

# IEG ICR Review

Independent Evaluation Group

<b>1. Project Data:</b>		<b>Date Posted :</b> 02/10/2012	
<b>Country:</b>	Kazakhstan		
<b>Project ID:</b>	P046045	<b>Appraisal</b>	<b>Actual</b>
<b>Project Name:</b>	Syr Darya Control & Northern Aral Sea Phase I Project	<b>Project Costs (US\$M):</b>	83.34
<b>L/C Number:</b>	L4609	<b>Loan/Credit (US\$M):</b>	64.5
<b>Sector Board :</b>	Agriculture and Rural Development	<b>Cofinancing (US\$M):</b>	
<b>Cofinanciers :</b>		<b>Board Approval Date :</b>	06/05/2001
		<b>Closing Date :</b>	02/28/2007
<b>Sector(s):</b>	Irrigation and drainage (66%); Flood protection (29%); Central government administration (4%); Animal production (1%)		
<b>Theme(s):</b>	Water resource management (33% - P); Rural services and infrastructure (33% - P); Biodiversity (17% - S); Infrastructure services for private sector development (17% - S)		
<b>Prepared by :</b>	<b>Reviewed by :</b>	<b>ICR Review Coordinator :</b>	<b>Group:</b>
Rahul Raturi	Ridley Nelson	Soniya Carvalho	IEGPS1

## 2. Project Objectives and Components:

### a. Objectives:

The objectives of the project as stated in the Loan Agreement are: (i) to secure the existence of the Northern Aral Sea (NAS) and improve the carrying capacity of Syr Darya river to improve the ecological and environmental conditions and biodiversity in the delta and around NAS which will lead to improved human and animal health; and (ii) sustain and increase agriculture (including livestock) and fish production in the Syr Darya basin. These substantially match the objectives as stated in the PAD. This Review will use the project development objectives as stated in the Legal Agreement.

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

No

### c. Components:

Actual project costs are stated in the ICR as having been identical to those estimated at appraisal. This is not consistent with the actual implementation experience as noted in the ICR, where some of the components were not fully implemented as appraised.

A. **Rehabilitation of Northern Aral Sea (Appraisal US\$23.19 million; Actual US\$23.19million):** This included a dike to be constructed across the Berg strait, a deep channel connecting NAS and LAS; a spillway for regular use, and an emergency spillway with an earthen fuse plug.

**B. Improving the Hydraulic Control of the Syr Darya (Appraisal US\$40.95 million; Actual US\$40.95 million):** This included the rehabilitation and construction of hydraulic structures for regulating and improving water management, and for controlling allocations to various water users, including an increased inflow for the NAS. Specific works under this component included: (i) reconstruction of Aklak weir (and related works); (ii) reconstruction of the Aitek and Karaozek water control structures; (iii) rehabilitation and construction of low height dikes along the river to protect urban and rural areas from flooding and for increasing flow capacity of the river; and (iv) repairs of Kazalinsk headwork and Kzylorda barrage;

**C. Rehabilitation of Chardara Dam (Appraisal US\$14.10 million; Actual US\$14.10 million):** This included priority works such as rehabilitation of the Kzylkum irrigation outlet, the drainage system, spillway gates, and repairs of spillway outlets, chutes, stilling basins and related works, and installation of dam instrumentation.

**D. Aquatic Resources Restoration and Fisheries Development (Appraisal US\$2.00 million; Actual US\$2.00 million):** This included: (i) technical assistance for the preparation of a detailed resources and fisheries development plan and for its implementation; (ii) investments for rehabilitation of existing hatchery facilities at Kamyshbash (for Cyprinid and other forms of freshwater aquaculture) and at Tastak (for sturgeon production); (iii) the importation of sturgeon fingerlings, if needed; (iii) credit for fishermen; and (iv) the development of fish freezing, processing and marketing facilities.

**E. Monitoring and Evaluation (Appraisal US\$1.50 million; Actual US\$1.50 million):** The objective of the monitoring and evaluation (M&E) component was to evaluate the success in project implementation in terms of meeting the project's goals, and to assess its physical, environmental/ecological, social, agricultural, and economic impacts. The monitoring and evaluation activities would provide independent and continuous feedback to the implementing agencies on the project's performance and impact of its various components, so that corrective actions could be undertaken in a timely manner. Particularly, the implementation of the environmental mitigation plan would be monitored carefully. The M&E activities were expected to cover surface water flows and their quality, impact on groundwater quality, salinity levels of NAS and delta lakes; air quality; soil salinity levels; inflow to the NAS and the Larger Southern Aral Sea; impact on biodiversity; fisheries catch in the NAS and delta lakes; human and animal health indicators; land use, yield and livestock; the impact on the level of unemployment and household incomes in the project area; estimation of the project's overall benefits and economic rate of returns; etc.

**F. Project Management and Institutional Development (Appraisal US\$1.60 million; Actual US\$1.60 million):** This included costs associated with the operation of a Project Management Unit (PMU), and overall project management, as well as technical assistance in such areas as procurement, accounting, auditing, and supervision of construction, monitoring and evaluation activities and implementation of the environmental management plan.

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

In addition to the estimated project costs, the total project costs included US\$1.80 million towards the refinancing of the Project Preparation Facility (PPF), and a Front end Fee of US\$0.645 million. The ICR does not have information on the Borrower's contribution towards the project. Of the Bank Loan of US\$64.5 million, a total of US\$2.1 million is estimated to have been cancelled. Parallel financing for the fisheries component was to have been provided by the

US Agency for International Development (USAID), which was expected to provide technical assistance in fish catching, processing, and marketing facilities. Additional grant funds were to be sought to supplement resources for this component during project implementation. In this context, a JSDF Grant was approved towards the end of the project, in 2008, to support marginal fishing communities.

The project closing date was extended three times for a period totaling 3 years and 8 months. As noted in the ICR, the extensions were needed to allow for completion of the overall project infrastructure.

### **3. Relevance of Objectives & Design:**

#### **a. Relevance of Objectives:**

**Rated Substantial.**

The project was a modest first phase targeted at addressing the environmental issues of the Aral Sea. It was prepared at a time when significant attention was focused on the decline of the Aral Sea, which, as noted in the PAD, had started in the 1960s as increasing amounts of water were diverted from the Amu Darya and Syr Darya mainly for irrigation. By 1996 the surface area of the sea had declined by some 50 percent (from 67,000 km<sup>2</sup> to 30,000 km<sup>2</sup>) and the sea level had dropped by 16 meters. In 1990 the Aral Sea split into a small Northern Aral Sea (NAS) and a Large Southern Aral Sea (LAS) as the waters receded. The desiccation of the Aral Sea and the damage to the river deltas had resulted in serious economic, social and environmental consequences. Fish production in the delta and the NAS has been virtually extinguished, as well as hay production that benefited in the past from natural flooding along streams, lakes and wetlands. In addressing the crisis, the five Aral Sea Basin countries had requested assistance from the international community, and an Aral Sea Basin Program (ASBP) was prepared in 1993, by the Bank in coordination with UNDP and UNEP, and jointly approved by the five countries. The proposed project formed part of ASBP, and to that extent, was a component of government strategy to address environmental issues in the country. The overall objectives of the program continue to be supported under the Bank's most recent strategy, and a follow on phase two project is presently being prepared.

#### **b. Relevance of Design:**

**Rated Substantial**

Given the above considerations, the project made appropriate design choices, in terms of keeping the scale of the first phase modest, and to initially target the restoration of the Northern Aral Sea and the rehabilitation of the infrastructure on the Syr Darya. However, the project design chosen did not include the necessary downstream investments for fully supporting the realization of the second objective, of sustaining and increasing agriculture and fish production, relying instead on other ongoing programs in the area. There is also very little discussion in the PAD of the links between this project and others in the region which were expected to complement the investments under this project. At IEG's meeting with the project TTL, it was clarified that half the resources under the Irrigation and Drainage Improvement Project (Loan of \$360 million), which closed in 2006, supported the development of irrigation and drainage infrastructure in the project area.

### **4. Achievement of Objectives (Efficacy):**

***Achievement of securing the existence of the Northern Aral Sea (NAS) and improving the carrying capacity of Syr Darya river to improve the ecological and environmental conditions and biodiversity in the delta and around NAS, which will lead to improved human and animal***

**health. Rated Substantial**

**Outputs:** Discussion of project outputs is not sufficiently detailed in the ICR (other than that for the Chardara Dam rehabilitation), in terms of the actual works which were completed and what specific items were either deferred to the proposed succeeding phase, and which ones were either not done, or completed under programs not directly under the project. The ICR suggests that the closure dike in the Bering Strait as well as the deep channel connecting the NAS and the LAS was completed, as were the weirs (the Aklak and Aitek regulation weirs) and other major structures which were intended to improve the hydraulic control of the Syr Darya. The Chardara Dam was rehabilitated, but some issues remain, for example the vibration of the ground release gates at full capacity.

**Outcomes:** The ICR notes the following positive outcomes arising from the project investments. (i) NAS water levels above Baltic Sea Level (BSL) increased from a pre-project low of 38 m to the desired design level of 42 m. In 2006 and 2007 the NAS reached full capacity. Annual inflows into the NAS were 7 and 4 billion m<sup>3</sup> in 2007 and 2009 respectively. The water surface area increased by 37% from 2,400 km<sup>2</sup> in 2001 to 3,300 km<sup>2</sup> in 2009 (50% greater than at the historical lowest water level). The distance from Aralsk harbor to the NAS decreased from 75 km in 2001 to 40 km in 2009 and 35 km in August 2010. Following the closure of the Aklak control structure on 21 November 2009, the upstream water level reached 53 m above BSL as per design, allowing 75 million m<sup>3</sup> of water to be diverted into the delta lakes. (ii) The improved infrastructure provided an overall carrying capacity of the river of 700 m<sup>3</sup>/sec and increased the carrying capacity in winter from 300 m<sup>3</sup>/s in 2001 to 425 m<sup>3</sup>/sec in 2007; annual losses into desert sinks (the Arnasai depression) were reduced from 5 billion m<sup>3</sup> in 2003 to 0.4, 0.8, 1.0 and 0.2 billion m<sup>3</sup> in 2006, 2007, 2008 and 2009 respectively (the target outcome value was 1 billion m<sup>3</sup>). (iii) The increased freshwater inflow to the NAS more than halved the salinity levels in the sea, from more than 20 g/l in 2001 to less than 10 g/l in 2010 (drawn from page 13 of the ICR). In addition, the ICR notes that flora and fauna around the NAS have much improved, and that local people have reported better health and well being (these findings are not supported by findings of any structured surveys).

***Achievement of sustaining and increasing agriculture (including livestock) and fish production in the Syr Darya basin . Rated Modest***

**Outputs:** For the expected agriculture and livestock related outputs, the project only provided the major investments related to improving the water levels in NAS and the water flows on the river, and related major diversion structures. No downstream investments were provided for under the project. However, as noted earlier, at the meeting between IEG and the project task team leader, it was clarified that the Irrigation and Drainage Improvement Project (Loan of \$360 million), which closed in 2006, supported the development of irrigation and drainage infrastructure in the project area. The Government's commitment towards the fisheries component was weak, partly because the component was underfunded from the beginning (as explained by the project TTL at the meeting with IEG), and also due to an unwillingness to use loan funds for these activities. At project start up, USAID supported the rehabilitation of two existing hatcheries, but most of the other works were not implemented. The Bank processed a JSDF grant in 2008, but with a different focus from that in the project, taking a community based development approach, with the focus on the marginalized fishing communities in the NAS region. Here too, implementation is significantly behind schedule.

**Outcomes:** The ICR lists a number of significant outcomes. Areas planted to rice are reported to have increased from 58,500 ha in 2001 to 73,300 ha in 2009; and sustained cropping on all

Irrigated lands of around 150,000 ha has been secured. Similarly, cattle numbers are reported to have increased from 185,000 head in 2001 to 260,000 head in 2009. Fish catches in the region increased from 52 tons in 2004 to 2,650 tons in 2009. However, this review would like to introduce a note of caution on the manner in which these data are interpreted, as presently, the link between inputs (including from other associated projects and investments which are not discussed), outputs and outcomes is very unclear. The rating of modest reflects this lack of clarity on how much of this incremental production can be attributed to the project. The ICR does recognize this issue.

#### 5. Efficiency:

At appraisal, an ERR was estimated for two possible scenarios involving the relaxation of the water constraint, which were expected as a result of the investments under the project: (1) where productivity was sustained at the then prevailing low level (the assumption being that without the project, it would decline), and (2) where productivity gradually increases to the level previously achieved in 1990. For the first scenario, an ERR of 29 percent was estimated, while for the second scenario, an ERR of 44 percent was estimated. Individual sub-component ERRs were estimated, ranging from 13% to 43% for Scenario 1 and 24% to 63% for Scenario 2. The ICR does not provide sufficient information to assess the efficiency of the operation. An ERR has not been re-estimated, as the incremental agricultural benefits were found to be 'not readily definable' by the ICR team. Instead a ratio of the capital costs to the undiscounted annualized benefits is estimated, in itself a questionable measure of efficiency. Furthermore, there are also questions with regard to the values used for this measure - capital costs are exactly the same as at appraisal (this review would question this assumption, as much more additional costs would need to have been incurred, on the secondary and tertiary water delivery systems, the technical support services, among others, to ensure the on farm benefits as given to be realized), while the estimate of undiscounted annualized benefits of \$13.5 million is based on assumptions which have not been justified in the ICR. Given that the ICR notes that annual inflows of water into NAS had increased significantly, salinity had decreased, and that water supply on all irrigated lands had been secured, it is not clear why an economic analysis along lines similar to that done at appraisal was not attempted. This largely reflects the weak link between the design and implementation of project infrastructure, and the downstream investments which are essential for translating the increased water resource availability to more efficient availability of water at the farm level (which were not part of the project), and also the weakness in implementing the monitoring and evaluation component of the project. In the absence of any quantitative analysis, but also taking into account both the delays in completing project implementation and the factors which contributed to these delays, and the discussion on efficacy above, on balance, Efficiency is rated as **Modest**, but there are considerable uncertainties.

**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	Yes	44%	100%
ICR estimate	No		

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

#### 6. Outcome:

The first set of objectives is viewed as the main thrust of the project, and is accordingly given a higher weight in this review, as the realization of the second set of objectives clearly depends on achieving the first set. Based on the Substantial relevance of objectives, Substantial relevance of design, Substantial achievement of the first objective and Modest achievement of

the second objective, and Modest efficiency, the project's outcome is rated Moderately Satisfactory. The project was scaled at a modest level, and did well in achieving substantially its main objective, of securing the NAS and improving the carrying capacity of the Syr Darya, thereby improving the availability of water in both NAS and the basin.

**a. Outcome Rating :** Moderately Satisfactory

#### **7. Rationale for Risk to Development Outcome Rating:**

The Government's commitment to continuing with the next phase of the program is reflected by the fact that it is included in the future year's lending program as per the 2008 Country Partnership Strategy (CPS) Progress Report. However, the program is considerably delayed, and the next phase project has not yet been prepared. With the closure of the first phase project, there is a moderate risk that the existing institutional arrangements associated with the project and wider program, including the PMU, are discontinued, and operation and maintenance as well as completion of works (for example dealing with the increased erosion downstream of Aklak, and also the vibration of the ground release gates of Chardara Dam) are not attended to in a timely manner. The ICR notes that already a few shortfalls in the provision of operation and maintenance services for system infrastructure had been identified. This could compromise some of the outcomes realized so far.

**a. Risk to Development Outcome Rating :** Moderate

#### **8. Assessment of Bank Performance:**

##### **a. Quality at entry:**

The Bank made appropriate choices in the macro context, by first tackling the more manageable challenges and keeping the scope modest of this first phase project which aimed to improve water resources management on a very long stretch of an international river, and reverse years of neglect. Upfront cost minimization studies, as well as results from testing of some key design options, such as the idea of raising the water level by constructing a dike in the Berg Strait, were taken into account. There is an area which should have been given more attention at the beginning. This concerns the absence of provisions within the project for ensuring that the increased water resources do reach the farms, and technical services are available for maximizing production outcomes. The PAD does make reference to the fact that the project would link up with and rely on other investment interventions in addressing some of the issues, and also for the downstream requirements of providing irrigation water to the farm gate. However, there are no details of the projects involved, and also no specific provisions specified in the implementation arrangements, to ensure that the links do materialize as envisaged.

**Quality-at-Entry Rating :** Satisfactory

##### **b. Quality of supervision:**

a. The Bank's ICR notes that the supervision efforts could have been more proactive in facilitating a change in government willingness to bring change in government policies in areas where they were perceived to be not on par with international standards and guidelines. This could have helped bridge some of the differences between the Government and the Bank in, among others, the securing and administering of contracts. In addition, it is not clear from the ICR whether, and to what extent the Bank team used the midterm review (MTR) of the project to help address some of the implementation issues; as well as to deal with the slippage and poor implementation of the M&E component. At the meeting with IEG, the project TTL explained that the MTR was done, but it may not have been used in a sufficiently effective manner to address the issues which were being confronted during

implementation, and the possibility of project restructuring was not considered. The Borrower's full ICR is not attached, but it is stated that the Borrower expressed satisfaction in it with the Bank's inputs and support during supervision.

**Quality of Supervision Rating :** Moderately Satisfactory

**Overall Bank Performance Rating :** Moderately Satisfactory

#### **9. Assessment of Borrower Performance:**

##### **a. Government Performance:**

The Government did well on engaging in the macro level water management issues associated with the basin, and signing on to the five nation ABSP and moving forward on this project. The ICR does however highlight some issues where greater proactivity on the part of the Government would have gone a long way to getting more efficient implementation. In particular the ICR notes the lack of convergence between the policies, priorities and practices of the government in procurement, and in project, financial and contracts management areas with those commonly prevailing internationally which was a cause of delays in implementation, among others. There were also issues which arose on account of insufficient budget allocations, as well as the design of the fisheries component, and the willingness on the part of the government to execute the component as appraised and negotiated, which also contributed to delays and the non-execution of some project works.

**Government Performance Rating** Moderately Satisfactory

##### **b. Implementing Agency Performance:**

a. As noted in the ICR, the Committee for Water Resources (CWR), which was the main implementing agency, did well on completing the main infrastructure/construction aspects of the project, and getting the works fully operational, resulting in improvements noted above within the basin. However, the project was extended by nearly 4 years, as a result of delayed decision making, and some works could not be completed or had to be dropped. Implementation of the M&E component was allowed to slip significantly, with little if any routine M&E activity through much of the latter part of the project.

**Implementing Agency Performance Rating :** Moderately Satisfactory

**Overall Borrower Performance Rating :** Moderately Satisfactory

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

##### **a. M&E Design:**

The M&E activities were expected to cover surface water flows and their quality, impact on groundwater quality, salinity levels of NAS and delta lakes; air quality; soil salinity levels; inflow to the NAS and the Larger Southern Aral Sea; impact on biodiversity; fisheries catch in the NAS and delta lakes; human and animal health indicators; land use, yield and livestock; the impact on the level of unemployment and household incomes in the project area; and estimation of the project's overall benefits and economic rate of returns. The project design includes a set of clear indicators, and a logical results chain connecting inputs, outputs, and outcomes to these indicators. The ICR notes that data bases and the Geographic Information Systems (GIS) were set up to record and present historical and baseline data. The PAD also highlights the special

feature of the M&E component as being the inclusion of satellite remote sensing of the project area, to both establish a good baseline with respect to the then current use of the Syr Darya, and to monitor the impact of the project on water use and productivity of agriculture. It is unclear however from the PAD, as to what exactly the provision of US\$1.5 million of project cost for M&E was to be used for - given the broad nature of the project, covering both a large geographic area and a variety of areas which were expected to be impacted from it, there is a question of whether this amount was adequate for the proposed 5 year project.

**b. M&E Implementation:**

In the early years of project start up, the data bases and GIS were set up, and some of the data on the hydrological and environmental situation, to the extent that it was already available. However, implementation appears to have stalled early in project life, and further efforts at data collection and the training of government agency staff were not successful. The ICR notes that the formal M&E system was in place sometime around midway through the extended project life, but there was little if any routine M&E activity. As indicated in the PAD, detailed implementation of the component was dependant on the services of a consulting firm, which was expected to sub contract national firms or institutes, and set up the needed links with other institutions.

**c. M&E Utilization:**

In the absence of any routine M&E activity, there was no data generated which could have been used for improving planning and implementation of programs in the region.

**M&E Quality Rating :** Negligible

**11. Other Issues**

**a. Safeguards:**

The project was classified as a Category A project, for which a full Environmental Assessment and a Social Assessment were done, and an Environmental Management Plan (EMP) was formulated. In addition to OP4.01 on environmental assessment, the safeguard policies of safety of dams (OP4.37) and projects in international rivers (OP7.50) were applicable. As noted in the ICR, the implementation of the EMP included environmental audits comprising systematic independent reviews of works construction sites, camps, consultations and interviews with clients, consultants and contractors, and examination of relevant supporting documentation. For the dam safety works at Chardara Dam, an International Panel of Experts was constituted, comprising national and international experts, which provided advice, reviewed designs, and oversaw the works. At the end, as there were pending issues related to the contract works at the Aklak control structure, where erosion of river banks on both sides of the river had occurred downstream of the structure. Based on a review initiated by the Bank, the issue most likely occurred on account of a minor design issue, which can be tackled. Finally, the project involved an international river; with the project being part of the five nation ASBP, this meant that all riparian states were fully informed of and in agreement with its implementation.

**b. Fiduciary Compliance:**

The procurement capacity assessment had highlighted a weak legal and regulatory framework and project cycle management, and provided a high risk rating. The 2000 CPAR had classified the public procurement system as medium risk. The project was classified as medium risk from a procurement perspective, due to the relatively good experience with projects in the water/agriculture sector. The ICR notes that procurement planning was adequate, and the bidding process for all contracts was successfully completed on time. However, the project faced considerable contractual problems with the implementation of the NAS and nearby Aklak



structures, resulting in significant delays.

Financial Management faced problems with the automated accounting software; and the problem could not be fixed as funds had not been allocated for software maintenance during the last year. Otherwise, FM arrangements met Bank requirements through the project on quality of accounting, reporting, internal controls, staffing and audit arrangements. At the time of the ICR, the final audit report for the project was expected. At IEG's meeting with the project task team leader, the latter confirmed that the final audit report had been received.

**c. Unintended Impacts (positive or negative):**

The ICR has noted various additional impacts arising from the project, including: a poverty impact arising from higher incomes; improved biodiversity, environmental and human health impacts; better access to services and improved living conditions for earlier isolated communities, on account of the substantive investment made in road, power and other infrastructure. There are however, insufficient quantitative or structured survey data presented in the ICR to adequately substantiate these impacts.

**d. Other:**

<b>12. Ratings:</b>	<b>ICR</b>	<b>IEG Review</b>	<b>Reason for Disagreement /Comments</b>
<b>Outcome:</b>	Satisfactory	Moderately Satisfactory	Based on the evidence provided in the ICR, there is considerable uncertainty on the extent to which the outcomes related to the second objective can be attributed to the project. Furthermore, the quantitative analysis in the ICR does not provide a robust assessment of overall project returns. Both the achievement of the second objective and efficiency are rated as Modest. These amount to moderate shortcomings and an overall Moderately Satisfactory rating.
<b>Risk to Development Outcome:</b>	Moderate	Moderate	
<b>Bank Performance :</b>	Moderately Satisfactory	Moderately Satisfactory	
<b>Borrower Performance :</b>	Moderately Satisfactory	Moderately Satisfactory	
<b>Quality of ICR :</b>		Unsatisfactory	

**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:**

This IEG review highlights 3 important lessons (different from those outlined in the ICR):

1. The pursuit of components where governments have expressed an unwillingness to use loan funds is unlikely to end in a successful implementation of such activities. It is better to secure grant funds up front before the inclusion of such components.
2. The failure to implement monitoring and evaluation makes it difficult to correctly attribute outcomes. This becomes more important where investments for a large program (such as the ASBP) are phased, and the design of succeeding phases needs to be guided by the implementation performance of the earlier phases.
3. Projects need to build the anticipated impacts of local standards and practices on contracting, contract management, and other requirements, into the design and implementation phasing when they are not consistent with international practices. The provision of consultants alone is unlikely to fully address these issues.

**14. Assessment Recommended?**     Yes     No

**Why?** An assessment is recommended as there are uncertainties around the measures of efficiency for the project - an ERR has not been re-estimated, and there is insufficient information in the ICR about the estimated net incremental benefits arising from the project, particularly the attribution of agricultural benefits.

**15. Comments on Quality of ICR:**

The ICR is frank about the problems experienced under the project. There are however some important issues concerning the quality of the ICR. Firstly, and importantly, the ICR could have been much more informative on the link between the actual investments under the project, and the related projects/programs which were ongoing in the area to deliver the water and technical services to the farms, which enabled (or will do so) realization of the estimated on-farm and fisheries benefits which are ascribed to the project. It is not possible to feel confident from the write up about the extent to which benefits can be attributed to the project, and the achievement of the second objective was rated modest as a result. In addition, the surveys done as part of the ICR mission (a meeting with fishermen and an NGO in one village, and a public hearing workshop in the city) were too unstructured to improve the level of confidence about the claims on overall benefits. Secondly, without giving any reason for doing so, the ICR opted not to re-estimate the ERR at project closing, which could have been done using a similar methodology as appraisal, but with more current information and appropriate caveats. Instead, it provides a measure of efficiency which is at best questionable, using data and undiscounted measures that are not defensible and that do not offer any evidence on the cost-effectiveness of the interventions relative to alternatives. Thirdly, while the ICR does report actual Bank disbursements in the aggregate, it provides no information on the actual project costs, overall or by component. Annex 1 reports project costs by component that are identical to those at appraisal, which is clearly at variance with the text. What is presented as the total actual project costs appears to be the sum of the original component costs at appraisal. Annex 2, which details outputs by component, also does not report what was actually spent by component. The ICR is also not informative about the scale in terms of value of contracts which either had to be postponed to the follow up project, or were taken up under other programs.

**a. Quality of ICR Rating :** Unsatisfactory

