



1. Project Data:		Date Posted : 08/14/2002	
PROJ ID: P035697		Appraisal	Actual
Project Name: Mongolia Coal Project	Project Costs (US\$M)	61.91	61.30
Country: Mongolia	Loan/Credit (US\$M)	35.00	33.30
Sector(s): Board: EMT - Mining and other extractive (100%)	Cofinancing (US\$M)	15.59	19.90
L/C Number: C2854			
	Board Approval (FY)		96
Partners involved : Japan Bank for International Cooperation	Closing Date	12/31/2001	12/31/2001

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2. Project Objectives and Components

a. Objectives

The main objective of the project was to reverse the decline in Mongolia's coal production by increasing sustainable production levels at the Baganuur mine to 4 million tons per year. Additional, associated objectives were for Baganuur Joint Stock Company (BJSC) to:

- 1) develop financial self-sufficiency; 2) increase equipment productivity and improve efficiency; 3) operate as an independent commercial company; and 4) operate in an environmentally acceptable manner over the long term .

b. Components

The principal components of the project were :

- 1) procurement and commissioning of equipment to rehabilitate the Baganuur coal mine operation;
- 2) procurement and turnkey installation and commissioning of equipment for a coal -handling plant consisting of crusher, linear stacker, underground reclaimer and train-loader; and
- 3) technical assistance to BJSC including in-country and overseas training to: (a) improve mine operations and mine supervision practices and procedures; (b) develop mine maintenance management and materials management systems; (c) upgrade financial and cost accounting/management information systems; and (d) improve environmental management capabilities .

c. Comments on Project Cost, Financing and Dates

The total cost of the project was US\$61.3 million compared to the appraisal estimate of US\$61.9 million. The lower project cost was mainly due to good procurement procedure and competitive pricing . The savings from procurement of trucks enabled BJSC to buy more equipment than originally planned . The project closed on schedule on 12/31/2001.

3. Achievement of Relevant Objectives:

The achievements in respect of the project objectives are as below :

Coal production and mine rehabilitation: BJSC commissioned modern and new coal handling facilities, and undertook major internal reforms to improve corporate management and efficiency . Although the original annual production target of 4 million tons (and the revised target of 3.5 million tons) was not achieved, BJSC consistently met the demand for coal and avoided disruptions in coal supply to the economy as whole and to urban populations in particular. Production and rehabilitation were affected by serious financial problems from late 1998 to 2000, during which the government failed to implement agreed coal price increases and regular payments for coal . However, the situation began to improve in the first half of 2001. The achievement of this objective is rated *Moderately Satisfactory* .

Financial self-sufficiency: BJSC became a financially independent company with no direct subsidies from the government. But it remains vulnerable because the government continues to regulate coal prices, and is also its largest shareholder and main customer. The achievement of this objective is considered *Moderately Satisfactory* .

Equipment productivity and efficiency: BJSC was unable to meet the important performance indicator of excavator productivity. The achievement of this objective is rated *Unsatisfactory* .

Operation as an independent commercial company: BJSC made a successful transformation to a joint stock company from being managed by the Ministry of Energy, Geology and Mines (MEGM). Modern financial accounting, budgeting and cost accounting have been introduced and adopted. The achievement of this objective is component is rated *Satisfactory*.

Environmental Sustainability: BJSC implemented an Environmental Management Program under the project, and created a small Environmental Management Unit. The company implemented the first land reclamation program since 1999, and continues to reclaim at a pace that equals spoils creation. The achievement of this objective is component is rated *Satisfactory*.

Technical Assistance was generally successful in respect of: mine operations, supervision and maintenance; establishing new cost and financial accounting systems; and environmental management. A new Coal Sector Strategy was prepared covering a pre-feasibility study for coal deposits in Tavan Tolgoi, development of the Shive Owoo mine, the role of the government in the coal sector and a new long-term mine plan for BJSC.

The project yielded an ex-post EIRR of 24% which was the same as at appraisal. The ex-post FIRR was estimated to be 23%, considerably higher than the 15% at appraisal. Incremental economic NPV was estimated at US\$ 14.3 million against US\$ 17 million at appraisal, both computed at a discount rate of 12%. However, numerous changes in sign of the incremental cash flows make the ex-post IRRs somewhat unreliable.

4. Significant Outcomes/Impacts:

- BJSC converted from an outdated system to a modern mobile overhead coal removal system, and commissioned modern and new coal handling facilities; and
- BJSC made a successful transformation to a financially independent company with no direct subsidies from the government, from being managed by the Ministry of Energy, Geology and Mines.

5. Significant Shortcomings (including non-compliance with safeguard policies):

- Government's failure to meet its commitments to ensure timely payment from its power plants to BJSC and to implement step-by-step increases in the US\$ equivalent price of coal, particularly during late 1998 to late 2000, had a significant impact on BJSC's productivity and efficiency.
- Project implementation was delayed by an year due to delay in procurement of key IDA -finance mining equipment -- an action that was under the implementation agency's control -- adversely affecting equipment performance targets.
- As a consequence of the above:
 1. Arrears climbed to 277 days revenue equivalent by end-2001;
 2. By end-2001, BJSC's debt to total capitalization reached 88%, restricting the company's ability to borrow for its short-term and investment needs; and
 3. Productivity of excavators was only 277 tons/excavator/day against the target of 492 by end-2001.

(However, it is recognized that a steep decline in the world price of copper in 1998 was an important external factor which began increasing arrears in payments for BJSC's coal, as the ERDENET copper concern -- by far the largest electricity consumer in the country -- was unable to make payments for electricity use, which in turn undermined the ability of the power plants to pay for BJSC's coal).

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Moderately Satisfactory	A largely successful technical and structural transformation of BJSC was not sufficient to achieve the production target, or to make the company financially viable. The important indicators of accounts receivables and excavator productivity were considerably short of their targets. The rating is consonant with the ICR's description of the overall outcome as "marginally satisfactory" (ref. Sec 4.1 of ICR) but such a rating is not available on the ICR's 4-point scale.
Institutional Dev .:	Substantial	Substantial	
Sustainability:	Likely	Likely	Sustainability is only marginally Likely. The poor financial state of BJSC is only partially mitigated by its largely successful technical and structural transformation, the new government's positive moves on

			coal prices, improved payments since October 2000, and an apparently viable long-term plan.
Bank Performance :	Satisfactory	Satisfactory	
Borrower Perf .:	Satisfactory	Satisfactory	Borrower performance is considered only marginally Satisfactory, due to its inability to fulfil important commitments in the Development Credit Agreement, even though significant external factors constrained its ability to comply .
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:

- The financial and productivity impacts of the performance of downstream user companies must be clearly factored into any comprehensive approach to rehabilitating the energy sector; and
- Undue attention to numerical targets may detract from attention to more strategic goals .

8. Assessment Recommended? Yes No

Why? The project attempted a far-reaching transformation in the coal sector, in a difficult country and external environment. A careful look at this experience can yield valuable lessons and applications for similar situations.

9. Comments on Quality of ICR:

The ICR covers all issues in a detailed and balanced manner . providing clear monitoring indicators . The quality of the ICR is considered Satisfactory .