

CHAPTER V

COAL INDIA LIMITED

OBJECTIVES AND FUNCTIONS.

5.1 Coal India Limited (CIL), a holding company, was set up on 1st November, 1975 to streamline the working of the coal industry in a manner conducive to more efficient administration and rapid stepping up of coal production. The company has under it seven producing subsidiaries and one planning and design subsidiary. The coal mines in the north eastern region are directly managed by the holding company. Dankuni Coal Complex, a coal carbonisation plant in West Bengal, is also directly under the holding company. The subsidiary companies, with their powers defined in their respective Articles of Association, are responsible for all operational matters. The holding company, CIL, is primarily responsible for establishing corporate objectives and strategies for their achievements, for setting up of targets, monitoring of performance, marketing, raising resources and laying down broad guidelines in important policy matters like marketing, procurement, environmental management, inventory control, etc.

5.2 The authorised capital of Coal India Limited as on 31.3.2003 was Rs.8904.18 crores, which consists of Rs 8000 Crore of Equity shares and Rs 904.18 crore of 10 % redeemable reference shares. The paid up capital of Rs 7220.54 crore out of which a loan of Rs 904.18 crore has been converted into 10% redeemable preference shares. Govt. of India makes investments in Coal India limited either by way of loans or equity. The equity and loan capital of the company in turns is invested into equity or loan in the wholly owned subsidiary companies of CIL.

PLAN OUTLAY

5.3 The Plan outlay of CIL in the IX th plan period as per Mid Term appraisal of Planning Commission was recommended as Rs 12000 Crores. As against this target ,actual plan expenditure for 9th Five Plan was Rs 8632.19 Crores. The Budgeted outlay for 2003-04 (BE) and (RE) was Rs 2240 Crore and Rs 1846 Cr. respectively. Reduction of Plan outlay in 2003-04 is due to on-procurement of HEMM due to court cases, delay in taking up new projects due to revision in norms and also fund shortage in some subsidiaries. The Plan outlay for the year 2004-05(BE) is Rs 2310 Cr. X th plan outlay for CIL approved by the Planning Commission is Rs 14310 Cr. Year-wise and Subsidiary wise break-up of Capital outlay and financing plan is given below:-

SUBSIDIARY-WISE INVESTMENT OF PLAN FUNDS

(Rs. in

COMPANY	crore)						
	1997-02	2001-02	2002-03	2003-04	2003-04	2004-05	X plan
	IXth Plan	Actual	Actual	BE	RE	BE	BE
ECL	650.10	118.70	131.45	190.00	140.00	200.00	1460.00
BCCL	555.40	59.84	55.39	200.00	150.00	200.00	1300.00
CCL	973.93	136.15	131.60	235.00	235.00	280.00	1250.00
NCL	2121.43	226.76	432.08	725.00	616.00	635.00	2750.00
WCL	1307.73	206.64	145.01	250.00	180.00	200.00	1435.00
SECL	1726.14	220.06	153.34	300.00	250.00	400.00	3520.00
MCL	1233.70	175.79	139.83	325.00	250.00	350.00	2500.00
CMPDIL	63.76	0.51	0.68	4.00	3.00	4.00	
NEC/DCC/CIL/IICM		2.24	2.80	11.00	22.00	41.00	95.00
TOTAL	8632.19	1146.69	1192.18	2240.00	1846.00	2310.00	14310.00

SOURCE OF FUNDING							
Internal Resources	4219.01	457.95	779.59	1702.65	1408.69	2165.00	8044.45
Bonds							
Suppliers Credit							6271.67
IBRD	2290.09	98.15	85.93	12.35	32.31		
Add 1. Res. Mobilisation							
Inter Corporate Loan /							
Commercial Loan:---	1913.46	533.46	314.05	525.00	405.00	145.00	
Others							
TOTAL IEBR	8422.56	1089.56	1179.57	2240.00	1846.00	2310.00	14316.12
Ext.aid thr .budget	199.95	57.13	12.62				15.48
Net Budgetary Support	9.68						
GBS	209.63	57.13	12.62	0.00	0.00	0.00	15.48
Fund Available	8632.19	1146.69	1192.19	2240.00	1846.00	2310.00	14331.60
Total Outlay	8832.19	1148.69	1192.19	2240.00	1846.00	2310.00	14310.00

SCHEME-WISE ALLOCATION OF PLAN FUNDS

5.4 Coal India Limited has been endeavoring to fulfill its objective of meeting the demand for coal through increase in production, improving efficiency, minimizing production costs and at the same time providing for social, educational, medical and welfare facilities to its employees. Given the limited resources availability, an effort is made to maintain an appropriate balance between short term production needs on the one hand and between production and welfare activities on the other.

The Subsidiary-wise and /group-wise Capital expenditure and Plan outlay is as follows:-

Group-wise breakup of Outlay

(Fig in Rs crore)

	2002-03 Actual	2003-04 BE	RE	2004-05 BE	X Plan Proj.
ECL					
Existing, Completed	113.13	150.25	117.11	165.53	780.00
On Going proj.					115.00
Major	6.77	11.98	3.94	5.72	
Board Level	2.22	3.70	4.25	1.60	
Total on going	8.99	15.68	8.19	7.32	
Future Project	1.77	13.85	6.00	15.15	515.00
Total Mining	123.89	179.78	131.30	188.00	1410.00
Other Non Mining	7.12	6.22	2.70	6.00	31.50
Exploration +P&D+R&D	0.43	4.00	6.00	6.00	18.50
TOTAL ECL	131.44	190.00	140.00	200.00	1460.00

BCCL

Existing, Completed	49.20	141.91	113.56	124.30	720.00
On Going project					30.00
Major		4.69	4.69	2.00	
Board Level		13.90	5.53	5.15	
Total on going	0.00	18.59	10.22	7.15	
Future Proj.	4.05	20.00	11.02	53.35	420.00

Total Mining	53.25	180.50	134.80	184.80	1170.00
Washery	2.01	10.00	5.00	5.00	60.00
Other. Non. Mining	0.13	3.00	3.00	3.00	50.00
Exploration +P&D+R&D		6.50	7.20	7.20	20.00
TOTAL BCCL	55.39	200.00	150.00	200.00	1300.00

CCL

Existing, Completed	95.77	108.00	163.28	155.50	389.13
On Going proj.					163.80
Major	3.36	36.59	12.82	20.00	
Board Level	13.18	9.41	17.33	20.00	
Total on going	16.54	46.00	30.15	40.00	
Future Proj.		51.00		40.00	599.23
Adv.Action Proj.	0.13	5.00	2.65	6.35	
Total Mining	112.44	210.00	196.08	241.85	1152.16
Washery	3.90	4.00	6.50	7.00	25.00
Other.Non.Mining	9.19	6.00	12.42	16.15	37.84
Exploration +P&D+R&D	6.07	15.00	20.00	15.00	35.00
TOTAL CCL	131.60	235.00	235.00	280.00	1250.00

NCL

Existing, Completed	90.22	201.18	175.75	219.37	774.48
On Going project					867.03
Major	330.76	408.21	384.76	223.11	
Board Level		78.90	19.00	2.20	
Total on going	330.76	487.11	403.76	225.31	
Future Project				128.75	928.30
Adv. Action Projects	0.71	3.46	1.31	5.40	96.49
Total Mining	421.69	691.75	580.82	578.83	2666.30
Washery ID. Plant		0.31			2.00
Other.Non. Mining	10.39	23.94	28.18	47.67	41.70
Exploration+P&D+R&D		9.00	7.00	8.50	40.00
TOTAL NCL	432.08	725.00	616.00	635.00	2750.00

WCL

Existing, Completed	82.53	135.09	102.07	94.14	507.27
On Going project					316.44
Major					
Board Level	30.06	65.18	38.84	67.66	
Total on going	30.06	65.18	38.84	67.66	

Future Project	2.93		1.02	3.75	463.66
Total Mining	112.59	203.20	141.93	165.55	1287.37
Washery			0.06	0.05	1.02
Other.Non .Mining	15.52	26.20	20.01	14.40	86.48
Exploration +P&D+R&D	16.90	20.60	18.00	20.00	60.13
TOTAL WCL	145.01	250.00	180.00	200.00	1435.00

SECL

Existing, Completed	89.47	106.36	157.38	175.63	666.63
On Going project					578.97
Major					
Board Level	39.63	68.25	33.68	69.86	
Total on going	39.63	68.25	33.68	69.86	
Future Project		64.29	0.95	95.51	1935.80
Adv. Action Projects					
Total Mining	129.10	238.90	192.01	341.00	3181.40
Other. Non Mining	9.24	39.65	36.99	43.00	171.63
Exploration +P&D+R&D	15.00	21.45	21.00	16.00	166.97
TOTAL SECL	153.34	300.00	250.00	400.00	3520.00

MCL

Existing, Completed	72.70	49.11	78.65	66.85	548.96
On Going project					106.25
Major					
Board Level	4.54	37.17	52.75	84.45	
Total on going	4.54	37.17	52.75	84.45	
Future Project.	12.54	193.32	65.28	158.20	1314.64
Adv. Action Project		1.50	0.05	1.50	43.80
Total Mining	89.78	281.10	196.73	311.00	2013.65
Other Non. Mining	50.05	25.90	37.27	22.00	415.35
Exploration +P&D+R&D			18.00	16.00	17.00
TOTAL MCL	139.83	325.00	250.00	350.00	2500.00

NEC

Existing, Completed	1.86	3.50	2.50	3.50	15.00
On Going project					
Future Proj. ect					27.00
Total Mining	1.86	3.50	2.50	3.50	42.00

Other. Non. Mining	0.40	0.50	0.50	0.50	3.00
TOTAL NEC	2.26	4.00	3.00	4.00	45.00
CMPDIL	0.68	4.00	3.00	4.00	20.00
DCC/CIL HQ/IICM	0.55	7.00	3.00	5.50	30.00
R & D +ECL Exploration		16.00	31.50		
COAL INDIA LIMITED					
Existing, Completed	594.88	895.40	910.30	1004.82	4401.47
On Going project	0.00	0.00	0.00	0.00	2177.49
Major	340.89	461.47	406.21	250.83	
Board Level	89.63	276.51	171.38	250.92	
Total on going		430.52	737.98	577.59	501.75
Future Proj. ect	18.36	345.39	84.27	494.71	6203.63
Adv. Action Project	0.84	9.96	4.01	13.25	140.29
Total Mining	1044.60	1988.73	1576.17	2014.53	12922.88
Washery	5.91	14.31	11.56	12.05	88.02
Other.Non.Mining	102.04	131.41	141.07	152.72	837.50
Exploration +P&D+R&D	38.40	94.55	95.20	89.70	411.60
Others(CMPDIL/CIL/DCC)					50.00
IICM, ECL Exploration		1.23	11.00	22.00	41.00
Total	1192.18	2240.00	1846.00	2310.00	14310.00

COAL PRODUCTION

5.5 Coal production from the existing mines, on going projects and new projects for the year 2002-03(Actual), 2003-04(Target and Antic) and target 2004-05 are as under:-

	COAL PRODUCTION			
	(In million Tonne)			
	2002-03	2003-04	2003-04	2004-05
	Actual	BE	RE	BE
Existing	29.13	26.71	29.82	26.19
Completed Projects	234.67	226.04	234.94	214.47
On-going	26.11	31.65	31.58	41.34
Future Projects	0.78	14.10	3.16	32.00
Total	290.69	298.50	299.50	314.00

5.6 The company-wise coal production given in Table below:-

(In Million Tonne)

	2002-03	2003-04	2003-04	2004-05
Company	Actual	BE	RE	BE
ECL	27.18	29.00	28.00	29.00
BCCL	24.15	27.50	24.00	25.20
CCL	36.98	35.50	38.50	40.00
NCL	45.10	46.50	46.50	47.50
WCL	37.82	37.25	37.85	38.00
SECL	66.60	69.00	69.00	74.50
MCL	52.23	53.10	55.00	59.00
NEC	0.63	0.65	0.65	0.80
OVER ALL CIL	290.69	298.50	299.50	314.00

5.7 Production of washed coal during 2002-03 was 4.62 Mt. In the Year 2003-04 anticipated production of washed coking coal is 4.73 Mt. projection for 2004-05 is 4.99 M.T.

COAL OFFTAKE AND PIT HEAD STOCKS

5.8 Off take of raw coal was 282.43 m.t. during 2001-02 and 289.22 m.t. during 2002-03. At the end of March 2003, the Vendible Saleable stock of Coal was 19.25 M.t. and anticipated stock during March 2004 is 17.90 m.t.(Provisional).

Subsidiary-wise figures of off take and pit head stocks of coal are given in the table below:-

COAL OFFTAKE AND PIT HEAD STOCKS

(in million tonne)

Company	Coal Off take					Coal Stock (Vendible)	
	2001-02 Actual	2002-03 Actual	2003-04 BE	2003-04 RE	2004-05 BE	As on 1.4.2003 (Actual)	As on 31.3.2004 (Prov)
ECL	28.38	27.29	29.00	28.00	29.00	2.33	2.33
BCCL	25.20	22.22	27.50	26.00	25.70	4.14	4.14
CCL	33.30	36.74	36.50	39.00	40.50	3.89	2.89
NCL	42.68	44.43	46.50	46.71	47.50	1.22	1.22
WCL	38.09	38.16	37.50	37.85	38.00	0.77	0.52
SECL	65.10	68.37	69.00	70.00	74.50	3.91	3.91
MCL	49.06	51.37	53.10	55.00	59.00	2.52	2.52
NEC	0.62	0.64	0.75	0.75	0.85	0.47	0.37
Total CIL	282.43	289.22	299.85	303.31	315.05	19.25	17.90

VENDIBLE STOCK

(in million tonnes)

5.9 Vendible coal stock on 1.4.2003. was as under:-

	Opening Stock as on 1.4.02	17.83	
	(As per audited A/Cs 2002-03)		19.30
(i)	Derived Stock	18.97	
(ii)	Measured Stock		
	Break up of difference		
a)	Excess within 5%		0.04
b)	Shortage within 5%	0.32	
c)	Excess beyond 5%	0.00	
d)	Shortage beyond 5%	0.04	
	Stock adopted in A/cs. (ii-a+b)		19.25
	Less: Seized Coal		
	Total vendible stock	19.25	

COAL SALE DUES

5.10 Coal India Ltd. is required to meet coal needs of all consumers including power, steel, cement, fertiliser & others. While coal is released to some sectors against advance payments, the bulk consumers like power & steel are taking coal on credit. Due to the poor financial position of SEBs and SPCs an amount of Rs 6223 crores was outstanding as coal sale dues as on 31.3.2002.

The Sector wise Coal sale outstanding dues as on 31.3.2002 are as under:-

Sector	Undisputed	Disputed	TOTAL Total dues	(Rs.in crore)	
				Expressed in %over	
1.Power	4060.00	1658.00	5718.00	92%	
2.Steel	93.00	433.00	526.00		8%
3.Others		-53.00	32.00		-21.00
	0%				
Total	4100.00	2123.00	6223.00	100%	

PRODUCTIVITY

5.11 The productivity in coal sector is normally measured in terms of output per man shift in tonne (OMS).

It would be seen that OMS is going up from year to year showing efforts to improve efficiency. The following table shows labour productivity as a result of various measures:

	2001-02	2002-03	2003-04	2003-04	2004-05
COMPANY	Actual	Actual	BE	RE	BE

ECL	1.04	1.03	1.08	1.08	1.10
BCCL	1.15	1.21	1.33	1.21	1.30
CCL	2.13	2.43	2.54	2.66	2.86
NCL	10.39	10.58	10.70	10.62	11.05
WCL	2.09	2.21	2.17	2.20	2.23
SECL	3.01	3.23	3.22	3.30	3.55
MCL	9.98	11.57	10.61	11.60	11.87
NEC	0.84	0.85	0.88	0.88	1.27
OVERALL CIL	2.45	2.67	2.71	2.77	2.92

Capital Restructuring of Coal India Limited

5.12 A policy support package was approved by the Government to restructure the capital base of Coal India Limited which had the following components:

- (a) Outstanding interest free non-plan loan of Rs. 432.64 crores owed by CIL to the Government as on 31.3.1992 was allowed to continue as such in the books of CIL upto 1998-99. Thereafter, CIL was to repay the amount in three equal instalments with usual interest.
- (b) Outstanding plan loan to the extent of Rs.904.18 crores owed by CIL to the Government as on 31.3.92 was converted into non-cumulative 10% preference shares, redeemable in 2003-04.
- (c) Overdue interest of Rs.891.75 crore upto 31.3.92 and penal interest of Rs.553.92 crores payable by CIL to Government was waived / written off.
- (d) WCL was allowed to charge the grade price of coal notified for SCCL.
- (e) Price and distribution of coking coal and non-coking coal of grades A, B & C were deregulated. Subsequently grade D coal had also been deregulated and the Government allowed coal PSUs to notify prices of the regulated grades i.e. E, F & G coals on the basis of BICP formula. Subsequent revision based on the same formula have been allowed at intervals not less than six months till 1st January, 2000. The pricing of Coal has been fully deregulated from 1.1.2000 in super session of the Colliery Control Order, 1945.
- (f) Disinvestments of equity in WCL may be undertaken at the appropriate time.

CAPITAL RESTRUCTURING OF THE SUBSIDIARIES OF COAL INDIA LTD.

5.13 An internal exercise of restructuring of capital and debt profile of the subsidiary companies of Coal India Limited was decided by the Coal India Board in its 166th meeting held on 08.05.1997 and the following restructuring plan was approved -

- i) Conversion of debt of Rs.994 crore in ECL, Rs.1180.70 crore in BCCL and Rs.86.40 crore in MCL into equity.

- ii) Reduction of equity by Rs.1000.80 crore in NCL, Rs.761.30 crore in SECL and Rs.413.90 crore in WCL for simultaneous infusion of identical amounts as debt in these companies.

5.14 This restructuring plan was approved by the Ministry of Coal. Since the restructuring plan involved reduction of equity in SECL, WCL and NCL, it was necessary to obtain the permission of the Department of Company Affairs to reduce the equity in SECL, WCL and NCL under the provisions of the Companies Act, 1956. The permission in respect of these three subsidiary companies of CIL has since been received from Department of Company Affairs and the same has been notified in the Gazette of India.

5.15 CIL has taken necessary action to implement the internal capital restructuring on the lines of para 5.13 above.

WORKING RESULTS OF COAL INDIA LTD.

5.16 CIL and its subsidiary companies made a pretax profit of Rs 2865.50 crores in the year 2002-03, against a pre tax profit Rs 1754.56 crore in the year 2001-02.

The company wise position is given below:-

WORKING RESULTS OF SUBSIDIARIES OF CIL

Name of the Subsidiaries	Rs in crore				
	1998-99	1999-00	2000-01	2001-02	2002-03
ECL	-472.47	-728.23	-917.19	-277.64	-338.78
BCCL	-442.34	-692.32	-1276.70	-755.00	-507.13
CCL	-149.35	-121.24	-792.91	-108.34	384.65
NCL	802.14	936.87	1025.05	1387.34	1293.01
WCL	476.58	405.86	28.23	310.20	472.52
SECL	676.55	455.34	116.92	768.87	882.13
MCL	601.31	607.65	641.35	719.60	882.31
CMPDIL	0.63	0.71	-3.81	2.80	1.99
CIL (incl. NEC/DCC)	606.20	581.18	280.21	561.80	280.08
Sub Total:-	2099.25	1445.82	-898.85	2609.63	3350.78
Less Dividend received from subsidiaries & accounted for in NEC/CIL					
	647.46	751.95	515.62	855.09	485.28
OVER ALL CIL	1451.79	693.87	-1414.47	1754.54	2865.50

The Company-wise dividend provided by subsidiaries to CIL for the year 2002-03 are given below:-

Company	Rs in Crores
NCL	197.00
WCL	55.96
SECL	117.41
MCL	114.91
TOTAL	485.28

WELFARE ACTIVITIES IN COAL INDIA AND ITS SUBSIDIARY COAL COMPANIES.

5.17 The management of CIL and its subsidiary companies firmly believe that success and growth of public sector coal mines largely depend on contented and motivated work force. Manpower is the key and crucial resource and their involvement and support are necessary for efficient and effective functioning of non-human resources. Coal is manpower intensive industry and at present ,CIL and its subsidiary companies have approximately a strength of 5.01 lakh manpower (as on 31.03.2003). Welfare in CIL enjoys the same importance as production, productivity and safety.

PRE-NATIONALISATION SCENARIO

5.18 Coal mines are generally situated in isolated and far flung areas where the facilities of modern life are lacking. At the time of nationalisation, the quality of life - both at the working and living place of the coal miners was very poor and unhygienic. The employees had to live in sub-optimal conditions. The erstwhile private owners were not able to provide even the basic necessities of life such as housing, drinking water, medical facilities etc.

POST-NATIONALISATION SCENARIO

5.19 Soon after nationalisation, public sector coal companies embarked on massive drive to root out the evils prevailing in the coal mines . The workmen were paid wages due to them as per Coal Wage Board Award. Joint Bipartite Committee for the Coal Industry(JBCCI) was set up to negotiate and decide new wage structures.

5.20 Similarly, extensive welfare programmes were undertaken both at the working place and living place. From the year 1975-76 to 2002-2003 CIL and its subsidiaries have spent Rs.16498.28 crore (Rs 2582.98crore as Capital expenditure and Rs.13915.30 as revenue expenditure) on welfare measures for the employees. The details of this is as follows:-

EXPENDITURE ON WELFARE ACTIVITIES

(Rs in crore)

YEAR	CAPITAL	REVENUE	TOTAL
1975-76	12.23	14.22	26.45
1976-77	23.02	21.85	44.87
1977-78	25.49	29.69	55.18
1978-79	18.27	33.04	51.31
1979-80	18.52	46.14	64.66
1980-81	25.38	72.31	97.69
1981-82	40.96	98.48	139.44
1982-83	66.37	115.73	182.10
1983-84	67.22	152.54	219.76
1984-85	69.68	194.89	264.57
1985-86	100.42	196.55	296.97
1986-87	122.00	236.18	358.18
1987-88	108.77	284.60	393.37
1988-89	124.02	279.24	403.26
1989-90	82.20	316.42	398.62
1990-91	124.13	364.82	488.95
1991-92	113.90	454.92	568.82
1992-93	132.48	591.57	724.05
1993-94	167.20	621.80	789.00
1994-95	134.23	696.71	830.94

1995-96	136.00	890.19	1026.19
1996-97	154.00	984.67	1138.67
1997-98	176.00	1071.11	1247.11
1998-99	152.04	1104.57	1256.61
1999-00	147.47	1126.94	1274.41
2000-01	93.42	1270.31	1363.73
2001-02	87.78	1231.99	1319.77
2002-03	65.12	1402.74	1467.86
TOTAL	2588.32	13904.22	16492.54

5.21 The coal companies are paying greater attention to the welfare of their workers. Every effort is being made to improve the living conditions of the coal miners. The thrust is on improving the basic necessities such as housing, water supply and medical care. Emphasis has also been laid on improving the general environmental and ecological conditions in the coalfield areas.

5.22

Welfare Measures	EMPLOYEES WELFARE	
	At the Time of Nationalisation	As on 31.3.03
No. of houses available	118366	408184
Housing satisfaction(%)	21.07%	81.40%
Population covered under		
water supply scheme	227300	2272263
Hospitals(Nos.)	49	87
Dispensaries(Nos.)	197	436
Ambulance (Nos.)	42	667
Hospital Beds	1482	5979
School & Colleges		
functioning in and round		
coalfield area(nos.)	287	561
Canteens(Nos.)	210	459
Co-operative(Nos.)	177	326

HOUSING

5.23 At the time of nationalisation, there were only 1,18,366 standard and sub-standard houses. The availability of these houses has increased to 4,08,184 as on 31.03.2003. The

housing satisfaction has now reached about 81.40% The coal companies are making all out efforts to further improve of these facilities.

WATER SUPPLY

5.24 As against only 2.27 lakh population having access to potable water at the time of nationalisation, at present the concerted efforts made by the coal companies 22,72,263 population as on 31.03.2003 have been covered under water supply scheme.

HEALTH CARE & MEDICAL FACILITIES

5.25 CIL and its subsidiaries are extending medical facilities to the employees and their families through various medical establishments starting from the dispensary level to the central and apex hospitals in different parts of the coalfields.

5.26 There are 87 hospitals with 5979 beds, 436 dispensaries, 667 ambulances, 1749 Doctors including specialists in CIL and its subsidiaries to provide medical services to the employees.

5.27 Besides, 15 Ayurvedic Dispensaries are also being run in the subsidiaries of CIL to provide indigenous system of treatment to workers.

EDUCATION

5.28 The primary responsibility of providing educational facilities lies with the State Governments. However, CIL on its part, has been providing financial assistance to certain schools like DAV Public Schools, Kendra Vidyalayas, Delhi Public School and other educational institutions run by State Government. In addition, as part of its community development programmed, CIL, and its subsidiary companies are also providing financial assistance by way of grant-in-aid to certain privately managed schools functioning in and around the coalfields areas.

5.29 As against 287 Number of educational institutions at the time of Nationalization at present subsidiary campanile of Coal India Limited are providing recurring grants of 62 number to Project Schools, 296 number of privately managed Schools. Besides 187 Number of other educational institutions have also been provided occasional grant along with 16 number of project schools provided infrastructure facilities .

OTHER WELFARE ACTIVITIES;

5.30 Subsidiaries of CIL are running 469 Canteens, 319 Co-operative institutions and 80 Crèches, 267 Bank branches including extension counters are also available in the coalfield areas to cater the needs of the miners

TREE PLANTATION / AFFORSTATION:

5.31 The subsidiaries of Coal India Limited have been undertaking the job of regular development of green belts on waste and reclamation land. During 2002-2003 the coal companies have planted 30.86 lakh trees in the coalfield areas.

SAFETY

5.32 In line with Coal India Ltd.'s commitment to continuous enhancement in safety in its operations vigorous efforts on the safety front were continued as result of which reduction of accident statistics in the period Jan – Oct, 2003 as compared to the same period last year. We come a long way in the march towards greater safety in operations is bome out by the table given below

YEAR	FATAL ACCIDENTS		SERIOUS ACCIDENTS		FATALITY RATES PER 3 LAKH M.T. MANSHIFTS		SERIOUS INJURY RATES PER 3 LAKH M.T. MANSHIFTS	
	Accid ents	Fatali ties	Accid ents	Fatali ties				
1975	177	233	1456	1515	2.62	0.52	17.03	3.41
2002	62	69	382	411	0.24	0.19	1.42	1.13
2002 (Jan-Oct)	48	52	382	400	0.22	0.17	1.69	1.32
2003 (Jan-Oct)	46	50	284	298	0.21	0.17	1.23	1.00

NOTE :

Figures for 2002-03 are subject to reconciliation with DGMs.

5.33 The following measures are being perused in 2003 for further enhancement in safety in operations of CIL:

- 1 Safety Audits of Mines by experienced mining/electrical/mechanical engineers and implementation of the recommendations of the same.
- 2 Greater use of quick-setting cement/resin capsules grouted steel roof bolts/steel wire ropes for support in development workings in underground mines as well as in some mechanised depillaring districts requiring prop free support.
- 3 Reduced exposure of Workers to mining hazards by mechanisation of loading operations by increasing use of Side-Discharge Loaders and Load Haul Dumpers in below ground mines, Power support Long wall System of Mining, Continuous Miner Technology etc. in suitable areas.
- 4 Regular Monitoring of mine environment by handheld gas detectors/alarms and flame safety lamps for detecting inflammable and noxious gases. Besides computerised continuous mine environmental telemonitoring system for giving advance warning of build up of situations that could lead to an out break of fire or explosion are in operation in thirteen mines.

- 5 Before monsoon the danger of inundation from both surface and underground sources of water were examined in every mine and necessary steps taken wherever required.
- 6 Coal India Limited has made a thorough review of precautions against inundation in its mine and taken the following steps:
- a) Check correlation survey has been undertaken to establish the barriers between water logged workings wherever danger of inundation exists.
 - b) Assessment of recruitment of survey personnel and survey instruments has been made and corrective action is being taken wherever required.
 - c) Digitization of mine plans has been initiated in some companies like NCL and WCL.
- 7 Trials with new technology are being carried out for identification of water bodies without physically proving the barriers by drilling. Electrical Resistivity Survey is being tried out by CMRI in ECL. In MCL, Seismic Method for identification of water body is being applied to identify the water logged body in between Talcher and Handidua Colliery by NIRM. Use of Ground Penetrating Radar for ascertaining the thickness of barriers against water body has been taken up by NIRM and the result is under study.
- 8 Thrust on training and retraining of workmen, supervisors to increase safety awareness of the workmen. CIL has taken up a programme of preparation of video films for imparting standardized training in all its training centres of which 32 out of a total of 58 films has been completed.
- 9 Promoting workers participation in safety management through various bodies, from the mine level to area level, subsidiary company level to CIL level, who regularly takes stock of safety of mines and make recommendations, which are being implemented.
- 10 For strengthening preparedness for emergencies site specific, emergencies specific emergency action plans have been drawn up, escape routes for use in emergency have been demarcated on plans as well as below ground and mock rehearsals conducted to familiarise workmen with the same in each underground mine.
- 11 To enhance and maintained the safety awareness amongst workers, safety weeks on particular items are organised at each area other than annual safety week.
- 12 Scientific study on slope stability of benches in OC mines are in progress by VRCE in WCL. Modern techniques in deep whole blasting in OC mines have been adopted in collaboration with scientific institution like CMRI, CMPDIL and Explosive Manufacturers to improve blasting performance with better fragmentation and reduce fly rock and ground vibration particularly in the vicinity of structures and dwellings.
- 13 Seminars/Workshops - Different workshops have been organised regularly to inculcate safety awareness amongst the worker men.
- 14 Competitions - Different competitions such as Annual Safety Week, First-Aid competition, VTC Competition and Rescue Competition are held every year in order to inculcate competitive spirit.

As accidents are by definition unplanned uncontrolled events resulting in loss or injury to life or damage to property no forecast can be made. However it is hoped that the implementation of the above measures will lead to further reduction in accidents.
