

Report Number: ICRR10024

1. Project Data:

**OEDID:** C2562 **Project ID:** P008280

Project Name: Earthquake Reconstruction Project

Country: Armenia

Sector: Other Urban Development

L/C Number: C2562

Partners involved :

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#### 2. Project Objectives, Financing, Costs and Components:

•The project sought to assist Armenia, five years after a major earthquake, to deal with a reconstruction process in crisis. The goal of the assistance was to (i) provide and improve housing and living conditions to residents of the earthquake zone (EQZ); (ii) reconstruct basic infrastructure and support employment creation, and (iii) support a longer term sustainable program for rehabilitation in the EQZ. Two additional objectives of the project were to introduce competitive bidding and to promote cost recovery in housing reconstruction.

■Total loan amount was US\$28 million, of which 99.89 percent was disbursed. Because of SDR appreciation against the USD, available funds were US\$1.75 million more than estimated at appraisal. Total project cost was US\$47.6 million.

Project components consisted of (i) housing, including completion of unfinished apartments, repair and strengthening of damaged buildings, and construction of serviced plots, (ii) municipal services, including bathhouses for temporary housing areas incorporating solar heating, water supply and sewerage projects and community facilities, (iii) unfinished factory shells for existing profitable industries, and (iv) technical assistance, training, equipment and studies for procurement and construction supervision, housing reform, regional development of the Earthquake Zone and support of the existing Earthquake Engineering Center.

# 3. Achievement of Relevant Objectives:

Implementation of project objectives was satisfactory. Physical objectives were achieved or exceeded due to additional funds,including reallocation from Technical Assistance, TA, and favourable SDR /USD exchange rate. Disbursements targets were exceeded. A Regional Economic and a Regional Infrastructure Studies were completed.

### 4. Significant Achievements:

The project largely exceeded its physical targets, except in cases where experimental approaches -- such as new buildings added near the end of the project at the request of local authorities done on a pilot basis using an increased financial participation of beneficiaries -- were used. The project had a positive impact on the construction industry, with all construction enterprises moving to privatisation and competitive procurement procedures. Procurement procedures set up for the project became the standard for all procurement of foreign investment in Armenia. Low technology methods for the strengthening of existing and new structures using seismic isolation systems introduced in housing structures pioneered several techniques that have attracted the attention of international professionals working in seismic -prone areas.

# 5. Significant Shortcomings:

Technical assistance was reduced considerably during implementation and fell behind original targets. In fact, the TA target was reduced by an agreement between the Borrower and the Bank as it became evident during implementation that it was over-budgetted. The impact of cost recovery mechanisms introduced was minimal,

and the collection performance and operational experience acquired by different agencies were weak . Poor contractor performance brought about delays in implementing the single family housing component, which in turn resulted in delays in the agencies in charge of allocating the new units, thus in low occupancy at the time the project was completed. Weak local "ownership" was also a contributing factor in slow occupancy . The construction of experimental buildings on a pilot basis was delayed .Out of ten factories assisted under the factory shell reconstruction component, only one was operating as of the ICR mission . The remaining units had difficulties due to the combination of two difficult situations : reconstruction and shifting to a market economy . It is estimated that only two entities using the factory shells will be able to survive under market conditions .

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev .:	Partial	Modest	
Sustainability:	Uncertain	Uncertain	
Bank Performance :	Satisfactory	Satisfactory	
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR:		Satisfactory	

### 7. Lessons of Broad Applicability:

- Project design should allow for flexibility, and changes at Mid-Term Review. This flexibility was incorporated in project design.
- Operational Plans should start early and receive adequate supervision from the Bank . Post-implementation operational plan was not emphasized in design and was inadequately carried out during supervision .
- •Monitoring and technical assistance to ensure an appropriate operation of project components needs to be included in the project.
- Experimental components that require elaborate research and testing are difficult to implement in emergency lending, a situation in which there are basic needs to address and "time is of the essence".
- •More emphasis needs to be provided to prevention and mitigation mechanisms, particularly in a transition to a market economy, in which disaster risk reduction efforts may not receive enough attention.

## 8. Audit Recommended? • Yes O No

Why? While the project outcome is satisfactory, and there is agreement in the ratings between the ICR and OED, this is an unusual emergency project implemented under difficult conditions, as the centrally -planned economy of the country had begun its shift to market -centered mechanisms. The audit should also focus on efforts to reduce risks and to implement disaster prevention and mitigation mechanisms.

#### 9. Comments on Quality of ICR:

The ICR is satisfactory: it provides a detailed account of the experience and it includes the borrower's ICR. However, the plan it provides for future operation is rather weak. Although the ICR mentions the disaster reduction efforts, it does so in a perfunctory fashion.