CNBC TV18 Hindustan Unilever Limited

Network 18

CASE STUDY

NITIE • PSU • COAL INDIA

The Case:

a) Coal, by legacy, is essentially being treated as commodity and the marketing activity was limited to equitable distribution of it in accordance to national priority.

b) With higher economic growth, the demand of coal has been surpassing the indigenous availability by leaps and bounds.

c) Due to various problems like land acquisition, environmental clearance etc., CIL has been failing to achieve its planned production level.

d) Availability of coal is limited to a few States, concentrated mostly in East and East-Central parts, whereas demand spreads over length and breadth of the Country. This situation leads to over dependence on railway transportation in coal movement logistics. Rail transportation is governed by Indian Railways. It acts as an independent institution with its own sets of policies and rules essentially in monopolistic environment particularly for coal sector, where (unlike oil sector) alternative modes of transportation is still scantily available for long haul.

e) The bottleneck in the logistics infrastructure is coming in the way of dispatching even the truncated production level, resulting in accumulation of coal stock

f) On the other hand the market is depending more on imported coal to bridge the gap between demand and availability. New players are entering into the foray taking the demand-supply gap as their opportunity to enter into the market with back to back contracts for coal supply from foreign origin. Movement of imported coal is also cannibalizing the hinterland logistics capacity and therefore posing threats to CIL on two counts:

   I. Loss of market share, and

   II. Further stagnation in movement of indigenous coal

g) CIL is also apprehending that captive coal blocks may be permitted in the long run to market their excess production, this may further erode CIL's market share.

Challenges for CIL:

a) How to retain its market share, and

b) How to sustain the growth

Background:

1. Coal – the mainstay of the commercial energy of India:

Meeting 55% of the demand, **Coal** is the mainstay of the **commercial energy** requirement of India. In August 1774 M/s Heatley, Summer & Redferen Co. signed a contract with East India Company to supply 400 tonnes of coal per annum. India at present has been producing more than 500Million Tonnes of coal, more than a million times growth, over a period of 230 years, is definitely a mind-boggling figure to remember. As of now, India stands as the third highest producer of coal in the world, trailing behind China and USA. **Coal India Limited**, alone caters more than 80% of the coal demand of the country, i.e. about 44% of the commercial energy demand of the country against **aggregate contribution of Oil & Gas Companies** at 39%.

2. Development of coal market:

Advent of steam locomotives could find a steady and extended market of coal from 1853 onwards. Till the beginning of the Second World War there was no formal sales policy or rule to guide coal marketing. Paucity of availability of wagon - the mode of bulk transport of coal and higher demand from defence oriented industries and loco sector necessitated to prioritize wagon allocation. This was the raison d'être for introducing **Preferential Traffic Schedule (PTS)** in the year 1943, the first policy guideline issued by Indian Railways for movement of coal. **Colliery control Order 1945** was another major policy guideline determining the entire gamut of coal industry from production to marketing. In order to maintain judicious use of limited production of coal in comparison to demand and ensure proper utilization, Government brought coal distribution under the purview of **Essential Commodities Act 1955.** The basic fabrics for weaving Coal Distribution Plan of the country were essentially drawn from these three policy guidelines.

- Coking coalmines were nationalized in 1971 and non-coking coalmines were nationalized in 1973. All the nationalized mines were brought under one umbrella of Coal India Limited formed in 1975.

3. Decade of first and second generation liberalization - Nineties

- Coal was brought under Open General License and import duty was drastically reduced from 85% to 15%.
- Between 1996 and 2000 control on pricing and distribution for all grades of coal had been withdrawn in phased manner.
- Mining of coal by private entrepreneurs was permitted for captive use
- Inter-ministerial Standing Linkage Committee, however, continued to link coal source for major core sector consumers including short-term allocations, accounting for more than 90% of indigenous coal production of the country and the overall Marketing Plan for coal continues to be a Governmental exercise essentially handled by Planning Commission
- The taste of competition was faced first in the western coast and subsequently in eastern coast from cheaper imports in terms of landed energy price, from Indonesia and South Africa.
- Economic recession and cheaper imports compelled to review off-take targets in 1998-99.
- Import duties for coal were further reduced and presently, it is 5% for non-coking coal and nil for coking coal.

The new millennium

Sector-wise trend in Coal Consumption

Figs. In Mt

Consuming Sectors	2006-07	2010-11
Steel & Coke Ovens	21.759	17.832
Power (Utilities)	298.251	353.677
Power (Captive)	23.663	28.987
Fertilizer	2.452	2.703
Cement	14.709	17.083
Railways	--	--
Sponge Iron	17.473	18.762
Other Industries	42.484	85.082
Total	**420.791**	**524.126**

i) Macro-economic environment:

- After adjusting the hiccups of economic recession, the Country registered robust GDP growth of 9.4% in the terminal year of X-Plan. Average Growth in X Plan period has been around 7%, which was 5.5% in IX Plan. In coal sector the growth has been over 5.7% in X Plan against 2.5% in IX Plan.
- Planning Commission envisaged a GDP growth of 8-9% in XI Plan period, which would have a larger ramification on macro-economic indicators as under:

	IX Plan (1997-98 to 2001-02)	X Plan (2002-03 to 2006-07)	XI Plan (2007-08 to 2011-12)
GDP growth (%) of which	5.5	7.0	8.5
o Agriculture	2.0	1.8	3.9
o Industry	4.6	8.0	9.9
o Services	8.1	8.9	9.4
Gross domestic (%of GDP at market prices)	23.1	28.2	31.0
Gross domestic Investments (%of GDP at market prices)	23.8	27.5	33.6

- In order to attain 10% growth in industrial sector, Planning Commission targeted 12% growth in manufacturing sector during XI Plan. Infrastructure had been identified as the most critical short-term barrier for achieving envisaged growth in manufacturing sector.
- Power utilities, being one of the most important infrastructure requirements, were required to grow by 8 to 9% in XI Plan. Additions of new generating capacities and reducing cost of generation had been identified as thrust areas for XI Plan.

ii) Expectation from Coal Sector:

- Coal to continue as dominant source of commercial energy. Approach Paper of Planning Commission envisaged increase in demand from a level of 432 MT in 2005-06 to 670MT in 2011-12, out of which demand from utilities to be around 500 MT.
- Working Group on Coal & Lignite for formulation of Eleventh Five-Year Plan projected a demand of 731 MT of coal, out of which 663MT is for non-coking coal. Demand of Power Utilities had been projected at 483 MT. Coal sector was poised to grow by 9.7% during XI Plan period.
- Sector-wise Demand as envisaged by Working Group for XI & XII Plans was as under:

Figures in Million Tonnes

Sector	X Plan 2006-07 Assessed	XI Plan 2011-12	CAGR (%)	XII Plan 2016-17 Projected
Power (Utilities)	315.00	483.00	9.27	750.00
Power Captive	31.00	57.06	9.50	85.00
Cement	25.00	31.90		50.00
Sponge Iron & Others	57.00	90.64	12.41	135.00
Total Non-Coking	428.00	662.60	9.70	1020.00
Coking-Steel	36.00	68.50	9.76	105.00
Total	**464.00**	**731.10**	**9.71**	**1125.00**

iii) Preparedness of Coal Sector:

- In the terminal year of X Plan, all India coal production had been 431 MT. Growth in coal production during X Plan had been 5.6% against original projection of 4.46%. This is substantial in comparison to 2.5% growth achieved during IX Plan.
- The growth could be achieved by higher capacity utilization in existing mines in CIL. However, commissioning of new mines was delayed essentially for land acquisition constraints.
- Captive mines produced 32.2MT in 2006-07 against original projection of 18.87 MT.
- During XI Plan period, share of Captive mines in indigenous production was envisaged to increase further, with a growth of over 30%, as may be seen from the table below:

	IX Plan (2001-02) Actual	X Plan (2006-07) Actual	Growth		XI Plan (2011-12) Projected	Growth	
			Abs	%		Abs	%
CIL	279.65	360.935	81.285	5.2	520.50	159.56	7.6
SCCL	30.81	37.707	6.897	4.1	40.80	3.09	1.6
Others	17.33	32.208	14.878	13.2	118.70	86.49	29.8
Total	327.79	430.850	103.06	5.60	680.00	249.15	9.5

- The indigenous supply plan was made absolutely attuned to priorities set by Planning Commission in its approach paper for XI Plan.
- However, there still remained a gap between demand and supply. Demand and supply gap was particularly predominant in coking coal segment and minor in case of non-coking coal.

Source	Coking Coal	Non-Coking coal						Total
	Steel	Power (U)	Power (CPP)	Cement	Sp.Iron	Others	Sub-total	
Demand	68.50	483.00	57.06	31.90	28.96	61.68	662.50	731.00
Indigenous Availability								
CIL	18.25	382.35	35.49	21.45	15.55	47.41	502.25	520.50
SCCL	0.00	29.40	2.20	5.50	0.40	3.30	40.80	40.80
Others	9.40	65.95	19.37	0.00	13.01	10.97	109.30	118.70
Total Indigenous availability	27.65	477.70	57.06	26.95	28.96	61.68	652.25	680.00
Gap(-) /Surplus(+)	(-) 40.85	(-)5.30	Nil	(-)4.95	Nil	Nil	(-) 10.25	(-) 51.10

- The gap envisaged in non-coking coal segment was essentially on the basis of the existing trend of preference for low ash coal being imported for coastal consumption centers. In fact, there was an in-built provision for further increase in production of non-coking coal, to meet increased demand, if any through captive mining blocks.
- Based on demand preference likely importing segments for non-coking coal has been identified as under:

Sector	Quantity (MT)	Remarks
Power Utilities	5.30	Essentially for import-based utilities
Steel Plants (Corex)	3.80	Esser Steels/Hazira
Cement Plants	4.95	Coastal Plants
Total	**14.05**	

- Since reserve of requisite quality of coking coal is not available in the country, import of such variety is an established fact.
- Creating matching transport logistics would be of paramount importance to meet the demand. Mode-wise transport requirement at the end of XI Plan would be as under:

Figures in Million Tonnes

Mode	In Raw Coal Terms	Coal & Coal Products
Rail	322.16 (47.4%)	342.78 (49.0%)
Road	190.57 (28.0%)	190.57 (27.2%)
MGR	133.49 (19.6%)	133.49 (19.1%)
Belt/Rope	32.70 (4.8%)	32.70 (4.7%)
Colly Consumption	1.08 (0.2%) 680.00	699.54

- Following requirements were identified to ensure creating required transport logistics. It was envisaged that Coal Companies and Indian Railways would concurrently and severally start taking requisite steps to creating additional facilities.
  - Development of independent/dedicated freight corridor
  - Up-gradation of axle load in important routes
  - Feeder lines from coal bearing areas to freight corridor
  - Up-gradation of terminal management
  - Increasing volume of rolling stocks to match with up-graded axle load
  - Development of railway sidings/tracks in Ib Valley, Korba & Karanpura fields.

- Port infrastructure that would be required for moving coal as per demand was envisaged as

Particulars	Expected port handling quantity (MT)
Non-coking coal (Import)	14.0
Coking Coal (Import)	40.0
Coastal movement of domestic coal (Load & Unload ports combined)	56.0
Total	**110.0**

4. The Plan and the reality:

a) **Widening of the gap between demand & indigenous supply:** As per XI Plan CIL was to produce 520Mt of coal in 2011-12 with 7.6% growth. 33% of this production was dependent on new projects. To accomplish this task about 50,000 Ha land was to be procured per annum with timely approval from various State & Central Government Agencies including clearances for forestry and environment. Due to these insurmountables, indigenous production is not likely to surpass 450Mt by the end of XI Plan. Thus the actual growth in XI Plan is likely to remain at 4.5%, against 5.2% achieved in X Plan. The production from Captive Mines is also not likely to surpass more than 50Mt against plan of 119Mt. Therefore, the availability of indigenous coal is likely to be less by at least 140Mt than the planned level. On the other hand, the growth in new capacity addition in power sector in the country (which till X Plan was less than or matching with the growth in coal sector) during XI Plan has been almost at the rate of 7%.

b) **Increasing demand of imported coal:** The demand of non-coking coal import was projected to be around 14Mt, that too essentially for quality and logistics reasons, has already been about 60Mt by the end of 2010-11 and ultimately is likely to surpass 80Mt by the end of XI Plan.

c) **Inadequate logistics infrastructure:** Even when the actual production has been substantially less than the projected level, coal stocks at CIL has increased from a level of 34Mt at the end of 2006-07 to 70Mt at the end of 2010-11. Thus the stockholding which had been about 10% of the production till X Plan has now been more than 16% of the production.

5. The New Coal Distribution Policy of Government of India:

Coal distribution system went through several changes since nationalization. In view of the fact that demand had always been higher than the availability, induced scarcity in the market is created by vested interest to develop a grey market. In order to deal with such a situation and enabled by the dilution of regulatory provisions by the Government, new distribution systems were experimented by CIL. Faced with stiff resistance from the same vested interests ultimately a very high level committee was constituted by the Government under direction of Hon'ble Supreme Court to formulate a transparent policy for coal distribution.

In October 2007, Government of India declared the **New Coal Distribution Policy (NCDP)**. The salient feature of this Policy is as under:

a) Distinction between core and non-core sector consumers for prioritization of coal supply abolished
b) Linkages for new consumers are to be replaced by letter of assurances (LOAs) and all coal supplies are to be made through legally enforceable fuel supply agreements (FSAs)
c) Power & Fertilizer sector consumers are to get 100% of their coal requirement and all other sectors would be getting 75% of their coal requirement through FSAs
d) 10% of the production of CIL would be offered to the market through electronic auction platform
e) CIL to meet entire requirement of coal in the Country, if required, even by importing coal.

6. Physical distribution- rule of the game:

a) **Indigenous coal:** CIL offers its products at FOR colliery basis. Therefore, the customer is required to take care of the logistics arrangement, be it placement of wagons by Railways or placement of trucks by Road Transporter or arrangement of any other modes of movement of coal from the point of delivery, which could either be the railway sidings or the road dispatch points at the colliery. Therefore, even if desired quantity of coal is not moved, CIL, as per FSA, is not exposed for any commercial default.

b) **Imported coal:** All the major consumers are supplied coal at the consumption points. Many of the large coastal consumers have developed captive facilities (conveyor belts) for movement of coal from the unload port to their consuming points. For others, suppliers ensure door delivery. Since CIL is not in a position to offer different sets of delivery methods for

indigenous and imported coal, the offer of imported coal is made on ex-unload port basis, which so far has received lukewarm response from the market. Therefore, in spite of provisions of NCDP, consumers so far prefer to arrange imported coal themselves.

Mentor

Devendra Prasad, dprasad@coalindia.in

Sunil Kumar Kasula, sunilkumarkasula@gmail.com