

## 8.1.2 COAL AND LIGNITE

### Annual Plan 2000-01

30. The Ninth Plan envisaged augmenting domestic coal production with a long-term perspective keeping in view the sharply increasing demand for the power sector vis-à-vis the long gestation periods of coal projects mainly through improved productivity, capacity utilisation, technology adaptation, project clearance and implementation, exploration, conservation, demand management etc. and making PSU's more independent for better resource generation, commercial operations etc. Facilitating private sector participation in commercial coal mining by means of necessary legislative amendments has been one of the important areas envisaged for supplementing the efforts of the public sector coal companies.

31. As against this, the coal demand and domestic production have suffered in the first two years of the Plan. However, during 1999-2000, there has been a slight improvement in the coal offtake and a marginal shortfall in coal production is anticipated, as indicated in Table 8.1.9 and Table 8.1.10.

32. The shortfall in the offtake in the first two years is mainly due to lower offtake by major consuming sectors like, power, steel, cement, etc. due to temporary sluggishness in the economy, as well as, non-materialisation of envisaged new coal-based generation capacity addition. Besides, thermal power stations regulated their offtake by consuming their stocks due to resource constraints, which has resulted in non-adhering to the agreed norm of 30 days stock position at load centers.

33. The prices of all grades of coal stand deregulated from January 2000 and the bill for permitting private sector in commercial coal mining has been approved by the Cabinet recently and placed in the house of Parliament for consideration.

### Coal Demand

34. The target of coal demand for 2000-01 has been fixed at 333.85 mt excluding 5.02 mt of washery middlings, against the anticipated consumption of 315.32 mt excluding 4.95 mt of washery middlings in 1999-00, which is about 6 per cent more than the anticipated consumption in 1999-00 and is mainly due to increase in demand by the power sector. The average annual compounded growth in the first three years of the Ninth Plan works out to 2.1 per cent against the revised targeted growth of 4.6 per cent during the Mid-Term. The sectoral details are given in Table 8.1.9.

**TABLE 8.1.9**  
**Coal And Demand/Off Take**

S. No.	Sector	1997-98	1998-99	1999-2000		2000-01	2001-02
		Actual	Actual	Target	Anticipated	Target	Projections As per MTA
	Coking Coal						
1.	Steel	33.06	31.27	36.02	31.47	36.76	44.60
2.	Coke Ovens			0.81	0.71	0.74	2.00

S. No.	Sector	1997-98	1998-99	1999-2000		2000-01	2001-02
	Sub-Total Coking	33.06	31.27	36.83	32.18	37.50	46.60
	Non-Coking						
3.	Power Utilities	212.92	205.38	214.00	216.53	223.63	235.00
		(3.62)	(3.02)	(3.00)	(3.56)	(3.37)	(5.00)
4.	Cement	10.13	13.23	10.00	14.63	15.42	21.40
5.	Steel DR	2.62	2.42	3.58	2.55	3.26	4.20
6.	Railways	0.05	0.03	-	-	-	-
7.	Fertilisers	4.64	4.10	4.30	3.21	3.70	3.80
8.	LTC/Soft Coke	0.04	0.04	0.04	0.04	-	3.00
9.	Export	0.06	0.04	0.07	0.04	0.07	1.00
10.	Captive Power	16.19	16.15	16.42	17.27	18.51	25.80
		(1.58)	(1.40)	(-)	(1.30)	(1.56)	(2.70)
11.	BRK & Others	23.64	25.75	23.34	26.06	27.85	26.00
		(0.60)	(0.59)	(-)	(0.09)	(0.09)	(-)
12.	Colly. Consumption	3.06	2.88	3.25	2.81	3.91	4.00
	Sub-Total Non Coking	273.35	270.02	275.00	283.14	296.35	324.20
		(5.80)	(5.01)	(3.00)	(4.95)	(5.02)	(7.70)
	Grand Total:	306.41	301.29	311.83	315.32	333.85	370.80
		(5.80)	(5.01)	(3.00)	(4.95)	(5.02)	(7.70)

Note.1 Figures in brackets are washery middlings and are not included in totals.

2. Steel demand includes imported coking coal of 9.77 mt. in 1997-98; 8.37 mt. in 1998-99; 8.09 mt. in 1999-2000 anticipated and 11.6 mt. in 2000-01.

35. Coal offtake has been affected as the major consuming sectors have not been lifting the linked quantities and consuming from their stocks mainly due to resource constraints of SEBs and quality problems of coking coal for steel sector and some duty free imports against exports of cement. Consequently, the coal companies have resorted to regulation of coal production to avoid piling up of pithead stocks. However, in the current year slight improvement is anticipated in the offtake of these sectors, if the power sector would maintain the stipulated norm of 30 days stock position at load centers and draw the linked quantities of coal to avoid crisis situation.

### Coal Production

35. The target of coal production for the year 2000-01 has been fixed at 308.07 mt against the anticipated production of 297.86 mt in 1999-00. The target of production in 2000-01 is 3.4per cent more than the anticipated production in 1999-00. The production targets in the first three years of the plan could not be met mainly due to regulation of production by the coal companies as a result of lesser offtake by the major consumers like power and cement. As a result the average annual compounded growth in the first three years of the Ninth Plan has been only 1.4per cent against the envisaged growth of 2.86per cent during the Mid-Term review of the Ninth Plan. The company wise coal production details are given in Table 8.1.10.

**TABLE 8.1.10**  
**Coal Production**

Company	1997-98	1998-99	1999-2000		2000-01	2001-02
	Actual	Actual	Target	Anticipated	Target	Proj. as per MTA
ECL	27.42	27.16	29.00	28.00	28.00	29.50
BCCL	30.92	27.17	27.50	29.00	29.50	30.00
CCL	33.08	32.18	33.50	32.00	34.00	36.00
NCL	37.12	36.52	37.50	37.50	39.00	41.00
WCL	32.52	31.75	32.00	32.00	33.00	34.60
SECL	56.63	57.56	59.50	58.00	60.00	66.00
MCL	42.17	43.51	42.40	42.00	43.00	47.40
NEC	0.69	0.64	0.60	0.50	0.50	0.50
CIL:	260.55	256.49	262.00	259.00	267.00	285.00
SCCL	28.94	27.33	31.00	30.06	31.67	34.00
TISCO/IISCO/DVC	6.31	6.34	6.80	6.80	7.40	7.60
Captive		2.00	2.00	2.00	2.00	2.26
Total:	295.80	292.16	301.80	297.86	308.07	328.86

37. In view of sluggish off-take by major consuming sectors, coal sector is compelled to regulate the production targets to avoid mounting of pithead stocks. As a result, the internal resources of the coal companies are adversely affected and they are reluctant to make new investments for capacity creation. CIL has expressed that any surge in demand is not likely to be met from the ongoing projects in the short term. New capacity creation would have to be linked with commercial contracts through fuel supply agreements. Thus, taking up of new projects is getting delayed which may lead to shortfall in coal availability in medium and long-term. Further, the proposed private sector participation in commercial coal mining is getting delayed. Also the longer gestation periods of coal projects when compared to that of power projects underscore the need for taking up of Ninth Plan identified projects to meet the requirements of power sector during the early Tenth Plan period.

#### *Washed Coking Coal Production*

38. The target for washed coking coal production in 2000-01 has been set at 6.71 mt including 0.90 mt of direct feed from CIL sources against the anticipated achievement of 6.45 mt including 0.90 mt of direct feed, in 1999-00. The overall yield of the washeries has come down from about 44 per cent to 42 per cent in 1999-00 mainly due to the deteriorating quality of the raw coal feed. Further it has been reported that three coking coal washeries in CIL have been converted to non-coking coal washeries in the recent past. This area needs immediate attention as the domestic supplies of washed coking coal are decreasing year after year. Also the coking coal imports by the steel sector are expected to be about 8.1 mt in 1999-00 and 11.6 mt in 2000-01.

### *Supply Plan*

39. The targeted raw coal demand of 333.85 mt in 2000-01 is proposed to be met from a domestic coal production of 308.07 mt, a stock draw down of 1.5 mt from CIL and an import of 11.6 mt of coking coal for steel. This would still leave a gap of 12.68 mt, which would need to be met from CIL sources.

### *Productivity*

40. The target of OMS in 2000-01 for CIL has been set at 2.25 tonne (underground 0.66 t, opencast 6.04 t) and for SCCL 1.58 t (underground 0.83 t and opencast 8.18 t) against the anticipated OMS of 2.11 t for CIL (underground 0.63 t and opencast 5.66 t) and 1.53 t (underground 0.79 t and opencast 7.45 t) for SCCL. All concerted efforts are required to be made to improve the productivity of underground mines of the coal companies since the improvement in OMS has been mainly due to open-cast mines.

### **Lignite**

41. The target of lignite production for Neyveli Lignite Corporation (NLC) for 2000-01 is fixed at 17.50 mt against the anticipated production of 16.90 mt in 1999-00. This is based on the requirements of its downstream units and 0.7 mt for open sale for Southern region industries, particularly cement sector.

### *Project Implementation*

42. The constraints of land acquisition and related rehabilitation, environmental and forestry clearances, adverse geo-mining conditions, contract management problems etc. continue to effect the implementation of the projects in coal sector. Though these projects are under regular monitoring at different levels, the delays in implementation are not getting reduced as desired. Almost 43 per cent of the 67 ongoing projects which are being monitored, each costing Rs.20 crore and above, are delayed.

43. The co-operation of the concerned State Governments in the matters of acquisition of land, forest land clearance etc is very much desired. Similarly prioritisation of investments for avoiding resource problems in implementation needs serious consideration.

44. No major coal projects have been sanctioned by the Government during the year 1999-00. However, 4 new projects (CIL-2; SCCL-2) for a total capacity of 3.53 mtpa (CIL-2.75 mtpa; SCCL-0.78 mtpa) have been sanctioned by the coal companies under delegated power for total capital cost of Rs.191.11 crore (CIL- Rs.143.60 crore; SCCL- Rs.47.51 crore). This slow rate of capacity addition would affect the domestic coal availability in the Tenth Plan Period and beyond.

### *Exploration*

45. The target of drilling for promotional exploration for coal and lignite has been set at 1,53,500 metres (m) in 2000-01, against the anticipated achievement of 1,65,000 m in 1999-00. The target of detailed drilling for coal & lignite by the coal companies in 2000-01 is 2,25,750 m (CIL-1,50,750 m, SCCL- 68,000 m & NLC-7000 m), against an anticipated achievement of 2,73,000 m in 1999-00 (CIL-2,10,000 m, SCCL- 57,000 m & NLC-6000 m).

The detailed drilling figures of CIL are exclusive of the targets under Non-CIL blocks, which are discussed below.

### *Private Sector Participation*

46. The Ninth Plan has laid emphasis on private sector participation in commercial coal mining. Recently, the Cabinet has approved the proposal for suitable legislative amendments to the Coal Mines (Nationalisation) Act 1973, in this regard. The Bill is yet to be passed by the Parliament.

### **Other Programmes**

#### *Science & Technology*

47. In the Ninth Plan, the emphasis has been laid on development of in-house R&D in coal companies. There are two major ongoing projects under coal S&T programme namely, Coalbed methane extraction under UNDP/GEF collaboration and washing of Low Volatile Medium Coking (LVMC) coal at Golukdih.

#### *Environmental Measures & Subsidence Control (EMSC)*

48. Under this scheme emphasis is laid on (i) control of mine fires in Jharia coalfields; and (ii) control of subsidence in old abandoned areas of Raniganj coalfield

#### *Rehabilitation, Control Of Fire & Subsidence In Jharia And Raniganj Coalfields*

49. The scheme envisages mitigating the problems of fire and subsidence and related rehabilitation of the affected people based on the recommendations of the High Level Committee on Control of Fire & Subsidence in Jharia and Raniganj Coalfields. This scheme is formulated by DOC under the Master Plan for all the unsafe areas in Jharia and Raniganj coalfields. The Schemes under this are proposed to be taken up for implementation after partial implementation of the two interim schemes sanctioned, one each for Jharia and Raniganj coalfields.

#### *Regulatory Framework Review Project*

50. This project is being implemented in compliance of the conditionalities for availing the World Bank loan for coal sector rehabilitation project of CIL. A credit of SDR 1.5 million from IDA has been made available for the purpose of implementation of this project. Under the project, a study of existing rules and regulations governing the coal industry in India and other major coal producing countries has been taken up. Based on the recommendation, action would be taken up to improve its regulatory framework. The study has just been concluded by the consultants and submitted for consideration.

#### *Detailed Exploration In Non-CIL Blocks*

51. Though the scheme was taken up as a onetime measure, based on the MTA discussions it was however felt necessary to extend the detailed drilling programme in Non-CIL blocks to upgrade the available reserves to 'proved' category by extending the budgetary support as national coal companies are not in a position to divert their resources for this activity in non-CIL blocks and at the same time private sector participation is not

forthcoming in near future. Thus, the DOC's proposal for undertaking detailed drilling in non-CIL blocks with an overall outlay of Rs.91.18 crore inclusive of the earlier sanction of Rs.9.38 crore for a total drilling programme of 3,63,900 metres has been agreed to. Accordingly, the target of drilling for AP 2000-01 has been fixed at 1,23,000 metres, against an anticipated achievement of 21,510 metres in 1999-2000.

### *Information Technology*

52. This is a new scheme under the head of IT for defining DOC's systems information needs in order to achieve its objectives and administer its responsibilities using IT as an enabler. The IT plan envisages procurement and maintenance of hardware/software, connectivity within the department and among constituent units of DOC. The estimated cost of the scheme is Rs.1.94 crore spread over five years.

### *Voluntary Retirement Scheme (VRS)*

53. The capital restructuring of CIL approved by the Government on 17.7.1996, envisaged reduction in manpower in ECL & BCCL for improving the financial health of the companies through VRS in 1996-97 and 1997-98 with Rs.60 crore each per annum from the Government (NRF) for these two years. Also, as per the World Bank loan conditions for Coal Sector Rehabilitation Project (CSRP) a sum of Rs.400 crore was earmarked in the Ninth Plan from the National Renewal Fund (NRF) to implement VRS in two coal companies namely BCCL and ECL during three year period 1997-98 to 1999-2000 for retiring 9500 employees in each company, totaling to 19000. Later on DOC has proposed to extend the scheme to cover CCL as well and increased the number of employees to be covered in ECL and BCCL. Now, the envisaged number of employees to be retired, in addition to the earlier 19,000 (ECL 9,500; BCCL 9,500) is 25,400 (9,700 in ECL, 9,700 in BCCL and 6,000 in CCL) by 2001-02, totaling to 44,400 (ECL-19,200; BCCL-19,200; CCL-6,000) with an additional fund of Rs.480 crore from budgetary support in addition to the Ninth Plan approved outlay of Rs.400 crore through NRF, totaling to Rs.880 crore.

54. In view of urgent need to rationalise manpower in the coal companies to improve their financial health, the MTA of Ninth Plan agreed in principle to support the proposal of DOC. However, the required additional amount was to be provided from the overall budgetary support available to the DOC during the Ninth Plan period for implementing VRS in addition to the fund identified through NRF since the coal sector has been separated from the NRF. Alongwith VRS, appropriate revival packages for the rehabilitation of the companies should be formulated and implemented on priority basis. DOC has indicated that one such revival package for ECL prepared by ICICI is under consideration of CIL/DOC.

### *Safety & Welfare*

55. The safety and welfare of coal mine workers continues to be a thrust area in the Ninth Plan. Taking up of safety audits, environmental monitoring of underground mines in particular, measures against inundation, scientific methods of roof support, training and retraining of workers etc. are some of the important areas in this regard. Similarly, thrust on improving the basic necessities like housing, water supply, educational and medical care continues.

*Plan Outlay*

56. The company-wise/scheme-wise approved outlays and anticipated expenditure for the Annual Plan 1999-2000, (BE & RE) and approved outlays for Annual Plan 2000-01 are given in Table 8.1.11.

**TABLE 8.1.11**  
**Company-Wise/Scheme-Wise Financial Outlays**

Company/Scheme	1999-00		2000-01
	BE	RE	BE
Coal India Ltd.	2556.00	2676.19	2790.32
Singareni Coll. Co. Ltd.	227.19	217.20	327.82
Neyveli Lig.Corp.	575.98	561.30	609.80
Science & Tech.	20.71	7.57	13.50
Regl./Proml.Expl.	32.56	32.56	30.37
EMSC	20.00	11.63	13.52
Detailed drilling	5.38	5.38	29.51
Reg.Fr.Rev.Proj.	3.89	6.00	-
Rehab.Proj.	-	-	6.69
Information Tech.	-	0.22	0.33
Total Coal & Lig.	3441.71	3518.05	3821.86
Neyveli Lignite	296.64	260.56	558.65
VRS	160.00	165.00	180.00
NEC	-	-	87.30
Total DOC	3898.35	3943.61	4647.81

57. The BE provision of Rs.4647.81 crore in Annual Plan 2000-01 including NLC (Power), VRS and NEC component is about 18 per cent more than the RE 1999-00. For the purpose of NEC, 10 per cent of the budgetary support of DOC has been earmarked in Annual Plan 2000-01. The outlay for 2000-01 comprises an IEBR of Rs.3774.81 crore and a GBS of Rs.873.00 crore. There has been an increase of about 60 per cent in the GBS over the revised estimates of 1999-00. This has been mainly due to the increase in the budgetary support for NLC for implementing Mine-1A project, which is linked to an IPP and for providing for implementation of VRS in CIL.

*Externally Aided Projects*

58. There are two components of External Aid. One is direct and the other is indirect. The direct component is made available to the beneficiary mostly in the form of Suppliers' Credit, a component reflected under IEBR of PSUs. The indirect component is routed through Budget, which gets reflected under GBS.

59. There are different projects being implemented under Bilateral Credit. The EAP component in BE 1999-2000 for the coal and lignite sector has been Rs.84.64 crore (CIL Rs.54.50 crore; SCCL Rs.16.80 crore; NLC Mines Rs.9.45 crore; and Regulatory Framework Review Project Rs.3.89 crore). The main project under EAP has been Coal Sector

Environmental and Social Mitigation Project (CSESMP) of CIL under IDA credit. The details of these projects are given in Annexure 8.1.7. As against this, the RE provision has been Rs.166.61 crore in the current year. The EAP component for Annual Plan 2000-01 is Rs.107.15 crore. Most of the Externally Aided projects in coal sector have almost been completed and new projects need to be identified for such assistance.

60. The direct component is the World Bank loan for Coal Sector Rehabilitation Project for CIL. The BE provision in 1999-2000 has been Rs.1455.60 crore, against which the RE has been Rs.1595.49 crore and the component for Annual Plan 2000-01 is Rs.1379.24 crore.