

BANGLADESH

By a Special Contributor

Bangladesh, with nearly half of its population of 135 million packed into an area the size of Greece, is one of the world's poorest countries. There have been some positive developments, however. Market reforms and liberalisation have pushed economic growth to an average 4.4% per annum, and the inflow of foreign capital has improved; US oil companies alone have invested US\$700 million in the country's natural gas fields.

The government has offered several incentives to foreign investors including 100% share ownership, except in four areas, including mechanised mineral extraction within the bounds of reserved forests. The old licensing system has been scrapped and so have the lengthy approval procedures for investment. Private investment is allowed in gas exploration and development and other mining and exploration activities.

Bangladesh's mineral resources remain grossly under-developed. Proven reserves of natural gas are placed at over 300 billion m³, sufficient to support current domestic needs for almost 200 years. Annual output is around 2.5 billion m³. Unocal Corp of the US has made a large investment and has identified 150-200 billion m³ of natural gas in the northeast and would like to sell gas to India. While the matter was under consideration, the government is keen that Unocal must first satisfy all domestic requirements and ensure that reserves are sufficient to last for 50 years.

Probable reserves of natural gas are estimated at 600 billion m³, and proven reserves exceed 360 billion m³ spread through 17 gas-fields. The reserves, according to some estimates, are considered large enough to support current consumption levels for almost 200 years. The annual output of natural gas is around 2.5 billion m³. Apart from providing feedstock for four fertiliser plants, natural gas is used for fuelling a sponge-iron plant. The power sector is a major outlet which is now open for private investment.

Substantial reserves of coal, estimated at 1,000 Mt, are known to exist in the Jamalganj and Rajshahi areas, but they lie at a depth in excess of 900 m, making exploitation both difficult and expensive. As a result, the country has to import about 60,000 t of coal from China, India and Indonesia. Some years ago, the Australian company BHP was permitted to explore and exploit the bituminous coal deposits in the north-west, near Hilli, close to the Indian border. The company obtained several prospecting licences during the 1990s and identified coal deposits beneath the town of Phulbari. Subsequent scoping studies indicated potential for open-pit operations, with an output of 3-4 Mt/y of bituminous coal suitable for power generation.

In April 2004, Asia Energy plc announced plans for feasibility studies at Phulbari, having acquired the project from BHP Billiton in 1998. London-listed Asia Energy has calculated an indicated and inferred resource of 370 Mt averaging 6,604 kcal/kg of low-sulphur coal with an ash content of 15%. It envisages a two-phase development, with a 2.5 Mt/y open pit by 2010. By 2017, a second-phase development could raise output to 9 Mt/y. The first phase of the project would require construction of a 400 MW mine-mouth power station. If and when the project develops, Asia Energy envisages additional revenues from the possible sale of aggregates, and of silica sands, kaolin, clays and water. The company reports that it has acquired a comprehensive development agreement, originally concluded between BHP and the Government of Bangladesh, that provides a comprehensive development framework for the project.

A second large coal deposit was located in north Dinajpur by the Geological Survey some years ago.

A scrap-based steel plant at Chittagong, operated by Bangladesh Steel Corp, has been functioning for some years, but much of its machinery and equipment needs to be replaced. Production is also hampered by a shortage of scrap feed.

Bangladesh has large limestone deposits, which are used to produce cement. The Jaipurhat Limestone Mining & Cement Works extracts over 1 Mt/y of limestone to operate its 660,000 t/y cement plant. Two other cement plants, Chhatak and Surma, utilise 1.1 Mt/y of limestone.

The country has some oil reserves near Haripur in the eastern hilly district of Sylhet, but these have yet to be developed. The Haripur reserves are estimated at 40 Mbbl, and the total resource is likely to be much higher. According to Petrobangla, which is responsible for oil exploration and development, there are considerable oil and gas reserves in the southwest delta region.

Eastern Refinery Ltd, the only oil refinery, modernised some years ago, processes imported crude.

Bangladesh's 550 km of coastline possesses large resources of beach sands; some 17 areas have been identified that contain monazite, ilmenite, zircon, rutile and magnetite.