#### EvSum491

### **OMBILIN COAL MINE, INDONESIA, 1982-84**

<u>The Project - The Evaluation - Overall Conclusions - The Main Findings - Lessons</u>

# The Project

ODA's support for this project involved a total grant of £5.21m in 1982, under ATP. The grant was used in support of the purchase of three sets of mechanised longwall mining equipment and an associated package of training and technical equipment. This was the first time such technology was used in Indonesia. The Evaluation

The evaluation was carried out in 1990 by an ODA economist, an economist from the DTI, ODA's Mining Adviser, a consultant Mine Training Adviser, and a consultant social anthropologist.

This evaluation report was used in the preparation of an additional report: "ATP Synthesis Evaluation Study: a Synthesis of the Evaluation Studies of Eight Projects Financed Under the Aid and Trade Provision" (see EvSum490).

#### **Overall Conclusions**

This project was *unsuccessful*. The ex-post economic rate-of-return has been negative. Only one of the three sets of mining equipment can be used. There are major technical and institutional problems with its operation.

# The Main Findings

- The project had many technical problems. Too much equipment was ordered at once. Its purchase should have been phased. Some of the equipment proved to be inappropriate for the geological conditions.
- Insufficient training and technical assistance was provided to cope with the transfer of the new technology. Too much of the training was provided in the UK. The management culture was not geared up to the efficient use of high value capital equipment.
- Partly as a result of these difficulties, the ex-post economic rate-of-return was negative. However, a detailed appraisal ex-ante would also have shown poor economic returns.
- The project also showed poor financial returns, although the client was protected from this, in part because the ATP loan was on-lent at low effective rates of interest.

• Other than the employment associated with the contract itself, the commercial and industrial benefits for UK industry forecast for the project did not materialise.

### Lessons

- If a detailed feasibility study of a project is not seen by ODA economists or independent consultants, and an appraisal mission is not mounted, no certain view can be taken on project economics.
- When a project entails the transfer of new technology, much institutional strengthening is likely to be involved. The appropriate amount and nature of input cannot be determined without a detailed institutional appraisal, involving a specialist technical adviser.
- If on-lending conditions are not imposed, recipient institutions do not perceive the true costs and benefits of projects.
- In-country training in the use of new equipment may be more effective than UK training.
- Claims for commercial and industrial benefits must be critically assessed; they are difficult to realise in practice.
- Consultants who are associated with the project contractors may not provide a balanced picture of the success in implementing the project, and, whilst their reports may supplement independent monitoring, they should not substitute for it.
- In low-wage, labour-abundant countries, mechanised mining may not be cost-effective compared with traditional manual methods.