



Validation Report

Reference Number: PCV: BAN 2008-37
Project Number: 30032
Loan Number: 1643(SF)
September 2008

Bangladesh: Sundarbans Biodiversity Conservation Project

Operations Evaluation Department

Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
EA	–	executing agency
FD	–	Forest Department
GEF	–	Global Environment Facility
IUCN	–	International Union for Conservation of Nature
IWM	–	Institute of Water Modeling
KNM	–	Khulna Newsprint Mills
LGED	–	Local Government Engineering Department
MOEF	–	Ministry of Environment and Forests
NDF	–	Nordic Development Fund
NGO	–	nongovernment organization
OED	–	Operations Evaluation Department
PCR	–	project completion report
PKSF	–	Palli Karma–Sahayak Foundation
PPTA	–	project preparatory technical assistance
SAC	–	stakeholder advisory council
SES	–	special evaluation study
SMU	–	Sundarbans Management Unit
SRF	–	Sundarbans Reserved Forest
SSC	–	Sundarbans Stewardship Commission
TA	–	technical assistance
TAG	–	technical advisory group
WNCD	–	Wildlife and Nature Conservation Division

NOTE

In this report, “\$” refers to US dollars.

Key Words

Bangladesh, biodiversity, environment, forest, lessons, adb, Asian Development Bank, mangrove, operations evaluation department, performance evaluation, Sundarbans

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PROJECT COMPLETION REPORT VALIDATION

A. Basic Project Data		PCR Validation Date:	July 2008	
Project and Loan/Grant Number:	30032 1643-BAN(SF)		Appraisal	Actual
Project Name:	Sundarbans Biodiversity Conservation Project	Total Project Costs (\$ million):	\$82.2	\$22.9
Country:	Bangladesh	Loan/Grant (\$ million): (SDR million equivalent)	\$37.0 (24.57)	\$7.7 (5.98)
Sector(s):	Environment and Biodiversity	Total Cofinancing (\$ million):	\$16.7	\$5.4
ADB Financing (\$ million):	ADF: \$7.7 (SDR5.98 M)	Borrower (\$ million):	\$16.1	\$5.4
	OCR: None	Beneficiaries (\$ million):	\$3.7	\$0.2
Cofinanciers:	Global Environment Facility Government of Netherlands	Others (\$ million): PKSF/NGOs	\$8.7	\$4.2
Approval Date:	27 Nov 98	Effectiveness Date:	20 Apr 99	6 Aug 99
Signing Date:	20 Jan 99	Closing Date:	31 Dec 06	19 Dec 07
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B. Project Description (summarized from the report and recommendation of the President)

- (i) **Rationale and expected impacts.** The expected long-term impact of the Sundarbans Biodiversity Conservation Project was to secure the integrity of the environment and biodiversity of the Sundarbans Reserved Forest (SRF). Comprising 6,000 square kilometers, the SRF is a globally significant ecosystem with a rich area of biodiversity and natural resources. It is the world's largest remaining contiguous mangrove area, which also serves as habitat for a variety of wildlife, including the Bengal tiger. At the same time, the SRF affords storm protection to the southwest of Bangladesh and subsistence to about 3.5 million people in 17 subdistricts of the impact zone (ranging from 0 to 20 kilometers outside the SRF border). Under pressure from a growing number of users, the SRF's biological resources were being depleted through deforestation and a loss of biodiversity. The Khulna Newsprint Mills (KNM) complex, which uses *gewa* wood (*Excoecaria agallocha*) as raw material for newsprint manufacture, also contributes to pollution in the SRF. While the Forest Department (FD) of the Ministry of Environment and Forests (MOEF) had been responsible for the management of the SRF for a century, there was an urgent need to shift from a single-sector institution to one that would be capable of managing a multidimensional resource. On the whole, the long-term sustainable use and conservation of the SRF required additional financial resources, a significant improvement in institutional capacity, and a restructured management approach based on appropriate research, community participation, and scientific planning.
- (ii) **Objectives or expected outcomes.** The immediate objective of the Project was to develop a sustainable management and biodiversity conservation system for all SRF resources on the basis of environmentally-sound plans and the participation of all key stakeholders. Expected outcomes included (a) effective organization and management of the SRF; (b) promotion of ecotourism and environmental awareness; and (c) sustainable development in the impact zone, including reduced poverty and improved living standards. The project area covered the SRF itself and 17 surrounding subdistricts located in the impact zone. The Project sought to establish a participatory system for the conservation and sustainable management of the SRF as a multidimensional resource area. An integrated approach would be taken to (a) improve biodiversity conservation and forest management; (b) improve institutional capacity to manage the SRF; (c) reduce the poverty level among 3.65 million people living in the impact zone by expanding economic opportunities, improving social infrastructure, improving organization for resources users, and facilitating stakeholder participation in resource management; and (d) adopt a supportive set of policies, especially for charging economic prices for access to SRF resources. In addition, the use of *gewa* by KNM would be phased out.

- (iii) **Components and/or outputs.** The Project comprised six parts, including an advisory technical assistance to address problems associated with KNM. These were Part A: Effective Organization of the SRF; Part B: Biodiversity Conservation and Sustainable Resource Management; Part C: Socioeconomic Development of the Impact Zone; Part D: Ecotourism and Environmental Awareness; Part E: Technical Advisory Group (TAG), Monitoring, and Research Studies; and Part F: KNM Effluent Treatment. Baseline activities intended under the Project included (a) developing the SRF from a resource-use perspective (outside the wildlife sanctuaries), (b) developing participatory community-based programs in the buffer zone, (c) investing in basic infrastructure for park management outside the wildlife sanctuaries, (d) strengthening park planning and management, and (e) conducting ecological research. Expected global benefits from the Project were (a) consolidating and strengthening the management of the three wildlife sanctuaries within the SRF, (b) supporting biodiversity conservation within the SRF and its buffer zone through sustainable productive activities, (c) introducing a participatory environment education and community awareness activities, and (d) establishing a biodiversity monitoring and evaluation system.

C. Evaluation of Design and Implementation (project completion report assessment and validation)

- (i) **Relevance of design and formulation.** The project completion report (PCR) assessment on design and formulation (PCR, paragraphs 4–8) was consistent with the findings of a post-project evaluation under a previous special evaluation study (SES) by the Operations Evaluation Department (OED).¹ The PCR assessment supported OED case study findings. Both found the Project relevant to the country and to ADB strategy and policies at the time of formulation. The Project was also consistent with ADB's forestry and fisheries policies, both of which emphasize the participatory approach as a necessary step to sustainable development. Likewise, both concluded that the Project was initially planned and implemented with excessive optimism. The PCR pointed out that the project preparatory technical assistance (PPTA) was overly ambitious in attempting to design a state-of-the-art, integrated conservation and development project for the SRF within the context of the governance and institutional structures and existing management ethos at the FD. The plan was to enhance stakeholder participation in SRF management, including decentralized management along functional lines. Taking from an ambitious vision set in the PPTA paper, the Project explored radical options, particularly in terms of management strategies. It envisaged introducing an ecosystem-based multisectoral management system that would increase the efficiency, accountability, and transparency of management decisions. Not unexpectedly, the FD refused to accept the PPTA result, but was overruled by MOEF. The PCR also correctly criticized the unreasonably short PPTA timeframe of 5 months. It was unrealistic to expect revolutionary institutional reforms for managing the SRF to be designed and fully owned by the FD within the short duration of PPTA implementation.

Concern over the lack of government commitment and complexity of the project design was raised at the ADB management review meeting, while the FD's governance and organizational deficiencies were highlighted as project risks during the staff review committee meeting. At the time of approval, the Board expressed concern over the choice of the FD as the executing agency (EA) since the Project had multiple components and required coordination between multiple stakeholders and several implementing agencies. The FD and MOEF did not enjoy good relations and needed to first build consensus about the Project between them.² In spite of being the EA, the FD was not present at the loan negotiations and instead was represented by MOEF. This became an issue during implementation since the FD "rejected" the final project design.

Several institutional changes in the FD were incorporated into the project design to increase external influence on the management of the SRF. Although the FD's dissatisfaction with these changes was apparent during loan preparation, this was not confirmed by the FD and MOEF during loan negotiations. ADB should have been more attuned to the institutional opposition to these changes. The institutional capacity of the FD to deliver the project objectives was also inadequately assessed. Other negative experiences in the Bangladesh forestry sector, notably the ADB-financed Forestry Sector Project and the World Bank-financed Forest Resources Management Project, were insufficiently considered and integrated into the design. As mentioned by OED, in hindsight, a phased approach of institutional strengthening

¹ ADB. 2008. *Project Completion Report on the Sundarbans Biodiversity Conservation Project in Bangladesh*. Manila; and ADB. 2007. *Asian Development Bank-Global Environment Facility Cofinanced Projects: Performance and Process Evaluations*. Manila.

² Contrary to the PCR suggestion, OED believes FD (and not MOEF) should have been the EA. However, there should have been consensus building with related institutions (FD, MOEF, etc.) and non-government and civil society organizations regarding project preparation activities.

preceding the other activities would have been preferred. Serious potential risks were ignored and not properly mitigated. Better arrangements and more resources could have been incorporated into the design to achieve institutional and technical outcomes, given the constraints that had to be overcome in the sector and the country.

- (ii) **Outputs and costs as envisioned during appraisal as compared to actual costs and achievement of outputs; reasons for any deviation.** The PCR assessments are consistent with the SES findings. (Table 1). The SES found that project achievements at the time of cancellation included: (a) creation of new management units for fisheries, wildlife, tourism, extension and communications, revenue collection, and a database; (b) establishment of a database for species, revenues, and other field data; (c) training of hundreds of FD and nongovernment organization (NGO) staff; (d) infrastructure development in the impact zone; (e) development of draft management plans for tourism, fisheries, and wildlife; (f) establishment of a geographic information system laboratory in Khulna and improvement of the geographic information system laboratory in Dhaka; (g) production of new SRF field maps; (h) establishment of an information center in Khulna; (i) upgrading of the visitor center inside the SRF; (j) establishment of a crocodile rearing station in the SRF; (k) completion of studies on socioeconomics, fisheries, wildlife, and revenues; and (l) completion of study tours to foreign countries.

Table 1: Project Outputs and Costs

Component		RRP (A)	PCR (B)	Ratio (B/A)	Effectiveness in Achieving Expected Outcome
Part A		16.57	3.28	0.20	Ineffective
Improve institutional capacity by setting up the:	Sundarbans Management Unit (SMU)	The SMU was never fully functional since its establishment in 1999 due to a lack of key personnel and unclear lines of authority. Instead, it functioned as a project support unit handling project-related procurement, disbursements, and management of consultants. The Head of the Sundarbans Management Wing, which was to replace the SMU and serve as a fully functional and authoritative project management entity, had not yet been delegated the overall management of the Project at the time of cancellation.			
	Sundarbans Stewardship Commission (SSC)	The SSC was formed and met in early 1999 to comply with loan effectiveness conditions. Thereafter, the SSC was inactive until it was reconstituted in 2002. Although three meetings were convened by the SSC during implementation, no policy agenda was ever discussed. The legitimacy of the SSC to make policy decisions regarding the SRF was subject to question. Lacking a clear mandate and leadership, the SSC remained largely ineffective.			
	Stakeholder Advisory Council (SAC)	The SAC was formed and met in 2004 as a condition for lifting the loan suspension. It lacked credibility since its members were nominated by the Minister of MOEF and were not considered to be representative of local user groups. The SAC did not effectively serve its intended role and was terminated at the time of project cancellation.			
Part B		16.98	2.13	0.13	Less effective
Adopt biodiversity conservation and forest management measures	Forest Resources	The FD considered the timber-stand improvement activities to be useful interventions. However, a lack of follow-up after project suspension reduced their impact. PCR assessments showed that gains made during the Project were not sustained. Less than 50% of the target was achieved.			
	Aquatic Resources	Seventy percent of the fish stock assessment was completed under technical advisory group (TAG) guidance. A database of 224 fish species was established and a draft fisheries management plan was prepared. Public awareness materials were developed. An aquatic resource unit within the SMU was established and its staff was trained in aquatic resource management. At cancellation, the unit was dissolved and absorbed by the Wildlife and Nature Conservation Division (WNCD) of the FD. The WNCD has continued with limited activities and no further work was conducted on either stock assessment or updating the management plan. The overall impact in terms of aquatic resource management is negligible.			
	Wildlife Resources	The wildlife resources component resulted in a baseline survey of tiger and deer, crocodile breeding center, pilot study for three sanctuaries, vegetation study, and wildlife management plan with the TAG. The wildlife management plan contains useful information on conservation objectives, species management and zonation strategies, and ecosystem monitoring techniques. A wildlife ecotourism unit was also established and absorbed into the WNCD of the FD after cancellation. The WNCD's primary current function is conducting limited patrolling activities in the three sanctuaries. The FD is unable to implement measures proposed in the wildlife management plan due to			

Component		RRP (A)	PCR (B)	Ratio (B/A)	Effectiveness in Achieving Expected Outcome
		resource constraints. Operation and maintenance of the project-financed crocodile breeding center and infrastructure facilities in the three sanctuaries are in serious jeopardy due to a lack of funds.			
	Integrated Conservation Management Planning	<p>The International Union for Conservation of Nature (IUCN) in Bangladesh, which was selected to undertake an independent conservation monitoring program, developed a set of indicator species to monitor the health of SRF ecosystems. However, the actual monitoring program of these indicators did not start due to the suspension and eventual cancellation of the Project.</p> <p>Several research studies were undertaken, among which the surface water quality modeling study conducted by the Institute of Water Modeling (IWM) stood out as an exceptionally successful study. For months after project suspension, the IWM collected data at its own expense to further calibrate the model. Although the model was never used for its intended purpose (analyzing ecosystem changes and formulating management strategies based on hydrological changes), it remains a useful tool. Meanwhile, Khulna University also conducted a study to determine the causes for the top-dying of Sundri (<i>Heritiera fomes</i>), but results were inconclusive.</p>			
Part C		28.01	10.88	0.39	Effective
Promote socioeconomic development of the impact zone through the organization of resource users, development of livelihood activities, and community-based planning and implementation		<p>With the exception of an initial delay in selecting NGOs, Part C activities were implemented fairly well even if not as ideally as per project design. A comprehensive socioeconomic survey was carried out to establish a benchmark of SRF resource-use intensity. The results of the survey and other information regarding the importance of the SRF and the need to adopt sustainable resource-use methods were disseminated to community groups. Twenty-two of the selected NGOs launched microfinance programs that are still operating today. The availability of microfinance was a boost to the livelihoods of many rural households, which had previously relied on money lenders who levied exorbitant interest rates. Due to the Project, many beneficiaries repaid the first loan and obtained a second loan to expand their livelihood activities. But the target groups were not necessarily those who depended on the SRF.</p> <p>To complement the above interventions, the Project also aimed to provide social infrastructure (e.g., primary schools, drinking water ponds with filters, sanitary latrines, rainwater collectors, and small roads) to targeted resource-user groups. The Local Government Engineering Department (LGED) was responsible for constructing these. LGED commenced activities on schedule in 2000 and made steady progress until suspension. At the time of cancellation, it had utilized 69% of loan funds in the civil works category. However, since LGED activities were managed by a separate project director operating under a separate implementing mechanism, these activities were not coordinated closely with the FD and NGOs. During the first 2 years, SRF resource-user groups were not specifically targeted for the provision of social infrastructure as was intended.</p>			
Part D		3.29	0.10	0.03	Less Effective
Implement ecotourism and environmental awareness programs, along with basic public infrastructure and training		<p>The main achievements were the (i) establishment of a public information and education center in Khulna and a visitor center near the entrance to the SRF at Karamjal; (ii) provision or upgrade of buildings, jetties, a wildlife observation tower, and other facilities in the three sanctuaries; (iii) preparation of an ecotourism management plan; and (iv) production of material such as posters, films, and plays to raise public awareness. These activities generally had a positive, albeit limited, impact. The public information and education center in Khulna and the visitor center at Karamjal continue to attract tourists, although the facilities have deteriorated substantially due to a lack of adequate maintenance. The information brochures and signage have not been updated since project suspension and will eventually become outdated or obscured. Similarly, the improved tourism facilities in the sanctuaries are useful, but badly in need of maintenance. A draft ecotourism management plan was prepared but was not made operational. Its general recommendations need to be translated into specific management prescriptions that can be incorporated into an integrated management plan for the SRF. Since project termination, the FD has had neither the funds nor shown a strong motivation to move the process forward.</p>			
Part E		11.10	6.42	0.58	Ineffective
Improve planning, monitoring, and applied research capacity		<p>The impact of the TAG was marginal for several reasons. Most importantly, the bulk of consultant inputs were scheduled during the first few years of the project period. In fact, the majority of applicable inputs were exhausted by project midterm even though the institutional arrangements for implementing the Project were still unclear at the time. The FD also viewed the TAG as an ally of external parties, which threatened to undermine the status quo with regard to control over the SRF. Therefore, it did not receive adequate</p>			

Component	RRP (A)	PCR (B)	Ratio (B/A)	Effectiveness in Achieving Expected Outcome
				<p>support from the FD, particularly in the form of suitable counterpart staff and office space within its premises. The FD was unable to assimilate the technical know-how generated by the TAG and to utilize it effectively in implementing project activities.</p> <p>The TAG's internal dynamics were also somewhat volatile. This led to the frequent replacement of consultants (including the team leader), which in turn disrupted continuity of activities and affected relations with the client (mainly the FD). The above-mentioned factors resulted in the general ineffectiveness of the TAG. The consultants produced a large number of technical outputs, some of which the FD regarded as being very useful and others that it dismissed as being technically inadequate or impractical. Overall, the majority of consultant outputs, although useful, remain unimplemented or unutilized.</p> <p>The Project supported a range of training programs both in-country and overseas. The Food and Agriculture Organization was commissioned to carry out a training needs assessment and facilitate the overseas postgraduate training of selected FD staff. Short-term overseas and in-country training was implemented by the TAG. Overall, the training programs exposed FD staff and impact zone beneficiaries to useful technical information. Six of the seven FD officials who received postgraduate training are still with the FD.</p>
Part F	5.05	0.0	0.0	Cancelled
Reduce pollution and resource utilization from the KNM				The component was cancelled due to the withdrawal of the co-financing commitment by the Nordic Development Fund.

KNM = Khulna Newsprint Mills, PCR = project completion, report, RRP = report and recommendation of the President.

Sources: Project Completion Report and PCR validation.

The SES identified additional goals that were not achieved: (a) expanding stakeholder influence over SRF management beyond the FD, (b) decentralizing decision-making to the FD in Khulna, (c) implementing a buffer zone strategy, (d) establishing alternative lifestyles for buffer zone communities through microcredit programs, (e) increasing household income by 30%, (f) expanding the number of tourists by 50%, (g) improving social infrastructure in the buffer zone to facilitate economic activity, (h) providing adequate funding for the maintenance of project facilities, (i) completing the SRF biodiversity baseline survey, and (j) integrating biodiversity into SRF conservation management plans. None of these activities was completed to the level needed to sustain project benefits.

Overall, the Project undertook work on five of six components. Part F was cancelled. Due to implementation problems and the subsequent cancellation of the Project, actual costs averaged about 28.1% of appraisal estimates and ranged from 3% to 58% of original costs. (Table 1).

- (iii) **Project cost, disbursements, borrower contribution, and conformance to schedule (as relevant to project performance).** At appraisal, the project cost was \$82.2 million (Table 2). The project cost was later revised to about \$77.2 million. The decrease was due to (a) the Nordic Development Fund withdrawing its commitment to cofinance the KNM wastewater treatment plant, (b) the Government of the Netherlands providing grant financing of \$3.5 million, and (c) corresponding adjustments to the ADB loan. The NGO contribution reflected in-kind contributions. The Project was implemented from 1999 to 2003. Due to serious implementation delays and a lack of proper financial management—including concerns about corruption—ADB suspended the Project in September 2003 and cancelled the Project effective January 2005. No new activities were carried out under the Project following loan suspension in September 2003. The project accounts were kept open for another 2 years due to disagreements regarding claims. The actual project cost at the time of loan cancellation was \$22.9 million, or about 30% of the revised cost estimate.

Table 2: Project Costs and Financial Arrangements (\$ million)

Financier	Original	Revised (A)	Actual (B)	Ratio (B/A)
Nordic Development Fund	4.52	0.00	0.00	0.00
Palli Karma–Sahayak Foundation (PKSF)	6.77	6.77	4.14	0.61
Beneficiaries	3.76	3.76	0.25	0.07
Non-government Organizations	1.91	1.91	0.09	0.05
Government	16.07	15.54	5.38	0.35
Asian Development Bank	37.00	33.50	7.71	0.23
Government of Netherlands	0.00	3.50	0.73	0.21
Global Environment Facility	12.20	64.98	4.64	0.07
Total	82.23	77.18	22.93	0.30

Source: Project Completion Report

Expectations to revive the Project continued, even when the many changes required in the loan covenants were identified as being not realistic within the original time frame. In August 2003, when ADB recommended loan suspension, the shared goal of revising project design within 3 months to build consensus and ownership, and to foster a more equitable sharing of access to the SRF resources, may have been too ambitious since the process eventually took 17 months to complete. Given the difficulties, ADB agreed to the extended time and provided a facilitator to support the needed revisions through a participatory process. Although the Project was eventually revised with NGO and FD staff input, some NGOs claimed that they were not aware of how their concerns had been addressed in the revised project design.

- (iv) **Implementation arrangements, conditions and covenants, and related technical assistance.** The FD was the EA for the Project. The implementation arrangements for such complex institutional, financial and administrative procedures were considered to have been inadequate given the weaknesses in governance capacity and practices in Bangladesh. Being the first ADB- Global Environment Facility (GEF) co-financing effort, a corporate desire to secure GEF may have added to the time pressures associated with loan processing, and perhaps diverted attention from mitigating risks and adopting a phased approach. These steps were among the key missing ingredients that inhibited development results. There were also a number of administrative issues regarding the financial management of the Project since GEF funds were channeled to ADB as a technical assistance (TA). Similarly, following the request of the Government of the Netherlands, the \$3.5 million grant was used to finance an equal portion of each major project component. This approach caused many additional administrative problems. The end result was an incompatibility between the Project's stipulated complex financing arrangements and the Government of Bangladesh's project pro-forma system.

The implementing agencies were either unwilling and/or unable to coordinate among themselves, resulting in poor integration of project activities. In the absence of a functioning steering committee, outputs generated by the different components did not complement each other. The lack of a strong and effective SSC reduced the efficiency of project implementation. Since it was not a member of the SSC initially, the FD was not enthusiastic about receiving SSC guidance on project implementation. This outcome might have been avoided if more discussions had been carried out during project preparation regarding the composition, mandate, and authority of the SSC. Project conditions and covenants in this regard did not create the necessary environment for smooth project implementation. Although the establishment of the SSC was a condition for loan effectiveness, it largely existed only on paper.

Overall, compliance with loan covenants proved unsatisfactory. The Project included a significant number of loan covenants, which had significant bearing on project implementation. Of the 43 covenants under the Project, less than half were fully complied with. On the other hand, 23 covenants, or 53% of the total, were either complied with either partly or not-at-all. Noncompliance or partial compliance with these covenants was among the reasons for suspension and eventual cancellation of the Project.

Table 3: Compliance with Loan Covenants

Covenants	Complied	Partly Complied	Not Complied	Not Applicable	Total
1. Particular covenants	2	2	0	0	4
2. Organizational arrangements	9	2	1	0	
3. Project coordination	1	1	1	0	3
4. Public participation & control over the SRF	0	3	1	0	4
5. Implementation schedule	0	1	0	0	1
6. Community organization and group development activities	2	2	2	0	6
7. Technical advisory group	0	1	0	0	1
8. Monitoring studies and evaluation	2	1	1	0	4
9. Legal and institutional reform	1	0	1	0	2
10. Environmental measures	2	2	1	1	6
Total	19	15	8	1	43

The attached TA for the study of future options for KNM was rated as partly successful. This PCR validation agrees with the conclusions of the TA completion report that the consultants performed well under difficult conditions. The report found the analysis as objective and technically sound. The TA study

reached the inevitable conclusion that the best option was to deactivate the KNM due to its poor financial condition and management problems. However, the consultants and ADB were unable to convince the Government to implement the recommendation since this would have been both socially and political sensitive. Alternative options were found by the consultants to be financially nonviable, and these views were challenged by the Government. No action was taken after TA completion. Subsequently, KNM was forced to shut down due to the very reasons cited by the consultant report.

(v) **Performance of the Borrower and Executing Agency.** The performance of the FD is assessed as unsatisfactory in both the PCR assessment and the SES. From the initial stages, the FD lacked ownership of the Project, and the FD and MOEF did not directly convey this to ADB. Even after the Loan Agreement was finalized, the FD remained intransigent, particularly with regard to proposed institutional reforms. As a result, many of the implementation activities were delayed. The FD did not initially complain about TAG consultants, but later indicated that the TAG was accountable only to ADB and not to the FD. On a positive note, the PCR assessment observed that during the course of project implementation the FD improved in certain areas, particularly in supporting outreach activities for the impact zone communities. The FD continues to maintain good working relations with the Project's microfinance partner NGOs. In addition, FD commitment was perceived to have increased when it was given an opportunity to redesign the Project after the suspension. Although the redesign process took longer than specified by ADB, field staff and most senior management of the FD were fully supportive of the outcome. In fact, most FD staff appeared surprised and disappointed when the Project was cancelled. Meanwhile, the performance of LGED was rated as less satisfactory, but it operated somewhat independently from the rest of the Project. This resulted in a mismatch between community development activities and community infrastructure development. Based on the considerations above, this validation reconfirms the PCR rating of unsatisfactory on overall performance.

(vi) **Performance of the Asian Development Bank.** The PCR gave a lesser rating of unsatisfactory compared to the SES assessment of partly satisfactory. ADB failed to assess the risks and implications of proposing an ambitious, state-of-the-art, integrated conservation and development project within the existing country and institutional contexts. The Project's aim to improve governance and management of the SRF threatened a much broader interest group than just the FD establishment (i.e., the well-established system of patronage and rent-seeking derived from managing SRF resources). ADB's determination to pursue the Project despite the evident lack of ownership and commitment was perhaps clouded by external factors such as the prospect of supporting a conservation project in a recently-declared World Heritage site and being the first GEF-cofinanced project for which ADB assumed responsibility as a partner similar to the World Bank, United Nations Development Programme, and United Nations Environment Programme.

Despite management advice to allocate above-average staff resources to supervise the Project, following approval, the Project was assigned to a junior staff member with no experience in natural resources management. Changes in project task managers (five changes since project preparation, including the crucial period between approval and effectiveness) also weakened ADB relations with the EA. The instability affected institutional memory on an already complex and ambitious project, which perhaps weakened ADB's understanding and commitment to push reforms and establish procedures that were fundamentally important to achieving project objectives. Failures or delays in undertaking certain critical reforms and procedures should have triggered remedial measures much earlier, and also prompted a reassessment of the situation vis-à-vis project objectives.

ADB devoted significant resources to process and administer the Project (four missions prior to loan approval, three missions prior to inception, and sixteen missions from inception). Of the 18 missions between March 1999 and October 2004, six of the later missions included staff consultants with expertise in biodiversity management. Considering the serious implementation delays and financial mismanagement issues, ADB suspended the Project. However, it continued to provide substantial consultant support and staff time to try and restructure the Project according to stakeholder views. During the midterm review, 3.5 years after project approval, serious attempts were made to restructure the Project. A genuine effort was made to move it in a more participatory direction. During the latter stages, ADB allocated senior staff time and resident mission resources to grapple with project issues. Nevertheless, given the complexity of issues and the need for frequent interaction with the stakeholders, a more hands-on role by the resident mission would have been useful from the beginning. Because the design weaknesses still outweigh the significant yet perhaps delayed attempts to bring the Project back on track, this validation reconfirms the PCR assessment of unsatisfactory.

D. Evaluation of Performance (PCR assessment and validation)

- (i) **Relevance.** Pressures placed upon biodiversity and forest resources, either through external causes (e.g., reduced freshwater flow and increased salinity) or unsustainable exploitation through the combined impact of the activities of the FD and surrounding communities, affirmed that the objective and scope of the Project were potentially highly appropriate.³ Providing infrastructure and development opportunities in the buffer zone, building the capacity of the FD, and introducing new conservation practices and institutional arrangements to support SRF management could have helped address these issues. However, project design was unrealistic in the context of the existing institutional environment. ADB was aware that the FD lacked ownership and commitment, yet the Project was too ambitious in attempting to achieve everything at once instead of pursuing a phased approach. The EA's lack of experience in working with stakeholders exacerbated the problem. A phased approach would have allowed the Project to build on successes and/or limit losses. Many known risks were not effectively mitigated, and it was assumed that they would be dealt with in good faith by committed stakeholders during implementation, despite the lack of ownership by the EA. The project design incorrectly assumed that these institutional weaknesses would be addressed through policy dialogue and the loan covenants during implementation. Also, the potential impacts of the various incentives involved (e.g., income generation from the forest resources and increased development in the impact zone) were insufficiently analyzed. Despite the Project's relevance to ADB and country priorities, and the global benefits it aimed to achieve, the Project cannot be assessed as relevant. This validation reconfirms the PCR rating of partly relevant based on the project design deficiencies described above.
- (ii) **Effectiveness in Achieving Outcome.** Of the five components implemented, one was effective, two were less effective, and two ineffective in meeting expected outcomes (Table 1). The project management structure that was created was weak. At the time of the midterm review, only the physical infrastructure had been implemented, and the required institutional changes had not been attempted. Although the SSC was established after some delay, it was an organization on paper only. The SMU was created as a parallel structure without the necessary staff and access despite repeated ADB attempts to have them established and the FD's agreement to do so. Although the Project generated some good outputs, the use of these outputs to effectively achieve the goal of securing the integrity of the environment and biodiversity in the SRF was not achieved. Several technical studies and reports of good quality are now available, which include new data and information required to properly manage the SRF. However, their proper application and integration into management plans were not pursued. Improved visitor facilities were constructed in the SRF, together with the necessary FD infrastructure to improve protection for resources. Support for livelihood opportunities for communities in the impact zone was initiated and provided by the Palli Karma–Sahayak Foundation (PKSF). However, these activities were not specifically directed to the target groups who most depend upon forest resources. Similarly, infrastructure constructed by LGED for local communities in the impact zone was not targeted to those who most depend and/or use SRF resources. This discrepancy reflects a lack of planning and coordination. Although such infrastructure could have helped develop the impact zones, it did not result in a strengthening of protection and conservation efforts due to the lack of coordination with project-awareness activities. The Project was cancelled mainly as a result of unresolved financial management issues, including concerns about corruption, and the absence of the stipulated institutional changes. Based on the consideration above, the validation reconfirms the PCR assessment of less effective.
- (iii) **Efficiency in achieving outcome and outputs.** The PCR did not re-estimate the Project's economic internal rate of return. This became irrelevant with the early termination of the Project that cut short the implementation period and suspended disbursement of project funds. Instead, the PCR assessed efficiency on a qualitative basis in terms of how project resources were utilized in achieving the desired outcomes. At the time of loan suspension, the Project had achieved 23% physical progress, utilizing 30% of the total

³ The entire SRF is recognized as a Ramsar site by the Convention on Wetlands of International Importance, and portions of it as World Heritage sites by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). It includes three wildlife sanctuaries covering 28% of its land area. The ecosystem is home to a significant number of threatened and endangered species (245 genera and 334 plant species have been recorded, and it is the most important remaining habitat for the highly endangered Bengal Tiger). In the SRF, 45 indigenous species are endangered, and the loss of at least six mammal species was recently reported. In addition, people live in the buffer zone area of the SRF. While the SRF has no permanent human settlements, a large number of fisherfolk and other resource harvesters spend substantial time in the SRF living on boats or in seasonal and semi-permanent structures, and camping along the SRF borders and islands.

project finances over 60% of the total project period. By the time of project cancellation in January 2005, physical progress achieved was only 24% against an elapsed project period of 75%.

Most project activities that were undertaken were not likely to yield meaningful returns. In particular, the utilization of funds in connection with (a) institutional strengthening and capacity building, (b) resource management and ecotourism planning, and (c) provision of consulting services was considered inefficient. The PKSf used its own funds for microcredit activities and determined the eligibility criteria for participation in microcredit activities. Restricted access to microcredit activities strengthened the already existing rivalry among NGOs in the area. Because the eligibility criteria for microcredit required NGOs to be PKSf members, nonmember NGOs felt excluded from the Project. Some of these NGOs established a watch group to criticize the approach of the Project, identifying disagreements between ADB and the Government on procedural, technical, and participatory issues. In addition to implementation issues, the Project had to continuously cope with interventions from the NGO community. The construction of social infrastructure by LGED and the microfinance activities carried out by NGOs stand out as being a somewhat efficient uses of resources. However, even in the case of these activities, a disconnect with the overall objectives of the Project rendered them less efficient. The facilities constructed in the buffer zone, for example, were not practically located for use of the community. This was partly a result of the complex design and insufficient consideration given to practical implementation details. Based on the considerations above, this validation reconfirms the PCR assessment of inefficient.

- (iv) **Preliminary Assessment of Sustainability.** Most activities that would have contributed toward achieving the objectives of the Project were incomplete at the time of cancellation. Sustainability was particularly compromised by a failure to implement the institutional and policy reforms that aimed to establish an effective and efficient system of governance and management for the SRF. Although some progress was made (e.g., draft management plans, sound analytical and research products, microfinance for resource users, and increased awareness), due to the lack of a cohesive SRF management system, this progress is not likely to contribute significantly toward the achievement of sustainable outcomes. Second, the budgetary allocation (or revenue sharing) provided by the Government to the FD was insufficient to maintain and operate the project facilities and equipment. Infrastructure facilities and vehicles in the SRF require more regular maintenance due to their exposure to salinity and extreme weather events. Third, the FD also lacks the commitment and motivation to carry through with activities initiated by the Project. In addition, the initial steps in creating a partnership with surrounding communities in the impact zone cannot be considered sustainable. The Project's benefits to the communities were limited when compared to those provided by groups interested in exploiting the SRF. The Project, through its incomplete implementation, appeared to create more confusion in the surrounding SRF areas. Finally, negative publicity surrounding the Project may have reduced the likelihood of future donor support for conservation and management of the SRF. Overall, the PCR argument is accurate and this validation agrees that the project benefits, if any, are unlikely to be sustained.
- (v) **Impact (both intended and unintended).** The PCR assessment showed mixed results in terms of intended and unintended impacts. The Project did not encounter any issues related to indigenous peoples during implementation. Socioeconomic impacts were generally positive. Many rural poor people benefited from the microfinance facilities and from the rural infrastructure established under the Project. The increase in tourism (partly attributed to the Project) had positive spillover effects on the local economy. As a result of the Project, NGOs and civil society were mobilized and gained greater awareness of the importance of the SRF. The environmental impact of the Project is considered marginally positive. This was mainly due to the availability of better equipment and facilities for the FD to engage in patrolling the SRF. The increased environmental awareness and appreciation gained by impact zone communities will also lead to better conservation and resource management practices. On the negative side, in terms of institutional impact, the Project had a somewhat negative effect on the FD by creating a poor image of its capabilities and reducing the morale of its staff. Similarly, the Project also had a somewhat negative impact on ADB's image as a development partner capable of handling complex natural resource management projects. In addition, some beneficiaries used the microfinance facility to expand their resource extraction activities from the SRF. Overall, OED concurs with the PCR assessment that the Project generated negligible positive impacts.

E. Overall Assessment, Lessons, and Recommendations (validation of PCR assessment)

- (i) **Overall Assessment.** Most project activities were halted midway through implementation due to loan cancellation. These activities are not likely to be followed through to their sustainable and logical conclusions. Based on facts and analyses of both the PCR and the SES, and using the 4-category

evaluation criteria (relevance, effectiveness, efficiency, and sustainability), this validation process reconfirms the overall assessment rating of unsuccessful.

- (ii) **Lessons.** Increasingly under pressure from population growth and economic development (and possibly in the future from the impact of climate change) the SRF is a globally significant natural asset in urgent need of conservation and management. The failure of this Project should not deter future efforts to conserve and sustainably manage the SRF by providing financial resources to support the FD. Quite constructively, the PCR provides a comprehensive list of lessons that may serve as a useful guide for the future project and programs of other development partners (e.g., strengthening the FD's ability to assume a role in managing the SRF). For ADB, the Project provides a rich learning experience in terms of processing and implementing projects (e.g., complex design and insufficient consideration of practical implementation details). In addition to the SES observations, OED supports the PCR lessons for future initiatives in the SRF.
- (iii) **Recommendations.** OED supports the relevant practical recommendations for action by the FD as outlined in the PCR. These include:
- a. Consider adopting covenants on institutional arrangements with key elements of sustainable and integrated management of the SRF (transparency, efficiency, and rights of beneficiaries).
 - b. Continue implementing several activities to their logical conclusion. These include (i) pursuing timber-stand improvement activities, (ii) finalizing the fisheries management plan and the ecotourism management plan, (iii) implementing certain provisions of the wildlife management plan, (iv) incorporating specific provisions of said plans (items ii and iii) into the updated and integrated management plan for the SRF, and (v) implementing social programs in the impact zone together with microfinance NGOs.
 - c. Utilize limited funds effectively by identifying priorities for the operation and maintenance of facilities.
 - d. Address the 33 remaining unresolved queries from the Government's Audit Department comprising four of nine serious financial irregularities and 29 of 38 non-serious financial irregularities.

F. Monitoring and Evaluation Design, Implementation, and Utilization (PCR assessment and validation)

The EA did not comply with the covenant on monitoring community organizations and group development activities, such as social surveys on group development, microcredit management, micro-enterprise development, poverty reduction, gender development, social development, resource extraction norms, and social enforcement by a local research institution. Despite its deficiencies in implementation, the PCR notes that the Project laid the groundwork for useful programs on biodiversity and water quality monitoring, and the FD should continue these programs. Paragraph 52 of the PCR provides useful suggestions to continue relevant monitoring activities in the SRF.

G. Other (e.g., safeguards, including governance and anticorruption; fiduciary aspects; Government assessment of the Project, as applicable) (PCR assessment and validation)

The Project envisaged a transparent financial management system, but this was difficult to achieve given the standard practices embedded in other FD activities. During implementation, there were official allegations of financial mismanagement of funds by the EA. For 3 consecutive years, the report of the Government's auditor general highlighted a number of serious irregularities in the project financial statements. ADB noted these financial irregularities which were serious enough to warrant a suspension according to ADB financial management guidelines. Since 2001, ADB has been concerned about the integrity of the financial management of the Project. Upon review of the audited financial statements, ADB found that it could not reconcile the project accounts and provided support to hire an accountant. Despite ADB support to reconcile project accounts, the FD was not able to do this in compliance with ADB guidelines. The accountant found other irregularities in the financial management system. When faced with the allegations of financial mismanagement, ADB took the necessary steps to examine and try to help redress the financial management weaknesses of the Project. ADB's Integrity Division also investigated alleged fraudulent and corrupt practices brought to its attention, but did not find concrete evidence that would have allowed ADB to act on those allegations.

H. Ratings	PCR	OED Review	Reason for Disagreement/Comments
Relevance:	Partly Relevant	Partly Relevant	
Effectiveness in Achieving Outcome:	Less Effective	Less Effective	
Efficiency in Achieving Outcome and Outputs:	Inefficient	Inefficient	
Preliminary Assessment of Sustainability:	Unlikely	Unlikely	
Borrower and EA:	Unsatisfactory	Unsatisfactory	This is largely due to the FD's unsatisfactory performance rating. LGED performance was considered satisfactory.
Performance of ADB:	Unsatisfactory	Unsatisfactory	Drawing from additional arguments by the PCR, ADB performance is rated unsatisfactory as compared to an earlier SES assessment of partly satisfactory.
Impact:	Negligible	Negligible	
Overall Assessment:	Unsuccessful	Unsuccessful	
Quality of PCR:		Satisfactory	

I. Comments on PCR Quality

Overall, the PCR is quite forthright in assessing the limited achievements and major pitfalls of this failed Project. The report is comprehensive, well-written, and consistent with the findings and analyses of the earlier OED case study. Only minor points require clarification and/or corrections:

- (i) A typographical error in the "Total" of Table A5.2. The number should be "12.2" instead of "64.98."
- (ii) Section C(v) of the validation notes that after the redesign process FD staff, demonstrated increased commitment and were surprised by the cancellation of the Project (PCR, paragraph 43). The PCR could have further elaborated on whether this was taken into consideration during the analysis of options and subsequent cancellation.⁴ However, the PCR states that partial compliance or noncompliance of project covenants was one of the key reasons for the cancellation of the Project. These covenants contained key elements for sustainable and integrated management of the SRF, such as transparency, efficiency, and the rights of beneficiaries (PCR, paragraph 53).
- (iii) Project accounts were kept open for 2 years to settle disagreements regarding claims. The PCR could have explained how this was reconciled (Section C[iii]).⁵

J. Recommendation for OED Follow Up

No follow-up action required. The Project was subjected to a post-project evaluation under an OED SES in 2006.

K. Data Sources for Validation

- (i) PCR, RRP, legal documents, Government's PCR;
- (ii) Management review meeting and staff review committee documents and summary record of discussion of ADB's Board of Directors;
- (iii) Board reports, and other progress reports;
- (iv) Project administration memorandum and list of archived documents;
- (v) Supervision reports, including most recent midterm review or progress reports, and back-to-office report of PCR Mission; and
- (vi) OED special evaluation study on ADB-GEF cofinanced projects (2007).

⁴ Regional department staff explained that the decision on cancellation considered several factors including the FD's commitment to the Project. Although increased commitment was observed, it was then judged not at the level that would allow the project to be implemented as redesigned in a reasonable time frame.

⁵ Regional department staff clarified that ADB's position on the disagreed claims as noted in para. 31 and footnote 26 of the PCR was final. After extensive communications over 2 years, the Government finally agreed to pay back the unliquidated balance of the imprest account to ADB. The refund took place in December 2007.

REGIONAL DEPARTMENT'S RESPONSE TO THE PROJECT COMPLETION REPORT VALIDATION REPORT

On 19 August 2008, Officer-in-Charge, OED2, Operations Evaluation Department (OED), received the following comments from the Agriculture, Natural Resources and Social Services Division, South Asia Department.

We have reviewed OED's earlier draft Project Completion Report (PCR) Validation Report for Bangladesh: Sundarbans Biodiversity Conservation Project that was circulated to us on 4 August 2008 and its final draft that was sent to us for review on 18 August 2008. We appreciate that the comments we made to OED on the earlier draft through our memorandum dated 9 August 2008 have been adequately incorporated in the final draft. Therefore, we have no further comment to make on the final draft.