

IEG ICR Review

Independent Evaluation Group

1. Project Data:		Date Posted : 06/18/2007	
PROJ ID : P049587		Appraisal	Actual
Project Name : Aquatic Biodiversity Conservation	Project Costs (US\$M):	5.0	3,3
Country: Bangladesh	Loan/Credit (US\$M):	5.0	3.3
Sector Board : ENV	Cofinancing (US\$M):		
Sector(s): Animal production (90%) Central government administration (10%)			
Theme(s): Environmental policies and institutions (50% - P) Biodiversity (50% - P)			
L/C Number:			
	Board Approval Date :		07/20/1999
Partners involved : IDA and DFID (for the Fourth Fisheries Project)	Closing Date :	12/31/2004	12/31/2004
Evaluator :	Panel Reviewer :	Group Manager :	Group :
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2. Project Objectives and Components:

a. Objectives:

This GEF Trust Fund Grant was closely integrated with the IDA financed Fourth Fisheries Project (FFP, Credit 3276, Project ID P009468) and was considered in the FFP appraisal report and in project supervision as a "component" of the FFP, fully blended with the FFP. Nevertheless, the "projects" have separate development objectives and financing sources, and the Region has prepared separate ICRs though with substantial common ground: the ICRs have different data sheets and analysis of each project's results framework, but the bulk of their main texts are common. The procedure used for the ICRs was cleared by Bank central management at the time when the ABCP grant was closed.

As with the ICR's, separate ICR Reviews for each project have been prepared, though with cross references to the other project where useful.

The Development Objective of the Aquatic Biodiversity Conservation Project (ABCP) was:

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 .

The following indicators were specified for monitoring the project's achievements against its objective :

- (a) Improving the understanding of aquatic resources and biodiversity conservation :
- 1. Studies completed by end project year 3.
 - 2. Action plans to mainstream biodiversity conservation into the fisheries sector completed .
- (b) A socially and ecologically sound Hilsa (the most important commercial fish in Bangladesh) management plan developed and implemented:
- 3. Relevant studies completed by end PY 1.

- 4. Hilsa management plan completed, discussed with stakeholders, approved and resourced by end PY 2.
- 5. Hilsa management plan under implementation by end PY 2.

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Components (or Key Conditions in the case of DPLs, as appropriate):

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 .
- (ii) *Hilsa conservation*: 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 .
- (iii) *Genetic diversity*: Studies on genetic improvement including development of safe stocking of exotic species, cross breeding to enhance productivity, and conservation of biodiversity in commercial hatcheries .

d. Comments on Project Cost, Financing, Borrower Contribution, and Dates:

The grant closure date was as scheduled . Due to major delays in contracting consultancies (section 8), about 2 years of the implementation period were lost .

The GEF grant was for SDR 3.7 million or \$5.0 million equivalent. At mid-term review (June 2002) \$1.3 million equivalent of the Grant was cancelled . At project completion final disbursements were \$3.3 million.

3. Relevance of Objectives & Design:

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 .

Relevance of design : The project's design recognized that environmental management of the fisheries sector required improved understanding of ecological and biodiversity issues, 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 . 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 .

4. Achievement of Objectives (Efficacy):

The project's monitorable indicators, and the project design itself, provide implicit clarification that the project aimed to make *a start* through studies and plans towards the project objective of mainstreaming conservation . From this perspective, good progress was made :

- 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 judgement 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 .
- 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 . 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*.

5. Efficiency (not applicable to DPLs):

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:

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.

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.

a. If available, enter the Economic Rate of Return (ERR)/Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation :

	Rate Available?	Point Value	Coverage/Scope*
Appraisal		%	%
ICR estimate		%	%

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome:

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).

a. Outcome Rating : Moderately Satisfactory

7. Rationale for Risk to Development Outcome Rating:

The project's strategy related studies have already contributed to the National Fishery Strategy and Hilsa Management Plan. 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.

a. Risk to Development Outcome Rating : Moderate

8. Assessment of Bank Performance:

Quality at Entry: The Bank/GEF supported a sector which was important to Bangladesh's sustainable development, and the project design chose study areas relevant to aquatic environmental management. The project design and monitorable indicators also recognized that studies should result in practical application. It was an excellent design feature that the the MIs and PAD discussion included integration of study conclusions into the National Fisheries Strategy, a Hilsa Management Plan and other actions. A key weakness was the

unreadiness of the studies for implementation, moderating an otherwise strong performance .

Quality of Supervision: Supervision was in most respects strong . The team was adequately resourced, promoted the practical application of the studies, and resolved problem areas . Good rapport with government facilitated the production of the various policies and action plans resulting from the project . However, the contracting process for the consultancies encountered major delays, suggesting that between government (section 9) and the Bank, mitigating actions were ineffective . While there was a complaint at contract evaluation/award stage by one consulting firm, which would have caused some delay to resolve the problem, a delay of nearly 2 years goes far beyond a reasonable expectation of the time required .

a. Ensuring Quality -at-Entry:Moderately Satisfactory

b. Quality of Supervision :Moderately Satisfactory

c. Overall Bank Performance :Moderately Satisfactory

9. Assessment of Borrower Performance:

The significant shortcoming was the inordinate delay in hiring consultants for the studies, the same issue as for Bank performance. This not only held up the ABCP but slowed implementation of aspects of the FFP that were dependent on the results of the studies (section 5).

In other respects both the Government as a whole and its implementing agencies - the Department of Fisheries and the Bangladesh Water Development Board - performed well.

Government Performance: Government strongly "owned" the project, promoting a number of actions that required political will to achieve . Amongst these actions, the National Fisheries Strategy was approved including environmental features emanating from the ABCP, the Hilsa Management Plan was approved, and subsequently enforced, and a budget head for fisheries management was established . However, lagging Government approvals during the hiring process for consultants were the primary cause of the major delays with the consultancies.

Implementing Agencies Performance: The largely succesful implementation of the project reflects dedicated staff and management in DOF and BWDB, and, after the two year hiatus, an ability to manage the implementation of a large group of studies and subsequent pilot actions . This required organization and energy, and assimilation and application of the study results .

a. Government Performance :Moderately Satisfactory

b. Implementing Agency Performance :Satisfactory

c. Overall Borrower Performance :Moderately Satisfactory

10. M&E Design, Implementation, & Utilization:

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, M&E quality is rated modest overall.

a. M&E Quality Rating : Modest

11. Other Issues (Safeguards, Fiduciary, Unintended Positive and Negative Impacts):

12. Ratings:	ICR	IEG Review	Reason for Disagreement / Comments
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Outcome:	Moderately Satisfactory	Moderately Satisfactory	
Risk to Development Outcome:	Moderate	Moderate	
Bank Performance :	Moderately Satisfactory	Moderately Satisfactory	
Borrower Performance :	Moderately Satisfactory	Moderately Satisfactory	
Quality of ICR :		Satisfactory	

NOTES:

- When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.
- The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate .

13. Lessons:

- 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".

14. Assessment Recommended? Yes No

15. Comments on Quality of ICR:

The ICR is Satisfactory overall . It is informative, thoughtful and candid, and its Annex 2 provides useful additional detail on project implementation. The particular strength of the ICR is its thorough and factual discussion of the project experience. The GEF Implementation Completion Memorandum prepared by the Bank specifically for the ABCP is precise, and, appropriately, evaluates the project mainly against its DO rather than by component . (This is a weakness in parts of the Bank ICR's text where evaluation of components rather than by DO is predominant .) The

CR could have been stronger in two main areas:

Depth of analysis for core issues: A notable gap in the ICR concerns the lack of a more detailed discussion of the project's main issue; the two year delay in contracting consultants . While frequent reference is made throughout the ICR to the late contracting, a more informative and evaluative discussion of the contracting issue is absent : why was contracting so late? what did the Government and the Bank respectively do? what could they have done better? why was implementation of the studies so important for start -up of the FFP? did some aspects of FFP go forward? how did the Bank and the borrower successfully put implementation into faster gear once the contract was signed?

Structure and Handling of the two projects: Given the interlinkages between the Fourth Fisheries and Aquatic Biodiversity Conservation "projects", the approach used for the ICR(s) - a common main text (with some individually tailored sections) and separate data and results framework sheets - is reasonable. However, the procedure used would have been clearer if: (i) a clear explanation had been provided at the beginning of each project's ICR on what has been done and where sections of the report are specific to the project being reviewed; and (ii) if the data/results framework material had been placed underneath the cover of the respective report rather than as a separate document. Also, some more information specific to the ABCP would have been helpful . For instance, the ICR main text has only brief mention of the studies' specific purposes and findings, and even the annexes (Annex 8, Borrower's Evaluation) contains only a cursory review of the studies .

a.Quality of ICR Rating : Satisfactory