

Armenia Dam Safety Project

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SYNOPSIS. The Armenian dam safety project involves the technical investigation of 64 dams during the period June 2002 to July 2003. The scope of work includes:

- Fieldwork: Dam inspections, Site investigations (4000m of drilling), Topographic survey, microseismic survey
- Studies: Hydrology, Flood routing, Dam break, Stability analysis, Seismic hazard assessment, seismic analysis
- Risk assessment
- Rehabilitation preliminary design and costing
- Dam safety plans (Operation & Maintenance, instrumentation, early warning systems and Emergency Preparedness Plan)

The dams include irrigation, water transfer and hydropower schemes and range from 1.5m to 83m high with both embankment and concrete gravity structures.

The paper gives an overview of the project and its challenges. Particular project issues include working across national and engineering cultural boundaries, obtaining information on existing schemes, and using a risk based assessment procedure for prioritising rehabilitation works. Particular technical issues include the refurbishment of neglected mechanical equipment and the rehabilitation of a 65m high dam that collapsed during construction.