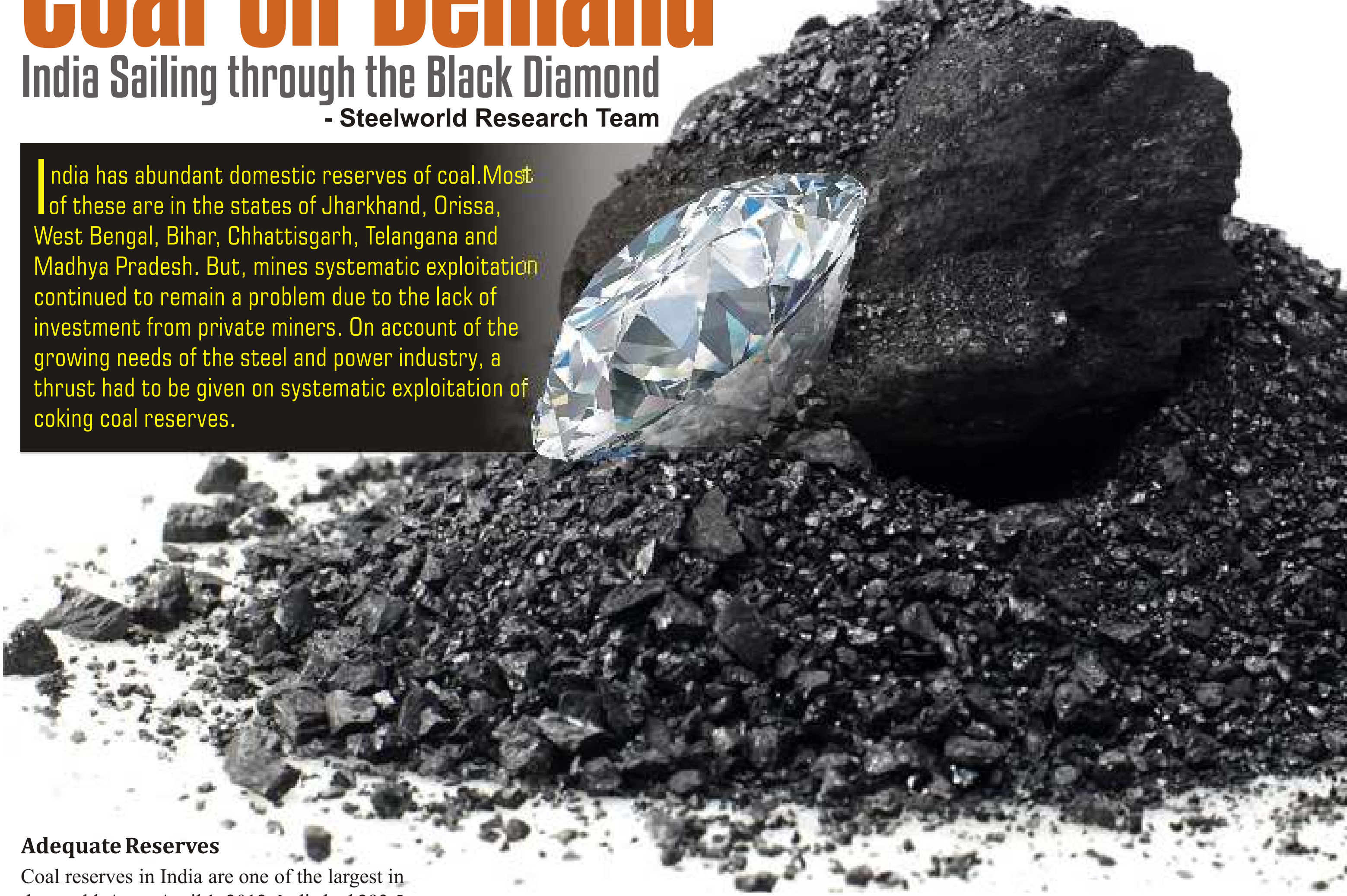
Coal on Demand

India Sailing through the Black Diamond

- Steelworld Research Team

India has abundant domestic reserves of coal. Most of these are in the states of Jharkhand, Orissa, West Bengal, Bihar, Chhattisgarh, Telangana and Madhya Pradesh. But, mines systematic exploitation continued to remain a problem due to the lack of investment from private miners. On account of the growing needs of the steel and power industry, a thrust had to be given on systematic exploitation of coking coal reserves.



Adequate Reserves

Coal reserves in India are one of the largest in the world. As on April 1, 2012, India had 293.5 tonnes of the resource. The production of coal was 532.69 million tonnes in 2010-11. The production of lignite was 37.73 million tonnes in 2010-11. India ranked third in the world coal production. The energy derived from coal in India is about twice that of energy derived from oil, whereas worldwide, energy derived from coal is about 30% less than energy derived from oil.

Unscientific Practices

Some of the mining companies adopted unscientific mining practices and poor working conditions of labour in some of the private coal mines became matters of concern for the government. On account of these factors, the Central Government took a decision to nationalize the private coal mines. The nationalization was done in two phases, the first with the coking coal mines in 1971-72 and with the non-coking coal mines in 1973. In October, 1971, the Coking Coal Mines (Emergency Provisions) Act, 1971 provided for taking over in public interest of the management of coking coal mines and coke oven plants pending nationalization. This was followed by the Coking Coal Mines (Nationalization) Act, 1972 under which the coking coal mines and the coke oven plants other than those with the Tata Iron & Steel Company Ltd (now Tata Steel) and Indian Iron & Steel Company Ltd, were nationalized on May 1, 1972 and brought under the Bharat Coking Coal Ltd (BCCL), undertaking a new Central Government. Another enactment, namely the Coal Mines (Taking over of Management) Act, 1973, extended the right of the Government of India to take over the management of the coking and non-coking coal mines in seven States including the coking coal mines taken over in 1971. This was followed by the nationalization of all these mines on May 1, 1973 with the enactment of the Coal Mines (Nationalization) Act, 1973 which now is the piece of Central legislation determining the eligibility of coal mining in India.

All non-coking coal mines were nationalized in 1973 and placed under Coal Mines Authority of India. In 1975, Eastern Coalfields Ltd, a subsidiary of Coal India Ltd, was formed. It took over all the earlier private collieries in Raniganj Coalfield. Raniganj Coalfield covers an area of 443.50 square kilometres (171.24 sq mi) and has total coal reserves of 8,552.85 million metric tonnes. Eastern Coalfields puts the reserves at 29.72 billion metric tonnes. That makes it the second largest coalfield in the country (in terms of reserves).

The North East Indian states enjoy special privileges under constitution of India. The Sixth Schedule of constitution and article 371 of constitution allows state governments to formulate its own policy in order to recognize customary tribal laws. For example, Nagaland has its own coal policy which allows its natives to mine coal from their respective lands. Similarly, coal mining in Meghalaya was rampant till imposition of ban on coal mining by National Green Tribunal. The Nagaland Coal and Meghalaya Coal has large buyers in North India, Central India and Eastern India.

New Mining Bill

With the passing of the Coal Mines (Special Provisions) Bill 2015 by the Rajya Sabha, the Bill gets the approval of the Parliament. Earlier the Lok Sabha had passed this Bill on March 4, 2015. The Bill will replace Ordinance issued by the Government, the first as on October 21, 2014 and then repromulgated on December 26, 2014, after the apex court cancelled the allocation of 204 blocks. Moving the Bill, coal minister Piyush Goyal said that the Bill aims at transparent allocation or auction of coal mines.

Salient Features of the Coal Mines (Special Provisions) Bill, 2015

- To provide for allocation of coal mines and vesting of the right, title and interest in and over the land and mine infrastructure to successful bidders and allottees with a view to ensure continuity in coal mining operations and production of coal.
- To take immediate action to auction or allot coal mines to minimise impact on core sectors such as steel, cement and power, which are vital for the development of the nation.
- To amend the Coal Mines (Nationalization) Act, 1973 and the Mines and Minerals (Development and Regulation) Act, 1957 thereby removing the restriction of end use from the eligibility to undertake coal mining except in the case of certain specified coal blocks.
- 204 cancelled blocks have been defined as 'Schedule-I coal mines'.
- 42 producing and ready to produce coal mine out of Schedule-I coal mines are defined as 'Schedule-II coal mines'.
- Other 32 substantially developed coal blocks out of Schedule-I coal mines are defined as 'Schedule-III coal mines' meant for specified end-use (more mines can be added to Schedule-III).
- The Central Government has the power to classify mines identified from Schedule-I coal mines as earmarked for a class of specified end-uses.

India's Coal Reserves

Mine	Quantity of Reserves (MT)
Neyveli	80356.21
Jharkhand	80356.20
Odisha	71447.41
Chattisgarh	50846.15
West Bengal	30615.72
Madhya Pradesh	24376.26
Telangana	22154.86
Maharashtra	10882.09
Uttar Pradesh	1061.80
Meghalaya	576.48
Assam	510.52
Nagaland	315.41
Bihar	160.00
Sikkim	101.23
Arunachal Pradesh	90.23
Assam	2.79
Total	293497.15

Allocation shall be made through auction to a company or their JV.

Recent Auctions

So far 29 coal mines have been auctioned under the provisions of Coal Mines (Special Provisions) Act, 2015 and the Rules are made under it. The auction process for non-regulated sector viz. iron and steel, cement and captive power was based on forward bidding process where bidders had to submit their final price offer above the applicable floor price. In case of power sector which is a regulated one, reverse bidding methodology was adopted where bidders had to submit bids below the applicable ceiling price, which shall be taken as fuel cost in determination of power tariff. In case, bid price reaches Rupees zero in reverse bidding, the bidding is based on additional premium payable to the concerned state government, over and above the fixed reserve price of Rs 100 per tonne.

Revenue which would accrue to the coal bearing State Government concerned comprises of upfront payment as prescribed in the tender document, auction proceeds Royalty on per tonne of coal production. In addition, an estimated amount of Rs. 1,41,854 crores would accrue to coal bearing States from allotment of 38 coal mines to Central and State PSU's.

Out of these 29 coal mines, 16 are operational coal mines included in Schedule-II of the Act and 13 are non-operational included in Schedule-III of the Act. Milestones for development and production of coal from the auctioned coal mines have been prescribed under the Coal Mines Development and Production Agreement signed with the Successful Bidder.

CIL Steps towards 1bn Tonnes Mark

The public sector coal mining behemoth Coal India Ltd (CIL) had unveiled its road map of strategies to be adopted, to attain the one billion tonne (BT) coal production mark by 2019-20. With the projected coal demand of the country hovering around 1,200 million tonnes (MTs) by 2019-20, at an envisaged growth rate of 7 per cent, CIL is expected to chip in one BT, of which 908 MTs is the expected contribution from the undentified projects. The process of identification of projects to share the balance quantity, to top up the one BT mark, is also underway. The town CIL subsidiaries Sambalpur based Mahanadi Coalfields Limited and the Bilaspur based South Eastern Coalfields Limited are expected to play a

pivotal role in CIL's quest of attaining the one BT production with 250 MTs and 240 MTs respectively. The key issues that the coal miner is basically relying on are timely completion of three critical railway lines and timely land acquisition and green clearance. The important actions initiated are creation of Coal Project Monitoring Group (CPMG) portal for regular monitoring of project related issues with different ministries and State Authorities. To overcome the hurdle of coal evacuation, CIL had decided to purchase 2000 railway wagons from its own kitty for which a specific fund had been earmarked. The coordination with Railways for implementation has already been initiated. In a move to synergize its efforts SECL already has 2 Special Purpose Vehicles (SPVs) with State governments to develop rail network including last mile connectivity, involving Railways. Another SPV between Ministry of Coal, Ministry of Railways and Government Jharkhand was signed on May 4, 2015 for the critical Tori-Shivpur-Kathotia line.

The strategies for future includes Technology upgradation in Opencast Mines with high capacity equipment, operator independence Truck Dispatch System, Vehicle tracking system using GPS/GPRS, Coal Handling Plants (CHPs) and SILOS for Faster Loading and monitoring using Laser Scanners. As far as productivity improvement in underground mines is concerned the steps taken by CIL will include introduction of Continuous Miner Technology in large scale, Long-wall Technology at selected places, Man Riding system in major mines and Use of Tele monitoring Techniques. CIL is also introducing a number of systems improvements that would help the company in realizing its challenging target.

Coke

India's increased contribution to global seaborne demand is being bolstered by its steel production growth which is on course to increase by 4% this year. Semi-soft coking coal and pulverised coal injection coal will see imports rise sharply thanks to the ongoing focus on hot metal cost reduction. India will remain a key driver of global met coal trade growth over both the medium and long-term. We predict a 123 Mt rise in global trade in the period to 2035, with India expected to account for 40% of this figure and China contributing 28%. Indian demand will reach parity with China by 2035. However, while there is potential for huge steel consumption growth within India, the ability to satisfy that demand is constrained by bureaucratic procedures, regulations and permitting issues. As a result, we anticipate relatively modest steel growth of 4-5% per annum from now until 2020 before ramping up to 6-7% per annum in the period to 2035. Overall, although India's steel sector is not yet a dominant force, it is clearly starting to show strength in supporting demand in a very week and oversupplied global market. It is certainly one to watch and understand the shift in demand growth concentration when China eventually reaches peak iron and steel demand.

Rising Import

Coal imports into India, the world's third largest buyer, jumped 33.5 percent in the last fiscal year to 242.4 million tonnes as China depressed prices by lower purchases and helped consumers, therefore preliminary data from online trader mjunction has showed. Indian power companies typically depend on imports for about 15 percent of their annual needs but that figure looks set to climb. Thanks to a continuous fall in prices, which has raised the appetite for foreign coal Imports in March have risen estimated to 80 percent to 24.73 million tonnes, according to mjunction data based on information from shipping companies, ports and other sources. Government data on imports generally comes with a lag and varies with those from private firms like mjunction, which collects data from a greater number of ports and includes additional coal grades. Going by existing trends and a soft trend in international markets, India's coal import of all types in 2015-16 would be more than 260 million tonnes.

Coal Secretary Anil Swarup estimated imports of 200 million tonnes for 2014/15 and 160 million tonnes for the 2015/16 fiscal year. According to official data, India imported 168.4 million tonnes in 2013/14, while mjunction put the figure at 181.58 million.