



1. Project Data :
OEDID: C2159
Project ID: P003558
Project Name: Hebei Agricultural Development Project
Country: China
Sector: Irrigation & Drainage
L/C Number: Cr. 2159-CHA
Partners involved :
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2. Project Objectives, Financing, Costs and Components :
 The main **objective** of the project was to increase farm incomes by increasing productivity and marketability of agriculture, livestock and aquatic products in the northeast coastal area and the inland Heilonggang area of Hebei Province. The project was designed to: (a) strengthen the management of water resources; (b) increase productivity of existing low yielding crops and diversify the cropping pattern; (c) promote market analysis for major commodities; (d) expand agro-processing activities, rationalize fertiliser production, and make use of by-products; (e) promote an effective use of crop residues in livestock production; and, (f) strengthen provincial applied research and extension .

Main **components** were: (a) water conservation (about one third of project costs); (b) agriculture development; (c) livestock development; (d) aquaculture; (e) agro-industries; (f) institutional development.

*Total Project **Costs** at Appraisal: US\$309.6 m; Total Project Costs at Completion: US\$342.6 m; IDA Financing at Appraisal: US\$150.0 m equivalent; IDA **Financing** at Completion: US\$164.8 m equivalent. The IDA credit was approved in FY90 and closed on June 30, 1998, after a year and then a six month extension, 18 months behind schedule.*

3. Achievement of Relevant Objectives :
 Project objectives were relevant and drew from the earlier project experience . Achievement of objectives was generally very successful, with most of the targets set at appraisal attained or surpassed . Complex design and international competitive bidding procurement procedures did, however, slow down the early implementation in agro-processing and aquaculture components .

4. Significant Achievements :
 The project was generally successful in achieving its engineering objectives to improve the efficiency of groundwater. Most targets were met. By 1999 the project will have converted 142,125 ha to full irrigation from dryland, 18,355 ha to full irrigation from partial, and 21,332 ha from dryland to partial. Yield increases have mostly exceeded the modest appraisal estimates .

5. Significant Shortcomings :
 Counterpart financing was a problem at some points in the project . There were some shortcomings in areas related to sustainability but provincial project management appear to be fully committed to address these and their strong performance during the project gives reason to be optimistic . While the project developed a groundwater monitoring mechanism, it has not been conducting annual updates of the groundwater map, thus there are some weaknesses in water resource management. Furthermore, agreement on the sharing of water resources between competing uses is still to be achieved. Further progress is needed in cotton pest management . Livestock performance was somewhat disappointing because in some cases households were grouped into cooperative style units and performance in those was weaker than in single household units . Benefits of agricultural research could have been more widely spread. A typhoon in scallop production areas, shrimp disease, and bollworm in cotton set back progress in two of the project components, but these are normal hazards rather than shortcomings in project performance .

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
Outcome :	Satisfactory	Satisfactory	
Institutional Dev .:	Substantial	Substantial	
Sustainability :	Likely	Likely	No difference in rating, but some issues still to be addressed .
Bank Performance :	Highly Satisfactory	Highly Satisfactory	
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR :		Satisfactory	

7. Lessons of Broad Applicability :

1. After initial success of a water component within a multi -component project, simplifying future interventions and tackling only water, leaving the other components to develop through private initiative, may be the best approach (the region have been moving in this direction but the borrower often still prefers multiple purpose projects to get the wider financial support). 2. Policies related to sustainability need early and sustained attention . 3. Individual incentives are paramount considerations and there should be very strong management or services or scale arguments for grouping of households for production . 4. The explicit development of research /extension linkages either within or outside the project is important for maximising benefits of research components, strong diffusion should not be assumed .

8. Audit Recommended? Yes No

9. Comments on Quality of ICR :

Thorough and well argued. A little more clarification on the incentive implications of the household production responsibility system would have been useful .