 out of 238 species of peat swamp forest plans have been recorded. Faunal diversity surveys does not appear to have been systematic.	Area-wide biodiversity information is critical for the prepapration of a comrehensive IMP.	Delayed
2.3.3	Formulate strategies for conservation	Strategies for conservation per se has not been developed.	Essential for long-term sustainability of the area as a peat swamp forest conservation area.	Delayed
2.3.4	Formulate Forestry Action Plan	A forestry action plan was prepared by the Danida component of the project. This information is being supplemented with information from research conducted by the FRIM team as well as with information from work undertaken by the Forestry Department Pahang.	Essential to ensure sustainable use of the area as a production forest.	On time
2.3.5	Prepare Integrated Management Plan	This is being prepared and 10 Management Plan Core Team consultations have been held.	Essential for long-term management of the area.	On time

* Delivery rate: Delayed or On time, relative to implementation schedule provided in the Inception Report.

No.	Activity	Status & contribution to achieving outcome/performance indicator	Initial & potential impacts	Delivery rate*
3	Implementation & demonstration of conservation & sustainable use of PSF ecosystem resources & functions			
3.1	Loagan Bunut			
3.1.1	Establish management presence	LBNP facilities & SFC mgt. presence well established in area. SPC and FMC, along with IMP development by CT. SFC re-organisation has reduced mgt presence in area, and reduced operational budget. Park mgt. & local communities cooperate well at present.	SPC and FMC are already having impacts, e.g. on fisheries mgt. Ultimately, the project is likely to achieve significant results in terms of resource management. This will hinge on success of SFC in maintaining adequate staff presence, and providing sufficient budget	On time
3.1.2	Implement specific action plans	IMP still being drafted. Some steps have been undertaken regarding pollution & sedimentation issues (e.g. with NREB, addressing oil palm estate compliance with EIA). Fisheries mgt regulations need to be implemented. No ecological monitoring reports have been produced (although some monitoring – e.g. of birds – is occurring along the biodiversity trail), nor is there a business plan for the area.	Little impact so far, but the fisheries mgt approach is promising in terms of impact on communal mgt. Sediment load is still high and is likely to remain so during further expansion of oil palm plantations. Ecological monitoring programme has yet to be designed, and impacts during remaining project period are likely to be negligible.	Significant delays
3.1.3	Develop ecotourism infrastructure	Eco-tourism infrastructure (hostel, chalet, interpretation boards, trails, lookout) developed and operational. Performance indicator met, but does not relate to actual impact of ecotourism (e.g. visitor numbers).	To date, and average of 50 visitors per month, which is low. No real increase, as the area is not being marketed; competes with Mulu and Niah, which are well established and have more to offer. Need to focus on unique aspects (cultural + PSF).	On time
3.1.4	Develop park interpretation	Park interpretation developed in LBNP headquarters (posters, maps, information boards), but so far no handouts or booklets for visitors as they are being developed under SFC.	Some impact, but given the low number of visitors, the overall impact is low. If numbers pick up, this could change, but this is not anticipated in the near future.	On time

3.1.5	Implement community participation plan	A Community Participation Plan has not been developed, although community participation is occurring at various leveles and is included in the SPC and FMC. Villagers have been trained as guides and boatmen, for example. It is not included in the IMP.	Impacts under project are likely to be small, as according to schedule in Inception Report, the draft plan is to be formulated and tested over a period of two years prior to finalisation, which is all the time that remains at present.	Significant delay
3.2	Klias			
3.2.1	Implement species/ecosystem management & protection plan	Plans have been established for monitoring of habitats and species, and is being implemented to some degree (e.g. vegetation plots along transect lines). No monitoring reports produced to date, but these are not expected until late 2005.	Impact is hard to assess, as monitoring results need to be translated into management actions in order to take effect. Potentially it could serve to modify water levels so that a compromise is reached between oil palm plantation owners and Klias FR management.	On time
3.2.2	Develop biodiversity conservation master plan	The (Biodiversity) Conservation Plan has been completed (August 2005), although furhter revisions are likely. Implementation would have been a better target/verifier of achievement.	Issues have actively been discussed and agreed upon by all government agencies included in the Project Core Team. The plan will be embedded in a regional development plan for the entire Klias Peninsula, as is being developed under auspices of the Chief Minister's Department.	On time
3.2.3	Support forest rehabilitation	Trial planting of PSF species carried out in 2004 at the R&D field station site. Contributes to performance indicator, but this is not very specific.	At present the scale is very small (only a few hectares), and it is too early to assess the results (mortality may increase if a drought arises, for example).	On time
3.2.4	Implement hydrological solutions	Incorporated into Conservation Plan, but not yet being implemented. Planned dam on main canal, not yet implemented. Hydrological monitoring ongoing.	No impact yet, but likely to be a key factor in maintaining the PSF, both for preventing tree fall and mortality, and for preventing fires.	Delayed

3.2.5	Implement alternative livelihood strategies	Initial study carried out late 2004, but this does not involve implementation of the strategy. Inconsistency in Logframe, as the activity consists only of identifying alternatives, not implementing them. Ecotourism trails being established.	Few impacts so far, but potentially a reasonable impact if strategies are incorporated into the regional plan, or are taken on board at the local level (e.g. focused on ecotourism).	Delayed
3.3	Pahang			
3.3.1	Simulation model for optimum harvesting	Pre-felling inventories conducted, and meetings held. This is a start, but still a long way from providing a model.	So far logging trials have not been carried out, and it remains to be seen if the results can be modelled by the end of the project. However, FRIM is likely to continue beyond the life of the project, so a model is likely to eventually be produced.	Significant delay
3.3.2	Implement species/ecosystem management & protection plan	An HCVF assessment has been carried out, and areas/species with a high conservation value have been identified and incorporated into a HCVF report. However, a species baseline needs to be finalised, and monitoring carried out. Internal zonation plan still being developed. No protection plan for endemic species.	The HCVF assessment is a requirement for FSC accreditation, but does not constitute a biodiversity protection plan, as was originally foreseen in the project proposal.	Delayed
3.3.3	Conduct forest rehabilitation	Trial rehabilitation planting was carried out by FRIM, with Danida cooperation, in 2004.	This seems a piecemeal approach, as FRIM's attention is now on trial felling for the optimum harvesting model. The impact is likely to be small, as it seems to be receiving little attention.	On time
3.3.4	Implement hydrological solutions	Trial canal blocking was carried out under the Danida project in 2004; results indicate that this is feasible for small roadside canals, but prohibitably expensive for the larger log extraction canals. As such, a solution for managing the latter is not yet provided.	Results indicate that blocking of large canals in expensive, so either the result will be small (no blocking of extraction canals), or in combination with the FRIM model, it may result in a ban on canal construction for log extraction, and have a significant impact.	On time

* Delivery rate: Delayed or On time, relative to implementation schedule provided in the Inception Report.

No.	Activity	Status & contribution to achieving outcome/performance indicator	Initial & potential impacts	Delivery rate*
4	Inter-agency networks at State level to integrate biodiversity overlays into development planning on peatlands			
4.1	Loagan Bunut			
4.1.1	Coordinated enforcement	The WMC has met several times to discuss issues at LBNP; a Special Park Committee has been established at LBNP. Meetings alone cannot solve the issues, but NREB's response to the siltation issue is a positive start. The Core Team producing the IMP is small, and includes FD and FSC staff, along with NREB; other sectoral agencies do not appear to be involved. As a result, inter-agency linkages are not as strong as in the other project sites.	Initial impacts have been modest: NREB has addressed siltation issues with the oil palm estates, but whether this is effective needs to be seen.	On time
4.1.2	Coordinated alternative livelihood options	Local community members have received training as boatsmen for ecotourism, and in producing handicrafts. These initiatives have been coordinated at state level. Incorporating these into regional development planning and business planning would have been a better solution.	Impacts are modest, as tourist numbers have remained disappointingly low (average 50/month). This is unlikely to change in the near future, but may improve in the medium term, once a business plan is made and SFC begins to promote LBNP.	On time

4.1.3	Mitigate potential impacts of development	A modest start has been made regarding mitigation of the sedimentation problem (NREB has reprimanded the company involved). Changes in modus operandi for oil palm estate development have yet to be made operational.	A small impact to date, but this may be more significant once the training programme for oil palm estates is launched. Elevated Pb issue not addressed to date.	Some delays
4.2	Klias			
4.2.1	Establish & support operations of SSC/WMC	The SSC has been established and has convened regularly to discuss issues at Klias FR and in the Klias Peninsula in general. This does not yet constitute a WMC, but this may become one in the future. The SSC appears to be effective in coordinating issues at Klias FR.	Wetland issues in the greater Klias region (the peninsula) have already been discussed by the SSC, so in terms of coordination it seems to be working well.	On time
4.2.2	Ensure institutional linkages	At state level institutional linkages are firmly established by means of both the SSC and the MPCT. In addition, workshops and technical meetings at state level have strengthened linkages. Indicators (verifiers) have been achieved.	As under 4.2.1.	On time
4.3	Pahang			
4.3.1	Establish & support operations of SSC/WMC	A multi-agency SSC has been established and convened regularly to discuss Pahang FR and the issues. In addition there have been regular technical meetings. The SSC does not yet constitute a WMC, but it in fact already functions as one, as it is the same group that deals with issues at Tasek Bera (Malaysia's first Ramsar site/wetland of international importance).	Pahang already had an institutional precursor for the WMS/SSC, as such a body has been operational for Tasek Bera. As such, it is already effective in addressing issues.	On time

* Delivery rate: Delayed or On time, relative to implementation schedule provided in the Inception Report.

No.	Activity	Status & contribution to achieving outcome/performance indicator	Initial & potential impacts	Delivery rate*
5	Decision-makers, communities & other stakeholders better aware of the importance of conserving peat swamp forests & associated wetland ecosystems			
5.1	Loagan Bunut			
5.1.1	Design & implement awareness campaigns	14 sub activities carried out. TV3 and media coverage including local community awareness has been the key highlights.All local communities residing within the park and surrounding long houses have been reached. Visitors to Longan Bunut park remains low due to poor road way. However, facilities available has attracted both locals and people from Miri.	The materials prepared and activities carried out has created awareness among local communities and relevant agencies putting into motion commitment and cooperation for conservation and sustainability. Awareness among plantation owners and management has been weak. Therefore there might not be any change in their attitude towards conservation.	On time Delayed
5.1.2	Conduct seminars	2 sub activities are listed. However project document indicates seminars for high level decision makers. Therefore activity lacks specific targeting and programme developed intended for this purpose.	Current activities will make little effect unless this activity sets the right targets	Delayed
5.2	Klias			
5.2.1	Design & implement awareness campaigns	4 key sub activities cited. Awareness materials produced including the development of an 'Environment Education Programme' targeting local communities.	Initial work has begun, however inadequate number of local awareness activities to make sufficient impact for change especially among private sector players.	Delayed

5.3	Pahang			
5.3.1	Design & implement awareness campaigns	Extensive development of awareness materials and programmes on the ground. 14 sub activities have been cited.Outstanding is the outreach to local communities through multiple workshops.	Impact on the relevant agencies and local communities will be long lasting towards conservation and sustainable use.	On time
5.3.2	Conduct joint seminars with Danida on Sustainable Forestry Practices	While seminars have been conducted, it did not target the intended target group (potential logging contractors)	Specific targeting of logging contractors is imperative to overcome real threat to conservation and sustainable use.	Delayed
5.4	National			
5.4.1	Implement awareness raising activities	An outstanding list of initiatives through a multiplicity of activates. 28 sub activities are listed. Significant are awareness materials produced, website launch and development including support to the 3 project teams with national level media coverage.	National level awareness leading to cross sectional support for PSF conservation is necessary.	On time

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No.	Activity	Status & contribution to achieving outcome/performance indicator	Initial & potential impacts	Delivery rate*
6	Strengthened institutional & human capacities to conserve & sustainably manage biological diversity in peat swamp forests and associated wetland ecosystems			
6.1	Loagan Bunut			
6.1.1	Conduct training needs assessment	Has not been undertaken as a training specialist has not been identified.	Negative impact on the project as the remaining time period might be adequate to undertake analysis, development of the materials and test it.	Significant delay
6.1.2	Organise workshops & training programmes for decision makers	3 sub activities have been carried out. The study tour undertaken by local leaders would be significant.	While some implementing staff have been targeted, however the activity has not targeted decision makers nor other levels in more in-depth training sessions.	Delayed
6.2	Klias			
6.2.1	Conduct training needs assessment	Training needs analysis has been undertaken for all levels however training modules have not been completed. Significant is the development of district level official and local community leaders. This has positive effects.	Capacity building is essential and it is necessary to move beyond awareness levels to ensure sustainability of interest of stakeholders	Delayed
6.2.2	Implement workshops & training programmes	With the exception of fellowship grants no workshops have been cited.	Impact on the long term will be negative if training workshops moving beyond awareness is not systematically organised.	Delayed

6.3	Pahang			
6.3.1	Conduct training needs assessment	Assessment has been initiated but not completed. Nor have training materials or modules been prepared.	Moving beyond awareness is imperative. Much scope for the transition as awareness programmes have been effectively carried out already.	Delayed
6.3.2	Implement workshops & training courses	8 sub activities have been carried out which indicates specific training has begun especially in the areas of fire prevention and use of IDMS.However stipulated design for all levels ie from decision makers to forest rangers and front-liners has not materialised	Initial activities will have some relevance and impact however specific training workshops targeting specific groups needs to be systematically developed in order to enhance long term effect.	Delayed
6.3.3	Provide training for timber industry personnel	Danida materials have been prepared and circulated, however no mention of specific training workshops to enhance private sector capacities.	Utilisation of the guidelines by loggers and their compliance of the standards require further examination to ascertain its impact.	Delayed
6.4	National			
6.4.1	National/PSU in FRIM	4 sub activities have been citied. Most significant is the study tour to Vietnam. While the publication of 'Blackwater Jewel' is mention in this category, it must be stated that this is more an awareness material rather than a training module.	Identification of training needs and the preparation of appropriate training modules and materials have been indicated has created interest among the relevant parties to further develop relevant competencies and knowledge base.	Delayed

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