

GEF EO Terminal Evaluation Review Form

1. PROJECT DATA				
GEF Project ID: 618		Review date: 2 Dec 07		
IA/EA Project ID: P009468		<u>at endorsement</u> (Million US\$)		<u>at completion</u> (Million US\$)
Project Name: Aquatic Biodiversity Conservation (4 th Fisheries Project)		GEF financing:	5.0	3.3
Country: Bangladesh		IA/EA own:	28	16.7
		Government:	15.5	15.5
		Other*:	12.3	6.5
		Total Cofinancing	55.8	38.7
Operational Program: 2		Total Project Cost:	60.8	42.0
IA	WB	<u>Dates</u>		
Partners involved: GoB various Gov't Departments such as Fisheries, Water Development Board, Fisheries Research Institute	Work Program date		-	
	CEO Endorsement		Jan 1999	
	Effectiveness/ Prodoc Signature (i.e. date project began)		Dec 1999	
	Closing Date	Proposed: Dec 2004	Actual: Dec 2004 (4 th Fisheries cont until June 2006)	
Prepared by: Lee Risby	Reviewed by: Neeraj Negi	Duration between effectiveness date and original closing: 60 months	Duration between effectiveness date and actual closing: 60 months	Difference between original and actual closing: 0
Author of TE: S. Rafiqzaman		TE completion date: March 2007	TE submission date to GEF EO: July 2007	Difference between TE completion and submission date: 4 months

* Other is referred to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

2. SUMMARY OF PROJECT RATINGS

Please refer to document "GEF Office of Evaluation Guidelines for the verification and review of terminal evaluations" for further definitions of the ratings.

	Last PIR	IA Terminal Evaluation	Other IA evaluations if applicable (e.g. IEG)	GEF EO
2.1 Project outcomes	S	MS	MS	MS
2.2 Project sustainability	N/A	Moderate	Moderate	MU
2.3 Monitoring and evaluation	S	UA	Modest	MU
2.4 Quality of the evaluation report	N/A	N/A	Satisfactory	S

Should this terminal evaluation report be considered a good practice? Why?

No, the ICR was rated as satisfactory by IEG, but they noted some lack of in-depth analysis of two core issues – contracting issues during implementation and projects coordination with the 4th Fisheries Project.

The IEG has made two reviews (a) of the GEF component – which was completed in 2004 and (b) of the 4th Fisheries (of which the GEF component was one part) in 2007. It would have been better to make one comprehensive review of the project rather than produce two IEG reviews. The later 2007 review also makes comments on the aquatic biodiversity conservation component which updates the earlier review, and also seems to cast doubt on the sustainability rating of 'modest'.

Is there a follow up issue mentioned in the TE such as corruption, reallocation of GEF funds, etc.? No

3. PROJECT OBJECTIVES AND ACTUAL OUTCOMES

3.1 Project Objectives

- **What were the Global Environmental Objectives of the project?**

According to the IEG review the global environmental objective of the project is to support the conservation of globally important wetlands and aquatic related biodiversity in Bangladesh by mainstreaming biodiversity and aquatic ecosystem conservation within the inland and coastal fisheries sector.

- **Were there any changes during implementation? No**

- **What were the Development Objectives of the project?**

According to the IEG review development objectives of the Fourth Fisheries Project (FFP) was to support sustainable growth in, and equitable distribution of, the benefits generated from increased fish and shrimp production, both for domestic consumption and exports.

- **Were there any changes during implementation?**

Yes, according to the ICR the Bank Board approved an extension to the project due to the following factors (note the GEF component closed on time in December 2004)

Changes of Project Outcome targets/objectives. Bangladesh suffered major flooding between July and September 2004. Major donor assistance was organized to deal with the costs of rehabilitation etc. A program of Bank assistance, totaling US\$200 million, was approved by the Board in early 2005, to be drawn from ongoing loans and credits. This included US\$2.0 million, to be included as a new component in the FFP, to finance the rehabilitation of 31 fish farms operated by the DOF, that had been damaged. Actual expenditure during the project period of US\$1.5 million was drawn from the undisbursed balance of the credit. More substantively, it became clear early in implementation that there would be significant impediments to the implementation of the inland fisheries component, since transfer of responsibility of public inland water bodies to MLF was a lengthy process. As a result the overall scope of the project was reduced at the MTR, including (a) reducing the area for inland open-water fisheries to be stocked from 60,000 ha to 22,700 ha, reducing the number of pilot fish-structures from 13 to 6 and habitats to be rehabilitated from 10 to 7, and dropping the development of a new shrimp polder. At the same time the poverty objective was also reduced, lowering the share of benefits to go to the poor from 80% to 50%, since the beneficiary groups had to be drawn from existing communities and it would not be feasible to select a group so overwhelmingly weighted towards the poor. A second revision was made in 2004, to eliminate all the pilot fish-structures.

3.2 Outcomes and Impacts

- **What major project outcomes and impacts are described in the TE?**

The ABCP comprised a set of studies and some subsequent training and piloting to strengthen the basis for aquatic resources policy development and management. There were 19 studies (later condensed to 14) covering three focus areas: aquatic biodiversity conservation, Hilsa conservation, and genetic diversity:

- (i) *Aquatic biodiversity conservation:* Studies on the ecology and biodiversity of inland aquatic systems including assessment of how biodiversity can be brought into fisheries management.

Although late, all of the 14 studies were completed.

MI 2 (the mainstreaming of biodiversity conservation into fisheries sector action plans) appears to have made progress, although the degree to which aquatic biodiversity is assessed to have been effectively incorporated is inevitably a matter of judgment and some subjectivity. However, the ICR reports that the environmental needs raised by the studies were incorporated within the new National Fisheries Strategy; that environmental awareness was increased; and that many of the findings from the studies were institutionalized within government policies and action plans. In practical application, the establishment of fish sanctuaries in combination with effectively timed closed seasons and a ban on the use of some fishing tackle, proved to be the key conservation measure, and such measures were adopted in the National Fishery Strategy.

<p>(ii) <i>Hilsa conservation</i>: Studies on the reproductive biology, management conservation approaches, stock assessment and catch monitoring of Hilsa, and activities to get a Hilsa conservation program underway, together with the training of government officials and trainers, awareness building of stakeholders, and piloting of 4 fish sanctuaries and other conservation techniques.</p> <p>A Hilsa Management Plan was prepared and discussed with stakeholders and implementation has commenced (satisfying MIs 4 and 5). Implementation activities to date include training (80 government staff and 2500 fishers and other stakeholders) establishment of a number of sanctuaries under the FFP, and creation by Government of a permanent budget head for the Hilsa program. The ICR also reports what it considers may be (only 1 year of data) a reversal of the long-term trend of declining Hilsa production.</p> <p>Auguring well for the longer-term biodiversity program, subsequent to closure of the ABCP, both the Hilsa and genetic diversity programs of the ABCP were continued with FFP funds. Also, the government is operating a program in partnership with the private sector for production of quality seed for fish farms.</p> <p>(iii) <i>Genetic diversity</i>: Studies on genetic improvement including development of safe stocking of exotic species, cross breeding to enhance productivity, and conservation of biodiversity in commercial hatcheries.</p> <p>See comments under (i)</p> <p>Overall, particularly when viewed from the context of what could realistically be achieved in the project period given the minimal prior level of conservation activities, the project's efficacy was <i>Substantial</i> (IEG review)</p>
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4. GEF EVALUATION OFFICE ASSESSMENT

4.1.1 Outcomes (use a six point scale 6= HS to 1 = HU)

A Relevance	Rating: MS (4)
<p>Relevance of Objectives: The project's objectives were substantially relevant. As expressed in the 2006 CAS, Bangladesh's goal to increase poverty alleviating economic growth depends on a platform of sustainable natural resources. A core need for Bangladesh is to raise the rate of economic growth in a poverty alleviating and sustainable way. The fisheries sub-sector contributes 5 percent of Bangladesh's GDP, 23 percent of agricultural GDP and 60 percent of animal protein consumed in the country. Sustainable development of the fisheries sector depends on preserving the aquatic environment and its genetic diversity.</p> <p>Relevance of design: The project's design recognized that environmental management of the fisheries sector required improved understanding of ecological and biodiversity issues relevant to the GEF, and subsequent integration of environmental actions in the sector's investment and management. The studies were a generally relevant group, and the project's design targeted integration of results into sector action plans (as per GEF strategic priorities – subsequently developed for 'mainstreaming'). The main design weakness, quite a serious one, was the short time frame assumed for implementing and then internalizing the studies. Any delays in commissioning the studies, which, in the event, did materialize, would leave little time for the studies to be "mainstreamed" into sector policy and action plans.</p>	
B Effectiveness	Rating: MS (4)
<p>The project's monitorable indicators, and the project design itself, provide implicit clarification that the project aimed to make <i>a start</i> through studies and plans towards the project objective of mainstreaming conservation. From this perspective, good progress was made:</p> <ul style="list-style-type: none"> • Although late, all of the 14 studies were completed (satisfying MIs 1 and 3). • MI 2 (the mainstreaming of biodiversity conservation into fisheries sector action plans) appears to have made progress, although the degree to which aquatic biodiversity is assessed to have been effectively incorporated is inevitably a matter of judgment and some subjectivity. However, the ICR reports that the environmental needs raised by the studies were incorporated within the new National Fisheries Strategy; that environmental awareness was increased; and that many of the findings from the studies were institutionalized within government policies and action plans. In practical application, the establishment of fish sanctuaries in combination with effectively timed closed seasons and a ban on the use of some fishing tackle, proved to be the key conservation 	

<p>measure, and such measures were adopted in the National Fishery Strategy.</p> <ul style="list-style-type: none"> • A Hilsa Management Plan was prepared and discussed with stakeholders and implementation has commenced (satisfying MIs 4 and 5). Implementation activities to date include training (80 government staff and 2500 fishers and other stakeholders) establishment of a number of sanctuaries under the FFP, and creation by Government of a permanent budget head for the Hilsa program. The ICR also reports what it considers may be (only 1 year of data) a reversal of the long-term trend of declining Hilsa production. • Auguring well for the longer-term biodiversity program, subsequent to closure of the ABCP, both the Hilsa and genetic diversity programs of the ABCP were continued with FFP funds. Also, the government is operating a program in partnership with the private sector for production of quality seed for fish farms. <p>Overall, particularly when viewed from the context of what could realistically be achieved in the project period given the minimal prior level of conservation activities, the project's efficacy was substantial.</p> <p>The ABCP was relevant in concept, although design should have allowed a longer time frame for completing the studies and integrating the study recommendations in sector policy and management. Notwithstanding, the project made a good start towards mainstreaming biodiversity and aquatic ecosystem conservation in the fisheries sector, and it was at least moderately cost-effective (outcome would have been greater had the studies commenced on time rather than two years into the project period).</p>	
C Efficiency (cost-effectiveness)	Rating: MS (4)
<p>Economic rates of return for an "aquatic resources component" (the ABC project) were calculated in the PAD and ICR for the FFP/ABCP, and resulted in high estimated ERRs for the ABCP (appraisal ERR: 261 percent and at completion ERR: 164 percent). However, ascribed benefits for the ABCP stretched well beyond the ABCP's activities (in the ICR, benefits from "aquatic resources" are reported as 83 percent of the entire benefits of the FFP, yet the ABCP costs were only 4 percent of the FFP's total project costs). Hence, while the ERR for FFP as a whole, including the ABCP, may be correct; the ERR calculation for ABCP alone is misleading, and alternative means of assessing efficiency are needed - refer below:</p> <p>The ABCP was cost-effective in that all of the 14 targeted studies, although delayed, were completed at about half the costs estimated at appraisal. The indications are (Section 4) that the studies have provided useful inputs for the future management of the sector. The progress made with integrating environmental features in the national policy and government action plans is a clearly positive outcome. The most tangible benefit to date is from the Hilsa development program, for which the ABCP studies were key inputs. Both Hilsa stock and fishery yields are reported in the ICR to be increasing, a good demonstration of the possibilities for improving both ecosystems and productivity together.</p> <p>These indications suggest that the ABCP has made a positive economic contribution to the fisheries sector. However, ABCP's efficiency could have been greater, especially when looked at from the perspective of the overall program funded by the FFP. As stated in the ICR, the nearly two year delay in commencing the ABCP's studies held up a number of FFP activities, especially the open water component.</p>	

4.1.2 Impacts

The 4th Fisheries ICR completed in 2007 – states that the transitional arrangements for the project were generally good and local Dept of Fisheries staff will continue to support polder and fisher communities. Hilsa and genetic components were continued by the 4th Fisheries project staff upto June 2006.

The ICR states:

Hilsa conservation plan affected those who were involved in the fishing of juveniles. While the hilsa conservation and development plan, implemented under the project, increased its production, it negatively affected those who were involved in jatka (juvenile hilsa) fishing. The survey carried out by the project indicated that livelihood of about 65% (270,000) of the hilsa fishers in the project area, had been affected seasonally as a result of establishing sanctuaries and closed season management. The Government, however, implemented the mitigation measures in a limited way through food/income support for the affected households. As under aquaculture, there were considerable production benefits; but there might have been considerable bias as to who enjoyed these benefits. The project also dropped an original sub-component targeted specifically at very poor, mainly women shrimp fry collectors, as wild shrimp fry collection was banned by the Government at an early stage. It was noted in its favor that the project, through other studies it supported, identified and strongly recommended measures to address these negative impacts. One study noted that wild shrimp fry collection by poorer people had only a minor role in shrimp fry

decline.

Institutional arrangements for broader M&E support are, however, not in place within the Dept of Fisheries. There is question mark over whether the Dept of Fisheries local staff have the capacity to maintain the momentum of the activities in the post-project climate (ICR – section on sustainability and risks)

4.2 Likelihood of sustainability. Using the following sustainability criteria, include an assessment of **risks** to sustainability of project outcomes and impacts based on the information presented in the TE. Use a four point scale (4= no or negligible risk to 1= High risk)

A Financial resources	Rating: MU (2)
Based on the ICR comments - The main risks are to the financial resources needed by institutions to ensure local operations and continuing support to poor fishing communities. The Department of Fisheries local representative CBOs are in their initial stages of development and require more financial resources to build capacities to manage fisheries resources and conservation.	
B Socio political	Rating: MU (2)
The main risk to the project outcomes (rated as substantial by the ICR) are poverty related and community issues.	
C Institutional framework and governance	Rating: MU (2)
See (A) – The IEG 4 th Fisheries review also states – “while the project developed improved knowledge and awareness of the aquatic resources and conservation issues, it remains open to question whether these insights can be translated into effective policies and programs	
D Environmental	Rating: MU (2)
The ICR states - Mainstreaming of biodiversity and conservation aspects will face challenges and is at substantial risk. Regarding biodiversity and conservation aspects, which have been incorporated in the approved National Fisheries Strategy, the Government is likely to find it difficult to implement its action plan satisfactorily in view of growing population with a low resource base.	

4.3 Catalytic role

a. Production of a public good

The project produced ‘public goods’ through the strategy related studies which contributed to the National Fisheries Strategy and the Hilsa Management Plan.

b. Demonstration –

In the Hilsa program and for privately owned fisheries (fish ponds), good conservation also results in higher yields, and sustainable production needs to be hand-in-hand with conservation. For shared resources such as open and coastal waters, the continuation of community organizations is likely to be necessary. Continued government involvement will be needed for overall management of the sector, as intended in the National Fisheries Strategy. For the present, government commitment is strong. If this continues and attention is also paid to supporting community management, the risks to development outcome are manageable.

c. Replication – See comments under demonstration

d. Scaling up – See comments under demonstration

4.4 Assessment of the project's monitoring and evaluation system based on the information in the TE

A. M&E design at Entry	Rating (six point scale): MU (3)
The ICR states: Overall, the original design for M&E was rather weak, especially on the critical matter of defining and measuring changes in poverty situation. As to how the critical poverty target (KPI no.4: At least 80% of project benefits were to accrue for beneficiaries from moderately and extremely poor categories by end of project.) would be achieved was neither thought out for the fresh water and shrimp aquaculture components, nor were resources clearly allocated to identify baselines and monitor on this indicator, including other M&E activities.	
B. M&E plan Implementation	Rating (six point scale): MU (3)
The IEG review states: A conventional M&E system would have had limited relevance for this kind of project, and was not established. Some matters such as the implementation progress of the studies appear to have been regularly monitored, but this is management information system material more than M&E.	
Notable, however, is that the studies themselves obtained data that can serve to form a useful baseline of the resource situation prior to conservation actions. In some cases (eg. the Hilsa population), the start of a time series of data has commenced, with several sequential measurements. This is a positive though	

modest beginning.

A systematic monitoring system for Bangladesh's aquatic ecology and biodiversity conservation has still not been designed. It would have been desirable for this to have been one of the project "studies". Based on the commencing data collection from some of the studies, but the limited forward planning for M&E.

C.1 Was sufficient funding provided for M&E in the budget included in the project document? It is not a question of the budget but design of activities – as the IEG review states – 'M&E should have been one of the 'studies'.

C.2 Was sufficient and timely funding provided for M&E during project implementation? No, this takes into consideration comments and analyses provided by the IEG review and the ICR

C.3 Can the project M&E system be considered a good practice? No

4.5 Lessons and Recommendations

Project lessons and recommendations as described in the TE

What lessons mentioned in the TE that can be considered a good practice or approaches to avoid and could have application for other GEF projects?

Lessons taken from the IEG review:

1. The effectiveness of an applied research program can be substantially enhanced if structurally linked with training, piloting and targeted mainstreaming: The ABCP could be viewed as primarily a research project. However, **Mainstreaming** research findings into practical conservation of the fisheries sector was ABCP's focus. In fact, the research program is not even mentioned in the project's Development Objective. Instead, the DO places emphasis on fisheries sector ecological management. Similarly, 3 of the project's 5 monitorable indicators target the preparation and commenced implementation of action plans for sector management rather than studies. Also, the project components included substantial piloting and training, contributing further to the project's practical focus. As a result of the project's strong orientation towards practical application of research, ABCP, while it had some shortfalls, made a significant contribution to sector policy, strategy and conservation actions.

2. Where critically important actions are required as precursors to proceeding with other project activities, these actions are best done during project preparation: This all too familiar lesson is illustrated particularly clearly by the project. It took 2 years before the contract for the studies was signed. This meant that the ABCP effectively lost 2 years. The FFP's implementation was also held up as it partly depended on the ABCP findings.

3. Political support is particularly important for an environmental management program: While some of the ABCP activities were win-win both environmentally and in terms of enhanced stakeholder incomes, a number of actions related more to externalities and the longer term, or to community collaboration without immediate benefits for an individual stakeholder. There were also a number of policy and strategy documents to be approved which potentially could have been held up by vested interests. The Government strongly owned the project and wanted to push through with a fisheries sector action plan integrating environmental management. Implementation was much easier in this environment. Without the political commitment, achievement would have been seriously compromised.

4. A pilot project provides a good opportunity to develop a broader M&E program. The project missed a ready opportunity to develop a comprehensive M&E system for aquatic environmental management. Individual studies provided some material for monitoring, but not an overall M&E system. Preparing an overall M&E system could have been one of the project's "studies".

Lessons from the ICR:

- 1. User rights over common property resources are fundamental.** While there was considerable achievement in terms of production increases in aquaculture, the greatest share of benefits to the poor accrued under the inland open water component. This was particularly important, especially in a situation where inland open water fisheries are gradually declining. Resolving the institutional issue of lease, which provides secured access right to the fishing communities in a predictable and fair manner, is fundamental for successful implementation of the open water fisheries component and a prerequisite for further development of many other water bodies in Bangladesh.
- 2. Political support is critical to sustain nature conservation efforts.** Implementation of the hilsa management and conservation plan by the Government showed that political will, coupled with strong support by the relevant Government agencies, can bring about cooperation among various parties; and that accurate management information from the project and the local communities was

essential for successful management of fishery and other natural resources.
3. Dealing with social change demands longer time and realistic targets. A protracted time horizon and less ambitious targets are needed to deal with social change, the creation and distribution of rights, building community organizations to manage common property resources and the accompanying changes of thinking in the bureaucracy.
List (or if detailed summarize) the recommendations given in the terminal evaluation
No recommendations provided in the ICR

4.6 Quality of the evaluation report Provide a number rating 1-6 to each criteria based on: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, and Highly Unsatisfactory = 1. Please refer to document "GEF Office of Evaluation Guidelines for the verification and review of terminal evaluations" for further definitions of the ratings.

4.6.1 Comments on the summary of project ratings and terminal evaluation findings from other sources such as GEF EO field visits, etc.
None

4.6.2 Quality of terminal evaluation report	Ratings
A. Does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	5
B. Is the report internally consistent, is the evidence complete/convincing and are the IA ratings substantiated?	5
C. Does the report properly assess project sustainability and /or a project exit strategy?	4
D. Are the lessons learned supported by the evidence presented and are they comprehensive?	5
E. Does the report include the actual project costs (total and per activity) and actual co-financing used?	5
F. Does the report present an assessment of project M&E systems?	5

4.6.3 Assessment of processes affected attainment of project outcomes and sustainability.

Co-financing and Project Outcomes & Sustainability. If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability, and if it did affect outcomes and sustainability then in what ways and through what causal linkage did it affect it?
The ICR states: Of the total IDA Credit of SDR 20.6 million (US\$28.0 million equivalent), 58% was disbursed, 6% was undisbursed and 36% was cancelled with downscaling. DFID provided US\$15.5 million equivalent of co-financing, of which almost 100% was disbursed. Out of the total GEF Grant of US\$5.0 million, 66% was disbursed, 9% undisbursed and 25% was cancelled with adjustment in the planned studies. As scope of the project was scaled down at MTR, SDR 6.0 million was cancelled as of January 30, 2003 at the borrower's request. There was also a second cancellation of SDR 1.5 million, effective May 2, 2006 due to downward revision of the scope. As of December 31, 2006, total IDA disbursement amounted to SDR11.99 million (92%) of the revised total allocation of SDR13.10 million.
Based on the review of the ICR and IEG review there was no significant impact on the GEF component of the reduction in project spending. The main cause of the cancellation of US1.3 million of the GEF grant was the delay in contracting which caused about 2 years of implementation time to be lost.
Delays and Project Outcomes & Sustainability. If there were delays in project implementation and completion, then what were the reasons responsible for it? Did the delay affect the project's outcomes and/or sustainability, and if it did affect outcomes and sustainability then in what ways and through what causal linkage did it affect it?
There were delays in the contracting for the GEF component studies, this adversely impacted the timing of their integration into the National Strategies and Plans and reduced the 'mainstreaming' potential

4.7 Is a technical assessment of the project impacts described in the TE recommended? Please place an "X" in the appropriate box and explain below.	Yes:	No: X
Explain: Not recommended by IEG review		

4.8 Sources of information for the preparation of the TE review in addition to the TE (if any)

TER follows the existing IEG reviews of the GEF component and the 4th Fisheries Project, PIR 2004.