1. Project Data

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<th>Project ID</th>
<th>Project Name</th>
<th>Country</th>
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<td>P114138</td>
<td>CN - Water Conservation II</td>
<td>China</td>
<td>Water</td>
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<tr>
<th>L/C/TF Number(s)</th>
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</table>

Prepared by: Richard W. Pollard
Reviewed by: Victoria Alexeeva
ICR Review Coordinator: Christopher David Nelson
Group: IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

The Project Development Objective as stated in the Loan Agreement (page 5) and the PAD (page 4) is "to improve agriculture water management and to increase agricultural water productivity in the Project Areas".

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

No
c. Will a split evaluation be undertaken?  
No

d. Components

A. Water Works and Water-saving Facilities:  (Estimated cost at appraisal - US$98.71 million; actual cost - US$116.37 million)
Carrying out of specific investment sub-projects for the improvement of the physical conditions and delivery efficiency of the irrigation systems in 24 selected project counties, including:

- the construction of about 4.22 km lining and/or dredging of Xiaoyinhe Canal in Hebei's Daming County and about 17.55 km branch canal lining in Qingtongxia and Weining Irrigation Districts of Ningxia, and lining of about 677.38 km lateral and lower canals;
- a low rubber dam for water regulation in Jiexiu County and a pump station of design discharge of 0.12 m³/s for irrigation in Lishi County in Shanxi;
- main water conveyance pipelines of about 92.82 km for supplying about 36.65 million cubic meters of water annually for irrigation and other uses to a number of townships and villages of Yushe, Jiexiu, Linxian, Lishi, and Jiaocheng Counties in Shanxi, and;
- on-farm works covering about 58,466 ha of irrigated area equipped with water saving works and technologies,

B. Agricultural Water-saving Measures and Support Services:  (Estimated cost at appraisal - US$25.31 million; actual cost - US$25.68 million)
Provision of financial and technical support to reduce no-beneficial evapo-transpiration (NBET), increase the resilience of farm communities to climate change, and increase farm yield and output value through activities pertaining to: (I) about 30,020 ha of land leveling; (ii) crop residue utilization on about 24,428 ha; (iii) plastic membrane covering for soil moisture preservation over about 17,580 ha; (iv) balanced fertilizer applications over about 27,468 ha; (v) new seed varieties applied on about 7,864 ha; (vi) deep-ploughing about 14,522 ha of farmland; (vii) integrated pest management demonstrations over about 4,817 ha, and; (viii) about 6,920 green houses for growing high-value vegetables and fruits.

C. Management Measures and Institutional Development:  (Estimated cost at appraisal - US$6.44 million; actual cost - US$5.27 million)
Carrying out of programs to improve agricultural water management capacity of irrigation management staff and user communities for the purpose of saving water and increasing water productivity, including: (i) participatory irrigation management through the establishment and/or strengthening of about 259 WUAs; (ii) training of farmers in irrigation management and agricultural technologies for water saving and productivity improvement; (iii) development of water resources management strategic plans in selected counties; (iv) two innovative water resources management pilot schemes, and; (v) applied research on salinity control in high groundwater table areas of Ningxia and ET-based water resources management planning in water-scarce areas of Shanxi.

Facilitating project implementation through: (i) carrying out surveys, feasibility studies, and design and construction supervision support for all sub-projects; (ii) provision of provincial and municipal mobile
specialist teams for technical and management guidance to local project staff, and dam safety expert review and advice for linked dams in Shanxi, and; (iii) provision of project management support at national, provincial, municipal, and county levels, and carrying out of results-based monitoring and evaluation, including the establishment of a management information system.

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

**Project Cost**: The original estimated cost was US$160,000. The amount actually disbursed by project closing was US$158,317,298.

**Financing**: IBRD lending at the time of appraisal was US$80 million; actual lending at completion was US$76.73 million, about 96 percent of the original estimate.

**Borrower Contribution**: The original projected borrower contribution was US$80 million equivalent at the time of appraisal. At closing the contribution had risen slightly to US$81,590,000 equivalent.

**Dates**: The project closed on schedule on 30 June, 2017 with no extensions. At the time of the Mid-term Review in June 2015, the project was restructured to reflect changes in costs due to inflation, devaluation of the US dollar since appraisal of about 10 percent, and contract variations in Shanxi Province. Implementation progress had been delayed in the first half of the project in Hebei Province and parts of Shanxi Province due to the unavailability of counterpart funds. To remedy this, several project activities were selected to be fully financed by government-funded national and provincial programs. Changes were made to the results framework. Two PDO indicators were added to measure project performance against core sector indicators ("Direct project beneficiaries (number), of which female (%), and "water users provided with new/improved irrigation and drainage services (number)). Other changes were made to reflect project performance and actual implementation experience. The fourth PDO indicator, which provided a target for agricultural water productivity, was raised from 1.2Kg/m3 of ET to 1.32 Kg/m3 to reflect much better than expected overall performance during the first half of project implementation.

3. Relevance of Objectives

**Rationale**

The key development challenges addressed by the project were water scarcity combined with low water use efficiency, low agricultural water productivity, and low farm income in the project area. The PDO to improve agricultural water management and increase agricultural productivity in the project areas was relevant to China’s development priorities and the national policy context throughout the duration of the project. The project activities and objectives of improving agricultural water management through reducing withdrawals are considered an essential contribution to China’s Three Red Lines Policy of Water Resources Management. The project remains aligned with China’s current 13th Five-year Plan 2016-2020, where it is specifically linked a number of chapters on agricultural development and water and food security. The PDO also remains well-aligned with the World Bank Group’s CPS for FY13-16 and it’s three main areas of engagement (greener growth, more inclusive development, and advancing mutually beneficial relations with the world). The project supported greener growth by promoting sustainable agricultural practices, demonstrating pollution management, and strengthening mechanisms for managing climate change. It
promoted more inclusive development by enhancing opportunities in rural areas, most of which have relatively high levels of poverty. The project also supported China's South-South cooperation and the nation's role as a global stakeholder through piloting and advancing innovative agricultural water management and related strategies for improving agricultural productivity. The project also continued and expanded application of the innovative concept of value added per unit of evapo-transpiration (ET), which was introduced in the preceding First Water Conservation Project.

Rating

High

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

Improve agricultural water management in project areas.

Rationale

The project's Theory of Change aimed to improve agricultural water management by reducing the amount of water used through infrastructure improvements and more efficient agricultural practices. This was measured by a reduction of water withdrawal for irrigated agriculture in Ningxia Province, reducing groundwater overdraft in Hebei Province, and reducing groundwater withdrawal in Shanxi Province. All indicators were achieved as follows:

- Water withdrawal in Ningxia was reduced by 22.67 million cubic meters (MCM), exceeding the target of 22.20 MCM by 2 percent;
- Groundwater overdraft in Hebei was reduced by 16.52 MCM, exceeding the target of 13.50 MCM by 22 percent;
- Groundwater withdrawal in Shanxi was reduced by 5.80 MCM, slightly exceeding the target of 5.70 MCM.

New or improved irrigation and drainage services reached 594,200 beneficiaries, of whom 287,300 (48 percent) are women, exceeding the targets for each of these measures by about 7 percent. Targets for all physical works as defined at the time of restructuring were met or exceeded. These included canal lining, dredging, a low rubber dam, a pump station, and conveyance pipelines, as well as on-farm physical works. The original target for greenhouse construction was reduced at restructuring from 6,920 to 196 to reflect the actual need due to changes in market conditions. In lieu, greater investments were made in field crops. For institutional strengthening, the project established new or strengthened existing Water User Associations (WUAs) at total of 290 WUAs benefited, slightly exceeding the formally revised target of 288 and substantially surpassing the original target of 259 WUAs.

In Ningxia and Hebei Provinces, ET-based water rights/entitlement systems were piloted and integrated
water conservation plans were developed to provide technical support for developing water systems in the provincial municipalities. The ICR cites a number of examples in these provinces of the establishment of innovative entitlement and water conservation taxation systems that were introduced during project implementation, and mentions that the Government of China has introduced water conservation taxes in nine other provincial regions. It is unclear the extent to which all of these institutional improvements are directly attributable to the project inputs and outputs, but they certainly contributed to them.

Rating
Substantial

Objective 2
Objective
Increase agricultural water productivity in project areas.

Rationale
Overall water productivity rose to 1.40kg/m³, substantially exceeding the formally revised target of 1.32 kg/m³ and even more so the original target of 1.2 kg/m³ at appraisal. To achieve this increase, the project provided financial and technical support to farm communities to reduce non-beneficial ET, leading to substantial increases in farm yield and output value with much lower water consumption. This increase in water use efficiency also increased resilience to climate change. This was achieved through crop diversification, switching to less water-intensive and higher-value crops and preservation of soil moisture and fertility through measures such as land leveling, crop residue utilization, plastic membrane covering, balanced fertilizer application, use of new seed varieties, deep ploughing, demonstrations of Integrated Pest Management (IPM), and construction of 196 greenhouses for high-value fruits and vegetables. Crop yields increased against 2011 baseline figures in all cases. The following table summarizes yield improvements by crop type and province:

<table>
<thead>
<tr>
<th>Province</th>
<th>Crop Type</th>
<th>Crop Yield at Baseline 2011 (kg/m³)</th>
<th>Crop Yield at Closing 2016 (kg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ningxia</td>
<td>Wheat</td>
<td>0.49/0.59</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>Corn</td>
<td>1.03/1.24</td>
<td>1.61</td>
</tr>
<tr>
<td></td>
<td>Rice</td>
<td>0.75/0.79</td>
<td>0.9</td>
</tr>
<tr>
<td>Shanxi</td>
<td>Wheat</td>
<td>0.85/0.88</td>
<td>1.12/1.13</td>
</tr>
<tr>
<td></td>
<td>Corn</td>
<td>1.56/1.76/1.75/1.79/1.67</td>
<td>2.24/2.23/2.21/2.21/2.26</td>
</tr>
<tr>
<td></td>
<td>Millet</td>
<td>0.57/0.58</td>
<td>0.79/0.72</td>
</tr>
<tr>
<td></td>
<td>Vegetables (open field)</td>
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<td>4.84/5.19</td>
</tr>
<tr>
<td></td>
<td>Vegetables (greenhouse)</td>
<td>n. a. (no greenhouse production before the project)</td>
<td>13.01</td>
</tr>
<tr>
<td>Hebei</td>
<td>Wheat</td>
<td>1.00</td>
<td>1.32</td>
</tr>
<tr>
<td></td>
<td>Corn</td>
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<td>1.97</td>
</tr>
<tr>
<td></td>
<td>Peanuts</td>
<td>0.85</td>
<td>1.06</td>
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Rating
High

Rationale
The project objective to improve agricultural water management is rated Substantial. The second objective to increase agricultural water productivity is rated High. The project was able to meet and exceed its PDO targets and also achieved almost all of the intermediate indicators, with some minor variations. On balance, the overall efficacy rating is substantial.

Overall Efficacy Rating
Substantial

5. Efficiency

Economic and Financial Analyses:
At project closure efficiency was determined through a cost-benefit analysis using the methodology applied at appraisal, covering total project costs. The economic benefits are derived from three outcomes: (a) the economic value of the water resources saved, (b) the value of industrial and drinking water used from reservoirs constructed with Government funding as a part of the project, and (c) the incremental value of agricultural production from improved irrigation efficiency and water productivity. The projected ERR at appraisal was 20%. The estimated ERR in the ICR is 19%, using a discount rate of 8% and NPV of US$64.29 million.

Financial analysis was conducted to gauge the impact on farmers' incomes and evaluate their ability to pay the water charges to cover O&M costs. Crop budget and farm models were developed under 'with' and 'without' project situations to gauge the financial impacts for the beneficiary farmers. The results show a substantial increase in farmers' income from improved crop production, ranging from 36 to 74 percent, and the financial analysis indicates that although water charges have increased, their share of farm incomes has dropped. The fiscal impact after the project is minimal since the incremental income is more than sufficient to cover the O&M costs of the infrastructure improvements and other institutional costs. The project also introduced participatory processes to ensure a high level of ownership and commitment to sustaining the outcomes through the WUAs.

Operational/Administrative Efficiency:
Overall operational and administrative efficiency was satisfactory. Delayed provision of counterpart funding in one province (Shanxi) was addressed and adjustments made to increase the Borrower's share of financing to rectify this in a timely manner during the Mid-term Review. The project was implemented on schedule and closed on the originally planned ending date of 30 June, 2017.
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:

<table>
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<tr>
<th></th>
<th>Rate Available?</th>
<th>Point value (%)</th>
<th>Coverage/Scope (%)</th>
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* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The project contributed to implementation of China’s national agriculture development and water resources management strategies and policies, and the objectives continue to be highly relevant to national priorities. The project substantially achieved its first objective to improve agricultural water management, as measured by reductions in water extractions for agricultural use. The achievement of the second objective to increase agricultural water productivity as measured by Kg/M3 crop yield, which was exceeded by nearly 17%, is rated high. The project also introduced innovative approaches to water management that are now being adopted on a broader scale in China and also are being reflected in newer World Bank-supported projects. The project was efficiently executed with minimal delays and timely identification and rectification of counterpart funding issues. It was completed in accordance with the originally planned schedule. The overall rating of this project is Satisfactory.

a. Outcome Rating
Satisfactory

7. Risk to Development Outcome

The primary risk identified is the financial sustainability of the WUAs, which depends on a variety of factors related to the perceived value added that the WUAs bring for the farmers, the effectiveness of the associations in operating and maintaining the irrigation systems, the support they provide to farmers for new approaches and technologies, and increases in crop yields and productivity that will lead to increased income for farmers that will allow them to pay for O&M. Most WUAs have shown good results and adequate financing, but some have reported operating at below cost recovery level and therefore relying on Government subsidies. Most WUAs
collect volume-based water tariffs, but collection rates are often low, or the tariff is insufficient for full cost recovery. Given the relevance of the project outcomes to the Government's agenda, and the strong fiscal capacity of the Government, it is likely that subsidies will continue to be provided where necessary. (Ref. ICR, Para. 85)

A longer term risk relates to the inverse relationship between volume-based water fees and increasing agricultural water use efficiency. WUAs are expected to work toward reducing overall water use, which also reduces WUA revenue from volume-based water tariffs. This will require increasing volume-based tariffs, or preferably establishing a blended tariff with a flat fee component.

8. Assessment of Bank Performance

a. Quality-at-Entry

The World Bank team incorporated lessons from the preceding WC1 Project and ensured that objectives were fully aligned with the World Bank's 2006-2010 CPS and the 2002 Country Water Resources Assistance Strategy, as well as with the Government's priorities and strategies. A team of specialists was mobilized to address all the key elements of project design, including technical aspects, social and environmental safeguards, and M&E. In light of the contractual delays and lack of counterpart funding that became apparent at the time of the Mid-term Review, more attention could have been applied to implementation readiness during design and appraisal, but these factors did not significantly impede achievement of the project's objectives overall. Stakeholder risk (principally the reluctance of farmers to limit water consumption) was assessed to be moderate during preparation, and the Bank team adequately addressed the identified risks by combining water-saving efforts with incentives to improve farm incomes. A well-designed monitoring and evaluation framework was integrated in the project design, although the lack of establishing a means to measuring poverty reduction outcomes was a lost opportunity to further highlight the project's achievements.

Quality-at-Entry Rating
Satisfactory

b. Quality of supervision

Supervision missions were carried out in a regular and timely manner that included frequent field visits to construction and resettlement sites to ensure quality control and compliance with World Bank requirements. Field supervision missions were carried out roughly every six months, and 12 Implementation Supervision Reports were prepared over the five-year life of the project. The team provided effective and practical advice to counterparts, based on the Borrower's assessment of key value added, and worked with them to quickly address implementation issues as they arose. The World Bank carried out a Mid-Term Review in late 2014, followed by a restructuring in 2015, which identified the adjustments needed to achieve the PDO. Ongoing support was provided on fiduciary and safeguard issues during implementation. The team provided advice to counterparts on implementation of the Resettlement Policy Framework and compliance with procurement and financial management policies. Aide memoires adequately described progress and issues arising, and recommendations to address the issues were agreed with the implementing agencies during the supervision missions.
Quality of Supervision Rating
Satisfactory

Overall Bank Performance Rating
Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The project design is logically portrayed in a Theory of Change that clearly elucidates the causal flow from the three main areas of project activities through intermediate results and project outcomes to the long-term impacts of improved sustainability of water management and increased farmer incomes. The M&E design was structured around an adequate logical framework for understanding the flow of activities to achieve measurable outputs that lead to the achieving the clear and succinct PDO. The PDO was disaggregated into four indicators, which covered both parts of the PDO or all provinces. Consultants were hired during preparation at both national and provincial levels to establish a baseline for the M&E system between 2010 and 2012.

The initial design of two of the PDO indicators turned out to be less suitable for practical implementation, requiring a change in the wording of the indicators for easier use as measures of project achievements. The Results Framework also was less effective at describing and measuring some of the social impacts of the project, such as the proportion of women beneficiaries. Although poverty reduction was not an explicit objective of the project, the M&E design and baseline could have easily incorporated data to identify and assess the disaggregated impacts of the project on poor farmers.

b. M&E Implementation
M&E was contracted out to well-qualified institutions to undertake continuous monitoring, analysis and reporting on outcome and intermediate indicators for the project's progress. The contracted institutions followed the methodologies and the frequency of data collection as specified in the PAD, considering lessons from the preceding WC1 Project. The M&E report was prepared regularly with quantitative target values updated on a timely basis.

Information provided from the monitoring system was validated through inter-calibration between different sectors, layers, and data sources. Feedback on project progress was obtained by discussing the monitoring results with technicians and farmers in the project areas, further improving the accuracy of the results as well as providing feedback and training at the implementation level.

c. M&E Utilization
The results of the M&E process were compiled and used by project management and decision-makers to monitor progress closely and make changes to the project's structure and targets through restructuring
following the MTR. The extensive monitoring network and the accuracy of the data compiled allowed project management to make informed and timely decisions to adapt the implementation model and align the RF so that almost all indicators were achieved or exceeded by project completion. The baseline values were effectively used to track and measure the achievements of the project during implementation and for the ICR.

M&E Quality Rating
Substantial

10. Other Issues

a. Safeguards

The project was classified as Category B and it triggered four safeguards policies - Environmental Assessment (OP/BP 4.01), Pest Management (OP 4.09), Involuntary Resettlement (OP/BP 4.12), and Safety of Dams (OP/BP 4.37).

A Resettlement Policy Framework and a Social Assessment Report were prepared due to minor land acquisition and anticipated significant social impacts in the project areas. The actions described in both documents were fully implemented and monitored during the life of the project. Land acquisition and compensation requirements were minimal, and limited to a single province. No household relocation was needed. The ICR provides a useful summary table of social impacts and mitigation measures (Table 4, P. 18).

Environmental Impact Assessments and Environmental Management Plans (EMPs) were prepared for all three provinces, along with Pest Management Plans. Compliance with the Bank's environmental safeguards policies was monitored adequately and found to be satisfactory (P.19).

Environmental Assessment (OP/BP 4.01) - According to the semi-annual M&E reports, appropriate mitigation measures were taken during project construction to address the resulting environmental impacts based on the EMPS. In addition, continuous monitoring of soil and groundwater quality in the course of project implementation indicated that compliance with groundwater quality standards, reduced drop in water tables, and soil fertility improvements. Impacts of increased water use for industrial purposes as a result of infrastructure improvements in Shanxi Province were apparently not monitored.

Pest Management (OP/BP 4.09) - IPM approaches were promoted following the guidance of the Pest Management Plan. Local technologists were engaged to provide training to farmers for safe and scientific pest management.

Safety of Dams ((OP/BP 4.37) - The policy was applied to a project-financed two meter-high rubber dam for irrigation and six linked dams upstream of the project areas. An independent dam safety expert was employed to review the safety status of the six existing dams, where no irregularities were found. The qualifications of the designer for the new rubber dam were reviewed and found to be adequate.

All World Bank policies pertaining to public consultation and information disclosure were applied in a timely and satisfactory manner.
b. Fiduciary Compliance

Fiduciary. An integrated project management system was maintained for accounting, financial reporting, and disbursement purposes throughout implementation. However, due to staff turnover and inadequate data entry, not all required financial reports were provided on time for some reporting periods. The required audit reports with unmodified audit opinions have been submitted to the World Bank. General financial management issues included slow implementation, lack of counterpart funds during the early stages of the project, and contract payments. The noncompliance issues have been rectified by PMOs as requested. Issues related to counterpart funding have been addressed through project restructuring. (Ref. ICR Para. 69)

Procurement. The ICR (Para. 70) reports that the procurement process of the project generally complied with the World Bank’s procurement rules and procedures, even though some minor deviations were identified and rectified during the project implementation period, such as delayed payments due to internal management efficiency, and other contract management-related issues. The project implementation agencies demonstrated sufficient capacity in carrying out the project procurement activities in a rather satisfactory manner, including procurement preparation, procurement planning, bidding process, and contract management. (Ref. ICR Para. 70)

c. Unintended impacts (Positive or Negative)

No significant unintended impacts were identified.

d. Other

N. A.

11. Ratings

<table>
<thead>
<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreements/Comment</th>
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<td>Satisfactory</td>
<td>---</td>
</tr>
<tr>
<td>Bank Performance</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>---</td>
</tr>
<tr>
<td>Quality of M&amp;E</td>
<td>Substantial</td>
<td>Substantial</td>
<td>---</td>
</tr>
<tr>
<td>Quality of ICR</td>
<td>Substantial</td>
<td>Substantial</td>
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</tr>
</tbody>
</table>

12. Lessons

The ICR summarizes five key lessons derived from the project (Ref. ICR Para. 87 - 91). Of these, three stand out as relevant to this project specifically and also applicable more broadly:

1. Albeit more complex in design, the comprehensive approach of combining engineering works and
measures to improve agricultural water management with incentives for farmers was key to get farmers to adopt the project's approach. Developing incentives for farmers in the form of sustained increases in income was important in mitigating the risk of farmers' likely reluctance to reduce water use or pay more for water.

2. *Well thought-through and proven financing models are required to ensure the sustainability of WUAs.* Closely related to improving farm incomes and sustaining agricultural water infrastructure is establishing viable local institutions, in this case the WUAs. The financial viability of the WUAs over time will be a good indicator of the likelihood of infrastructure sustainability.

3. *Strategic pilot activities in the project areas are key to demonstrate advanced concepts for successful implementation by the project.* It would perhaps be clearer to say that pilot activities are key to providing beneficiary farmers and the Government opportunities to learn from and assess the value of innovations. The project can then support scaling up, as may be appropriate and desirable, based on the pilot experience.

IEG-identified lesson:
For projects that are expected to directly impact beneficiary incomes and livelihoods, building assessments of poverty impacts into baseline analysis and M&E systems is key to measuring a project's contribution to both the World Bank's and recipient Government's broader poverty alleviation goals. A project's specific development objectives might not be explicitly poverty-focused, but measurement of poverty impacts can still be important in assessing the value of Bank and Government investments. This project appears to have had poverty impacts that would have been useful to monitor.

13. Assessment Recommended?
No

14. Comments on Quality of ICR
The ICR was very well written with a logical outline that provides a clear and balanced assessment of project performance and outcomes. The report effectively utilized data available from the strong M&E system established for the project, and supported its assessment with clear tables and graphics where appropriate. The efficacy section is exemplary. This is a successful project, but the ICR could have provided more analysis of the causes of the contractual delays and lack of counterpart funding that were addressed at the time of the MTR and subsequent Restructuring. The project monitoring system did not adequately track impacts on poverty reduction. While the ICR notes this, it could perhaps have provided some more detailed estimation of poverty reduction impacts, using the robust M&E data that was available. Also, while the prognosis for sustainability of the project outcomes is substantial, a more detailed and quantified assessment of the financial viability of WUAs would be useful - what was the actual number or percentage of WUAs that were fully covering O&M costs at the end of the project? What was the average tariff collection rate? Answers to these questions would have given the reader a better understanding of the magnitude of the risk to the financial sustainability of the WUAs. The economic assessment includes water value addition for industrial use in Shanxi Province, but the report does not describe in any detail the extent to which the project increased water availability for industry, how it
was used, or whether this use had any significant environmental impact. However, the industrial use of water was included in the Environmental Assessment at the outset of the project.

The ICR provides adequate detail on specific social impacts and mitigation measures, and it provides a summary table of social impacts that quantifies these impacts in a clear and concise way. The Report should have mentioned on P. 19 that Involuntary Resettlement (OP/BP 4.12) was triggered along with the three environmental safeguards, but it does discuss the Resettlement Policy Framework in Para. 71.

The report contains minor typographical and grammatical errors that could have been rectified with a careful final edit, but it is nonetheless a highly readable and coherent document.

a. Quality of ICR Rating
   Substantial