COAL PRICING
From Price Stabilisation to Commercialisation

D.K. MITTAL

The paper highlights the fact that till the Eighties the coal price revisions granted by the Government were delayed and kept below the recommended level so that cost escalations generally remained uncompensated. Moreover, in earlier price revisions certain elements of cost, such as, depreciation, interest and return on investment were not considered for constructing a cost structure for price fixation. Only in recent years normative cost structure has been adopted for coal pricing except for inferior grade coals supplied to SEBs and for soft coke used as domestic fuel. In addition, of late, the CIL has also launched a number of schemes to improve liquidity and profitability.

I

Introduction

Coal caters to about two-fifths of total energy requirements in the country. The share of coal in the overall consumption of commercial energy in the country was 81.8 per cent in 1953-54 and even now the share of coal is about three-fifths of the total consumption of commercial energy in India (see Table 1),[1] thanks mainly to oil politics and the rise in prices of petrol and diesel. The total production of coal which was only 79 million tons during 1974-75 (i.e. immediately after nationalisation of coal mines), reached 229 million tons in 1991-92.

TABLE 1: Share of Primary Sources of Energy

	Coal	Lignite	Oil	Natural gas	Hydro	Nuclear
1970-71	60.1	2.8	31.1	2.1	3.5	0.3
1980-81	61.2	2.7	29.3	2.2	4.2	0.3
1984-85	58.7	3.1	29.3	5.0	3.6	0.3
1985-86	56.0	2.9	32.7	5.1	3.1	0.3
1989-90	55.8	3.4	29.7	8.0	2.9	0.2
1990-91	56.4	3.7	28.4	8.2	3.2	0.3
1991-92	57.7	3.9	27.2	8.0	3.0	0.2
1992-93	58.4	3.7	27.2	7.6	2.8	0.3

The entire coal production is in the public sector except for a few captive coal mines. Seventy-five per cent of total commercial demand for coal also

Dr. D.K. Mittal is Reader, Deptt. of Commerce, Shri Ram College of Commerce, University of Delhi, Delhi.

comes from public sector enterprises like the railways, power plants, steel, fertilisers and cement enterprises. The Working Group on Coal and Lignite set up by the Planning Commission had estimated the total demand of raw coal at 240 million tons in addition to a demand for 7.59 million tons of middling by the end of the Seventh Plan (1989-90), the sectorwise break-up of which is given in table 2. It is estimated that by 2000 AD the demand for coal will go upto 427 million tons with power and steel consuming two-thirds of total coal production.

TABLE 2 Demand for Coal by the End of the Seventh Plan (1989-90)

Sectors of consumption	Quantity (Million tons)
Coking coal :	
Steel and coke ovens	41.10
Non-Coking Coal:	
Power	120.00
	(9.00 m.t. middling)
Railways	8.00
Cement	12.60
Fertilisers	6.50
Soft Coke/LTC	5.00
Captive Power	10.00
Bricks etc.	29.00
Export	0.50
Colliery consumption	4.00
Total	236.70

II

Low Price Elasticity of Coal

Major portion of the demand for coal comes from the government sector and large private sector. The prices of other substitutes like power and petrol are also rising. The overall demand for coal, therefore, has very low price elasticity. Unlike most other consumer goods elasticity in demand for coal is confined to small consumers like small scale industries and the household sector, which alone have a choice from a narrow range of alternative fuels. In all other cases, lower prices will not directly spur consumption nor will high prices immediately throttle demand. However, cascading effects of price increases in coal have always been considered significant and an attempt has been made to restrict prices of coal to a reasonable level that does not hamper industrial growth through cost-push inflation. It is due to this reason that in the initial years certain elements of costs such as depreciation, interest and return on equity were not allowed to be built into coal prices. Only in recent years normative cost structure has been adopted for coal pricing.

III

Historical Analysis of Coal Prices

The history of price and distribution controls on coal can be traced to a heavy demand on rail transport during the Second World War that made it inescapable to lay down priorities for transportation. The distributional priorities for railway transportation effected from March 1942 in effect resulted in a beginning of distribution control over coal. Control over production, distribution and prices of coal was first imposed in 1944. These controls, on the one hand, aimed at protecting the interests of the consumers against soaring prices under scarcity conditions and on the other, intended to provide a safeguard to the miners against exploitation through unremunerative prices under conditions of glut in the market. These controls were also a safeguard against mines being subjected to reckless and slaughter mining and curtailing waste of scarce reserves of high grade coal through their wrongful utilisation.[2]

Till 1944 coal operated in a free market, at least on paper, where the laws of supply and demand were to regulate the prices. During the forties and upto the sixties the largest consumers of coal were the Railways and the Steel plants. The prices settled by the Railways for their requirements of non-coking coal during yearly negotiations with the mine owners formed the basis for the general price in the markets during this period. In the case of coking coal, similar negotiations undertaken by the steel plants regulated their prices in the market. However, after coal prices came under statutory control in July 1947, the selling prices were fixed by the Government in consultation with the Railways and the concerned administrative ministries such as steel, power etc., and the controls were exercised under Essential Supplies/Commodities Act. Thereafter, the issue of coal prices was periodically examined by numerous Committees and Study Groups appointed by the Government and by the Tariff Commission and Bureau of Industrial Costs and Prices. Their recommendations and the evaluation of various policy objectives, such as promotion of industries based on coal, general price stabilisation and the need to reduce coal industry's losses due to resource constraints, guided the Government's decision regarding the extent of neutralisation of cost escalation in determination of coal prices.

The Energy Survey Committee and a study by the Indian Statistical Institute[3] advocated marginal cost pricing for coal in India. The Tariff Commission, however, maintained that marginal cost would be an inappropriate basis for price fixation in India as it would be injurious both to best exploitation of coal mines as well as development of the economy.[4] It was rightly pointed out that purely theoretical justification for a policy of marginal cost pricing is valid only if it is universally adopted.[5] Marginal cost pricing was neither recommended before nationalisation by the Bhoothalingam Committee (1958) and Bureau of Industrial Costs and Prices (1971 and 1972) nor after nationalisation by the Fernandes Committee (1974) and Inter-Ministerial Committee on Revisions of Coal Prices headed by Sukhamoy Chakravarti (which came to be called Chakravarti Committee that submitted its interim report in 1975 and final report in 1977).

It was in 1957 for the first time that a detailed examination of the cost of production of a large number of representative mines was taken up by the Bhoothalingam Committee (Coal Price Revision Committee i.e., C.P.R.C.). The Committee was convinced that average cost as a pricing basis would be inappropriate and proceeded with the estimation of normal level for each main item of cost by a study and comparison of actual costs and what the costs should be in a colliery managed with reasonable efficiency and enjoying neither special difficulties nor special advantages, i.e., 'should be' costs in a representative colliery. The representative cost was calculated by averaging costs of representative collieries.[6] Prices recommended by C.P.R.C. on the basis of over-all average cost per ton for different grades of coal from different areas were formally fixed. With effect from 24th July, 1967 prices of all varieties of coal and coke were decontrolled and subsequently settled through consumers like the Railways, the Steel Plants and the Power Houses. Immediately before nationalisation there were a large number of different prices for coal throughout the country. Not only collieries needed to be reconstructed and capacity expanded but in addition a rational price and wage structure needed to be forged out of the vast ranges of prices and wages at the time of nationalisation.

The position of decontrol continued to prevail till July 31, 1975. However, the owners were not free to sell coal to any party and at any price. Railways once again came to exercise domineering role in determining the market prices and in regulating despatches. Despite the fact that by May 1973 the entire coal industry had come under public ownership as a consequence of coal nationalisation, formal controls were reimposed and the price notifications were issued by the Government under the Essential Commodities Act.

Upto 31 March, 1974, pithead prices were determined according to grades based on ash percentage. From 1st April 1974, the base for grading was changed to Useful Heat Value. A feature of this pricing was that the differentials between Bengal-Bihar and outlying areas were abolished; the price differentials between superior and inferior grades were increased substantially; and all coking coals and better quality non-coking coals became more expensive whereas the lowest quality non-coking coals were not affected. The objective was to conserve use of scarce high grade coal and also minimise losses on sale of coal.

The first examination of the prices of coal and coke after nationalisation was undertaken by an Inter-Ministerial Committee under the chairmanship of Shri P.J. Fernandes, Director General Bureau of Public Enterprises by the Ministry of Steel and Mines in January 1974 which evolved the following pricing principles:

(i) There should be common pithead price.
(ii) The prices of different grades of coal should be related to their useful heat value (UHV).
(iii) The coal producing agencies should earn a return of 10 per cent on the capital employed including working capital.

This implied a price increase of Rs.12 per ton on the then prevailing price. However, the government "with a view to limiting the increase in coal prices to the minimum", decided that no return on equity be allowed and therefore average price increase was limited to Rs.10 per ton w.e.f. April 1, 1974. After the price increase coal companies were expected to run on no-profit no-loss basis but in fact, they incurred continuous losses because of non-realisation of targets, increase in wage costs due to increase on variable dearness allowance; increased costs on account of better mine safety measures etc., and increases in costs of storage and of inputs. The National Wage Agreement which came into force w.e.f 1st January 1975 increased the wage burden and led to the constitution of the Chakravarti Committee.

The basis of price fixation was reviewed by the Chakravarti Committee[7] which while computing the price structure took care of all costs including depreciation, interest, an amount for replacement and a return on equity. Considering the significant impact of coal prices on general price level it suggested that (a) the proposed return of 5 per cent on equity may not be charged in 1975-76 only, (b) that the price could further be scaled down by making no provision for depreciation in 1975-76. This would in effect mean that the coal companies would end the year 1975-76 with an accounting loss but with no cash loss and consequently no burden on the central exchequer.[8] The Committee therefore suggested an average price increase of Rs.21 per ton. However, actual price increase granted was only Rs.17 per ton w.e.f. July 1, 1975. It was variously realised that a cost-plus approach to coal prices would impart a jolt to industries in the process of recovery.[9]

The Chakravarti Committee submitted its final report in January 1977 on the revision of coal prices for 1977-78 and 1978-79 recommending further increases in the prices of coal. In the meantime the Government constituted Baveja Committee to go into the scope for improvements and economies in coal industry. The Baveja Committee in its report presented to Lok Sabha on August 2, 1978 brought out various inefficiencies and over-staffing in coal industry and suggested scope for economy in cost to the extent of Rs.10 per ton over a period of four to five years.

Since then there had been substantial increase in costs so that the coal companies continuously incurred losses. The wage settlement with coal-mine workers in June 1979 which was effective since January 1, 1979 further pushed up cost of production and the government announced on July 17 1979 a coal price increase to an average price of Rs.101.18 per ton against the then price of Rs.64.71 per ton. For the coal produced by the Singareni collieries, the average price was increased from Rs. 68.70 to Rs. 99.92 per ton. It was expected that this would enable Coal India Limited to earn a net profit of Rs.3 per ton. It was believed that after this price revision Central Coalfields Ltd. and Western Coalfields Ltd. would earn a profit of Rs.19 and Rs.16 per ton respectively but Eastern Coalfields Ltd., Bharat Coking Coal Ltd. and North Eastern Coalfields Ltd. would even then suffer a loss of Rs. 18.92, Rs.10 and Rs.27 per ton respectively. An increase in the average price to Rs. 128.02 per ton in 1981 and to Rs.145.90 in 1982 was intended to cover escalation in labour cost only. The

BICP in working out the revised prices in 1983 took the average quality of coal in terms of the then prevailing grade mix as the reference point from which the prices for all qualities of coal above and below the reference point were worked out with sharp differentials.[10] The result was that the poorest quality of coal was given such a low price that it proved to be unremunerative.[11]

Prices recommended by the BICP in July 1983, formed the basis for the revised structure of coal prices in 1984 and the price revision on January 9, 1986. These price revisions were expected to cover total cost of production of coal companies, though there was no provision for any return on capital employed. Since then the pricing of coal got substantially divorced from the cost of production of different varieties of coal and there was substantial cross subsidisation of various types of coal. Generally, higher grades of coal were priced high so as to yield substantial surpluses and lower grades of coal were priced much below their cost to encourage their use for power generation. This explained profits by Singareni Coalfields and losses incurred by Bharat Coking Coal and Central Coalfields. Moreover, average cost of production of underground mining had throughout been much higher and could never be recovered from the coal prices while coal from opencast mines could result in surpluses. Thus a type of averaging of costs was implicitly adopted for pricing of coal.

The two successive massive increases in the administered price of coal in 1984 and 1986 did not provide for any return on capital; nor were they adequate to cover the actual costs. In the CIL Annual Report for 1985-86 the then Chairman of CIL, Mr. G.L. Tandon, had observed : "the existing system has completely delinked the price of coal from its cost of production. The cost of production is not related at all to the quality of coal. Under the prevailing system of pricing, an inefficient mine producing high grade coal, fetching a higher price, can earn profit, while an efficiently managed mine could incur colossal losses by producing poor grade, low priced coal. Such distortions have generated problems for objective appraisal of various units by CIL's top management. It has also adversely affected the morale of managers" as many CIL units showed heavy losses purely due to unremunerative prices for low grade coal despite efficient performance of these units.

In February 1985 the Bureau of Industrial Costs and Prices was assigned the task of determining normative costs of coal production. The Bureau assessed the normative costs of coal production in 1984-85 and updated these during the next three years. For the year 1986-87 the cost of production of coal per ton in Coal India Ltd. group of coal companies was Rs.219 as against the average selling price of Rs.210 per ton effective from 9th January 1986. CIL coal prices were raised form the then prevailing price of Rs.183 to Rs.210, and an increase from Rs.192 to Rs.219 per ton was granted for Singareni coal. The price of soft coke, used mainly as domestic fuel was not disturbed, but in the case of industrial consumers its price was increased to Rs. 300 per ton. In January 1987 the BICP recommended price of Rs.218.55 which included a post-tax return of 12 per cent over the normative cost. However, this price of Rs. 219 per ton was made effective from December 1987. Actual costs remained much above the normative cost assessed by the BICP, particularly due to wage revision, time-gap be-

tween cost escalation and price revision and high distribution costs and losses. As a result the coal sector continued to incur losses, though the losses came down during 1987-88, 1988-89 and 1989-90. It is only since 1990-91 that the coal sector started earning profits mainly based on remunerative coal prices and a shift in approach from price stabilisation to higher degrees of commercialisation. The coal prices prevailing before nationalisation and that emerged since nationalisation of coal mines in 1972 and 1973 are given in Table 3.

TABLE 3 Coal Prices before and after Nationalisation

Year	Rs. Per Ton
1960-61	20.75
1965-66	23.78
1970-71	35.68
1972-73	36.41
1973-74	37.50
1974-75	47.50
1975-76	64.92
1976-77	64.92
1977-78	64.92
1978-79	64.92
1979-80	101.18
1980-81	101.18
1981-82	128.02
1982-83	145.90
1983-84	145.90
1984-85	183.00
1985-86	183.00
1986-87	210.00
1987-88	219.00
1988-89 (w.e.f. 1.1.1989)	249.00
1989-90	249.00
1990-91	249.00
1991-92 (w.e.f. 28.12.91)	322.00
1992-93	322.00
1993-94 (w.e.f. 17.2.93)	364.00
1993-94 (w.e.f. 19.6.93)	381.00

IV

Why Coal Prices Did Not Prove Profitable till 1988-89?

Despite regular increase on coal prices, the coal sector could not recover total cost till 1987-88 and Coal India Ltd.'s accumulated losses reached Rs. 2259.79 crore as on March 31, 1988. Though coal enterprises were also entitled to collect a premium of Rs.25 per ton of 'long flame' coal sold by it and realised Rs. 3 to Rs. 10 per ton on sizing, costs of which were included in overall production costs, the CIL's sales realisation could not recover the actual production costs, which were around Rs.224 per ton during 1986-87. In

1987-88, the gap between sales realisation and production costs widened further firstly due to delay in granting higher prices to the CIL (as they were available to the CIL from December 1987 only) and secondly, not only because of the usual escalation in costs of inputs but also on account of heavy burden of interim relief to workers retrospectively from January 1987. For December 1987 the BICP's recommended prices was Rs. 246 per ton based on efficient operation norms, though the Government did not allow the CIL to charge prices accordingly.[12]

Moreover, the BICP recommended price had been ex-pithead. It did not include costs incurred by the CIL on transportation of coal from pithead to the despatch point, preparation of the coal and its loading. Prices suggested by the BICP did not provide for the losses incurred by the CIL on soft coke and washery operations, which for the year 1987-88 were estimated at Rs. 72 crore.[13]

The higher production during 1988-89 and the 13.7 per cent increase granted in coal prices from January 1, 1989, making the CIL's average price to Rs. 249 per ton, were expected to enable the CIL to end the year with at least an operating profit of Rs. 185 crore after several years of continuous losses. However, the CIL's audited accounts for 1988-89 showed a loss of Rs. 23.26 crore after providing for the impact of National Coal Wage Agreement-IV (NCWA-IV) for the period from Jan. 1, 1987 to March 31, 1989. It was estimated that but for the huge accumulated payments under wage agreement the CIL would have made profit of Rs. 138 crore against a total loss of Rs. 224.64 crore during 1987-88 and Rs. 331.75 crore loss for 1986-87. The advantage of price increase were totally nullified by the fourth coal industry wage agreement signed on 27th July 1989 which provided for payment of massive 27 months accumulated wage burden of around Rs. 300 crore. The position of the CIL had become worse because for purposes of price revision, the government had considered only the escalation due to interim relief, but not the additional wage liability. However, coal companies under permission from the Union Government have begun specifying additional transport costs which they would charge for carrying coal upto the loading points. These rates are Rs. 10 per ton for a distance of over 3 kms but not above 10 kms, and Rs. 20 per ton for over 10 kms but not more than 20 kms. Earlier, such costs were charged by coal companies on the basis of actuals.[14]

The poor grades of non-coking coals are severely underpriced. To balance the losses, at least partly, and to keep down the price of low grade coal used for power generation, the prices of all types of coking coal and of superior grades of non-coking coal have been raised to excessively high level. The losses on such low grade coal outweigh the gains on superior grade coals because the power sector's consumption of lower grade coal has been steadily going up. By the year 2000, it would account for almost two-thirds of the country's overall demand for coal. In fact, with steady increase in the demand for coal for power generation, several coal mining projects have been taken up for providing coal to the power plants and from the word 'go' they are heavy losers.[15] The following example illustrates the point:

Cost and Price of certain Inferior Grade Coals 1986

Project	Capacity (M.T./Year)	Coal Grade	Estimated Production Cost Rs./ton	Selling Price Rs./Ton	Loss per Rs./Ton	Estimated Annual Loss Rs./Crore
NIGAHI	4.00	E	223.37	138.50	84.87	36.65
KHADIA	4.00	E	243.10	138.50	104.60	41.84
AMLORHI	4.00	E	269.60	138.50	131.10	52.44

On the other hand, the production costs during 1986, excluding the element of return on investment, were higher than the notified selling price of Rs. 138.50 per ton for grade E coal by an average of Rs. 100 per ton. Including 12 per cent return on Rs. 1000 investment per ton of coal produced, the coal companies were subsidising the power plants to the extent of Rs. 220 for each ton produced and supplied from these projects. It is in conflict with the acknowledged principle that energy prices must reflect their true costs to the economy. The Bureau of Industrial Costs and Prices (BICP) in its report submitted during 1988 had recommended that coal produced and supplied from mines linked to pithead power stations should be priced on a cost-plus basis because in many cases the CIL was not able to recover even operating costs incurred on a number of linked coal mines. Price charged from power plants was in many cases even lower compared to the operating cost. It is understood that the cost-plus price formula may be used once the CIL opens more coal mines linked to the pithead power plants scheduled to come up in the Eighth Five Year Plan. Of the 38146 mw power capacity to be created as much as 24000 mw would account for coal-based plants.[16] This makes cost-plus pricing for inferior grade linked mines crucial to the economy of coal sector.

In addition, there was heavy subsidisation of coal supplied to State Electricity Boards (SEBs) in the form of heavy outstandings unpaid for long. As on Jan. 31 1990, there was a total outstanding of Rs. 1911.48 crore on SEBs alone of which Rs. 1078.74 crore was undisputed and the rest was disputed due to various reasons.[17] This meant an annual loss of interest of Rs. 150 crore to the CIL thereby rendering the existing price of coal supplies to power houses further unviable. The accumulated dues of Coal India Ltd. from different SEBs and power houses as on July 31, 1991 stood at Rs. 1829.86 crore including Rs. 1220.60 crore undisputed and Rs. 609.26 crore disputed.[18]

Unviable prices also resulted from the fact that the coal price hikes allowed by the Government had been lower than those recommended by the Committees appointed by the Government. Even the BICP's recommended prices based on efficient operations norms were seldom allowed to the CIL. Moreover, the CIL generally could not attain the normative cost level adopted as price fixation basis by the BICP.

Another factor making the prices of coal unremunerative is the average time lag of one year between the occurrence of events leading to cost increases and the price increases allowed by the government. The time lag between the impact of production cost increases and the price increases has ranged between six

months and four years.[19] As a result not only that the coal price did not cover full cost during the intervening period, but also price revisions were based not on the cost structure prevailing at the time of the grant of price revision but to lower cost prevailing a few months in the past. Time gap between recommendation of a price and its implementation widened this gap further.

Moreover, underground mining of coal had always been unremunerative since nationalisation of coal in 1972-73. About four-fifths of the CIL's total manpower engaged in underground mining accounted for only one-third of the total production of the CIL. The effect is that surpluses generated in case of opencast operations are offset by losses incurred on underground mining operations. Underground mines have excessive manpower and their productivity is low. Many of these mines have no potential for improvement. However, the price of coal cannot be hiked to a level that makes underground mining remunerative.

V

Towards Greater Commercialisation and Surplus Generation

For the last three years the Government has been laying greater emphasis on surplus generation by coal enterprises based on price revisions, efficiency improvement and introduction of new schemes aimed at recovering full cost plus profit margin. Presently the pithead prices of coal and coke are determined on the basis of formula suggested by the BICP. The BICP recommended price hike based on the indices available for August 1991 for All India Consumer Price Index and June 1991 for other related indices. However, the average pithead price of Run-of-Mine (ROM) coal was revised w.e.f. Dec. 28, 1991 from Rs. 249 per ton to Rs. 322 per ton in respect of coal produced by the CIL and from Rs. 297 per ton to Rs. 388 per ton for coal produced by Singareni Collieries Company Ltd. (SCCL). No price revision was made in respect of prices of soft coke which continued to remain at Rs. 175 per ton for domestic consumption and Rs. 300 per ton for industries since January 9, 1986.[20]

After 30 per cent price hike on Dec. 28, 1991, the Government again increased the prices of coal on Feb. 17, 1993. Based on the indices available upto November 1992, the BICP had recommended an average hike of 17 per cent in the prices of coal because of the increase in input costs during the preceding 12 months. However, the government hiked coal prices by 12.8 per cent in the case of Coal India Ltd. (CIL) and by 11.8 per cent in the case of Singareni Collieries Company Ltd. (SCCL). Accordingly, the average price of the CIL coal was increased from Rs. 322 to Rs. 364 per ton and that of the SCCL coal from Rs. 388 to Rs. 434 per ton. The price of soft coke which is commonly used as domestic fuel was exempted from price hike, thus remaining stagnant for about two decades. Immediately before this price hike the Government had also allowed free market in coal through the private sector wholesale trade.[21]

The increase of Rs. 42 per ton in the case of the CIL coal was on account of escalation in the prices of inputs like variable DA for employees, power,

explosives, petroleum oil and lubricants, other stores and depreciation and interest on capital. The CIL's wage bill alone has been pushed up by Rs. 1000 crore annually due to the national wage agreement.[22] For similar increases in input costs, the price of the SCCL coal was hiked by Rs. 46 per ton. It was estimated that the impact of the coal price increase would be to the tune of only 2.9 paise per kwh in the case of power industry, Rs. 142 per ton on production of steel and to the extent of 0.32 per cent on the wholesale price index. This coal price hike had also put an additional burden of Rs. 50 crore on the Railways.[23]

Just four months after the previous price hike the average price of the CIL coal was hiked by 4.89 per cent, i.e., to Rs. 381 per ton and that of the SCCL coal by 4.09 per cent, i.e., to Rs. 452 per ton w.e.f. June 19, 1993. Soft coal was exempted from price hike.[24] Thus, three price revisions took place in a span of 30 months as against a time interval of two to four years between price revisions effected between 1974-75 and 1987-88.

However, the tendency to pass on the burden of inefficiency in the coal mining, administration of coal enterprises, losses on account of vast pilferages of coal and other corrupt practices, and that of excess labour force in coal mines, to the consumers of coal is disturbing. Moreover, over half the mines run by the CIL are unviable and their present loss per ton of coal exceeds the latest increase in price per ton. The present cost plus pricing does not allow for any improvement in productivity or elimination of corrupt practices which continue to flourish in coal mines. In a situation where the CIL enjoys a monopoly in coal production, the BICP's recommendation of price decontrol would also fail to force efficiency on the CIL, particularly when it is protected by a customs duty of 85 per cent.[25]

As if these price revisions have not been adequate Coal India Ltd. (CIL) has demanded annual revision in coal prices to keep pace with effects of inflation on input costs, so as to prevent erosion in the CIL's profitability due to delays in price revisions. The CIL suggests that the same formula of the BICP which is currently in vogue may be used for annual price revisions also. This is considered to be the only way, in addition to efforts at efficiency improvement, of running the CIL on commercially viable lines and generating adequate internal resources for future growth.

It is only after the price revision at the end of 1991 that the resource position of the CIL improved. For the first time in 1989-90 the CIL mobilised internally about Rs. 230 crore to sustain a plan size of Rs. 1280 crore. Mobilisation of internal resources increased to about Rs. 600 crore in 1990-91 and to about Rs. 875 crore in 1991-92.[26] After the last three price revisions the profit profile of the CIL has also undergone a remarkable change. Contrary to heavy losses till 1988-89 the CIL earned a profit of Rs. 225 crore (unaudited) in 1992-93 at the top of Rs. 187 crore profit in 1991-92. Still higher profit is anticipated for 1993-94.[27] However, higher profits and internal resource generation in future should not be based on price hike but on cost efficiency. Price revisions should be granted only to cover reasonable profit margin based on normative cost structure and with due regard to micro and macro objectives involved in coal pricing. From December 1987 onwards, for the seven different grades of coal

from A to G, depending on their calorific heat value (CHV) and ash content, prices are regulated on the basis of normative costs as recommended by the BICP. As a result, revision in coal prices based on actual cost, irrespective of efficiency cannot be granted. Therefore, if the CIL has to earn profits, it would have to contain its cost of production at levels close to the normative costs acceptable to the BICP. Such cost structure takes care of higher costs of underground mining and a process of averaging of costs is resorted to which is unavoidable because of vast differences in per ton cost of coal production, not only in the case of underground and opencast mines, but also from pithead to pithead in the same region due to differences in terrain etc.

VI

Schemes for Reducing Losses/Increasing Profits

In addition to the success in fetching viable prices for various grades of coal during the last three years, the CIL has also launched a number of schemes aimed at improving liquidity, reducing interest loss and earning higher return on investment. These schemes are: 'Cash and Carry' Scheme, 'Cost-plus' scheme, and 'Wash and Carry' scheme.

'Cash and Carry' Scheme: The main purpose behind 'cash and carry' scheme was to compel the power houses and other core sector giants to pay at the time of loading because these agencies had not paid as much as Rs. 1800 crore as on September 30, 1991, to the CIL for the steam coal moved on priority basis. The CIL was suffering an annual loss of about Rs. 600 crore as at the end of 1991-92 on account of interest payable on the loans raised against the overdues of the supplies to power houses and locos.[28]

Despite certain difficulties requiring occasional suspension of the scheme and its modification, the 'cash and carry' scheme introduced by the CIL from October 1991 worked satisfactorily and enabled the CIL to realise Rs. 1484 crore under the scheme during Nov. 1991 to Feb. 1992.[29] Improved collection of dues together with the coal price hike effective from Dec. 28, 1991 contributed significantly towards improvement in the financial position of the CIL.

'Cost-Plus' Scheme: With a view to further improve its liquidity position, the CIL also introduced 'Cost-Plus' Scheme in 1992. Under this scheme the CIL's subsidiaries will mine coal exclusively for select consumers and charge them the full production cost plus an adequate return on capital. Thus consumers will pay for the CIL's investment in new mines. The coal obtained under the scheme would be more expensive and therefore only some well-off users may opt for the scheme on the belief that an assured supply at somewhat higher rate is superior to uncertain supplies at a lower rate.[30]

'Wash and Carry' Scheme: Encouraged by the success of 'Cash and Carry' scheme, the CIL introduced 'Wash and Carry' scheme for all bulk coal consum-

ing industries. Under the scheme bulk consumers are allowed to set up washeries, or could get washed coal provided they pay the cost of washing to the CIL.[31] This scheme should improve coal washing capacity in the country, reduce imports of coal and provide better quality coal to the industry; and all these objectives would be achieved without commensurate expansion in the public sector coal investment.

VII

Conclusion

To sum up, during the seventies and till mid-eighties coal prices were set below production cost and even below the price of fuel oil in terms of equivalent energy value. Justification for keeping coal prices stable and below fuel oil prices has been : (i) strategic consideration of reducing dependence on imported fuel; (ii) social consideration of keeping the inflationary pressures under check; and (iii) conserving limited reserves of superior coals and maximising use of low grade coals.

Moreover, for purposes of fixation of price, cost of production of all mines producing a particular grade of coal is averaged. This allows uneconomic mines to coexist with economic production centres. Due to this averaging process losses in individual mines are ignored, inefficiencies in the operation of individual mines are not sighted and proper identification of mines for priority investment also becomes difficult.

Another difficulty with the pricing procedure adopted so far is that it focusses only on pithead costs and prices, regardless of the cost of coal delivered to the consumer. As a result, gradewise price differential at the pithead becomes meaningless at the consumers' end due largely to the high transportation cost. Consumers, therefore, prefer to use superior quality coals, which are scarce, and there is inadequate incentive to switch over to inferior grade coals. The World Bank also feels that the approach to coal pricing needs to (a) reflect the demand and supply for different coal qualities fairly closely, (b) provide incentives for improving coal quality, and (c) assure that Coal India Ltd. can generate sufficient resources for investment in new mining capacity and efficiency improvement.[32]

The pricing of coal has to meet the twin objectives of price stabilisation by keeping the price to minimum due to cost-push inflation potentials of coal price-hike, and covering of full cost and internal resource generation so as to avoid strain on already tight budgetary position. This calls for maximum economy in the manpower cost, optimum utilisation of machinery and equipment, technological improvements, improvements in the quality of coal through reduction in ash content, control on pilferage, minimising project delays and cost overruns and thus achieving overall reduction in cost.[33]

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