



1. Project Data :	
OEDID:	C2010
Project ID:	P009898
Project Name:	Upper Krishna (Phase II) Irrigation
Country:	India
Sector:	Irrigation & Drainage
L/C Number:	C2010
Partners involved :	
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Date Posted:	08/12/1998

2. Project Objectives, Financing, Costs and Components :

3. Achievement of Relevant Objectives :
Implementation concentrated on major civil works, including advancing construction of items not included in the project (according to the ICR, to stake a claim on water supplies ahead of the upcoming tribunal on inter-state water allocations). Some 93,500 ha was irrigated compared to 148,000 expected at appraisal. Agricultural production in the fully served irrigated areas surpassed appraisal expectations .

4. Significant Achievements :
The project has brought major agricultural benefits to an area that is agriculturally sub -marginal. Those farmers with adequate land shaping and drainage have increased their net returns nine times and even those without such improvements are getting five times the returns they received without irrigation . Although the original resettlement plans failed and flooding of villages accelerated as major construction went ahead faster than anticipated at appraisal, progress is being made with the relocation of displaced persons to Resettlement Centers.

5. Significant Shortcomings :
(i) Resettlement and rehabilitation was highly unsatisfactory causing the Bank to resort twice to suspension of disbursements to achieve the necessary actions (about 200,000 people are adversely affected, with the majority not benefitting from irrigation development). Dam construction and impoundment outstripped resettlement such that emergency relocation was required . A fragmented approach slowed down the pace of resettlement and has left most of the income restoration work incomplete. Resettlement benefits are unlikely to be sustained in the absence of income restoration; (ii) Overall incremental production and net value added were below expectations due to lags in bringing new irrigation on-stream; (iii) Minor civil works (such as field channels and drains, and land shaping), agricultural aspects and malaria control were largely ignored . The lack of land shaping and drainage puts the sustainability of production achievements in serious doubt; (iv) Some construction quality is poor; (v) Operation and maintenance of the irrigation system is deficient and underfunded, including that poor management of the irrigation supply has already led to crop losses from salinity; (vi) Covenants reflecting borrower undertakings on the rotational supply system, cost recovery and catchment protection were ineffectual; (vii) The economic rate of return was reestimated at 5 percent (11 percent at appraisal).

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Unsatisfactory	Unsatisfactory	
Institutional Dev .:	Partial	Modest	

Sustainability :	Unlikely	Unlikely	
Bank Performance :	Deficient	Unsatisfactory	
Borrower Perf .:	Deficient	Unsatisfactory	
Quality of ICR :		Satisfactory	

7. Lessons of Broad Applicability :

The ICR lists a number of familiar lessons, especially in the context of this borrower, but the main lessons are: (a) the need for the Bank to restrict project designs to achieving realistic objectives to which there is real and substantial borrower commitment, rather than continue to approve operations which absorb large staff resources (48 SW p.a. in this case), and are costly in fees, as they struggle to an unsatisfactory conclusion. (b) the need for the Bank to adopt a basin-wide approach rather than supporting separate operations with competitive riparian authorities, and (c) on resettlement, income restoration is particularly difficult and takes much longer than relocation.

8. Audit Recommended? Yes No

Why? Unresolved resettlement and water allocation issues, the deficient performance of the Borrower (during implementation and operation) and of the Bank (during appraisal and supervision). Inadequate O&M and poor construction quality, and substantial differences between the Bank and Borrower views. The Region commented that an audit in two years time could evaluate the impact of the completion of all civil works (incl. on resettlement).

9. Comments on Quality of ICR :

The quality of the ICR is satisfactory, issues are identified, problems are highlighted and the analysis of Bank and Borrower performance is thorough, but the ICR might have discussed more fully the substantial differences between Bank and Borrower views.