



United Nations Environment Programme

Terminal Evaluation of project GF/1030-03-01 (4650) Integrated Management of Peatlands for Biodiversity and Climate Change - The Potential of Managing Peatlands for Carbon Accumulation while Protecting Biodiversity GEF ID No. 1769



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I. Executive Summary

1. This terminal evaluation was conducted as required by, and in coherence with, Global Environment Facility (GEF) and United Nations Environment Programme (UNEP) monitoring and evaluation policies and procedures, applying a mixed-methods participatory approach. The evaluation assesses the actual performance and results of the Integrated Peatlands Management project against the planned project activities, outputs, outcomes and objectives based on the evaluation criteria of relevance, efficiency, effectiveness, results and sustainability. United Nations Evaluation Group norms and standards were followed throughout the evaluation.

2. The “Integrated Management of Peatlands for Biodiversity and Climate Change” project was implemented by UNEP, with Wetlands International (WI) and the Global Environment Centre (GEC) as executing agencies (EAs). The project received GEF approval November 20, 2002 and began implementation in January 2003, although disbursement did not begin until June 2003, after agency approval. The project was originally planned for a 36-month implementation period, but was twice extended a total of an additional 18 months to allow completion of all activities and publication of the Global Peatlands Assessment (GPA). The project was a GEF targeted research Medium-sized Project (MSP) with \$0.973 in GEF financing and \$1.375 in expected co-financing, for a total cost of \$2.372 (not including PDF-A financing).

3. According to the project document, the project’s overall objective was *“to assess the capacity of peatlands, to act as significant carbon stores and provide recommendations on how these areas could be managed to ensure this attribute is maintained. It will also help determine what management measures can help reduce the net emissions of GHGs from peatlands.”* The project document identified “longer term outcomes”, but these were not explicitly linked to the planned project components/outputs. Two short-term outcomes were later extracted from the project document and included in a retrofitted logframe table in the later project Project Implementation Reviews (PIRs). These were, “Improved understanding of management issues affecting peatlands in selected case study countries” and “Guidelines on management options or interventions to maintain peatlands’ role in carbon storage.” The project objective and outcomes were to be achieved through seven planned components:

Component 1: Global Technical Component

Component 2: Country Study in Russia

Component 3: Country Study in Indonesia

Component 4: Country Study in China

Component 5: Regional Component for Southeast Asia

Component 6: Global Outreach/Capacity Building and Linkage to Environmental Convention Deliberations and Actions

Component 7: Project Coordination and Development of a Synthesis Report

4. The Integrated Peatlands Management project was developed in response to a number of issues related to peatlands and climate change arising in the late 1990s, and a lack of information, data, and analysis on these issues. Also, as noted in the project document, “within the framework of the [United Nations Framework Convention on Climate Change] (UNFCCC)

the focus is on man-induced changes rather than natural changes” in environmental conditions and associated greenhouse gas implications (release or sequestration). It is also noted that “data shows a significant potential of peatlands to contribute significantly to worldwide atmospheric carbon dioxide levels”, implying that conservation of peatlands is of critical importance for the objectives of the UNFCCC, as well as the Convention on Biological Diversity, and other conventions such as the Ramsar convention.

5. Project **relevance** is rated *highly satisfactory*. The project was relevant to local, national and regional priorities, as well as international priorities related to the Convention on Biological Diversity (CBD) and UNFCCC. The project was also relevant to GEF priorities in the biodiversity and climate change focal areas.

6. The project design had multiple shortcomings in terms of the management arrangements, financial planning, and monitoring and evaluation. Management arrangements were not restructured at project start-up, and the poor design ultimately led to problematic project management throughout the project’s life, characterized by delayed reporting and poor communication between the implementing agency (IA) and EAs.

7. Project **efficiency** is rated *moderately satisfactory*. The majority of project resources were budgeted for the project’s technical components, which were successfully implemented and produced results commensurate with or exceeding what would be expected for the relatively small investment. For the technical components (each implemented by individual partner organizations), financial management and expenditure was in-line with norms and standards for international development projects, as far as the data available for this evaluation indicates. At the central level, project management was not efficiently carried out due to the problematic institutional arrangements, inadequate oversight by the IA, and poor financial planning. All evidence indicates that project financial management was carried out appropriately.

8. The project lacked adequate indicators, baselines and targets to objectively assess achievement of outcomes and objectives, but based on the evaluative evidence available, **effectiveness** is considered *satisfactory*. A “Review of Outcomes to Impacts” (ROtI) analysis was also conducted as part of this evaluation (according to guidelines from the GEF Evaluation Office), and a ROtI rating of “AC” was assessed. The project contributed to the development of the conditions necessary to achieve Global Environmental Benefits, but these conditions have not yet been fulfilled and many barriers to effective peatland management remain.

9. It is highly likely that the project made a significant and valuable contribution to improving the understanding of the role of peatlands as carbon deposits in developing countries among key target audiences. At the global level, the recommendation by the CBD Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) highlighting the GPA is one indication of increased understanding and awareness of the role of peatlands. While both of the EAs continue to highlight peatland issues in their advocacy efforts, it is highly likely that without this project far less would have been accomplished in terms of raising the profile of the importance of peatlands with respect to climate change. At the regional and national levels, the project’s “Peat-Portal” network, support for the ASEAN Peatland Management Strategy, and capacity development activities contributed to improved understanding and awareness. The scientific review and synthesis in the participating countries has also produced

important outputs highlighting the role of peatlands. Within each of the demonstration countries there have been actions taken by government actors at local, sub-national and national levels that demonstrate an enhanced appreciation for the role of peatlands.

10. Overall **sustainability** of project results is considered *likely*. There are limited risks under each of the four components of sustainability. The assessment of short-term sustainability has benefited from the fact that this was an ex-post evaluation, which took place more than three years after the completion of the majority of project activities.

11. **Lessons and Recommendations:** The key project lessons and recommendations are presented below in summarized form. These lessons and recommendations are outlined in greater detail in the final section of the evaluation report. Considering that this is a terminal evaluation and an ex-post evaluation, there is little scope for extensive recommendations.

12. **Lesson:** A positive lesson is that a project of modest size and scope, with a broad focus, can achieve meaningful results in raising global awareness of a key issue. Similar projects in the future could learn from the project's example of engaging and focusing the efforts of a large number of technical experts on a single critical issue.

13. **Lesson:** There are multiple potential lessons related to the project management and implementation arrangements, but these can be distilled into one key lesson: when it becomes clear that there are problems related to project management, these must be adequately addressed as early as possible in a comprehensive manner and through collaboration between implementing and executing agencies.

14. **Lesson:** The project's institutional arrangements, with one administrative head and one technical lead, proved problematic, as there was insufficient information flow from the ground level of the technical components to the central level for reporting and other purposes. In this sense it would have been helpful if project management functions had been consolidated in one organization, with hierarchical responsibility to a single individual.

15. **Lesson:** Steering committees can be useful in providing oversight and technical guidance for project implementation, but the utility of such structures must be balanced against the cost of operationalizing them. The constitution of a steering committee can also be structured to involve key stakeholders and constituencies, which can increase cost-effectiveness.

16. **Lesson:** On the technical side, one of the lessons of the project was that achieving local, ground-level results could only be accomplished by cooperating with local communities. Conflict and adversaries will be created by not effectively working with local stakeholders.

17. **Lesson:** Demonstration efforts are valuable for identifying and developing environmental management techniques, but to achieve results of any significant scale requires a sustained source of funding to support ongoing management. Ultimately, large-scale restoration efforts will need a sustained source of financing, either from the government or new innovative mechanisms such as carbon financing.

18. **Recommendation:** The GPA is an important and comprehensive resource that is likely to remain relevant for years to come. WI and GEC should continue to actively disseminate this document through all available channels, and should ensure that it remains easily accessible in electronic form, available for download, for at least five more years, or until experience

indicates it is no longer in demand. Download activity of the report from GEC’s website should be monitored to assess reach and demand over time. *[For WI and GEC]*

19. **Recommendation:** The executing organizations of this project and UNEP should within the next two years examine the potential to develop a community-support program to increase understanding and awareness in Sumatra and Kalimantan about the role peatlands play in climate change, and the potential carbon market that is developing. *[For WI, GEC and UNEP]*

20. **Recommendation:** Based on the lessons from this project, UNEP should avoid in all circumstances designing projects with institutional arrangements involving dual executing institutions. *[For UNEP]*

21. **Recommendation:** For a project of this size, redundant and excessive management and implementation arrangements should be avoided in future project designs. For scientific or highly technical projects there is a tendency to have an external technical advisory body, but when the project implementation team includes individuals who are themselves international experts, such structures are redundant and unnecessary. *[For UNEP]*

22. **Recommendation:** All projects, even targeted research projects, should have adequate logframes with SMART indicators at the outcome and impact level. *[For UNEP and GEF Secretariat]*

23. The below ratings table summarizes the assessed required ratings, while the same ratings table is included at the end of the evaluation report with Evaluator Summary Comments for each rating.

Integrated Peatlands Management Project Ratings

Criterion	Rating
A. Attainment of Project Objectives and Results (overall rating) (Sub criteria below)	S
A. 1. Effectiveness: overall likelihood of impact achievement / ROtI rating	S / AC
A. 2. Relevance	HS
A. 3. Efficiency	MS
B. Sustainability of Project Outcomes (overall rating) (Sub criteria below)	L
B. 1. Financial	L
B. 2. Socio-political	L
B. 3. Institutional Framework and Governance	L
B. 4. Environmental	N/A / L
C. Catalytic Role	HS
D. Stakeholders Involvement	S
E. Country Ownership / Drivenness	MS
F. Achievement of Outputs and Activities	MS
G. Preparation and Readiness	U
H. Implementation Approach	MU
I. Financial Planning (and Management)	MU
J. Monitoring and Evaluation (overall rating) (Sub criteria below)	U
E. 1. M&E Design	U
E. 2. M&E Plan Implementation (Use for Adaptive Management)	MU
E. 3. Budgeting and Funding for M&E Activities	U
K. UNEP Supervision and Backstopping	MU

II. Introduction

A. Evaluation Scope and Methodology

24. According to GEF evaluation policies, all GEF funded projects must undergo a terminal evaluation. This terminal evaluation was initiated by UNEP following the close of the Integrated Peatlands Management project. This terminal evaluation seeks to assess the actual performance and results of the Integrated Peatlands Management project against the planned project activities, outputs, outcomes and objectives based on the relevant evaluation criteria, as well as any unanticipated results. The evaluation will identify lessons relevant for other peatlands focused projects in the future, and will provide recommendations as necessary and appropriate. As the primary external resource documenting the project activities and results, this evaluation report takes a comprehensive approach, on the assumption that this report will be the primary, and potentially only, resource available to later external reviewers.

25. The evaluation focuses on the four-year project implementation period, but includes an assessment of project design, and provides recommendations related to the project's post-implementation period. The evaluation Terms of Reference (TORs) propose the following key questions based on the project objectives and outcomes, to guide the overall scope and framework of the evaluation:

- Key Question 1: Did the project 'improve understanding of the role of peatlands as carbon deposits in developing countries" among key target audiences (international conventions and initiatives, national level policy-makers, regional and local policy-makers, resource managers and practitioners)?
- Key Question 2: Did the outputs of the project articulate options and recommendations for managing peatlands as carbon deposits while protecting biodiversity? Were these options and recommendations used? If so by whom?
- Key Question 3: To what extent did the project outputs produced have the weight of scientific authority and credibility necessary to influence policy makers and other key audiences?

26. In addition to these key questions, the evaluation provides the required ratings on the relevant elements of project design and implementation. Further, the evaluation will, when possible and relevant, assess the project in the context of the key GEF operational principles, as summarized in Annex 3.

27. The evaluation methodology was based on a participatory mixed-methods approach, which included three primary elements: a) a desk review of relevant project documentation and other documents; b) interviews with key project participants and stakeholders; and c) a field visit to the Indonesia Country Study Central Kalimantan demonstration project site.

28. As with any GEF project terminal evaluation, the main limitations are time and resources available to conduct the evaluation. In the case of this evaluation, the field visit was limited to one of the Indonesia demonstration sites; it was not possible to also visit the China and Russia demonstration sites. Therefore, the data and information available from these components of the project are less in-depth than for the Indonesia component. Another limitation was that the terminal evaluation was initiated more than 12 months after the closure of the project, and

24 – 36 months after the completion of the majority of project activities, limiting the availability of data, and rendering the evaluation an ex-post exercise, although this also had some benefits.

29. The evaluation was conducted in accordance with UNEP and GEF monitoring and evaluation policies and procedures, and in-line with United Nations Evaluation Group norms and standards. The intended users of this terminal evaluation are the GEF Evaluation Office, UNEP, project participants, and others who may find the lessons and experienced documented herein useful in the context of other projects.

III. Description of the Integrated Peatlands Management Project

A. Environmental Context and Background

30. The Integrated Peatlands Management project was developed in response to a number of issues related to peatlands and climate change arising in the late 1990s, and a lack of information, data, and analysis on these issues. Also, as noted in the project document, “within the framework of the UNFCCC the focus is on man-induced changes rather than natural changes” in environmental conditions and associated greenhouse gas implications (release or sequestration). It is also noted that “data shows a significant potential of peatlands to contribute significantly to worldwide atmospheric carbon dioxide levels”, implying that conservation of peatlands is of critical importance for the objectives of the UNFCCC, as well as the CBD, and other conventions such as the Ramsar convention.

31. The project was also built on growing global awareness of peatland conservation issues in relation to examples such as the mega-rice project catastrophe in the mid-1990s in Indonesian peatlands, and the subsequent massive fires that resulted in dense haze across Southeast Asia. The project document states that fires in 1997-98 burnt or partially degraded more than 1.45 million hectares of peatlands, and cites a study estimating that as a result of fires in one national park in Indonesia, 29 million tons of carbon were released. Although numerous individual studies had been conducted, the overall state of knowledge on global peatlands was not well consolidated, an issue the project sought to address.

32. Individuals involved with the project’s development indicated that initial work leading to the PDF-A was done in the 1998-1999 timeframe, which could therefore be considered the origination of the project concept. Due to the age of the project (having been designed more than eight years ago), the exact circumstances of the project background were not available for this evaluation.

B. Project Development and Overview

i. Development and Implementation Timeframe

33. The “Integrated Management of Peatlands for Biodiversity and Climate Change” project was implemented by UNEP, with WI and the GEC as executing agencies. According to the GEF project database, the PDF-A was approved January 1, 2000. The project received GEF approval November 20, 2002 and began implementation in January 2003, although disbursement did not begin until June 2003, after IA internal approval. The project was originally planned for a 36-month implementation period, but was twice extended a total of an additional 18 months to allow completion of all activities and publication of the GPA. Key project dates are outlined in

Table 1, below. The project was a GEF targeted research MSP with \$0.973 in GEF financing and \$1.375 in expected co-financing, for a total cost of \$2.372 (not including PDF-A financing). A complete breakdown of expected and actual project financing is included in Table 4, and project planned and actual co-financing is shown in Table 5 Section IV.B.

Table 1 Integrated Peatlands Management Project Key Dates

Milestone	a. Expected date	b. Actual date
i. PDF-A Approval	N/A	January 1, 2000
ii. CEO endorsement/approval		November 20, 2002
iii. Agency approval date	January 2003	June 3, 2003
iv. Actual start date	January 2003	January 2003
v. Implementation start (first disbursement)	January 2003	June 10, 2003
vi. Mid-term evaluation	N/A	N/A
vii. Project completion	April 2006	December 2007 ¹
viii. Terminal evaluation conducted	December 2006	February 2010
ix. Project closing	December 31, 2006	December 31, 2008

Sources: i.a. N/A; i.b. GEF online project database; ii.a. N/A; ii.b. 2007 PIR; iii.a. Assumed; iii.b. 2007 PIR; iv.a. Assumed; iv.b. 2007 PIR; v.a. Assumed; v.b. 2007 PIR; vi.a. N/A; vi.b. N/A; vii.a. 2007 PIR; vii.b. Project internal communication documentation; viii.a. Assumed; viii.b. Evaluation; ix.a. Assumed based on expected project completion date; ix.b. Assumed based on project terminal report date of September 2008.

34. From PDF-A approval to implementation took 42 months, one year longer than the average for GEF MSPs around that time. The 2006 GEF Evaluation Joint Evaluation identified the average for the MSP development and approval process as 30 months. Partly because of the long development and approval time, activities for which co-financing had been secured were ongoing during project development, so that some activities originally planned in the project document were well underway or completed by the time of “official” project start-up. For example, agreement was reached on the ASEAN Peatland Management Initiative (APMI) during the project development period, so component 5 of the project was re-structured to take the next step of supporting the development of the ASEAN Peatland Management Strategy (APMS). Another example was the Indonesia country study component, which had received significant co-financing from the Canadian International Development Agency (CIDA) and begun work before project implementation with GEF-funding began. Under the global outreach component there was an activity planned with Dutch co-financing that was later dropped from the official GEF project because it had been completed before the project began.

¹ The majority of the project technical work was completed by June 2006, including the country components. An initial project no-cost extension to October 2006 was granted, followed by “informal” agreement between the IA and EA to extend through June 2007 but this was never formalized; official paperwork for a second no-cost extension to December 31, 2007 was agreed and completed in November 2007. Over the final year of project operation there was ongoing only the completion and publication of the Global Peatlands Assessment report, and project financial and administrative matters.

ii. Project Objective, Overall Structure, and Stakeholders

35. According to the project document, the project's overall objective was *"to assess the capacity of peatlands, to act as significant carbon stores and provide recommendations on how these areas could be managed to ensure this attribute is maintained. It will also help determine what management measures can help reduce the net emissions of GHGs from peatlands."* As a targeted research proposal developed in the second operational phase of the GEF, the project was not well-structured in terms of current practice with an alignment of well-defined inputs, activities, outputs, outcomes and impacts. The project proposal lacks a well-defined logframe with identified indicators and targets (e.g. anticipated results), as further discussed in Section VI.C on monitoring and evaluation. As a targeted research proposal the project document identifies the questions to be answered:

- Do peatlands play a significant role in accumulating carbon, in both the short and long-term? If so, why and how? What variables influence this role?
- How do practices such as drainage, conversion and water level manipulation affect carbon flux and how can this information be used in the management of a peatland for the benefit of maintaining its carbon storage and its biodiversity related functions?
- What successful management methods or tools are being used to maintain the potential of peatlands to act as carbon stores while concurrently ensuring the conservation of biological diversity?
- What type of sites can be managed to bring about multiple environmental benefits in terms of carbon storage and biodiversity conservation?
- What are the current socio-economic activities in the selected peatland areas and how can these be improved / modified to make them more sustainable with reduced impact on climate change and biodiversity?

36. Outcomes were also identified, but not explicitly linked to the planned project components/outputs. Identified "longer term outcomes" (as per the project document) were:

- Information on the carbon storage estimates in selected sites of peatlands
- Adoption of better models for sustainable development and management of peatlands
- Continued maintenance and improved protection of peatlands
- Significant reduction in emissions through prevention of burning of peatlands
- Increased recognition of the importance of the sustainable management of peatlands and the relationship with climate change
- Increased number of projects in the GEF portfolio related to management of peatlands to buffer climate change and enhanced biodiversity benefits
- Sustainable livelihoods based on peatland management

37. Two further outcomes, extracted from the project document, were included in a retrofitted logframe table in the later project PIRs. These were, "Improved understanding of management issues affecting peatlands in selected case study countries" and "Guidelines on management options or interventions to maintain peatlands' role in carbon storage." The project objective and outcomes were to be achieved through seven planned components:

Component 1: Global Technical Component

Component 2: Country Study in Russia

Component 3: Country Study in Indonesia

Component 4: Country Study in China

Component 5: Regional Component for Southeast Asia

Component 6: Global Outreach/Capacity Building and Linkage to Environmental Convention Deliberations and Actions

Component 7: Project Coordination and Development of a Synthesis Report

38. Each of these components is described in greater detail in Section V.B on results, which highlights the results of the project under each component.

39. Because the project was a “global” project and included global, regional, national activities and local site-level demonstrations, there are relevant stakeholders at the international, national and local levels. Identified international stakeholders include parties to international conventions (such as the CBD and UNFCCC), and international non-governmental organizations (e.g. International Mire Conservation Group (IMCG)) and research institutions (e.g. Center for International Forestry Research (CIFOR)). There are a wide variety of relevant stakeholders at the national level, including government agencies and national non-governmental organizations (NGOs) and research institutes. Site level stakeholders include local resource users and local governments. According to the project document, “stakeholders will be engaged through direct involvement in project activities, participation in workshops and consultations, provision of information and awareness materials, etc.”

IV. Assessment of Project Design and Implementation

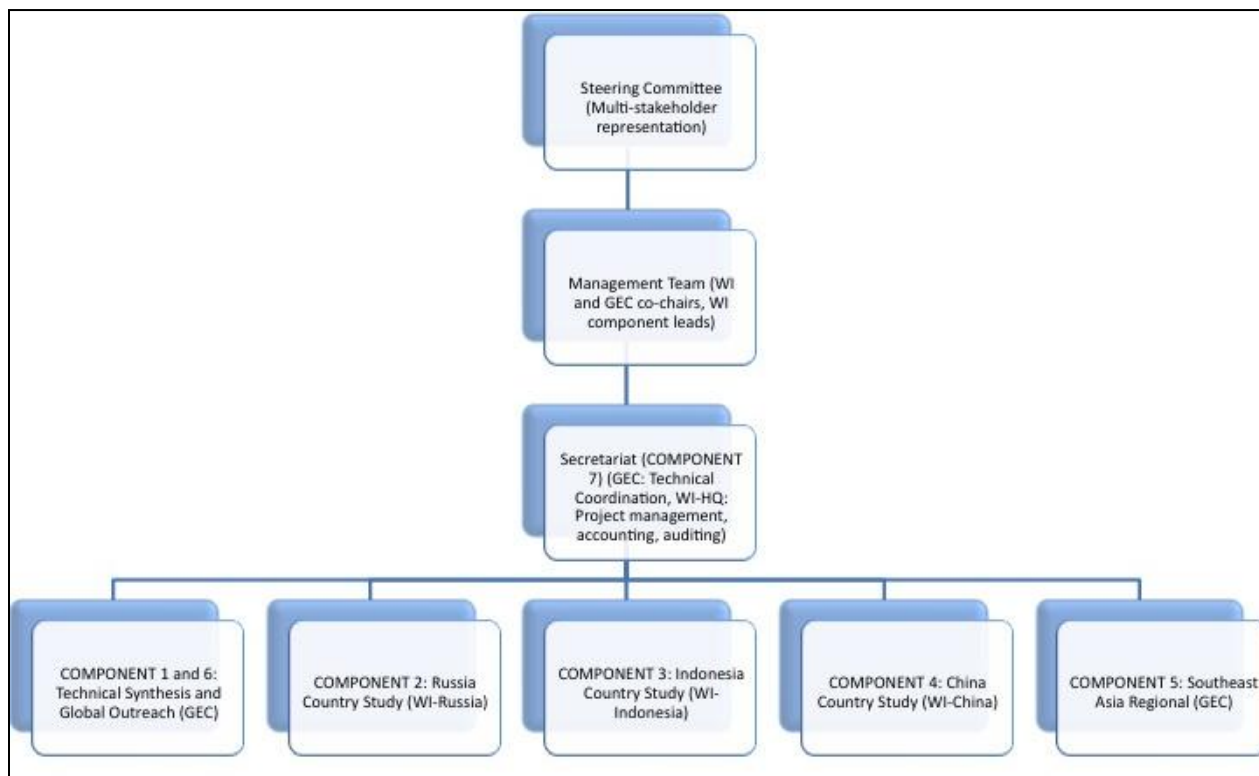
A. Project Design and Relevance

i. Implementation and Execution Arrangements

40. There were two executing partners for the project, WI and GEC. The organizations were expected to play complementary roles in execution, with GEC overseeing technical coordination and synthesis, and WI handling project management and financial management. According to one source, the dual-executing agency implementation structure was a result of the GEF’s or UNEP’s reluctance to have GEC as the only executing agency, because at the time GEC was a relatively new organization without an established track record. An execution-level partnership with WI headquarters was then a logical approach given the involvement of the WI country offices in Russia, China and Indonesia.

41. Figure 1 gives a visual representation of the institutional arrangements. As shown, there was a designated institution responsible for each of the project components. The project was a “global” project, but with a decentralized approach of six separate technical components (plus a management component) that were implemented virtually independently at the national, regional and global levels.

Figure 1 Integrated Peatlands Management Project Institutional Arrangements



42. Along with the fact that all components were in some way overseen by WI and GEC, a project steering committee provided a centralized mechanism to bring together the various components of the project, with responsibility, according to the body’s terms of reference, “for providing guidance and advice to the management team regarding the progress and direction of the project and exerting proactive influence on policy processes.” Box 1 highlights the institutional representation on the steering committee. Four steering committee meetings were held: November 4, 2003 in Wageningen, Netherlands; February 8, 2004 in Kuala Lumpur, Malaysia; May 27, 2005 in Kuala Lumpur, Malaysia; May 18-19, 2006 in Chengdu, China. Because of limited attendance at the 2003 meeting, the 2004 meeting was the first full meeting of the steering committee, approximately seven months after project start-up. Steering committee members also provided ad-hoc

Box 1 Steering Committee Representation

- Convention on Biological Diversity Secretariat
- Wetlands International (President)
- Sichuan Forest Department
- International Mire Conservation Group
- United Nations Environment Programme
- Ministry of Forestry, Indonesia
- Ministry of Natural Resources, Russia
- ASEAN / Ministry of Environment, Indonesia
- GEF Scientific and Technical Panel
- Malaysian Meteorological Services Department
- Ramsar Convention Secretariat

input, particularly on the global assessment report. The steering committee also served as an effective mechanism for engaging constituencies and stakeholder groups. For example, through the presence on the steering committee of a member of the CBD Secretariat the project was able to provide inputs directly to CBD processes. According to the project’s terminal report, “Involvement of representatives from the project target

countries and regions were also important in supporting the development and implementation of project components.”

43. The institutional arrangement design also included a “Technical Advisory Group” of international peatland and climate change experts, and an “Outreach Group.” The latter was to be made up of representatives from a variety of international organizations, including, for example, the International Institute for Environment and Development, the implementing agencies of the GEF, and the technical bodies of the CBD and UNFCCC. The 2004 steering committee minutes include TORs for both of these groups, but in the 2005 steering committee meeting a decision was made to abandon establishment of the Technical Advisory Group “given the strengthened technical membership of the [steering committee]² as well as the set up of a separate technical team to guide the process of the Assessment.” The project did however develop an extended network of technical and outreach professionals from a broad range of organizations at both the global level and within the three demonstration countries.

44. In project design GEF MSPs, and even full-sized projects (FSPs), often face cost-efficiency trade-offs in identifying an adequate project oversight structure. A project steering committee is a common way to proceed, but the effectiveness of a steering committee is dependent on its members meeting at least once if not twice a year to be updated on project progress, make strategic adaptive management decisions, and provide technical input. For a global project such as this one, a steering committee is usually made up of a mix of individuals from around the world in order to sure broad and diverse inputs. Convening steering committee meetings is often therefore costly, and not cost-effective for a project with a budget of approximately \$1 million, unless other external processes are leveraged such as holding steering committee meetings during other international environmental gatherings such as COPs. In the Integrated Peatlands Management project external meetings were partially leveraged for project steering committee meetings – for example, the first full steering committee meeting was held immediately prior to the CBD Conference of Parties (COP) in Kuala Lumpur in February 2004. Only around \$14,000 was budgeted for the project steering committee, which clearly would not have been enough to hold three or four international gatherings of ten or more people.

45. For the Integrated Peatlands Management project the steering committee played an important role in keeping the project on track from a management perspective, but some participants felt that such a structure was too “heavy” for a project of this size. For international environmental projects, management cost norms are around 10% of the project budget, and this is the standard used to by the GEF to limit management costs. The reality may be that “global” projects with complex partnership and institutional arrangements, involving multiple countries (and multiple languages) may as a necessity have higher transaction costs than other types of GEF projects implemented at the national level. Such complex projects often require more intensive coordination to avoid internal communication and management challenges.

² It was decided in the 2004 project kick-off steering committee meeting to include the International Mire Conservation Group and GEF Scientific and Technical Panel in the steering committee.

ii. Strategy: Technical Approach, Structure and Design

46. This evaluation, through the ROTI methodology, proposes a retrospective logic chain in the draft ROTI analysis included as Annex 4, and the overall effectiveness rating is drawn from the ROTI analysis. It may be noted however, that targeted research projects typically do not score well under the ROTI methodology because they are focused on addressing enabling conditions, and are far removed from impact level results in the intervention strategy.

47. A common problem among GEF projects is over-ambitiousness, and the Integrated Peatlands Management project was no exception. Multiple individuals involved remarked on the planned scope of the project relative to its overall size. As discussed below and as can be seen in Table 4, the actual resources available for each component to be spent over three years were relatively small – around \$40,000/year per technical component. As noted in the project terminal report, the project was “extremely ambitious in scope with seven separate components, 16 objectives, 52 specific outputs, 75 planned activities to be implemented at site, provincial, country, regional and global scales – but with an allocation of GEF funds of only US\$975,000 and co-funding of \$1.3 million. The project was planned for implementation over three years by five different lead partners and many other partners at regional, national and local levels.” The fact that the project was successful in producing the expected outputs (albeit with some delay) is a testament to the importance and overall relevance of peatlands in the climate change realm, and the technical quality of the project implementers.

48. In GEF project conceptualization and design there is often a tension between strategic approaches to generating global environmental benefits, and the GEF’s key operational principle of country drivenness; countries naturally prioritize domestic needs over benefits for the rest of the world. This tension is apparent in the Integrated Peatlands Management project design. The project document extensively discusses the global environmental rationale for the project (the dearth of research and data on an important ecosystem type), but does not discuss the strategic rationale of the design, including the structure of the seven project components. How and why was it determined that these seven components represent a strategically advantageous and appropriate approach to resolving the underlying research questions? There are often good reasons why things are done (or designed) a certain way, but these reasons should be documented and communicated to facilitate later understanding.

49. Regarding components 2, 3 and 4, the three countries involved – China, Indonesia and Russia – do contain a large portion of the world’s peatlands, but their participation appears to be based on opportunistic partnerships from previous and planned related activities (as described in the project document’s incremental cost section). According to individuals involved in the project’s development, the China demonstration site was selected based on previous knowledge of the project developers; some scientific research had been conducted in the Central Kalimantan site, and WI-Indonesia was already doing some work in the Sumatra demonstration site. Given the three countries’ importance with respect to peatland ecosystems this may have been a strategic as well as opportunistic approach, and clearly demonstrates country-drivenness by involving many key national-level stakeholders. Beyond the country/site selection, within the three country study components the approach of having both scientific reviews and on the ground demonstration activities is not rationalized.

50. The logic of the other three technical components (1, 5 and 6 – representing more than 50% of the planned budget), particularly the Southeast Asia regional component, is also not explained. For example, why the choice to support ASEAN policy processes instead of more extensive technical peatland / fire management capacity development? The project document explains what the project plans to do, but not why the proposed approach was taken to address the overarching problem of inadequate global understanding of the importance of peatlands in relation to climate change and biodiversity conservation. This does not mean that the project strategy was poor, but the rationale for the strategy was not clearly articulated and alternative approaches were not discussed.

iii. Multi-focal (OP12) Approach in Design

51. The Integrated Peatlands Management project was classified and reviewed as an “Operational Program 12” (OP12) or multi-focal area project, as the project objective presented an opportunity for the generation of global environmental benefits in both the climate change and biodiversity focal areas. According to the GEF Evaluation Office OP12 program study, completed in 2005, “OP12 was initially conceived in 1999 as an operational program on carbon sequestration, but a year later was given its current title to reflect an integrated and multifocal approach to the management of natural systems.” The April 20, 2000 GEF document describing OP12 states the program objective “is aimed at catalyzing widespread adoption of comprehensive ecosystem management interventions that integrate ecological, economic, and social goals to achieve multiple and cross-cutting local, national and global benefits.”³

52. On the whole the project document does a good job of explaining in a straightforward manner the benefits generated in both focal areas, without over-promising. As stated in the OP12 program study, in some cases dual focal area benefits “may be nearly automatic.” This appears to be the case in peatland conservation and restoration, where resource use practices that are good for carbon stock maintenance and sequestration are often also good for biodiversity, and vice-versa.

53. The project document uses language referring to the simultaneous rather than “synergistic” benefits generated: “This proposed project will investigate techniques for conserving these areas to facilitate carbon accumulation while at the same time maintaining or enhancing their biodiversity”; “This project would address these issues by providing information on the viability of managing peatlands for reducing net Greenhouse gas emissions and biodiversity conservation concurrently”; “This project would support targeted research to verify operational feasibility and viability for wetland ecosystems to serve as carbon deposits and to be managed in such a way as to improve their carbon accumulation ability while concurrently reducing loss of biodiversity.” [Emphases added] The project document does not claim that there will be synergistic focal area benefits, defined in the OP12 program study as not just win-win, but “win by more-win by more.”

54. The OP12 program study included the Integrated Peatlands Management project in its individual project reviews, in which each OP12 project document was assessed on a scale of 0

³ In GEF-4, with the implementation of the GEF Resource Allocation Framework, OP12 was eliminated as an operational program with an individual strategic objective, though the GEF continues to fund projects that generate global benefits in multiple focal areas.

(highly unsatisfactory) to 5 (highly satisfactory) on criteria developed around the key questions for the evaluation. Table 2 below summarizes the scores given for each of the criteria assessed in the OP12 program study. The project document scored a “5” on “multi-focal area claims”, “global environmental benefit”, “partnerships”, “country drivenness”, and “themes fall within focal areas.” Low scores (< 3) were received for “synergies”, “stakeholder participation”, “lesson learning” and “comparative advantage [of being a multi-focal area project]”. The project’s overall mean score of 3.2 across all criteria assessed was higher than the overall mean for all OP12 projects of 2.8.

Table 2 OP12 Program Study Evaluation of Integrated Peatlands Management Project

Criteria	Assessed Score
Convincingly Addresses Multi-focal Area Claims	5
Adequately Measures Global Environmental Benefits	5
Establishment of Baselines and Indicators	4
Convincingly Demonstrates and Measures Synergies Among Focal Areas	2
Extent and Appropriateness of Partnerships	5
Demonstration of Country Drivenness	5
Specificity and Definition of Stakeholder Participation Arrangements	2
Extent of Sectoral Integration in Management on Recipient Side	2
Plans for Lesson Learning and Knowledge Management Regarding Integration and Synergies	0
Consistency with GEF Policy for OP12 Selection Criteria	3
Influence on Broadening or Changing Relevant Focal Area Objectives	3
Thematic Fit within Strategic Priorities and Objectives of Respective Focal Areas	5
Adequacy of Data Collection to Demonstrate Multi-focal Comparative Advantage	2
Overall Environmental Benefit	3
Integration Giving Synergy	3
Mean	3.2

iv. Relevance to Local, National, International and GEF Priorities

55. Project relevance is rated *highly satisfactory*. The project was relevant to local, national and regional priorities, as well as international priorities. The project was also relevant to GEF priorities in the biodiversity and climate change focal areas.

56. Although the project was a “global” project, the demonstration sites and country studies necessitates a brief review of the relevance to local and national priorities in China, Indonesia and Russia. In Indonesia, the demonstration site activities were relevant to local priorities through the focus on reducing fire incidence in degraded peatlands, and improved local livelihoods and sustainability of resources use in the drainage basin between the Kapuas and Mantangai rivers, where the demonstration site was located. At the national level in Indonesia, peatlands are an important ecosystem type and the project document states that the country has 60% of the world’s tropical peatland resources. Indonesia’s National Biodiversity Strategy and Action Plan (NBSAP) highlights the fact that “The opening up of one million hectares [of] peatswamp through the Conversion of Peat Swamp project in Central

Kalimantan causes one of the most serious ecological damages to wetlands. This project was aimed at converting peat swamp forest into wet rice fields, but the project ended in environmental disaster.” Also, Indonesia’s First National Communication to the UNFCCC indicated that 70% of its GHG emissions related to land use and land use change including peatland degradation.

57. Peatland ecosystems are identified as priority ecosystems in Russia’s NBSAP, occupying over 20% of Russian territory. The NBSAP highlights, among the consequences of human impact on peatland ecosystems, “Man’s interference with natural carbon and water cycles, turnover of other elements and substances, hydrologic, climatic, and other regulatory functions intrinsic in peatlands.” The project document also notes that Russia endorsed the call to elaborate a global action plan for peatlands and endorsed the draft action plan at the 7th Conference of Parties of the Ramsar convention. At the site level, the project activities were relevant to Tver and Tomsk oblast environmental priorities, both of which developed peatland conservation plans addressing issues highlighted by the project.

58. In China the project document states that the work to be conducted in China will be within the framework of China’s Wetland Action Plan and China’s Agenda 21. China has extensive peatland areas, and the demonstration site was located in the Ruorgai peatlands in Sichuan province.

59. The project is assessed as supporting multiple multi-lateral environmental agreements, including the CBD, the UNFCCC, and the Ramsar convention. According to the project document, “In particular it will contribute to the implementation of CBD Decision IV/4 on Inland Water Biodiversity which includes management of peatlands and also Recommendation VII/1 of the Ramsar Convention on Wetlands which calls for urgent action related to the conservation of temperate and tropical peatlands as well as the development of a Guidelines for Global Action on Peatlands which incorporates climate change considerations.” The participating countries are parties to the CBD and UNFCCC.

60. The GEF’s strategic priorities have evolved through each phase of the GEF. The Integrated Peatlands Management project was approved in 2002, during GEF-2, at which time strategic priorities were not clearly defined beyond the objectives of the relevant conventions (UNFCCC in the climate change focal area and CBD in the biodiversity focal area). The primary guiding strategic document of the GEF at this time was the GEF Operational Strategy (1994), which outlines the focal area specific operational programs, and which stated that “The GEF will fund targeted research, including information collection, analysis, and dissemination, only in the context of the operational programs.” For a period during part of GEF-2 and GEF-3 there was a “multi-focal area” operational program, OP12, within which the Integrated Peatlands Management project was well-qualified and designed from a technical perspective (as discussed in the previous section).

61. A May 1997 GEF Council Document further outlined principles for financing targeted research, defining targeted research as “goal oriented research that supports the GEF operational strategy by providing information, knowledge and tools that improve the quality and the effectiveness of the development and implementation of GEF projects and programs” and “systematic investigation of a well defined problem.” This council paper set out a set of principles with which targeted research projects are required to conform: Convention guidance;

Consistent with the GEF mandate, objectives and operational strategy; Based on programmatic needs; Economically feasible; Incrementality; Scientific soundness; Consistent with recipient country interests; and, Overall eligibility. The Integrated Peatland Management project is judged to be in-line with and relevant to the GEF's operational strategy for the relevant focal areas, and in-line with the principles for funding targeted research.

v. Stakeholder Participation and Catalytic Role in Design

62. Stakeholder participation in project design was not one of the strongest aspects of the project, perhaps due to its nature as a targeted research project. The project document does highlight that "At each of the project sites in the three case study countries, preliminary consultations have been undertaken with selected local stakeholders such as local government agencies, peatland managers and users, NGOs and community representatives. These consultations will be expanded at the initial stage of the project." The OP12 program study also noted that while the project was well designed, it omitted or lacked detail related to stakeholder participation. The project document includes a "public involvement plan," but this has few specifics; under "Stakeholder Participation" the project document states only, "Throughout this project's development, participation strategies will include different players from national governments, scientists, local communities, environmental non-government organizations to international agencies and donors."

63. The "catalytic role" of the GEF is one of the key GEF operational principles, as highlighted in Annex 3. GEF projects are required to take a catalytic approach, which may include mechanisms or linkages for replication or scaling up of efforts in conjunction with or following project implementation. In some sense the "targeted research" nature of the Integrated Peatlands Management project is inherently catalytic, in that the results of the research are intended to catalyze additional efforts drawing on the research findings. Although the project document does not explicitly articulate a "replication approach", the longer term outcomes in the project document are all catalytic outcomes (i.e. beyond what would be achieved by the project alone during the implementation period), in particular, the "increased number of projects in the GEF portfolio related to management of peatlands to buffer climate change and enhance biodiversity benefits." The primary catalytic mechanism employed by the project was increased outreach and awareness of international stakeholders to disseminate the findings of the project. It was further anticipated that the demonstration site techniques and efforts could be scaled-up and replicated more broadly within the respective countries. Results and evaluative evidence of the project's catalytic efforts are discussed in Section VI.B.

B. Project Implementation and Cost-Effectiveness (Efficiency)

64. Based on the evaluative evidence discussed below, project efficiency is rated *moderately satisfactory*.

i. Project Management

65. There are multiple lessons to be drawn from the project management process of the Integrated Peatlands Management project. At the level of the individual technical components project management was adequate, if not strong, with the exception of the effort to produce the GPA, which was an excellent output but took much longer than expected. Components 2-5

- the country studies and the regional component - were managed and implemented efficiently within the anticipated timeframe. At the aggregate level, however, the decentralized structure of the project and the split institutional arrangements presented some challenges; it appears that the administrative (WI, located in the Netherlands) and technical (GEC, located in Malaysia) executing organizations did not adequately communicate with or update each other regarding project progress, or take primary responsibility for communicating with and responding to UNEP and the steering committee. WI was the primary contact point for UNEP, but the majority of information required on project progress needed to come from GEC, which was leading the technical implementation of the project. Thus WI was an added communication layer, which proved to be only semi-permeable. The project management issues are well documented throughout the project monitoring reports, and were mentioned by multiple individuals interviewed for this evaluation.

66. The frequent delays and miscommunication on administrative matters, particularly on progress reporting and communication between the EA and IA can also be attributed to an inadequate monitoring and evaluation plan and budget. The EA cited limited resources budgeted for effective project management, and the project did not have a dedicated monitoring and evaluation budget (also see the following Section IV.B.iii on financial management and Section VI.E.i on project monitoring and evaluation). At the project's first full steering committee meeting in 2004 WI already expressed concern that management funds were inadequate to cover the level effort required for progress reporting and administrative management. If there was a shortage of funds budgeted for project management this can be attributed to poor planning and execution of the implementation arrangements: in the project document the project coordination and synthesis component (component 7) was budgeted for 16% of GEF resources,⁴ well above the current GEF standard of 10%. Under implementation the management budget was broken out in a different form under the UNEP budget format, but totaled approximately the same percentage.

67. Although in the project document component 7 is described as the management component, in practice management costs were broken out separately, and under component 7 GEC provided significant technical support to the country study components. For example, between the 2004 and 2005 steering committee meetings there were four technical support missions to Indonesia, three to China, and four meetings with the Russian team leader to provide input to the local partners. Although the decentralization of the project components helped ensure their technical delivery, synthesis of the progress and achievements of the various components for regular progress reporting was problematic.

68. At the central level, by the 2005 steering committee meeting, UNEP "expressed concern that the management was apparently not allocating enough time to actively manage the project" and requested "more clarity and better coordination between the two project managers" while questioning the wisdom of having two project managers. In the project's final PIR in 2007, it was noted that the "co-managed project structure has apparently lead to various communications flaws, unclear responsibilities and delays in reporting." Ultimately the split

⁴ The percentage of resources that could or should be considered as part of the "management" budget is further discussed in Section IV.B.iii below on financial planning and management.

project management function proved unworkable in this case, in terms of meeting the administrative and reporting requirements, and communicating effectively with UNEP. Fortunately these institutional arrangements did not have a significant negative effect on the technical delivery of the project components, but as qualified in the 2007 PIR, “this structure has often been rather inefficient.”

ii. Flexibility and Adaptive Management

69. The project lacked a proper logframe, which limited the project team’s ability to use the logframe as a management tool to gauge implementation progress and assess risks. In the early part of the project the project team did try to structure progress reporting more in line with a logframe format, but this did not meet UNEP reporting requirements at the time, and so was abandoned. PIRs were completed for all years, but were not always comprehensive; for example the risk assessment section of the 2006 PIR was mostly incomplete. The steering committee reviewed annual workplans and associated budgets, which were revised as necessary. Significant management-related revisions were the initial extension to October 2006, and the later extension to December 2007.

70. On the side of technical implementation some changes were made to the workplan and related activities at various points. In the 2004 steering committee meeting changes were made to the Southeast Asia regional component based on the advanced status of the APMI compared to what was foreseen in the project document. At the 2005 steering committee meeting the synthesis report originally envisioned under component 7 was switched to component 6, while funding in component 6 originally planned for a micro-grants program (with significant co-financing from the Global Peatlands Initiative that did not materialize as expected) would be used to support production of the synthesis report. The funds originally planned for the synthesis report under component 7 remained under this component for technical support for the other components. Also, in the 2005 steering committee meeting the Russia and China country components were extended until March 31st 2006.

71. There was some sentiment among steering committee members prior to the 2005 steering committee meeting that the project was not making sufficient implementation progress and was in some way off track, although this may have been a result of inadequate communication of progress and results by the project team. Multiple decision points and actions were outlined at the 2005 steering committee meeting and followed-up on by the 2006 steering committee meeting, at which point it was agreed that implementation progress was satisfactory.

72. Considering the previously described issues related to project management, institutional arrangements, and monitoring and reporting, there were many additional opportunities for adaptive management related to this aspect of the project. Unfortunately these problems were not adequately addressed in a timely manner. As noted in the project terminal report “On reflection, a more substantive review of the project’s administrative processes in association with UNEP staff should have been undertaken early on once these problems became clear.” There are a number of options that could have been explored – for example, GEC could have been made the primary contact point for UNEP and been responsible for producing progress reports, while essentially contracting WI for financial management to address the GEF and IA

concerns about GEC's institutional maturity. Fortunately, as previously stated, the administrative and monitoring problems did not derail the technical implementation of the project other than the fact that the GPA was significantly delayed.

iii. Financial Planning and Management

73. Table 3 below shows project budgeted and actual expenditure in UNEP budget management format, while Table 4 at the end of this section shows the project budget based on the project document. In the project document the project management budget was not clearly split out from any of the other components, and the description of component 7 in the project document includes project coordination and management. In both sources the IA fee was not clearly split out, and it is assumed that it was prorated across all components, or paid separately by the GEF to UNEP as 10% on top of the project budget.

Table 3 Integrated Peatlands Management Budget and Actual Expenditure (UNEP Format)

Budget Line	Responsible Party	Budgeted GEF Resources	%	Notes	Actual Expenditure	%
Project Personnel	Executing Partner: WI-HQ - includes administrative support, technical support, technical and management travel, and steering committee travel	108,062	11.11%	Of this, 2.71% is classified as technical, and 8.40% classified as management, including steering committee travel (1.48%).	110,379	11.35%
Component 1: Global Technical Component	Executing partner: GEC	122,500	12.59%		122,957	12.64%
Component 2: Russia Country Study	Executing partner: WI-Russia	98,000	10.07%		98,875	10.16%
Component 3: Indonesia Country Study	Executing partner: WI-Indonesia	96,705	9.94%		96,705	9.94%
Component 4: China Country Study	Executing partner: WI-China	99,500	10.23%		99,491	10.23%
Component 5: SE Asia Regional	Executing partner: GEC	143,000	14.70%		143,000	14.70%
Component 6: Global Outreach	Executing partner: GEC	244,000	25.08%	Including travel to and participation in global forums.	241,962	24.88%
Component 7: Technical Coordination and Synthesis	Executing partner: GEC	54,600	5.61%	Including travel to participating countries for technical support.	54,600	5.61%
Miscellaneous	Auditing and communications	6,338	0.65%		4,735	0.49%
Total		972,705			972,705	

Source: Project documentation: "Final Expenditure Report"

74. According to the final project expenditure report, there was little variation between the planned and actual expenditures. Component 6, the global outreach component, was the largest of the project components, with approximately 25% of the project budget. Each of the country components was allocated approximately 10% of the project budget.

75. The amount of resources that could be considered available for project management (management costs under “Project Personnel” plus “Miscellaneous”) amounted to 8.89% of the expenditure of GEF resources, which is below the GEF’s stated threshold of 10%. This percentage does not include administrative overhead or travel under each of the technical components, though these costs could be considered inclusive in the technical aspects of the project. Throughout the project documentation there are references to overspending in the Project Personnel budget allocation, but this was ultimately reconciled, as shown in the project final expenditure figures. This did lead at one point in the project (during the first half of 2005) to a problem with cash flow: overspending in project management and delays in progress reporting led UNEP to withhold the cash transfer for the first half of 2005 until WI confirmed in writing that they would cover overspending related to project management. This caused some minor difficulties for the partners implementing the technical components; for example WI-Russia had to borrow funds from its host organization, WWF Russia, until the cash flow problem was resolved.

76. Financial planning for the project clearly could have been improved, and the project would have benefited significantly from a dedicated monitoring and evaluation budget. This is now a requirement for all GEF projects. As stated in the project terminal report, “The budget for project administration and finance management was very tight (about 5% of the project budget)⁵ and as a result the EA staff time for overall project management amounted to about one person month per year which in a practical sense had to be combined with many other institutional roles within the organisation.” This arrangement contributed to the poor communication within the project team, and the problematic synthesis and delayed delivery of reports highlighted in the previous section.

77. While the use of management resources was not highly efficient, the resources allocated to the technical components (the majority of the project budget, at approximately 88% of resources) were used in a cost-effective manner. As described in Section V.B below, the project results were significant, and were commensurate with international norms and standards. With less than \$100,000 each of the country components conducted technical and scientific syntheses, produced numerous publications and outreach materials, and carried out demonstration site activities over a three-year period. The project’s achievements also would not have been possible without important co-financing from a variety of sources. To paraphrase one component leader interviewed, from their point of view the project is the best example of UNEP effectiveness in using \$1 million dollars, and the international recognition and influence of a document such as the GPA is very rare for a GEF MSP.

78. The project’s financial management included the production of quarterly budget reports, submitted to UNEP. As with the project progress reports, financial reports and other

⁵ The “5%” mentioned by the report is presumably referring to the Project Personnel management budget line, which actually amounted to 6.6% of the project budget.

required documentation were also regularly significantly delayed and not always structured according to UNEP requirements. For example, the final requirement regarding documentation of the equipment list for project closure remained unfulfilled from December 2008 to at least January 2010. As summarized in the project's final PIR, "The successful outputs and outcomes of the project have been achieved despite some weaknesses in the project's technical and financial administrative performance in relation to UNEP requirements."

79. There were multiple budget revisions, particularly with regard to the project extensions, and all budget changes were approved following UNEP guidelines. Audits were conducted annually, through the hiring of an external auditor to review the WI-HQ financial records. According to the 2006 audit report, the project financial statements "are compiled in accordance with generally accepted accounting principles", "all project expenditures are supported by vouchers and adequate documentation," and "expenditures have been incurred in accordance with the objectives outlined in the project document." The 2006 PIR notes "funds are correctly managed but required too many adjustment entries upon receipt of yearly audits." There is no indication that the project component sub-contracts (carried out by GEC and the three WI country offices) were audited; each component represented a relatively small amount of money, and all available evidence suggests funds were used in a responsible and effective manner. WI-HQ handled disbursement to the sub-contracts for the technical components without delays or other problems (following cash advance transfers from UNEP every six-months), and cash flow was not an issue other than the previously mentioned instance in the first half of 2005.

iv. Co-financing and Leveraged Resources

80. The project was highly successful in securing the expected co-financing, and in leveraging additional resources to address peatland management issues. As shown in Table 5, approximately \$1.4 million in co-financing was proposed at the start of the project, and more than \$2.1 million was received, which equates to 55.5% more than was planned. Thus the project's co-financing ratio was approximately 2.1 to 1. Co-financing came primarily from bilateral sources – CIDA and the Netherlands Government. CIDA provided \$1.2 million for the "Climate Change, Forest and Peatland in Indonesia" project which was particularly important in developing the models for community based peatland management in Indonesia and helping to build capacity at local, national and regional levels.

81. The funds leveraged by the project for peatlands management work building on the project's efforts are even more significant than the co-financing raised. The project identifies approximately \$9.5 million in leveraged resources for work to be carried out in China and Southeast Asia. The most significant source of leveraged funding was a 5 million euro (\$7.4 million United States dollars (USD)) project from the Netherlands government to continue and expand peatland rehabilitation work in Central Kalimantan from 2005 – 2007.

82. The actual figure for leveraged resources is arguably higher. For example, the project records indicate \$1 million in leveraged funds for a project funded from the European Union-China Biodiversity Partnership: "Integrated Management of Wetlands in Ruergai Plateau and Altai Mountains to support Biodiversity Conservation and Sustainable Development," which includes the project demonstration site. This project actually has a total budget of \$3.3 million,

with sources other than WI and GEC contributing the majority of resources. As part of this project, significant resources were leveraged from the Chinese government as well. As stated in the project terminal report, “In China a visit by the Vice Minister of forestry to the project site led to an immediate allocation of US\$200,000 to expand the scope of the blockage of drainage channels in the peatland areas in Ruogai county. This was facilitated by the fact that the local authorities had been closely involved in the implementation of the pilot activities and so were able to explain in detail the function and value of the interventions.”

83. There are also significant funds that could be considered as leveraged resources for which the project has not claimed specific responsibility. In 2009 Australia committed \$30 million dollars to support the Kalimantan Forests and Climate Partnership (KFCP). The project was not necessarily primarily responsible for the leveraging of these funds, but made a significant contribution – the former GEF project technical lead presented information drawn from the project experience to the Australian government prior to Australia’s commitment. The KFCP initiative is further highlighted in Box 3 under component 5 in Section V.B below. The \$10.2 million in co-financing for the regional peatlands project implemented by the International Fund for Agricultural Development (IFAD) (further discussed in Section V.B.v) could also be considered funding partially leveraged by the project.

C. UNEP Project Oversight

84. The inadequacies in project management described above were exacerbated by a challenging relationship between the executing and implementing agencies. As noted in the project terminal report and PIRs, and as further seen in project documentation and supported by evaluation interviews, the implementing oversight relationship was characterized by poor communication, and inefficient reporting requirements. The difficulties encountered were compounded by the fact that there was high turnover in UNEP’s task manager position for the project, with three individuals responsible over the life of the project. The full extent of supervision communication between UNEP and the project team was not available for review (partly due to the turnover in task managers), but it was clear that there were some egregious steps and resulting tensions. In one example, at the 2005 meeting a closed steering committee session was required to discuss the regional ASEAN peatland project being developed with IFAD as the executing agency (this project is further discussed under component 5 in Section V.B below). The project terminal report (produced by the EAs) notes that there was “a barrier to constructive partnership with UNEP” and that criticism from UNEP regarding project management and progress “could have been provided much more constructively.” Many of the oversight problems during the main period of project implementation may have been directly relevant to the individuals involved, and UNEP took the necessary steps to improve the situation when there was the opportunity, although this was when the project was mostly complete. A new UNEP task manager took over supervision duties in September 2007, at which point communication and oversight diligence improved significantly.

85. The initial change in task manager, in the early part of the project around 2004, may have left the new task manager without the full context and understanding of the project’s background, development, and activities, at least from the point of view of the EA. Yet apparently only one supervision field mission was undertaken, at the time of the final steering committee meeting in China in May 2006. The project’s terminal report notes that “More

regular contact with UNEP might have reduced communication and project management issues” and recommends “For projects with field components, visits by the task manager would enhance mutual understanding. It would be strategic that task managers visit project sites at an earlier stage. By doing this, verification of activities carried out in the field can be seen and direct advice if needed can be made to the implementers. The task managers would also be more familiar with the issues being addressed by the project.” This evaluation concurs with both of these statements.

86. Another shortcoming in supervision was the process for the second project extension. Following the initial extension to October 2006 there was agreement in principle between UNEP and the project team in April 2007 (which was already six months after the previous extension ended) for the project to be extended to June 2007. The requirements for the extension were communicated by UNEP to the EAs. However, the requested documentation to officially extend the project was not received from the project team until November 2007 (with the extension now going through December 2007) – 13 months after the previous extension had expired. From a financial and administrative management point of view, the fact that the project had, by September 2007 (when UNEP followed-up to receive the necessary documentation for the extension), carried on 11 months beyond its previous official closing date was highly problematic.

87. As further discussed in Section VI.E.i on project monitoring and reporting, the insufficient oversight by UNEP (combined with the problematic project management structure discussed previously) contributed to significant delays in a large number of reports and communications. Whether due to the project management structure or other reasons, the EAs frequently fell short in timely reporting and follow-up to issues raised by UNEP, which was challenging from UNEP’s oversight perspective. As highlighted in one IA to EA communication, by September 2007 there were 11 delayed reports and other communications. UNEP noted in the 2007 PIR (the project’s last), “UNEP’s changes in [task manager] as well as other flaws have negatively impacted the proper teamwork on management as well as support to the EA in completing its work.” There is clearly a balance of responsibility between the IA and EA in this and other troublesome project management / oversight matters, but the timing and sequence of events makes clear that more intensive or alternate approaches to supervision from UNEP was needed.

Table 4 Integrated Peatlands Management Project Financial Breakdown (\$ USD)

	GEF Amount Planned	% of GEF Amount Planned	GEF Amount Actual*	% of GEF Amount Actual *	Total Planned	% of Total Planned	Total Actual**	% of Actual Total
Component 1: Global Technical Component	125,500	14.3%	122,957	12.6%	213,500	8.6%	N/A	N/A
Component 2: Russia Country Study	102,000	11.7%	98,875	10.2%	160,000	6.5%	N/A	N/A
Component 3: Indonesia Country Study	100,705	11.5%	96,705	9.9%	932,615	37.6%	N/A	N/A
Component 4: China Country Study	103,500	11.8%	99,491	10.2%	227,000	9.2%	N/A	N/A
Component 5: Southeast Asia Regional Component	151,000	17.3%	143,000	14.7%	265,000	10.7%	N/A	N/A
Component 6: Outreach / Capacity Building and Linkage to Global Environment Conventions	252,000	27.4%	241,962	24.9%	476,500	19.2%	N/A	N/A
Component 7: Coordination and Report Synthesis	140,000	16.0%	169,714	17.4%	205,000	8.3%	N/A	N/A
Monitoring and Evaluation (no budget provision in project document)	0	0.0%	0	0%	0	0.0%	N/A	N/A
IA Fee*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	974,705		972,705		2,479,615		3,110,705	

Source: Planned amounts from Project document; actual amounts from project records provided for the evaluation.

*Financial reporting records of actual costs did not clearly break out the IA fee, which may have been prorated across all components in project budgeting or was paid separately by the GEF to UNEP on top of the total project budget.

** Co-financing was not tracked per project component, thus it is not possible to determine total actual expenditure per component.

Table 5 Integrated Peatlands Management Project Anticipated and Actual Co-financing (\$ USD millions)

Co financing (Type / Source)	IA own Financing		Multi-lateral Agencies (Non-GEF)		Bi-laterals Donors		Central Government		Local Government		Private Sector		NGOs		Other Sources		Total Financing		Percent of Expected Co-financing	
	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual		
Grant			0.060	0.090	1.060	1.729												1.120	1.819	162.4%
Credits																				
Loans																				
Equity																				
In-kind													0.255	0.319				0.255	0.319	125.1%
Non-grant Instruments																				
Other Types																				
TOTAL																		1.375	2.138	155.5%

Source: Project Final Revised Terminal Report, September 29, 2008.

V. Integrated Peatlands Management Project Performance and Results

A. Evaluation Key Questions

88. The following table provides a brief summary response directly to the evaluation key questions as defined in the TORs (see Section II.A). The key questions correspond directly to the project’s anticipated outcomes. However, there were no adequate indicators, baselines and targets to objectively assess the answers to the key questions. Therefore, the summary answers below represent a subjective assessment based on the evaluative evidence presented in this report.

Key Question 1: Did the project ‘improve understanding of the role of peatlands as carbon deposits in developing countries’ among key target audiences (international conventions and initiatives, national level policy-makers, regional and local policy-makers, resource managers and practitioners)

Based on the projects outputs and activities, it appears highly likely that the project made a significant and valuable contribution to improving the understanding of the role of peatlands as carbon deposits in developing countries among key target audiences. At the global level, the recommendation by the CBD SBSTTA, highlighting the GPA, is one indication of increased understanding and awareness of the role of peatlands. The project also held numerous well-attended presentations and side events at international meetings such as UNFCCC COPs. While both of the executing organizations continue to highlight peatland issues in their advocacy efforts, it is highly likely that without this project far less would have been accomplished in terms of raising the profile of the importance of peatlands with respect to climate change. In addition, the GEF’s strategic priorities for the fifth replenishment of the GEF (agreed in May 2010) includes, as a key outcome for the climate change focal area, “restoration and enhancement of carbon stocks in forests and non-forest lands, including peatland.”

At the regional and national levels, the project’s “Peat-Portal” network, support for the APMS, and capacity development activities contributed to improved understanding and awareness. The scientific review and synthesis in the participating countries has also produced important outputs highlighting the role of peatlands.

Within each of the demonstration countries there have been actions taken by government actors at local, sub-national and national levels that demonstrate an enhanced appreciation for the role of peatlands. Specifically, in Russia, the oblast administrations in the project area took actions to improve peatland management. In China, county and national level government institutions have provided increased support for peatland restoration activities at the demonstration site. Indonesia has recognized the role peatlands play in Indonesia’s share of global greenhouse gas emissions and a variety of institutions and non-government actors are increasingly active in peatland restoration and management, although there remain numerous significant environmental threats.

Key Question 2: Did the outputs of the project articulate options and recommendations for managing peatlands as carbon deposits while protecting biodiversity? Were these options and recommendations used? If so by whom?

Multiple project outputs identified options and recommendations for sustainable peatland management generating both climate change and biodiversity benefits, though there are many financial, social and political barriers to successful peatland management still to be addressed. The most significant project output was the GPA, the recommendations of which were formally supported by the CBD in SBSTTA recommendation 12/5. It is not possible within the scope of this evaluation to determine if these recommendations have been implemented, but the GPA continues to be in demand and in circulation, and is now in its third printing. It is notable that a GEF FSP on peatland management is currently being implemented in Southeast Asia, involving many of the partners of this project, applying their previous experience. Additionally, as mentioned in the previous question, the GEF has specifically incorporated restoration and enhancement of peatlands in its strategic priorities for GEF-5, which is likely to lead to the implementation of peatlands management recommendations. At the regional level, the APMS includes a detailed action plan for sustainable peatland management, and national action plans are being developed by ASEAN member nations. The demonstration sites in Indonesia and China, and the scientific research and synthesis in Russia also produced valuable lessons and recommendations, which were documented in scientific papers and peatland restoration manuals produced by the project. Anecdotal evidence indicates that the lessons and good practices for peatland restoration techniques from the Indonesia Kalimantan site are being used by other institutions and organizations involved in peatland restoration in Indonesia.

Key Question 3: To what extent did the project outputs produced have the weight of scientific authority and credibility necessary to influence policy makers and other key audiences?

On the whole the project was of high technical quality. Many of the individuals involved are international experts in peatland issues related to climate change and biodiversity loss. The GPA was the main technical output at the global level, and has been used and referenced extensively.⁶ The fact that the GPA was recognized and supported by the CBD's scientific and technical body is a significant endorsement of the scientific credibility of this report. In Indonesia, national government institutions have used the peatland atlas produced with the project's support in policy decisions. In Russia, the project team and other partners have published numerous scientific articles. While the scientific authority and credibility of the project outputs is not in question, as a partial targeted research project, the project might have had an even greater and long-lasting impact if it had produced more publications in peer-reviewed journals to supplement the extensive gray literature produced. For example, an analysis of the restoration techniques assessed in the pilot sites could have been published, or other aspects of the project could have been synthesized.

⁶ A quick search on Google Scholar indicates that the assessment has been referenced 26 times in other publications, though not all of these are scientific references.

B. Achievement of Anticipated Outcomes (Effectiveness)

89. As described in Section III.B.ii on project design, the project document lacked an adequate logframe, and the described objectives, outcomes and outputs are not clearly linked to the project components. Outcomes were partially retrospectively reconstructed in the later PIRs, but indicators, baselines, and targets were still not adequately defined to facilitate evaluation based on expected results. Achievement of objectives and outcomes – effectiveness - is rated *satisfactory*. The outcomes and indicators in Table 6 below, drawn from the final project PIR, were synthesized from the original project document.

Table 6 Project Objective and Outcomes with Indicators and Results

Objective and Outcomes	Indicator	Self-reported Results	Evaluation Assessment
Objective: The project aims to address the capability of peatlands to act as significant carbon deposits, and provide recommendations on how these areas could be managed to ensure this attribute is maintained and even improved while protecting biodiversity	1. Improved understanding of the role of peatlands as carbon deposits in developing countries.	Significantly improved understanding of the role of peatlands as carbon stores in developing countries as demonstrated by strong supporting statements and decisions in CBD and UNFCCC deliberations as well as reports by IPCC and other authorities	Based on statements and documents from the CBD, UNFCCC and Ramsar, and the publication and dissemination of many technical documents from the project including the GPA, the identified indicators have been satisfactorily achieved. There were no quantitative targets identified related to the specified indicators.
	2. Improved availability of documents providing options and recommendations for managing peatlands as carbon stores while protecting biodiversity.	Peatland restoration manual and Global Assessment report and more than 10 other publications from the project in 5 different languages available to provide options and recommendations for managing peatlands as carbon stores while protecting biodiversity eligible countries.	
Outcome 1: Improved understanding of management issues affecting peatlands in selected case study countries.	1.1 Active participation of peatland managers and specialists from at least 15 countries in sharing and promoting management options for peatlands which take account of climate change and biodiversity issues.	Active participation of peatland managers and specialists from at least 25 countries in sharing and promoting management options for peatlands taking into account climate change and biodiversity issues	Concur with self-reported results. The reported number of countries with active peatland managers and specialists (25) may relate to those serving as authors of the GPA, and/or participation in the Peat-Portal website. In each of the case study countries, local and in some cases national level government officials have gained increased awareness and understanding of the importance of peatland management, as demonstrated by participation in project events and the associated allocation of resources, especially in China. Technical publications related to peatland management, which have subsequently been applied by other stakeholders, were also produced and disseminated in national languages in each of the case study countries. The indicators have been satisfactorily met. There were no quantitative targets identified related to
	1.2 Status report on the scientific knowledge concerning the role of peatlands in accumulating carbon pursuant to various management practices and the relationship of these activities to biodiversity	Assessment on Peatlands Biodiversity and climate change prepared and welcomed by the CBD SBSTTA 12 meeting In July 2007	

			the specified indicators, other than the number of countries with active peatlands managers and specialists.
Outcome 2: Guidelines on management options or interventions to maintain peatlands' role in carbon storage.	2.1 Recommendations to the GEF, CBD, Ramsar Convention and UNFCCC Contracting Parties on improving, enhancing and restoring peatland function to improve capability for carbon accumulation while concurrently enhancing/maintaining conservation of biological diversity	Global Assessment on peatlands biodiversity and Climate change (produced by the project) formally welcomed by the CBD SBSTTA in July 2007; Executive Secretary of the CBD mandated to formally convey the assessment and recommendations to the UNFCCC COP13 in December 2007.	Concur with self-reported results. The GPA includes management guidelines and recommendations, and has been widely disseminated, as noted in the self-reported results. Broadly speaking the project has produced a large body of information and documentation on which others can draw for development of projects or other activities related to peatland management for carbon storage and biodiversity conservation. There were no quantitative targets identified related to the specified indicators.
	2.2 A document for eligible countries to assist them in developing projects if they so wish, related to the utilization of peatlands as carbon stores while protecting and restoring their biodiversity values	Synthesis report Peatland restoration manual and more than 20 other publications/ awareness materials from the project in 4 different languages (Russian, Chinese, Indonesian, English) available to provide information and guidance to eligible countries.	

i. Component 1: Global Technical Component

90. As shown in Figure 1, this component was overseen by GEC, with support from WI. Key activities and outputs under component 1 of the project were the technical review and synthesis of the global “state of knowledge” related to peatlands. This included a review of peatland management strategies and information on carbon accumulation in peatlands, and assessment of the impacts of peatland management practices on carbon stores and biodiversity, a review of possible peatland restoration options, and the production of background and issues papers as inputs to the other project components. Also produced was a web-based handbook on peatland restoration, which is available from the International Mire Conservation Group website. This manual is a “living document” to allow regular updates, with the latest version dated April 18, 2008. Technical support activities such as drafting workshops and technical advisory missions related to components 2 – 4 were also included. The project produced a large number of technical outputs related to synthesis of scientific information, and documentation of lessons and good practices from the demonstration sites. This included the peatland restoration handbook and manuals produced. The project apparently did not seek to produce technical peer-reviewed publications. Such publications would have complemented the extensive gray literature produced, and contributed to broader and longer lasting project outcomes. The project was not a technical field research project per se, but there were numerous aspects that could have been developed into peer-reviewed publications, such as the experiences with various peatland restoration techniques.

ii. Component 2: Russia Country Study

91. The Russia country study included three sub-objectives: 1. Review and conduct a gap analysis of key information on peatlands in Russia; 2. Assess the impact of management options on peat / climate / biodiversity at key regions; and 3. Enhance awareness and share information regarding peatland management / biodiversity / climate change interface. This component was carried out by the WI – Russia Country Office.

92. The Russia country study included 16 activities across the three sub-objectives. A large portion of the work included the review and synthesis of over 2,000 references, reports, and ongoing projects related to peatlands in Russia. Following the identification of knowledge gaps, some field research was conducted using closed chamber methods to assess greenhouse gas emissions in peatlands at various levels of degradation. The distilled information was developed as a series of review papers used for input to policy decision-making. An executive summary of the project technical papers and articles, with management recommendations, titled “Peatlands’ Status in Russia and their role for biodiversity and climate change,” was delivered to the Ministry of Natural Resources. Final regional workshops were held in Tver and Tomsk oblasts, with peatland management recommendations presented. Other activities included outreach and awareness activities such as a website promoting the wise use of peatlands in Russia – www.peatlands.ru (which continues to be maintained by Wetlands International – Russia), the publication of flyers and articles, study tours to the project demonstration sites in China and Malaysia, and an additional peatlands site at Sungari River in China. The project also supported the sharing of information among a network of interested managers, scientists and decision-makers.

93. Among the highlights of the Russia component was a high level workshop, “Wise Use of Peatlands in Russia”, held from 20-25 September 2005. The workshop was held partially in the Ministry of Natural Resources of the Russian Federation and partially in Tver oblast, and included participation from Center of Environmental-Economic Research and Information, WI-Russia Programme, Tver State Polytechnic University, Scientific-Research Center “Radchenkotorf”, Ministry of Environment and Nature Management of Moscow Oblast, and the Research Center “Mosoblekologia”.

94. As a result of project activities, the Ministry of Natural Resources provided \$30,000 funding to develop the national methodology for inventoring wetlands as sinks and sources of green house gasses related to land-use, land-use change and forestry, which was one of the unexpected results of the project. At the sub-national level, following the project, Tver and Tomsk oblast administrations developed peatland conservation plans focused on biodiversity aspects. In 2008, the Tomsk oblast administration designated the Vasyuganie protected area of 1.5 million hectares, finalizing a process started during the project. The WI-Russia program continues to initiate policy discussions at the federal and oblast level on peatlands, but individuals involved in the project indicate that national policy has not necessarily become more favorable towards the sustainable management of peatlands.

iii. Component 3: Indonesia Country Study

95. This component also included three sub-objectives: 1. Review key information on peatlands in Indonesia; 2. Assess the impact of management options on peat / climate / biodiversity at key sites; and 3. Enhance awareness and share information regarding the impact of peatland loss on biodiversity and climate change. WI-Indonesia was responsible for this component.

96. As with the Russia component, a set of activities for the Indonesia country study included a review and assessment of information on Indonesian peatlands. A significant technical output was the atlas of peatlands for Sumatra and Kalimantan, published in 2005.⁷ According to project sources, the atlas has been used by local and national government institutions for policy making on peatlands, and by private sector and other actors. For example, at least four proposed peatlands concessions areas for industrial estate crops companies in South Sumatra were carefully studied prior to permitting by Ministry of Forestry using peat information gathered by the project and the peatland atlases. The atlases have also been distributed to international organizations and research institutes, such as WWF, CIFOR and JICA. Manuals on peatlands restoration techniques such as canal blocking, fire management, and above and below ground carbon measurement were also developed in Bahasa Indonesian and English. According to the project terminal report, “In early 2007 an Indonesian Presidential Instruction (INPRES 2/2007) directed the large-scale rehabilitation of peatland in the former mega Rice scheme – utilizing many of the techniques developed by the project.” According to another source, a recent cost-benefit analysis by Indonesia’s national planning agency identified peatlands as the highest priority for meeting the Indonesian governments 2009 pledge to cut greenhouse gas emissions by 26% by 2050.

97. Outreach and awareness targeted decision-makers, with policy dialogues and workshops organized at the national and provincial levels. The two high level workshops held were “Workshop on National Wetlands Strategy and Action Plan”, Ministry of Environment office, Jakarta, February 25, 2005, and “Workshop on National Peatlands Management Strategy & Donors meeting”, Ministry of Home Affairs, Jakarta, November 29-30, 2005. As in Russia, the Wetlands International Indonesia office established a communications network on peatlands / climate change / biodiversity with interested stakeholders and experts. As one example of the project’s successful outreach efforts, the Al Jazeera television network showcased the demonstration site and project coordinator in their special feature on peatlands and climate change released on the first day of the UNFCCC COP 13 in December 2007. According to multiple stakeholders interviewed for this evaluation, the Central Kalimantan government has demonstrated it is positively disposed toward peatland conservation and restoration.

98. There were two separate field sites in Indonesia for the assessment and testing of restoration techniques: Merang-Kapahyang in South Sumatra, and the drainage basin between the Kapuas and Mantangai rivers in Central Kalimantan (see area outlined in red in Figure 2). Biological, physical and hydrological monitoring was carried out in both sites.

⁷ Reference: Wahyunto, Sofyan Ritung, Suparto, Subagjo (eds.) 2005. “Peat distribution and carbon contents in Sumatera and Kalimantan”, Edited by I Nyoman N. Suryadiputra and Dandun Sutaryo, Wetlands International Indonesia Programme, ISSN No. 979-99373-4-5 (1500 copies).

Figure 2 Central Kalimantan Demonstration Site⁸



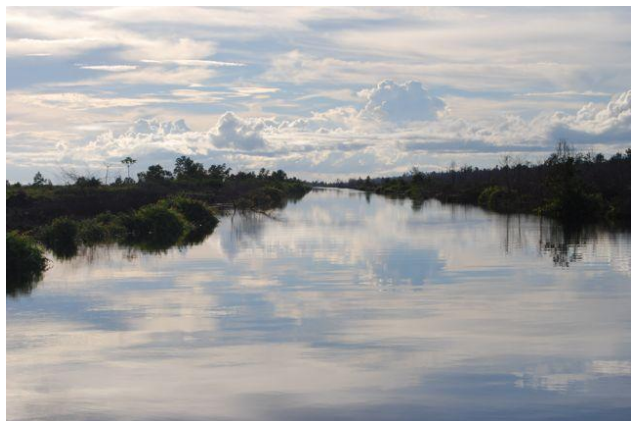
99. The Central Kalimantan demonstration site sits in a 40-50,000 hectare drainage basin, which was part of the failed former Mega-Rice project, in which the government of Indonesia set out to clear and build canals through 1 million hectares of peat forest in the mid-1990s. Demonstration activities were carried out in areas affecting approximately 6-8,000 hectares. Photo A shows cleared and burned peat former peat forest area, and Photo B shows one of the large canals extending for tens of kilometers that continue to drain extensive peat substrate. The main project field activities were the testing of canal blocking using local methods and materials, and tree planting from a local nursery to rehabilitate burned areas.

Figure 3 Photo Documentation from the Central Kalimantan Demonstration Site

Photo A. Former Peat Forest in Mega-Rice Project Area



Photo B. Drainage Canal in Mega-Rice Project Area



⁸ Source: Google Maps.

Photo C. Canal Blocking Dam Example 1



Photo D. Canal Blocking Dam Example 2



Photo E. Earthen Dam Spillway



Photo F. Boat Passage Over Restoration Dam



Photo G. Illegally Cut Timber Rafted for Transport



Photo H. Saplings Planted by Project Destroyed in August 2009 Fires



100. The evaluation field visit was carried out in the Kalimantan field site to view the canal blocking techniques and assess the activities completed and the sustainability of results. The demonstration site activities were not intended to restore large areas of degraded peatland, but to test techniques that could be employed with much larger investment. According to individuals involved, only about \$10,000 of the Indonesia country component was used in the Central Kalimantan site to support restoration activities. Achieving any significant amount of

restoration would require a much larger investment, along the lines of the KFCP initiative. Local community members were employed to implement innovative low-tech restoration techniques involving building dams with local materials to reduce the rate of water flow through the large drainage canals (see Photos C and D).

101. Throughout implementation of the canal blocking the project team gained insight and learned lessons vis-à-vis specific techniques. For example the team learned to construct spillways so that the blocked water wouldn't completely wash out the dam during the wet season (see Photo E). Spillways also facilitated the passage of local boats (Photo F), which use the canals extensively for transportation. The team learned to plant saplings on the downstream side of the dams during the dry season, to help support the dam and eventually create a natural barrier. Some local community members discovered that the blocked canals could provide improved fish harvest during the dry season. It was also found that illegal loggers, who use the canals to transport cut timber (Photo G), also destroyed some dams. The evaluation field visit, carried out two to three years after the end of project activities, provided a view to the sustainability of certain restoration techniques. The local unavailability of sand or other mineral soils for dam construction remains a significant barrier to large-scale restoration.

102. Demonstration site activities also included tree planting in an effort to restore burned areas with vegetation, but unfortunately a fire in the summer of 2009 destroyed approximately 50% of the planted saplings (see Photo H).

103. Less information is available about the Merang-Kapahyang demonstration site in South Sumatra, though similar activities were carried out in this site. According to one source there are initial plans to develop the site into a 150,000 hectare carbon reserve, financed by a private company from the United Kingdom, from which carbon credits could be sold under the UNFCCC REDD mechanism or on the voluntary carbon market.

iv. Component 4: China Country Study

104. As with the other country study components, the China component was carried out by Wetlands International's China Office, and had three sub-objectives: 1. Information sharing and review; 2. Assess impact of management options on peat / climate / biodiversity at key sites; and 3. Enhance awareness of the impact of peatland loss on biodiversity and climate change. During the May 2006 steering committee meeting, steering committee members highlighted their view that the component in China "had been more effective than many projects in China partly because it had been managed by an NGO."

105. Activities included a technical literature review and synthesis on peatland status and distribution, key threats and management regimes, and the interface between peatlands, biodiversity, and climate change. Information gaps were identified and further desk study undertaken. An international workshop on peatlands biodiversity conservation, restoration and sustainable use was held in Lanzhou July 7-9, 2004, attended by 100 participations. A professional network was established, and two training sessions were held for media regarding the monitoring of the restoration of peatlands. A final wrap-up workshop was held with international and local partners at the field site in Ruergai County in May 2006 to share and disseminate lessons and experience. Additional awareness activities included the production and distribution of 10,000 newsletters and 500 brochures and factsheets. At the 2006 project

steering committee meeting it was further noted that the project had been impressive with respect to “the achievements in raising political awareness and securing political support. Politicians seem to be aware of issues related to peatland conservation and are providing their support through participation in project activities such as the recent stakeholder workshop.”

106. The field demonstration site was located in the Ruorgai peatlands, which cover approximately 500,000 hectares at an altitude of 3400 – 3900 meters, one of the largest high altitude peatlands in the world. The area has been degraded through conversion to agriculture and grazing pressure, leading to erosion and loss of wetland areas. The project established an MOU with the Hongyuan and Ruorgai County governments regarding peatlands restoration. This partnership set the foundation for additional work, including a \$1.6 million project funded by the European Union.⁹

107. There were four pilot sites established in which sandbag and wooden dam techniques were tested for blocking canals and erosion drainages to restore the peat areas (see Figure 4). According to project documentation, the area has been subsequently monitored by German scientists, and has shown improved hydrological function, and vegetation and biodiversity recovery. Training exercises were successfully held with over 50 people from local government concerning the function and value of peatlands, and management and restoration options. The

Figure 4 Peatland Sandbag Restoration Techniques in Ruorgai Demonstration Site (Source: GEC)



demonstration restoration work encouraged the government to prioritize wetlands conservation, and the State Forestry Administration has shown its appreciation of the restoration efforts through recognition by the Vice Administrator. A significant outcome of the demonstration site efforts was an increased recognition by the government of the ecosystem services provided by peatlands, specifically the hydrological regulation peatlands provide for the downstream Yellow River watershed.

108. According to the project’s terminal report, prior to the scientific work carried out at the project field site, wetlands research had focused primarily on wetland biology; the interaction between wetlands and socio-economic development, especially in relation to agriculture and livestock, was rarely considered. The project contributed to an increasing awareness by local government of the importance of the linkage between agricultural development and wetlands conservation, and according to the project terminal report, an area of mined peatland in Hongyuan was set aside for restoration.

⁹ Project: “Integrated Management of Wetlands in Ruorgai Plateau and Altai Mountains to support Biodiversity Conservation and Sustainable Development” See: <http://www.undp.org.cn/showproject%5Cproject.php?projectid=00057530>.

v. Component 5: Southeast Asia Regional Component

109. This component focused on the development of a regional peatlands management strategy through ASEAN, and increasing awareness and capacity at the regional level on peatland management issues. The regional ASEAN Peatland Management Strategy for 2006 – 2020 was prepared through consultative workshops in Bogor in 2003 and 2005, and formally adopted by ASEAN in November 2006 (see Box 2). By the end of the project five countries were working on National Action Plans.

Box 2 Background and Overview of APMI and APMS

ASEAN Peatland Management Initiative: The APMI was first proposed at the 9th ASEAN Ministerial Meeting on Haze on 11 June 2002 in Kuala Lumpur. The APMI was adopted at the 20th Meeting of the ASEAN Senior Official on the Environment-Haze Technical Task Force in Manila in February 2003, together with an initial work plan (2003-2005) that included development of a regional strategy.

APMI Goals: Promote sustainable management of peatlands in the ASEAN region through collective actions and enhanced cooperation to support and sustain local livelihoods, reduce risk of fire and associated regional haze, and contribute to global environmental management.

APMI Objectives:

- Enhance understanding and build capacity on peatland management issues in the region
- Reduce the incidence of peatland fires and associated haze
- Support national and local level implementation activities on peatland management and fire prevention
- Develop a regional strategy and cooperation mechanisms to promote sustainable peatland management

ASEAN Peatland Management Strategy: The strategy was developed within the framework of the APMI, and was initiated during the first regional workshop on the APMI, held in Bogor, Indonesia on 16-17 October 2003, where each ASEAN Member Country presented background information and a country paper. The ASEAN Secretariat, with the assistance of the GEC, then developed the outline into a full regional strategy, taking into account the discussions in the regional workshop, country papers, statements and recommendations from relevant workshops and conferences on peatlands, and inputs and comments gathered from ASEAN Member Countries, APMI partners and supporters. The ASEAN Secretariat circulated the first draft of the regional strategy in July 2004. ASEAN Member Countries were requested to conduct their respective national consultations to provide inputs to the draft strategy. The Second Regional Workshop on the APMI was held at the end of May 2005 to consolidate results of the national consultations and finalize the draft regional strategy. The APMS was formally endorsed by the ASEAN Environment Ministers meeting, 10 November 2006 in Cebu, Philippines.

The APMS has the same goal as the APMI, and a detailed action plan to implement the four objectives:

- Objective 1: Enhance awareness and capacity on peatlands
- Objective 2: Address transboundary haze pollution and environmental degradation
- Objective 3: Promote sustainable management of peatlands
- Objective 4: Promote regional cooperation

Source: ASEAN Secretariat. 2007. "Strategy and Action Plan for Sustainable Management of Peatlands in ASEAN Member Countries," Jakarta: ASEAN Secretariat. <http://haze.asean.org/peatlandmanagement/apms>.

110. Specific online tools / websites were employed as part of this component to help raise awareness and share information about peatland management in the region. The project established the SEA-Peat Network e-group with over 500 members, and further developed the Peat Portal website (<http://peat-portal.net/>). Information was also disseminated through the ASEAN Haze Online website (<http://haze.asean.org/>).

111. Additional activities under the awareness and capacity development portion of this component included support for three regional workshops, one national and two regional training courses on peatland fire prevention and control, and four study tours. The project conducted public outreach regarding the APMI, and produced awareness brochures and other materials in four languages that were displayed and distributed at relevant regional forums. Additional resources went to small pilot activities in Malaysia and Viet Nam: In Malaysia's Raja Musa Forest Reserve three small dams were emplaced in abandoned logging canals to test the effectiveness of different dam construction materials; a grant of \$5,000 was awarded to the Viet Nam Environmental Protection Agency to initiate a variety of activities supporting peatland conservation and sustainable management. The component also engaged the government of Thailand, which voluntarily translated the peatland restoration manual into Thai.

112. One of the outputs under this component was the securing of additional resources for national and regional initiatives on peatlands management. A key follow-up to the project is a subsequent GEF-supported regional full-sized project, "Rehabilitation and Sustainable Use of Peatland Forests in Southeast Asia," also executed by GEC, with IFAD as the implementing agency. Other partners include the ASEAN Secretariat, and national and local government stakeholders in the participating countries of Indonesia, Malaysia, the Philippines and Viet Nam, as well as Brunei Darussalam and Singapore. The project has a four-year implementation period and a total budget of \$14.5 million, including \$4.3 million in GEF financing. According to GEC's website, the project "aims to

demonstrate, implement and scale up sustainable management and rehabilitation of peatland forests in South-East Asia. It fits within the framework of the APMI, and directly supports the APMS (2006-2020), and associated National Action Plans on Peatlands in the participating ASEAN countries." The project is also highlighted on the ASEAN Haze Online website.¹⁰

113. Another significant follow-up initiative is the KFCP initiative, funded with \$30 million Australian dollars by AusAID (further detailed in Box 3). The KFCP project area includes the former GEF project demonstration site.

Box 3 The Kalimantan Carbon Forest Partnership

In 2008 Australia committed A\$30 million to support the first large-scale REDD demonstration in Indonesia. The demonstration activity is being implemented in an approximately 120,000 hectare area of forested and degraded tropical peatlands in Central Kalimantan. The KFCP aims to reduce greenhouse gas emissions and demonstrate an equitable and effective approach to REDD by developing:

- Measures to reduce emissions from deforestation and forest degradation;
- Approaches to forest carbon measurement, linked with Indonesia's national systems;
- Incentive based payments for forest-depending communities in Central Kalimantan; and
- Institutional and governance arrangements for REDD activities.

Source: AusAID. 2009. "Kalimantan Forests and Climate Partnership Factsheet," December 2009.

¹⁰ See <http://haze.asean.org/peatlandmanagement/gefifad>.

vi. Component 6: Global Outreach and Linkages to Conventions

114. This component was managed by GEC, and focused on increasing understanding and awareness of the role of peatlands among audiences related to the UNFCCC, CBD and Ramsar convention. A primary output under this component was the development and publication of the Global Peatlands Assessment,¹¹ developed with extensive input from a broad range of sources and expert authors. This document is an incredibly valuable resource that brings together a massive amount of information on all different aspects of peatlands, and can be considered an excellent achievement of the project (even if it did take longer to produce than planned). Unfortunately GEC has not tracked the website traffic and number of downloads of this document to assess its possible reach and influence.

115. Key project outputs, including more than 80 publications, were widely disseminated in the global outreach component, especially the GPA, which was formally presented to the CBD SBSTTA in July 2007, which recognized and welcomed the report. The meeting's recommendation 12/5 "Urges Parties, other Governments, donors and relevant organizations to support further action, such as the ones listed in the global Assessment of Peatlands, Biodiversity and Climate Change, that could contribute to the conservation and sustainable use of peatlands and assessment of their positive contributions to climate change response activities."¹² The report was also promoted at the UNFCCC COP 13 in Bali in December 2007. A UNEP press release at the COP highlighted peatlands as a quick and cost-effective measure to reduce 10% of global greenhouse gas emissions.

116. Individuals involved in the project attended 25 convention meetings to promote peatland biodiversity and climate change issues: five UNFCCC COPs, seven UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA) meetings, one CBD COP, five CBD SBSTTA meetings, and seven Ramsar meetings. According to the project terminal report, individuals involved in the project made more than 200 presentations at national, regional and international meetings in more than 20 countries. Twelve workshops were also held at multiple convention meetings to raise awareness. According to the project team, peat-related side events at UNFCCC COPs at the beginning of the project attracted 20-30 participants, while the side event held at the UNFCCC COP in Copenhagen in December 2009 attracted 200 people (though overall COP attendance has increased many-fold in this time period as well). Project results were shared with "relevant" GEF focal points, according to the project terminal report. Also under this component, a global workshop on Integrated Management and Rehabilitation of Peatlands was held February 6-7, 2004 - immediately before the seventh COP of the CBD, in Kuala Lumpur. There were 95 workshop participants from Europe, Asia and North America.

117. One indication of the project's sustained effects is that under the 5th objective of the GEF's climate change strategic priorities for its fifth replenishment, a key expected outcome is the "restoration and enhancement of carbon stocks in forests and non-forest lands, including peatland." This could potentially have a significant long-term impact, as these strategic

¹¹ Reference: Parish F., Sirin A., Charman D., Joosten H., Minaeva T. and Silviu M. (eds) 2007. Assessment on peatlands, biodiversity and climate change. Global Environment Centre, Kuala Lumpur and Wetlands International Wageningen.

¹² The full text of the recommendation, which extensively highlights the GPA, can be found at <http://www.cbd.int/recommendation/sbstta/?id=11464>.

priorities will guide GEF investments in the climate change focal area for the next four years. Another unexpected result from this component is that methodologies for measuring greenhouse gas emissions from peatlands are being developed and incorporated in the Voluntary Carbon Standards used in the international voluntary carbon market. The private sector is becoming increasingly interested in Indonesia's carbon market potential.¹³ In another development, the UNFCCC's carbon accounting methodologies will distinguish between organic and mineral soil carbon, opening a door for the importance of peatlands to be operationalized.

vii. Component 7: Project Coordination and Development and Report Synthesis

118. As previously described, WI and GEC were responsible for project management and technical coordination. The activities under this component focused on project management, technical support, monitoring, and financial management:

- Monitoring of project technical activities (17 monitoring visits completed to China, Indonesia and Russia);
- Evaluation of project technical activities (three technical review meetings held by component leaders to compare and evaluate progress, terminal evaluation carried out);
- Monitoring of project financial expenditure (completed through quarterly financial reports and annual audit);
- Annual audit of project accounts (completed);
- Coordination of project cash-flow (completed);
- Development of partnership agreements (completed);
- Development and updating of guidelines for project management and administration (see information on project management, monitoring and reporting);
- Organizing and running project steering committee (three meetings held).

119. These topics are otherwise covered in Section IV.B on project management and financial management, and Section VI.E.i on project monitoring and reporting.

VI. Key GEF Performance Parameters

A. Sustainability

120. Sustainability ratings are provided in this report, as required. The fact that this terminal evaluation is ex-post – carried out more than two years after formal project completion, and more than three years after a majority of activities were finished - presents an opportunity for increased visibility toward the sustainability of project results, at least in the short-term. In the context of GEF projects there is no clearly defined timeframe for which results should be sustained, although there is the implication that they should be sustained indefinitely. It must be kept in mind that sustainability is a dynamic state, which can be dramatically influenced by

¹³ For example, see Kusumaatmadja, R. "Private Sector Opportunities in Indonesia and the United States for Investment in REDD Projects," Presentation, Jakarta, October 6, 2009.

small changes in context and external factors. Therefore, the longer the time horizon, the lower the degree of certainty possible when evaluating sustainability.

121. In the case of the Integrated Peatlands Management project, it is particularly important to distinguish between risks to the sustainability of project results, and risks to the sustainability of peatlands in general (which are manifold). Although this was a “global” project working toward sustainable peatland management and restoration, the project objective was not to directly ensure the conservation and sustainable management of all global peatlands. The project sought to provide recommendations on the management of peatlands to maintain their carbon storage function, while protecting biodiversity. The project produced a broad range of results, from local to global levels, and from basic publications to on-the-ground restoration to high-level outcomes. Annex III of the project’s 2004 steering committee minutes includes a sustainability plan, which had six main elements: multi-stakeholder involvement and support; linkage to implementation of current policies or priorities; linkage to long-term programmes or projects; contribute to the setting of procedures and priorities in global environmental conventions; generate additional financial support; and, encourage involvement of international organizations and mechanisms. The sustainability plan did not outline a specific workplan to be carried out, but through the activities of the project these elements have in fact contributed to the sustainability of the project results, as further discussed below.

i. Financial Risks to Sustainability

122. There are few risks to financial sustainability, and financial sustainability it considered likely. A majority of project resources were used to synthesize and publish technical information, and to raise awareness and develop capacity on peatland management issues. The nature of these results is that they are for the most part, self-sustained. The GPA will remain in circulation as long as it remains relevant, though this will be assisted by it remaining available for download from GEC’s website (as it is currently). The executing organizations have managed to secure funding for additional printings of the project materials, as required.

123. At the regional level, the currently implemented GEF FSP is supporting additional work on peatland management in Southeast Asia, and assisting in the implementation of the APMS. At the local level, additional resources (much greater than those disbursed by this project) are being invested in the demonstration sites in both China (i.e. the EU-funded project) and Indonesia (i.e. the KFCP initiative), from a variety of sources. In Indonesia particularly, and possibly other areas as well, there is also great potential to secure future resources through either REDD or the voluntary carbon market. Based on the experience of the project and other efforts in Indonesia, the cost of sequestering carbon through peatland restoration is quite favorable in relation to the current price of carbon under current international regimes.

124. In the Central Kalimantan demonstration site the actual on-the-ground efforts are not likely to be sustained; considering their limited geographic coverage and their nature as demonstration activities, this is not a major concern. Without ongoing maintenance the dams constructed will eventually deteriorate, with the help of illegal loggers and other community members that use the canals for transportation. A significant portion of tree planting carried out has been lost to fire. But the knowledge gained, documented, and disseminated through the demonstration activities will remain in the form of the technical publications and manuals

produced by the project. A greater concern would be if WI or GEC were to disappear and therefore be unable to carry forward and disseminate the knowledge and experience from the project, but this does not appear to be an issue.

125. The GPA repeatedly highlights the difficulty of peatland restoration, and when one views the massive scale of degradation – for example, the former mega-rice project landscape – it begs the question what are the real long-term prospects for peatland restoration in these larger landscapes? Undertaking demonstration activities in a few thousand hectares is one thing, but the scale of resources and effort required to make a significant impact is nearly overwhelming, not to mention the long timeframes required. Many experts consider that we have only approximately 30-40 more years to make significant progress against climate change. A top priority then must clearly be avoiding any further degradation of peatland areas. For already degraded areas, what are the full range of potential solutions? It seems unlikely that the international donor community could (or would be willing) to generate the resources necessary to adequately restore huge areas of degraded peatlands. The global carbon market is currently a “Wild West” market landscape, but this is likely to be a key long-term opportunity for accessing resources of adequate scale for peatland restoration, if the global community can find the political will to set in place the necessary market mechanisms and processes.

ii. Sociopolitical Risks to Sustainability

126. There are few sociopolitical risks to the sustainability of project results, and sustainability in this area is rated as likely. There are significant sociopolitical risks to peatlands, but this is beyond the scope of this evaluation; Chapter 3 of the GPA extensively discusses peatland management issues related to people. At the site level, sociopolitical factors are contributing to the deterioration of the project’s demonstration works, in Central Kalimantan for example as previously mentioned, where the dams constructed have been partially dismantled by local stakeholders. However this is not a major concern as the knowledge gained through the small-scale demonstration efforts will be carried on.

iii. Institutional Framework and Governance Risks to Sustainability

127. There are four main questions related to institutional and governance risks to the sustainability of project results, corresponding to each level of project implementation. For each question the answer appears to be cautiously optimistic, and sustainability in this realm is rated likely.

128. First, how and to what extent will peatland management issues be incorporated in future developments under the major international conventions, namely the UNFCCC and CBD? There are indications that the role of peatlands in sequestering carbon and maintaining biodiversity continues to grow as an issue of importance within these policy frameworks.

129. Second, what is the likelihood for implementation of the APMS? Full implementation of the strategy will take significant time and resources, but the current GEF-funded, IFAD implemented, ASEAN/GEC-executed FSP is contributing to progress in this area.¹⁴ Multiple

¹⁴ This evaluation assumes the project here referred to is being successfully implemented, but does not have direct knowledge of the project’s implementation status.

ASEAN countries are developing National Action Plans to implement the strategy. It would be especially encouraging to see national policies changed and implemented corresponding to the strategy, but such steps are part of an iterative process and take time in any part of the world.

130. Third, relating to the previous question, what is the level of political will in China, Indonesia and Russia to address peatland degradation and restoration through the development and implementation of responsible and adequate policies? The answer to this will only be known over an extended period of time, and may be the least optimistic from the present point of view; lacking the capacity for much more extensive analysis, this evaluation does not attempt to provide an answer. At the very least, it is safe to say there remains a great need for additional awareness, capacity development, and lobbying at the national level in support of peatlands.

131. Finally, what is the level of awareness, understanding, and commitment of sub-national / local government stakeholders in the demonstration sites regarding the importance of peatland conservation and restoration? Positive steps, highlighted earlier in this evaluation, by the Tomsk and Tver oblast governments in Russia, Ruoergai and Hongyuan county governments in China, and the Central Kalimantan provincial government in Indonesia all indicate limited institutional and governance risks to sustainability at this level.

iv. Environmental Risks to Sustainability

132. For the Integrated Peatlands Management project this criteria is primarily relevant, in a direct sense, to the project demonstration sites. Ideally the works undertaken at the demonstration sites would not be lost, even considering the tiny fraction of the overall project budget they represent, but through the lessons and good practices generated they have already proven to be a good investment. To the extent it is relevant in the context of this project, environmental sustainability is considered likely.

133. The Central Kalimantan demonstration site in Indonesia is included in the KFCP project area. Since the project sought to test restoration techniques, the demonstration site began as a severely degraded area that had already been clear-cut, channeled, and burned. There are some low-level environmental threats to the area, such as illegal logging in bordering areas that have not been cleared, as testified by a few small-scale sawmills on the banks of the Mantengai River. Palm oil development is also an issue in previously degraded areas of the former Mega-Rice project, but there are no known immediate plans for palm oil plantations in the project demonstration site's immediate vicinity.¹⁵

134. Extensive information was not available about the current status of the Ruoergai demonstration site in China. Although not a direct output of the project, the recently designated protected peatland areas in Tver and Tomsk oblasts in Russia can be considered a positive outcome to which the project contributed. Substantive information about environmental risks to the sustainability of these areas was also not available for this evaluation.

¹⁵ A recent article in *The Economist* highlighted the ongoing threat to peatlands from palm oil, noting that as a result of palm oil plantations "enormous amounts of carbon dioxide are released as forests and peatlands are destroyed." Ironically, one of the uses for palm oil is for biofuel to reduce GHG emissions, and multiple EU countries have set targets for biofuel use. However, the palm oil industry claims that plantations on degraded peatlands sequester more carbon than if the degraded areas were left as they are.

B. Catalytic Role: Replication and Scaling-up

135. Annex III of the project's 2004 steering committee minutes includes a replication plan. The Integrated Peatlands Management project has had a strong catalytic effect, as demonstrated by the co-financing leveraged, which was 55% higher than anticipated at the start of the project, and by the project's contribution to a significant amount of resources leveraged for related efforts, totaling at least \$10 million USD (see Section IV.B.iv on co-financing and leveraged resources). The specific inclusion of peatlands in the GEF's climate change strategic priorities for GEF-5 can also certainly be considered catalytic.

136. The project also helped galvanize additional efforts through raising awareness and building capacity on peatlands restoration and management. In one anecdotal example, at the China demonstration site twice as many people participated in a stakeholder workshop for local and provincial government officials than expected. The majority of additional resources leveraged in China for peatland restoration and management in the Ruorgai peatlands can be directly attributed to the project.

137. Other projects and initiatives, such as the KFCP program in Central Kalimantan, have carried forward and scaled up results and lessons in the project demonstration sites. Project outputs and awareness materials have helped disseminate experiences and lessons from the small-scale demonstration activities, and preliminary indications are that good practices are being taken up by other organizations. For example, other NGOs working in Central Kalimantan peatlands have specifically requested copies of the peatland restoration manuals produced by the project in Indonesia, and many of the same individuals who were involved in the demonstration sites are now working with follow-on initiatives. Yet there remains a need for much greater scaling-up of sustainable peatland management and restoration efforts to conserve carbon stocks and biodiversity associated with peatland ecosystems.

138. At the global level, it remains to be seen what formal and concrete actions the parties to the UNFCCC and CBD will take regarding peatland management. Movement toward greenhouse gas emissions measurement methodologies that take peatlands into account is a positive initial step.

C. Stakeholder Participation in Implementation

139. As mentioned through this evaluation report, stakeholder participation during implementation was a strength of the project. At the site level, local community members and government stakeholders were involved and positively engaged in the project demonstration activities, awareness-building and capacity development. In Indonesia the project relied on local community members and local techniques to construct the canal-blocking dams. Within the Southeast Asia region the project positively engaged the ASEAN members, contributing to the development of the APMS. The GPA relied heavily on the contribution of a large number of international scientists and other stakeholders, and the relevant target stakeholders in the CBD, UNFCCC, and Ramsar convention were actively engaged.

D. Capacity Development

140. The Integrated Peatlands Management project included specific capacity development activities in a majority of the components, such as training courses and study tours in China,

Indonesia, and other ASEAN member countries. For example, under component 5, basic “train-the-trainer” workshops on peatland management were held in Myanmar (15 people), Cambodia (20 people) and Laos (18 people).

141. The executing organizations themselves gained capacity through the experience of implementing the project. GEC and the WI country offices are now engaged in executing much larger projects than this one.

142. There is, however, no objective way for this evaluation to assess increases in capacity resulting from the project – there were no adequate capacity indicators, capacity needs assessments were not conducted, and there is little information available about outcome level (or even output level) results of the capacity development activities.

E. Monitoring and Evaluation

i. Project Monitoring, Reporting, and Evaluation

143. Project-level monitoring, reporting and evaluation was among the weakest aspects of the project. The project started off hampered by poor M&E design, and this led into problematic M&E implementation throughout the project’s lifetime. As noted in the 2007 PIR, “The fact that the project was designed and approved prior to the implementation of new GEF M&E guidelines and associated reporting formats created some difficulties in effective reporting against targets.” The brief M&E plan in the project document includes an annual PIR, quarterly technical progress and financial reporting (changed to half-yearly by the second steering committee meeting), and an independent external terminal evaluation. Annex 1 of the 2003 steering committee minutes includes a more detailed M&E plan (also mentioning financial audits), and a logframe with a column for “Impact Indicators” and “Means of verification” for expected outcomes; both of these columns are left blank. This annex does include information outlining timing of M&E requirements, and roles and responsibilities of the IA, EA, component leads, and steering committee.

144. The project design did not include an adequate logframe, and in particular, lacked outcome indicators, baselines, and targets by which to track project progress toward objectives. The project document does include a monitoring and evaluation plan with a “framework” for the monitoring and evaluation plan, which includes indicators, but these are far from meeting “SMART” criteria and are primarily output indicators for the planned activities, such as a report produced or meeting held. It should be noted that developing SMART outcome-level indicators for global projects focused on increasing understanding and awareness can be challenging due to the inability to directly attribute measurable results to project efforts, and the large geographic, political, and social scales involved.

145. Many of the project activities were related to increasing understanding and raising awareness about the importance of peatlands, but there were no relevant measurable indicators related to awareness, nor associated baselines or targets - with one shining exception: In the Russia Country study component there was a sociological baseline study conducted in Tver oblast regarding stakeholder attitudes toward peatlands, attitudes toward peatland restoration, and willingness to pay for restoration. This is one bright spot in the project’s approach to M&E, particularly so because social attitude baseline studies are rarely conducted in GEF projects. Otherwise, as stated in the 2007 PIR, “Lack of impact indicators has

seriously affected measuring project performance and impact, both at the EA side as well as UNEP as supervisor.”

146. There was no designated M&E budget (see previous Table 4), which contributed significantly to the problematic progress reporting, and caused other issues. As described by the 2007 PIR, “The ambitious nature of the project...despite the modest budget [left] relatively little resources for baseline assessment and independent monitoring of progress.” There were also challenges related to coverage of local travel costs related to the terminal evaluation field visit. GEF tracking tools were not applied under the project.

147. Project progress reporting was problematic in terms of reports being delayed, although progress reports and other monitoring and reporting documents were generally comprehensive, with the exception of some parts of the PIRs. One valuable and well-executed aspect of project monitoring are the detailed steering committee minutes, which clearly document the discussions, decisions taken, and follow-up actions required. Reporting practices had improved by the end of the project with a new PIR format introduced in 2006 and more flexibility in the regular progress reports, although reports continued to be significantly delayed. Reporting in progress reports, PIRs, and the terminal report was also admirably candid and realistic with respect to the problems encountered in project management and M&E. On the technical side there are some unsubstantiated achievements claimed in the progress reports; for example, the terminal report states under component 6 that the GPA report is “widely used for input to policy making and stimulating further action” but does not include the evidence on which this statement is based.

148. Responsibility for the problems in project monitoring and reporting falls on both the implementing and executing agencies. On one hand, initial UNEP progress reporting templates and requirements were time-consuming and not structured in relation to progress toward outcomes and objectives, instead requiring extensive details on project meetings held and publications produced. As noted in the 2007 PIR, “The project has also been somewhat affected by changes in project management and reporting procedures in GEF/UNEP and also some variance and delays in the reporting requirements. The project did develop an internal reporting procedure which was effective in tracking progress against internal project objectives and indicators and promoting the production of the technical results of the project - but these reports could not be used to meet UNEP reporting requirements and this led to significant reporting delays as reports needed to be rewritten and formatted.” The terminal report continues, “this meant that funds were wasted undertaking this process and confusion was generated in partners regarding formats to use and information to prepare. This problem continued throughout the project period.”

149. At the 2005 steering committee meeting, UNEP stated that the progress reports did not provide the necessary information on the direction and impact of the project, while the project team noted that “the reporting framework had (following initial consultation with UNEP) originally been designed to provide a logframe based approach to reporting that gives information more in line with [the requested information] but that this reporting had subsequently been rejected by UNEP about 12 months after the start of the project and as a consequence the decision had been made to return to the standard UNEP format, which does

not give useful overview information on project progress.” The January-June 2005 progress report does include a summary of progress toward outcomes and objectives.

150. On the other hand, as discussed in Section IV.B on management arrangements, there were two organizations involved in project execution, which apparently led to an inadequate level of direct responsibility for progress reporting to UNEP. Also contributing to the problem was poor communication between the project management team and UNEP, as discussed in Section IV.C on oversight. According to project documentation, reporting was insufficient and frequently delayed beginning in the early days of the project; timeliness did not improve over time, with the project’s final revised terminal report dated nine months after project close, and more than 15 months after the completion of all the main activities. UNEP also did not follow-up on delayed reports in a timely manner until the final task manager took over at the end of the project. Ultimately, once timeliness of reporting slipped, it tacitly remained a low priority. This is further demonstrated by the fact that this terminal evaluation was not contracted until 21 months after project completion, and the terminal evaluation report was only completed nine months later – far beyond the GEF standard of one year after project completion.

ii. Environmental Monitoring

151. The majority of the work completed by the project was to support technical synthesis, capacity development, and awareness-raising; environmental monitoring is not directly relevant to these aspects of the project. The demonstration sites do warrant a brief discussion on environmental monitoring, particularly in that other organizations are undertaking similar work at the sites. Environmental monitoring data to identify potential impacts was not available for this evaluation.

152. According to project documentation, biological monitoring was carried out in both of the Indonesia demonstration sites. Hydrological monitoring continues to be carried out in the Central Kalimantan project area under the KFCP initiative. Near the end of the project, one of the project’s key technical advisors contributed to an influential analysis of CO₂ emissions from drained peatlands in Southeast Asia, which is considered to have been key to the global community recognizing deforested peatland as a significant source of Indonesia’s GHG emissions.¹⁶ A national monitoring station was established in Ruoergai as a result of the project, and there is some indication that environmental monitoring is being conducted by German scientists at the China demonstration site in Ruoergai (presumably from Ernst-Moritz-Arndt University Greifswald, one of the partners in the EU-China Biodiversity Partnership project). In the Russia country study research was conducted on GHG emissions from peatlands by the Tomsk Academy of Sciences.

153. As a multi-focal area project concerned with both GHG emissions and biodiversity conservation in peatlands, the project could have had a much more significant focus on assessing and monitoring biodiversity in degraded peatlands at the demonstration site level, and in documenting potential biodiversity impacts. As discussed in Section IV.A.iii on the OP12 approach in project design, the focus of the project is well-suited to the generation of both

¹⁶ See Hooijer, A., Silvius, M., Wösten, H. and Page, S. 2006. PEAT-CO₂, Assessment of CO₂ emissions from drained peatlands in SE Asia. Delft Hydraulics report Q3943 (2006).

climate change and biodiversity benefits. It is likely that biodiversity benefits were generated from the restoration activities or at least have the potential to be generated from future scaled-up activities, but there was little focus within the project on analyzing or documenting biodiversity benefits. The GPA includes a chapter on biodiversity in peatlands, but in terms of actual on the ground activities, biodiversity conservation was left as a side benefit of peatland restoration for the sake of carbon sequestration, rather than a second primary focus of the demonstration activities. Admittedly, this may have been due to the generally higher level of political traction of climate change issues relative to biodiversity conservation issues. Further analysis would be helpful, as in some cases there are trade-offs between biodiversity benefits and peatland restoration – for example, in Central Kalimantan, some species that are not normally present in peat forests, such as kingfishers, have colonized degraded peatland areas.

F. Impact-level Results and Global Environmental Benefits

154. For the GEF biodiversity focal area project impacts are defined as documented changes in environmental status of species, ecosystems or genetic biodiversity resources. For climate change, impact level results are reduced or avoided greenhouse gas emissions. Global Environmental Benefits have not been explicitly defined in either the biodiversity or climate change focal areas, but are generally considered to involve sustained impact level results of a certain scale or significance.

155. The project focused on improving the enabling environment through increased awareness, capacity, and improved knowledge and information regarding the environmental importance and status of peatlands. The project was not primarily targeted at generating direct impact-level results; the project strategy and logical approach is such that the project's level of intervention is far upstream of impact level results and Global Environmental Benefits. As shown in the ROtI analysis in Annex 4, there is the potential for the project to have contributed to Global Environmental Benefits, but this will be over time and results will be diffuse. Previous GEF evaluations have identified adequate information flows as a key impact driver,¹⁷ and the project made a significant positive contribution in this aspect.

156. At the demonstration site level there may have been some positive impact level results, but as mentioned above, environmental monitoring data was not available for this evaluation. In Russia it was noted that peat extraction was reduced in the project focus area. In China, according to project documentation, monitoring in the area has shown improved hydrological function and some improved status of biodiversity, such as nesting by black-necked cranes in restoration sites and improved vegetation coverage. The restoration activities in Indonesia demonstrated that rewetting peatland can increase carbon sequestration and reduce GHG emissions from the drying of peatland and associated fires. To achieve Global Environmental Benefits such activities would require massive scaling-up.

¹⁷ See, for example, GEF EO. 2009. "Fourth Overall Performance Study of the GEF," Washington, DC: GEF Evaluation Office.

VII. Main Lessons Learned and Recommendations

A. Lessons from the Experience of Integrated Management of Peatlands Project

157. **Lesson:** A positive lesson is that a project of modest size and scope, with a broad focus, can achieve meaningful results in raising global awareness of a key issue. By leveraging the efforts of many highly qualified technical individuals the project was able to produce a substantive valuable output in the GPA. This, along with the project's outreach and awareness raising efforts, has raised the level of awareness about the importance of peatlands in international and national policy realms. Similar projects in the future could learn from the project's example of engaging and focusing the efforts of a large number of technical experts on a single critical issue.

158. **Lesson:** There are multiple potential lessons related to the project management and implementation arrangements, but these can be distilled into one key lesson: when it becomes clear that there are problems related to project management, these must be adequately addressed as early as possible in a comprehensive manner and through collaboration between implementing and executing agencies. In the case of the Integrated Peatlands Management project, potential and real issues related to project management and oversight were identified in the early stages of the project, but these were not dealt with, and lingered through the project's lifetime. As stated in the project's terminal report, "On reflection, a more substantive review of the project's administrative processes in association with UNEP staff should have been undertaken early on once these problems became clear."

159. **Lesson:** Broad, decentralized global projects can have high transaction costs, and require appropriate administrative arrangements to ensure adequate communication and management. The Integrated Peatlands Management project had six technical components: two at the global level, one at the regional level, and three at the national level that also involved local level activities. The project stretched from the local to the global, from small rural communities in remote locations in Kalimantan and the Tibetan Plateau to the highest levels of international environmental law and policy. The project's institutional arrangements, with one administrative head and one technical lead, proved problematic in this context, as there was insufficient information flow from the ground level of the technical components to the central level for reporting and other purposes. In this sense it would have been helpful if project management functions had been consolidated in one organization, with hierarchical responsibility to a single individual.

160. **Lesson:** Steering committees can be useful in providing oversight and technical guidance for project implementation, but the utility of such structures must be balanced against the cost of operationalizing them. The Integrated Peatlands Management project steering committee was highly valuable, and was able to remain cost effective by partially leveraging related international gatherings as opportunities to convene steering committee members. The constitution of a steering committee can also be structured to involve key stakeholders and constituencies, which can increase cost-effectiveness. For example, in the case of this project, having a steering committee member from the CBD Secretariat proved highly useful in accessing opportunities to provide input to the parties of the CBD.

161. **Lesson:** On the technical side, one of the lessons of the project was that achieving local, ground-level results could only be accomplished by cooperating with local communities. Conflict and adversaries will be created by not effectively working with local stakeholders. As one project implementer put it, “Your forest will not be replanted, it will be put on fire.” The project was successful in working with local community members, but, in the Central Kalimantan site at least, the scale of the demonstration efforts limited the project’s ability to fully engage a meaningful number of individuals over an extended period of time.

162. **Lesson:** Demonstration efforts are valuable for identifying and developing environmental management techniques, but to achieve results of any significant scale requires a sustained source of funding to support ongoing management. In the case of the Central Kalimantan demonstration site, resources were limited and after the end of the project the canal-blocking and restoration infrastructure installed by the project has deteriorated, and will not be sustained. The new KFCP initiative is focusing on the same geographic area but it is a much larger program and is starting approximately three years after the completion of project activities. Thus far the KFCP project has not attempted to build directly on the previous demonstration efforts by rehabilitating and maintaining the previous infrastructure. Ultimately, large-scale restoration efforts will need a sustained source of financing, either from the government or new innovative mechanisms such as carbon financing.

B. Recommendations for Future Actions

163. Since this is a terminal evaluation, and an ex-post evaluation, there is little scope for recommendations. The few recommendations below are considered to still be relevant with respect to ongoing aspects of this project, and potential similar projects to be developed.

164. **Recommendation:** The GPA is an important and comprehensive resource that is likely to remain relevant for years to come. WI and GEC should continue to actively disseminate this document through all available channels, and should ensure that it remains easily accessible in electronic form, available for download, for at least five more years, or until experience indicates it is no longer in demand. Download activity of the report from GEC’s website should be monitored to assess reach and demand over time. *[For WI and GEC]*

165. **Recommendation:** The project made good progress in awareness raising and capacity development on peatland management issues at the regional and national levels, although there is always a need for more investment in this area. However, perhaps an even greater need is for increased capacity development at the community and local government level on climate change issues in relation to peatlands. The executing organizations of this project and UNEP should within the next two years examine the potential to develop a community-support program to increase understanding and awareness in Sumatra and Kalimantan about the role peatlands play in climate change, and the potential carbon market that is developing. *[For WI, GEC and UNEP]*

166. **Recommendation:** Based on the lessons from this project, UNEP should avoid in all circumstances designing projects with institutional arrangements involving dual executing institutions. When there is more than one single point of ultimate responsibility for reporting and other management functions, there is the potential for inadvertent abdication of responsibility. *[For UNEP]*

167. **Recommendation:** For a project of this size, redundant and excessive management and implementation arrangements should be avoided in future project designs. The original design of this project included two executing organizations combined into one “secretariat”, a project steering committee, a technical advisory group, an outreach group, and implementation teams for each of the six technical components. This was excessive for a GEF MSP. For scientific or highly technical projects there is a tendency to have an external technical advisory body, but when the project implementation team includes individuals who are themselves international experts, such structures are redundant and unnecessary. [For UNEP]

168. **Recommendation:** All projects, even targeted research projects, should have adequate logframes with SMART indicators at the outcome and impact level. [For UNEP and GEF Secretariat]

C. Project Ratings

Criterion	Evaluator’s Summary Comments	Rating
A. Attainment of project objectives and results (overall rating) Sub criteria (below)	The project achieved excellent technical delivery, and was highly relevant in the context of global environmental issues. The inefficient project management arrangements fortunately did not cause problems in technical delivery thanks to the decentralized implementation approach.	S
A. 1. Effectiveness: overall likelihood of impact achievement / ROtI rating	From a technical perspective the project was successful, with some aspects considered highly satisfactory. All technical aspects of the project were completed, although some were delayed.	S / AC
A. 2. Relevance	The project was relevant at local, national, regional and international levels with respect to addressing critical issues and responding to strategic priorities and policies. The project was relevant to both the CBD and UNFCCC (as well as the Ramsar Convention) and to GEF policies.	HS
A. 3. Efficiency	Project results for the technical components were at or above anticipated levels relative to funds invested. Expenditures were in-line with international norms and standards. Project management was not efficiently carried out.	MS
B. Sustainability of Project outcomes (overall rating) Sub criteria (below)	The overall rating on sustainability is equal to the lowest rating of the four components of sustainability, listed below.	L
B. 1. Financial	Project results in awareness building, capacity development, and knowledge generation do not need additional resources to be sustained. At the regional level a new GEF-funded FSP is carrying the APMS forward. At the country/site level, new initiatives and projects are being implemented with much greater resources than those invested under the current project.	L
B. 2. Socio-political	There are no significant socio-political risks to sustainability.	L
B. 3. Institutional framework and governance	The influence of institutional and governance factors on sustainability will only be known over an extended period of time, but there are currently preliminary positive indications at the global, regional and national levels.	L
B. 4. Environmental	Environmental sustainability is not directly relevant to the project as it primarily focused on improving the enabling environment. At the demonstration site level sustainability is likely as other projects and initiatives continue peatland management and restoration activities in the areas targeted by the project.	N/A / L
C. Catalytic Role	The project produced recommendations regarding the management of peatlands, and identified good practices for peatland restoration, which were then disseminated through various means. Equally importantly, the project contributed to the leveraging of significant additional funding to address peatland restoration, and the GEF’s strategic priorities for GEF-5 in the climate change focal area specifically include peatlands.	HS
D. Stakeholders	Stakeholders were adequately involved at global, regional, national and local	S

Criterion	Evaluator's Summary Comments	Rating
involvement	levels.	
E. Country ownership / drivenness	As a global targeted research project, the level of country drivenness was not inherently high. The project concept did originate to some extent based on ASEAN nations' concern about peat fires and regional haze. By the end of the project many of the countries involved were actively engaged in and concerned with peatland management issues. At the global level, CBD acknowledgement of the project results can be considered an indicator of ownership by the parties to the convention.	MS
F. Achievement of outputs and activities	All significant activities were completed and outputs produced, although there were delays for some key outputs.	MS
G. Preparation and readiness	The project design was unsatisfactory in multiple areas: There was poor financial planning/budgeting, the institutional arrangements were misguided, the scale of planned components and activities was extremely ambitious relative to the size of the budget, major monitoring and evaluation elements were poorly developed, and a long approval and design process led to need to change aspects of the design once the project started.	U
H. Implementation approach	The overall decentralized approach of implementing the components was a positive aspect, but the project management institutional arrangements were unsatisfactory. This, combined with inadequate IA support, led to chronic project management issues at the central node.	MU
I. Financial planning (and management)	Financial planning for the scale of the project relative to the size of the budget, and in relation to the institutional arrangements and project management was unsatisfactory, as well as budgeting for monitoring and evaluation. Financial management during implementation had minor issues requiring budget revisions, and there was at least one instance of a delayed six-month cash advance. Financial reporting (tied to progress reporting) was consistently delayed. Audits were satisfactorily conducted and no inappropriate expenditures were noted.	MU
J. Monitoring and Evaluation (overall rating) Sub criteria (below)	All aspects of monitoring and evaluation were at least partially unsatisfactory. It should be kept in mind that the project was designed long-before the current GEF M&E policies, standards and norms were implemented.	U
E. 1. M&E Design	The project did not have an adequate M&E plan, including lacking a logframe with outcome and impact level indicators. The institutional arrangements for progress reporting were also problematic.	U
E. 2. M&E Plan Implementation (use for adaptive management)	In general the required minimum M&E elements were completed, though with frequent significant delays. Once submitted, reports and other monitoring documents were generally comprehensive.	MU
E. 3. Budgeting and Funding for M&E activities	The project did not have a dedicated M&E budget, which caused problems for key M&E activities such as consistent and timely progress reporting, and the terminal evaluation.	U
K. UNEP Supervision and backstopping	For a majority of the project implementation period there was a poor working relationship between the IA and the EAs. Turnover in the project task manager position contributed to the oversight issues. The IA reporting requirements during the first half of the project were unsatisfactory. Communication was sometimes problematic, as was timeliness of follow-up on delayed reporting, and the project was allowed to operate for 12 months without filing formal extension paperwork. Oversight improved towards the end of the project.	MU

I. List of Annexes

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