



1. Project Data:		Date Posted : 05/03/2001	
PROJ ID: P007100		Appraisal	Actual
Project Name : Guayas Flood Control	Project Costs (US\$M)	97.5	140.0
Country : Ecuador	Loan/Credit (US\$M)	59.0	59.0
Sector(s) : Irrigation & Drainage	Cofinancing (US\$M)	7.0	0.2
L/C Number: L3276			
	Board Approval (FY)		91
Partners involved : Government of the Netherlands	Closing Date	06/30/1999	06/30/2000

Prepared by :	Reviewed by :	Group Manager :	Group:

2. Project Objectives and Components

a. Objectives

- Reduce the risk of rural and urban flooding and resultant losses to life, property and agricultural output in the lower Guayas Basin.
- Improve health and living conditions in the area .
- Support agricultural and livestock development .
- Protect and conserve the natural environment in the Lower Basin and parts of the upper catchment area .

b. Components

- Infrastructure---dikes, flood relief channels, drainage, rural roads, bridges, etc (US\$51.9 million).
- Agricultural development---research, extension, marketing, farmer organization, land titling, credit (US\$16.3 million).
- Environmental protection---planning, impact monitoring, integrated pest management (US\$5.8 million).
- Institutional strengthening---technical assistance, training, equipment, vehicles (US\$3.4 million).

c. Comments on Project Cost, Financing and Dates
None

3. Achievement of Relevant Objectives:
The extent of rural and urban flooding was reduced during the bad weather brought by El Nino . Farm output went up.

4. Significant Outcomes/Impacts:
The ICR re-estimates the economic rate of return at 18.6% (compared to an appraisal estimate of 15%). The ICR infers that "Incomes and living conditions have improved for small, medium and big farmers, since average increase in land values rose from US\$500 to US\$5,000 per hectare" (p. 14). The cropped area rose from 90,000 to 110,000 hectares. Although most of the land in the project area was owned by medium and large farmers, there were probably significant indirect benefits to the poor . The protection from flooding of 160,000 hectares of crops, particularly the labor intensive crops sugarcane and banana, safeguarded an important source of employment for the poor (the sugar industry alone employs 60,000 families). More than 200,000 low income people live in settlements in the project area that would have been destroyed by the flood . In the course of this review OED examined documents supplementary to the ICR--including social assessments and letters from beneficiary groups --suggesting that these indirect benefits were indeed significant. Although there were initial problems in securing adequate maintenance of the civil works, at the project's end responsibility was transferred from government to user groups who, given the project's major demonstration effect in limiting El Nino damage, will probably have a powerful incentive to maintain the works

5. Significant Shortcomings (including non-compliance with safeguard policies):
Owing to faulty design, infrastructure costs were double the initial estimate, absorbing 98% of the project cost. This necessarily meant that the other components--agricultural development, environmental protection, institution building--were short changed. Other weaknesses are as follows:
(a) There were no performance indicators in the staff appraisal report : the ICR compares (retrofitted) indicators

contained in the last project status report with the latest estimates, which is hardly an adequate way to match actual against estimated progress.

(b) The indicators posited refer only to outputs (e.g. bridges built), not to development outcomes.

(c) The implementing agency, CEDEGE, focused narrowly on the engineering, and was not equipped to address matters of social and agricultural development. The Netherlands government ultimately withdrew its support for the agricultural development component following three years in which no progress was made; and owing also to the lack of poverty focus.

(d) Larger commercial farms captured most of the benefits; "low-income farmers lacked the support [envisaged from the agricultural development component] to help them to take advantage of the security afforded by flood protection " (pp. 4-5).

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
Outcome :	Satisfactory	Satisfactory	
Institutional Dev .:	Modest	Modest	Based on the development of private user groups, to whom responsibility for flood control system was ultimately transferred .
Sustainability :	Likely	Likely	The likely rating is based on the plausible assumption that user groups will have a sound incentive to maintain the flood protection works.
Bank Performance :	Satisfactory	Unsatisfactory	Poor quality at entry: the bank must share responsibility with the borrower for the inadequate costing of the infrastructure and the limited provision for adequate implementation of aspects other than civil engineering. Supervision was satisfactory, particularly with respect to progress in securing more adequate maintenance, and coverage of the environmental component.
Borrower Perf .:	Unsatisfactory	Unsatisfactory	
Quality of ICR :		Satisfactory	

NOTE: ICR rating values flagged with '*' don't comply with OP/BP 13.55, but are listed for completeness.

7. Lessons of Broad Applicability:

(a) Beneficiaries need to be closely involved in the design and implementation of the project; (b) The implementing agencies of development projects need to have a track record of addressing social and economic development issues satisfactorily; a focus on civil engineering quality is necessary but not sufficient . (c) The responsibility for maintenance of civil works needs to be closely addressed during the design of the project; and (d) Project appraisal of a civil works project should be delayed until a substantial part of the final design is ready for bidding .

8. Assessment Recommended? Yes No

Why? The evidence for the scale of the indirect benefits to the poor, and user groups commitment to maintenance, needs to be investigated .

9. Comments on Quality of ICR:

The economic analysis is sound but there could have been a sharper and more focused discussion of poverty reduction. Poverty reduction was not a central concern of the project but it is the bank's primary mandate . The OCS guidelines on preparing ICRs indicate (p. 7) that "The objective and how well it was achieved should be judged by the standards prevailing at the time of the ICR, not those at the time of the loan approval " .