

Parker reports that Indian coal mines tend to use sub-par mining equipment, suggesting a scope for greater technology transfer in the future. Clean coal technologies should grow in importance as international pressures grow to reduce greenhouse gas emissions from coal-burning power plants.

E. INFRASTRUCTURE

Power

The Indian power situation is characterized by chronic shortages, particularly in peak demand times. Over the period 1988/89 to 1993/94 demand exceeded supply by between 7.3 per cent and 8.4 per cent annually. These shortages are known to have resulted in delays in high energy-intensive industrial projects, notably including aluminum and base metal smelters. The severity of the situation also varies quite widely from state to state.

Total power generating capacity in India, as of April 1994, was 76,718 megawatts, of which 70.8 per cent is from thermal sources 26.6 from hydropower, and 2.6 from nuclear. Total generation increased by 7.5 per cent during 1993/94, and is projected to grow by 8.4 per cent in 1994/95. Most power plants are owned and operated by State Electricity Boards.

To address the shortfalls in Indian power supply, the Government of India has been aggressively seeking private and foreign investment in the power sector. In some cases, exchange rates and counter-guarantees have been granted. The response is striking. In the period mid-1991 to April 1995, 138 proposals, representing additional capacity of 58,745 megawatts (i.e. 75 per cent of current capacity) have been received. While there are significant delays between the proposal stage and actual increased capacity, the planned investment is a very positive sign.

Transportation

India has one of the largest rail networks in the world with lines extending over 62,462 kms. It is vital to the national economy. Indian Railways employs 1.6 million people.

Goods traffic, especially from minerals and mineral-products, forms a large portion of rail traffic and revenue. During 1993/94, the railways transported 358.72 million tonnes of goods, of which 269.3 million tonnes (75 per cent) is directly linked to the mining industry. Earnings from goods traffic represented 71 per cent of total earnings in 1993/94.

Indian Railways has recently come under criticism for delays in coal deliveries to some thermal power plants.