



1. Project Data

Project ID P110661	Project Name CN-Lake Aibi Conservation	
Country China	Practice Area(Lead) Environment & Natural Resources	
L/C/TF Number(s) TF-99890	Closing Date (Original) 31-Dec-2015	Total Project Cost (USD) 12,179,000.00
Bank Approval Date 31-May-2011	Closing Date (Actual) 31-Dec-2015	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	2,976,000.00	2,976,000.00
Revised Commitment	2,941,972.18	2,941,972.18
Actual	2,941,972.18	2,941,972.18
Sector(s) Agricultural Extension, Research, and Other Support Activities(28%):Public Administration - Agriculture, Fishing & Forestry(25%):Other Agriculture, Fishing and Forestry(20%):Forestry(15%):Irrigation and Drainage(12%)		
Theme(s) Biodiversity(43%):Water resource management(33%):Land administration and management(15%):Other environment and natural resources management(9%)		
Prepared by John Redwood	Reviewed by George T. K. Pitman	ICR Review Coordinator Christopher David Nelson
		Group IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

As a stand-alone GEF operation executed by the Bank the project development objective is the same as the Global Environmental Objective. The project development objectives in the Project Appraisal Document (PAD page 3) and the Global Environment Facility Grant Agreement (GA, page 6) are identical:

"To strengthen integrated planning and implementation of natural resource management and mainstreaming of biodiversity values in the Lake Aibi Basin."



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

No

- c. Components

1. Water Resources Assessment and Optimized Allocation (Appraisal Cost: US\$ 1.65 million; Actual Cost: US\$1.81 million) -- This component aimed at understanding water resource supply and demand in Bortala Prefecture and use this to optimize water allocation having the following subcomponents:

- **Water Consumption Balance for Entire Lake Aibi Basin** - assessment of the targeted consumptive use of water for irrigated agriculture and economic afforestation in the Lake Aibi Basin using Remote Sensing-based Evapo-Transpiration (RS-based ET) techniques to understand: (i) how best to increase water inflow to the Lake Aibi, and (ii) the balance between the actual consumptive use of water and the sustainable consumptive use of water for economic activities within the Basin.
- **Analysis of Real Water Savings in Bortala Prefecture** - (i) assessment of the actual amount of real water savings for different crops using RS-based ET techniques and field experimental data, and (ii) analysis of the maximum capacity of water savings in Lake Aibi that could be achieved within Bortala Prefecture.
- **Implementation of Pilot Programs** -- four pilot programs aimed at reducing consumptive use of water by Water User Associations (WUAs) by, inter alia, monitoring water consumption using RS-based ET techniques.
- **Dynamic Monitoring System** -- development and implementation of an operational ET production system supported by RS-based ET techniques with land maps which would be used to monitor actual consumption of water in the entire Lake Aibi Basin during project implementation.
- **Training and Capacity Building** -- (i) carrying out intensive training for relevant stakeholders on (a) the use of the RS-based dynamic monitoring system, (b) land use survey, (c) ET data production, (d) consumptive use comparison for various areas; and (e) monitoring system installation and analysis; and (ii) provision of technical advisory services in subjects related to this component.

2. Sustainable Land Management Practices (Appraisal Cost: US\$ 4.20 million; Actual Cost: US\$ 4.60 million) -- This component aimed at demonstrating sustainable management of watershed systems and increase the area of sustainable land management practices implemented in Bortala Prefecture, including the following subcomponents:

- **Forest Resources Management** - (i) protection of natural forests through *inter alia* prevention of vegetation damage by livestock, patrolling and pest control, pilot restoration of natural forests in four forest farms through minor enrichment planting and reseedling with native species; and (ii) monitoring of changes in existing forest resources during the project implementation period.
- **Sustainable Grassland Management** -- (i) demonstration of three options for sustainable grassland management including *inter alia* grazing, controlled grazing, and grazing ban; (ii) demonstration production of legumes, maize, and other fodder crops in support of herder livelihoods; and (iii) monitoring of the grasslands including *inter alia* data collection, tabulation, and analysis, as well as preparation of annual monitoring reports.
- **Training and Capacity Building** -- (i) training of patrollers and herders on rotational grazing, fodder production, natural forest management and biodiversity protection, and carrying out a study tour on sustainable forest and grassland management in similar social and ecological environments in other parts of China, including sustainable use and potential ecotourism development in forests and grasslands with herders involvement; (ii) development, testing, and finalization of a project-wide replication strategy; and (iii) provision of technical advisory services in subjects related to this component.

3. Biodiversity Conservation and Local Livelihoods Enhancement (Appraisal Cost: US\$ 5.40 million; Actual Cost: US\$ 5.41 million) -- This component aimed at: (i) protecting habitat and species of Lake Aibi Natural Wetland Reserve (NWR); (ii) monitoring and undertaking research on key species to allow for adaptive and well-informed management through staff capacity building and participatory development of a management plan, and build a local and regional constituency of support for the reserve, with the following subcomponents:

- **Habitat Protection** -- carrying out activities related to the management of the Lake Aibi NWR including *inter alia* patrolling, establishment and use of a data management system, and dissemination of NWR rules and regulations.
- **Key Species Monitoring and Research** -- (i) research and monitoring of the gazelle and deer populations in the NWR; (ii) research and protection



of birch trees and the associated alpine plant community; (iii) monitoring of poplar recruitment success with increased patrolling against illegal grazing; (iv) bird monitoring and research; (v) habitat research and restoration in the wetlands of NWR; and (vi) assisted breeding and protection of endangered salamanders at the Salamander Reserve.

- **Nature Reserve Management Support and Public Awareness Raising** -- (i) training in ecosystem management, survey techniques, bird monitoring, use of remote video monitoring equipment, and carrying out of study tours on ecosystem management in comparable protected areas in China; (ii) carrying out of an awareness campaign, including a poster for local community display, a short television show, a small guide book, and a display for the project implementing entity's Bole Museum in Bortala Prefecture; (iii) development of a management plan for the Lake Aibi NWR; and (iv) provision of technical advisory services in subjects related to this component.

- **Livelihood Enhancement** -- (i) carrying out activities aimed to provide alternative livelihoods for the Kekebasto community and to relieve grazing pressure on NWR, including demarcating an area within the allowed grazing area for grass collection and pen feeding; (ii) training and hiring herders to be NWR staff; (iii) vocational and skills training for Kekebasto herders on subjects approved by the World Bank; and (iv) provision of a health clinic.

4. Project Management, Monitoring and Evaluation (Appraisal Cost: US\$ 0.93 million; Actual Cost: US\$ 0.58 million) with the following subcomponents:

- **Project Management** -- (i) establishment and operation of the project's institutional structure at the Regional, Prefecture, County, and NWR levels for efficient project management and implementation including inter alia awareness raising activities, preparation of picture album and popular science documentary movie, and publication and dissemination of project documentation; and (ii) capacity building of the Project Management Office (PMO) staff at the Regional, Prefecture, County, and NWR levels through training and study tours.
- **Monitoring and Evaluation** -- monitoring and evaluation of changes brought about by the project by establishing and implementing a monitoring and evaluation system including physical progress monitoring, performance and project impact monitoring, and fiduciary and safeguards monitoring.

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

Costs: Project costs on completion (US\$ 12.40 million) were only slightly (2%) higher than anticipated at appraisal (US\$ 12.18 million), which was largely due to depreciation of the RMB in relation to the US dollar. The actual costs for Components 1 (Water Resource Assessment Optimized) and 2 (Sustainable Land Management Practices) were 9-10% higher than anticipated at appraisal, but those for Component 4 (Project Management, M&E) were considerably less (62%).

Financing: The GEF Grant was US\$ 2.97 million and US\$ 2.94 million disbursed. There is a slight discrepancy in Annex 1 (B) in the ICR in this regard. The difference was due to exchange rate variations.

Borrower Contribution: This was slightly higher than anticipated at appraisal (US\$ 9.46 million vs. US\$ 9.20 million) due to depreciation of the RMB.

Dates: The project closed as scheduled on December 31, 2015. However, due to start-up delays, the mid-term review, which had originally been scheduled for October 2013, took place in December 2014, one year before project closing.

3. Relevance of Objectives & Design

a. Relevance of Objectives

The relevance of project objectives is High. Lake Aibi is the largest saltwater lake in Xinjiang and provides habitat for a number of threatened birds and mammals as well as rare and endangered plant communities. The main threat to the lake and its associated wetlands at the time the project was appraised was its diminishing inflow due to expanding irrigated agricultural activities and other land use changes and the resulting deterioration of its ecosystems which the project was designed to reverse.

China's current (i.e., 13th) Five-Year Plan for 2016-2020 gives priority to improved environmental management, including that of water resources, and sets a specific target (35%) for reduction in water consumption by its end year compared with that in 2013. It promotes a cleaner and greener economy with strong commitments for environmental management and ecological protection, among other key objectives. The project is also consistent with the first main pillar -- supporting greener growth -- of the Bank Group's current Country Partnership Strategy (CPS, FY 2013-2016) for China, which includes promoting sustainable agricultural practices and piloting sustainable natural resource management (NRM) approaches. More specifically with regard to the latter CPS (page 22), it seeks to demonstrate ways to better manage ecosystems and conserve biodiversity, to implement approaches of integrated water resource management at the river basin



level addressing *inter alia* water scarcity, and to demonstrate innovative ways to manage wetlands and lakes, for all of which the present project is germane. The strategic use of Global Environmental Facility (GEF) resources in part for this purpose was also highlighted in the CPS.

Rating

High

b. Relevance of Design

The project design is also highly relevant considering that it sought to address water and land management challenges both within a protected area, the Natural Wetland Reserve (NWR) and it is surrounding water basin (i.e., the Aibi Lake Basin). This broad landscape approach to NRM was appropriate and the project sought to carry out its activities in a comprehensive and integrated manner. This approach was also important from the standpoint of biodiversity conservation as it clearly recognized the importance of managing water flows in the project area with protecting and preserving its natural habitats, and thus the flora and fauna that depended on them. As the ICR points out (pg. 14), the project sought to address "both the external and internal threats to the wetland's ecological integrity and biodiversity," both of which were necessary in order to achieve its development objectives.

The Results Framework and risk assessment were both generally adequate although there were also a few shortcomings (see section 8 below) which, in the case of the former confused some outputs with outcomes and in that of the latter, affected project start-up but did not materially alter project outcomes (see the next section).

Rating

Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To strengthen integrated planning and implementation of natural resource management in the Lake Aibi Basin.

Rationale

Outputs (performance indicators):

- RS-based ET Integrated Water and Environment Management Plan for Bortala Prefecture of Lake Aibi Basin completed, approved by local government and under implementation.
- Policy notes on natural forest management and sustainable grassland management approved by the Bortala Municipal Government and their recommendations reflected in local government regulations and its 13th 5 Year Development Plan.
- 24 (compared with a target of 20) government officials trained in Evapotranspiration (ET) management concept and the use of Remote Sensing-based Evapotranspiration (RS-based ET) monitoring for water management and planning (ICR, pg. viii). However, elsewhere (Annex 2, pg. 28, the ICR states that a total of 65 officials were so trained.
- The water balance was calculated and a deficit of 95 cubic meters/year was identified.

Outcomes (performance indicators):

- Amount of Evapotranspiration (ET) in each of four pilot areas used for demonstration of ET balance analysis -- 594 mm achieved at the time of project closing compared with a baseline of 630 mm and a target of 600 mm.



- Farmers' incomes in pilot program sites where demonstrations were carried out increased to 5,200 RMB, exceeding the target of 4,600 RMB and significantly exceeding the baseline of 3,800 RMB. According to the ICR (pg. viii), the farmers' income was calculated based on the net income earned from their irrigated fields within the area of four Water User Associations (WUAs). Elsewhere (para 84, pg. 18) the ICR states that per capita income increased from 1,036 RMB to 4,183 RMB in two Kazak herder communities over the project period, "a figure which far outpaced the rate of inflation" between 2011 and 2015
- 30000 mu (with 15 mu = 1 hectare) -- thus 2000 ha -- of natural grasslands in Bortala, Jinghe, and Wenchuan watersheds under active grazing management; this target was fully achieved with the managed grasslands divided into equal areas of rotational grazing, controlled grazing, and enforcement of grazing ban in order to demonstrate their effectiveness in halting and reversing land degradation.
- 8500 mu of fodder production in Bortala Prefecture; this target was fully achieved from a baseline of 0 mu, as these areas were established under the project to demonstrate the effectiveness of fodder production as a source of livestock feed to reduce grazing pressure on natural grasslands.

Outcomes (others):

- As land reclamation was banned in 2012, 6,667 ha were returned to nature land with a water saving of 150 million cubic meters (m3); and additional 20,000 ha are reportedly planned to be returned by 2020.
- 10,000 ha of land were also returned to forest or grassland as the result of rules to rectify illegal land cultivation issued in 2015; another 20,000 ha are planned to be returned by 2020.
- Increased government control led to closing of 32 wells to reduce unnecessary evapotranspiration.
- Irrigated land was reportedly returned to natural grassland by big water users and water consumption decreased by small users as the result of implementation of a new water tariff with a progressive surcharge on over-quota usage; however, the ICR (pg. 15) does not indicate how much land was returned as a result of this new tariff.

Rating
High

Objective 2

Objective

To strengthen mainstreaming of biodiversity values in the Lake Aibi Basin.

Rationale

Outputs (performance indicators):

- Age distribution of *Populus diversifolia* (poplar forest) in selected in Lake Aibi Natural Wetland Reserve (NWR) monitoring sites set out in Reserve Management Plan; according to the ICR (pg. vii), although this indicator did not include a specific quantitative target, an average of 7 saplings/young trees in the monitoring plots that were fenced in order to preclude grazing, which was considered a "good result" was achieved.
- 82 bird monitoring samples, exceeding the target of 72 and compared with a baseline of zero; there were 18 samples per year plus several extra ones near the end of the project.
- 1,320 monitoring patrols, which exceeded the target (1,140) by 16%.
- 100% of standard patrol monitoring forms were completed equaling the target set at appraisal.
- 66, compared with a target of 60, government officials trained in nature reserve management, biodiversity monitoring, and patrolling techniques.

Outcomes (performance indicators):

- The Management Effectiveness Tracking Tool (METT) index targeted increase (20%) over the baseline at the time of project closing was exceeded (25%). According to the ICR, this increase was set as the target because no baseline score was set at appraisal. However, the METT score at the end of the project (November 27, 2015) was reportedly 78% compared with a 49% figure for August 30, 2011 (pp. vii-viii). In addition, project



interventions reportedly resulted in "marked Improvements" on 18 out of 28 GEF METT indicators. However Annex 11 lists 30 METT indicators with scores of 3 (fully achieved) for 9 of them, scores of 2 (partly achieved) for 18, and scores of 1 (not achieved) for the remaining three, with 18 (60%) indeed indicating improvement over the baseline values. This is indicative of a substantial improvement in NWR management and its likely greater sustainability. The main improvements recorded through use of this tool are: (i) regulations for controlling inappropriate land use and activities in the NWR are now in place; (ii) protection systems for controlling access to and inappropriate use of its natural resources are now in place; (iii) the number of staff is now sufficient to meet the management needs of the protected area; and (iv) there is a secure budget from the local government for the NWR and its management needs.

- The three METT items that indicate that greater progress is still needed (i.e., those that received scores of 1)(ICR, Annex 11), however, are: (i) there is a limited and *ad hoc* education and awareness program; (ii) adjacent land and water use planning does not take into account the long-term needs of the protected area, but activities are not detrimental to the area; and (iii) fees are collected, but make no contribution to the protected area or its environs), while numerous other indicators (i.e., those which received a score of 2 out of 3) could also be further improved.
- Total spring vegetation cover in selected Lake Aibi NWR monitoring sites set out in Lake Aibi NWR management plan -- 34% compared with a target of 33% and a baseline of 30%, which, according to the ICR (pg. ix) consisted of 163 50m by 50m sampling plots and the indicator was the percentage of vegetative cover of the plot in spring time as determined by satellite technology.

Outcomes (other):

- Land management interventions have reportedly resulted in increased protection of forest habitat, as evidenced in the change in age distribution of *Populus diversifolia* in project monitoring sites mentioned above through the presence of seedlings, saplings, and/or young trees in the managed areas in relation to the baseline, which indicated that areas designated for protection were no longer open to grazing, which was expected to lead to natural restoration of forest habitats.
- Biodiversity conservation outside the Protected Area was reportedly also being mainstreamed, and project-supported studies and surveys of wildlife population (especially birds, deer, and salamanders) are being used to inform periodic revision of land use and NRM plans.

Rating
Substantial

5. Efficiency

Economic and Financial Efficiency:

No cost-benefit or cost-effectiveness analysis was carried out at appraisal or at in the ICR. An incremental cost analysis, as required by the GEF, was undertaken at appraisal. While the main text of the ICR and Annex 3 on Economic and Financial Analysis do not in themselves provide much evidence, a detailed account of project outputs by component in Annex 2 compares planned versus actual project activities and demonstrates that all planned outputs were either met or exceeded within the resource envelope envisaged at appraisal. In a subsequent telephone discussion with IEG, the ICR team argued that this was considered to be an indication of the project's substantial efficiency. In addition, they argued that project investments were cost-effective when compared with similar interventions elsewhere in China.

Operational and Administrative Efficiency:

The project fully implemented its proposed activities and met or exceeded all its implementation targets, although at somewhat higher costs for two of its main components, which was reportedly due at least in part to depreciation of the Chinese currency in relation to the dollar. On the other hand, project management cost was substantially less than initially anticipated suggesting at least modest administrative efficiency, although some project institutions were inefficient at first but later came up to speed and initial counterpart funding delays also led to implementation delays.

Efficiency Rating
Substantial



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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

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

6. Outcome

The relevance of project objectives is rated High and that of project design Substantial. Efficacy in relation to its first objective is likewise rated High while that in relation to the second objective is Substantial. Efficiency is likewise rated Substantial as the result of additional information provided to IEG by the ICR Team regarding the project's use of its allocated resources and comparative cost-effectiveness.

- a. Outcome Rating
Satisfactory

7. Rationale for Risk to Development Outcome Rating

The risk to the development outcome rating is modest. The development strategy for 2015-2030 prepared under the project by the municipal government is expected to lead to improved environmental management and conservation of biodiversity in the Lake Aibi Basin and has already started to do so. As noted in the ICR (para. 92, pg. 19), this will occur as the result of the combined impact of the following: (i) introduction of water consumption controls on the main river in the basin; (ii) establishment of an ecological minimum flow into the Natural Wetland Reserve (NWR), which will contribute to its restoration; (iii) promotion of water use savings through demand management and other means; (iv) reconversion of farmland to natural habitat; and (v) enhanced protection of forests and grasslands including through controlled grazing and alternative livestock feed supplies.

As concerns the NWR more specifically, the project also stepped up assistance to the protected area including development of a management plan and increased staffing and improved infrastructure, although, according to the ICR (para. 93, pg. 19), "while additional support for the NWR is expected along the lines outlined in the management plan, there is less certainty to what degree this will be fully implemented in the next 5 years." However, local political support for the project and its objectives reportedly continues to be strong and the project's approach is viewed as a model that should be replicated in other sub-catchments in the Lake Aibi Basin and elsewhere in the Xinjiang region.

A subsequent conversation between the ICR team and IEG indicated that the actions to control water loss have now been formally incorporated as targets in the provincial 13th Five-Year Plan for 2016-2020, which had not yet been the case at the time the ICR was drafted. Thus, the necessary policy framework is now fully in place and the implementation arrangements to ensure that these targets will be met during the plan period are expected to be finalized over the next few months. This greatly reduces the uncertainty in this regard that existed at the time the ICR was issued.

- a. Risk to Development Outcome Rating
Modest

8. Assessment of Bank Performance



a. Quality-at-Entry

Project quality-at-entry was generally good and the Bank provided helpful support in this regard. As noted in section 3 above, the broader landscape approach recommended by the Bank to ensure more effective protection of the Natural Wetland Reserve (NWR) by intervening in its larger catchment area, as well as within the Reserve itself, was highly appropriate. The Bank also deserves credit for limiting the project scope due to the comparatively small amount of external grant funding available and for ensuring that project objectives were fully consistent with local priorities. Project risks were likewise generally well-identified, especially those regarding local institutional capacity weaknesses and unfamiliarity with Bank procedures and requirements regarding procurement and financial management. While efforts were made by the Bank to help mitigate these shortcomings, subsequent implementation delays reveal that even greater up-front support would have been helpful. In addition, the Bank failed to recognize and the risk of counterpart funding delays, which also impeded faster implementation and disbursements that lagged considerably during the first two years of project implementation. Finally, the Results Framework could have contained a full set of targets up front rather than having to rely in part on baseline studies, which were also delayed, after implementation began, and no Monitoring and Evaluation framework was developed under the preparation grant.

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

Bank supervision was reinforced when lack of disbursements during the first year of project implementation and continuing weak institutional capacity on the borrower's part led to the latter's request for greater support. More generally, the Bank was reportedly "highly responsive" to the client's request for support and provided a number of "interventions and tools to assist the PPMO (Prefecture's Project Management Office)" to overcome implementation challenges. Four specific examples of such assistance are provided in the ICR, including the development of action plans to accelerate implementation and disbursements in several supervision missions. This notwithstanding, given the aforementioned clearly recognized local institutional weaknesses and borrower unfamiliarity with Bank procedures, as well as the occasional delays in the provision of counterpart funding, the Bank supervision team could have been more proactive in anticipating the need for greater support during the first year of implementation rather than waiting for a specific request from project management.

Quality of Supervision Rating
Moderately Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance

The Prefecture Government's commitment to the project's objectives and design was reportedly strong throughout project preparation and implementation. The Government also provided additional financial resources when they became necessary as a result of depreciation of the PMB and its Project Lending Group (PLG) played a useful role in terms of coordinating the numerous agencies involved in project implementation, as indicated in Table 1 in the ICR (pg. 22). However, delays in the provision of counterpart funding reportedly contributed to the disbursement delays during the first two years of project execution.

Government Performance Rating
Moderately Satisfactory

b. Implementing Agency Performance

As noted in the ICR (para. 101, pg. 22), "weak project performance in the early years of the 4 year project were largely due to...lack of experience manifested in delays in setting up the Special Account, transfer of funds, slow reimbursement cycles, etc." While these problems were later resolved in part due to Bank assistance, and the project ultimately produced positive outcomes without requiring an extension of the closing date, they nevertheless contributed significantly to the implementation and disbursement delays experienced



during the first half of the project implementation period.

Implementing Agency Performance Rating
Moderately Satisfactory

Overall Borrower Performance Rating
Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

M&E was intended to entail the monitoring of four elements: (i) physical progress; (ii) contract-based procurement and financial management; (iii) environmental and social safeguards; and (iv) project performance and impact (based on the Results Framework). However, according to the ICR (para. 48, pg. 10), no M&E system was developed under the preparation grant and, thus, nothing was in place before project implementation began, although the Project Implementation Plan (PIP) reportedly provided "some general guidance" in this regard.

b. M&E Implementation

Start-up of M&E activities was subject to the same delays that affected project implementation more generally due to the Borrower's general institutional weakness and lack of prior experience with Bank and GEF requirements. There was still no M&E team in the Prefecture's Project Management Office (PPMO) in mid-2013, nor were the baseline studies for the Results Framework carried out until that time even though the grant was declared effective in September 2011 nearly two years earlier. As a result there were no monitoring reports until the PPMO hired a specialist at the Bank's request and, while such reports were being generated by June 2015 (i.e., six months prior to project closing), according to the ICR (para. 49, pg. 10), there still were "in need of improvement in terms of data consistency and relevance."

c. M&E Utilization

Albeit with the substantial delays mentioned above, the monitoring system was reportedly eventually used to inform project decision-making with respect to the disbursement lags and associated need for adjustments in project implementation, as well as in relation to the existence of illegal activities in the Natural Wetlands Reserve (NWR), leading to increased enforcement within the areas affected.

M&E Quality Rating
Modest

11. Other Issues

a. Safeguards

Both environmental and social safeguard policies were triggered by the project and it was placed in the "B" Category for Environmental Assessment (OP 4.01). In addition five other safeguard policies were triggered -- Natural Habitats (OP 4.04), Forests (OP 4.36), Dam Safety (OP 7.60), Indigenous Peoples (OP 4.10) and Involuntary Resettlement (OP 4.12). An Environmental Impact Assessment (EIA) and associated Environmental Management Plan (EMP) were prepared and focused primarily on potential project impacts on forest protection, conservation and ecological management, as well as restrictions on local herders' access to the use of natural resources. A Social Assessment (SA) was also carried out during project preparation and it was determined that it would likely impact the livelihoods of two Kazak herder communities in the proximity of the NWR, thereby triggering both social safeguard policies mentioned above. In response, a combined Ethnic Minorities Development Plan and Process Framework (EMDP/PF) was prepared because the affected peoples under both policies were the same. Public consultations were carried out for both plans.

The ICR briefly describes actions taken with regard to application of each of the safeguard policies and indicates that EMP and EMDP/PF



implementation was generally satisfactory, noting more specifically with respect to the former that: (i) project technical assistance studies fully incorporated Bank safeguard policy considerations with respect to biodiversity, natural habitats, and forests; (ii) potential adverse impacts on the livelihoods on local communities and ethnic minorities were adequately addressed; (iii) the project's physical interventions and associated impacts on the physical environment were well managed; (iv) environmental monitoring was conducted properly and well documented; and (v) dam safety monitoring was conducted in a timely way and reviewed satisfactorily by the Bank supervision team. While it provides less detail on implementation of the EMDP/PF, it does observe (para. 60, pg. 12) that this plan, which was based on considerable consultation with the affected herder communities focused on activities that the affected herders could undertake without having to leave the protected area and jeopardizing the project's conservation objectives.

b. Fiduciary Compliance

Procurement: Project processes were reportedly satisfactory despite the delays mentioned above and the need for added Bank assistance during the early years of implementation. All contracts were either prior- or post-reviewed by the Bank team and no issues were reported.

Financial Management: Again despite the delays in implementation and disbursement, project financial management was also reportedly satisfactory and "remedial" actions were taken to accelerate matters during the final two years, allowing it to close as scheduled and with full disbursement of the GEF grant. While there were also some initial problems with counterpart funding, the borrower eventually provided the financial resources needed including those to make up for the depreciation of the RMB. Required financial reports and audits were submitted in a timely way and the latter were unqualified with no issues identified by external auditors. In addition, according to the ICR (para. 62, pg. 12) PPMO financial staff also helped the project director to monitor its general progress and coordinate activities among the various Prefecture Project Implementation Units (PPIUs).

c. Unintended impacts (Positive or Negative)

Positive project impacts reportedly went beyond those originally anticipated due to the approval and early implementation of policy recommendations with were converted into "legal decrees and notices" for: (i) a cap on overall water use; (ii) water pricing; (iii) management of ground water wells; (iv) performance checking on officials; (v) a ban on illegal land reclamation; and (vi) environmental protection regulations and mitigation of adverse impacts on land and water use.

d. Other

The project had a positive impact on the livelihoods of affected herder populations, as indicated under Objective 1 above (see section 4) and also supported vocational training using GEF resources and improved medical services to villages in the project area. Institutional capacity was likewise reportedly increased in the three participating Prefecture bureaus -- for Forestry, Water Resources, and Land -- and the NWR as the result of training provided under the project, and tools, policies, and procedures used in project design and implementation, such as use of Results Frameworks, procurement procedures, and monitoring protocols, were adopted by one or more of the Prefecture Project Implementing Units (PPIUs). A local Water Users Association, which already existed prior to the project, was also strengthened, as were the linkages between the municipal bureaus of finance, forestry, water resources, agriculture and animal husbandry and the National Wetland Reserve (NWR).

12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	---
Risk to Development Outcome	Modest	Modest	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---



Borrower Performance	Satisfactory	Moderately Satisfactory	Even though project outcomes were largely satisfactory, institutional weaknesses and delays in the provision of counterpart funding had an adverse impact on project implementation and disbursements
Quality of ICR		Substantial	---

Note

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

Among the lessons drawn by the ICR, the following are of more general relevance:.

- 1 The direct participation of local government officials in support of project objectives and activities is likely to improve its effectiveness.** In the present case the drafting of key decrees and regulations needed local ownership to be acceptable.
- 2 Strong beneficiary participation is also a key to project success.** As an example, the ICR (para. 109, pg. 24) refers to the initial actions of the Ethnic Minorities Development Plan and Process Framework which provided training and follow-up consultations to local officials, farmers, and herders that were reportedly essential to ensure adequate implementation of this plan.
- 3 Where local institutional capacity is poor, ensure up-front training of local management staff with regards to Bank requirements and procedures for procurement and financial management,** etc. is sufficient to address significant weaknesses and/or lack of prior familiarity. In some cases, there should be follow-up with more "hands-on" assistance by the Bank to guarantee adequate "learning by doing" and to help avoid unnecessary implementation delays.

An important lesson for this type of operation should also be highlighted:

- 4. Protected area projects should be appraised within the larger environmental context.** As the main threats (e.g., uncontrolled grazing and water use upstream) to the ecological integrity and biodiversity of the project wetland came from areas outside the protected area (in this case a Natural Wetland Reserve) itself, it is important to directly identify and address these problems by taking a broader landscape management approach rather than focusing exclusively on improved management of the protected area *per se*

14. Assessment Recommended?

No

15. Comments on Quality of ICR

This is a well-drafted and, for the most part, very good ICR. In particular, its detailed discussion of project environmental and social safeguards experience merits highlighting and could well be a model for other ICRs. The ICR team should also be commended for providing strong and multiple reasons for many of its assessments. However, more specific information and analysis could have been provided in the ICR regarding project cost-effectiveness, even considering that no such analysis was undertaken at appraisal. Thus, the main text of the ICR did not provide sufficient evidence to clearly justify its proposed "Substantial" rating for Efficiency, but a subsequent discussion between the ICR team and IEG has led to the provision of additional information to support a positive assessment of the project's efficient use of resources and comparative cost-effectiveness in relation to similar interventions elsewhere in China. The ICR's ratings for Bank performance during supervision and both Government and Implementing Agency -- hence Borrower -- performance appear to be somewhat high based on the information provided.



-
- a. Quality of ICR Rating
Substantial