

## 第 3 章 営 業 費

### 3-1 炭 鉱 開 発

営業費は人件費、電力費、機器更新費、物品費、維持費、管理費、償却費、金利、輸送費に区分した。エスカレーションは考慮しなかった。

#### (1) 人件費

人件費は PMDC の P C - 1 フォーム ( 1 9 7 6 年 2 月 1 2 日 ) の給与賃金等を参考にして計算した。

1 9 7 6 年の PMDC の P C - 1 フォーム作製時から本見積り作製時まで 4 年間経過しており、その間の賃金上昇率は年間 1 0 % として約 1. 4 6 倍となる。また時間外労働に対する割増金、退職金、引当金、ボーナス等を考慮した。基準給与賃金に対する割増率の実績は 1. 5 5 倍となっている。したがって今回の見積り中の給与賃金単価は上記の倍率を乗じて得た 2. 2 6 3 を 1 9 7 6 年作製の P C - 1 フォームで使用されている給与賃金単価に乗じた値を使用した。その結果、山元における平均給与および賃金は各々 3 Rs/t 、 9 Rs/t となった。

#### (2) 電力費

使用電力量は年度別負荷設備より年次別に算出し、料金は WAPDA の料金規程 C - 3 により算出した平均 4 9 Ps/kWh を使用した。その結果、山元平均は 5 Rs/t となった。

#### (3) 機器更新費

機器更新費は使用設備の耐用年数に応じて計上した。その結果、山元平均は 6 6 Rs/t となった。

#### (4) 物品費

物品費はタイヤ、坑木、火薬、油脂、燃料油、ケーブル等の購入費であり、予想される消耗度を考慮し計上した。その結果、山元平均は 1 3. 6 Rs/t となった。

#### (5) 維持費

維持費は機電設備、建物、機械の維持費およびそれらのパーツ等であり、機械のスペアパーツはそれぞれ 1 年分を計上した。その結果、山元平均は 4. 2 Rs/t となった。

#### (6) 管理費

管理費には外注費、本部管理費、旅費等を計上した。その結果、山元平均は 3 Rs/t となった。

#### (7) 償却費

償却費は PMDC の P C - 1 フォームに基づき設備費等の償却とその他費用の償却に区分した。

設備費等の償却は残存価格 1 割を考慮し 3 0 年間均等償却とした。その他費用には坑

内掘進費、露天掘はく土費、エンジニアリングフィー、管理費、建設期間中の利息等が含まれ生産高比例法により償却した。その結果、山元平均は59 Rs/tとなった。

(8) 金利

起業工事費の借入金返済は外貨分5年据置後5年均等償還、内貨分据置期間無5年均等償還とし、外貨分金利は年8.75%、内貨分年12.5%として計上した。その結果、山元平均は36 Rs/tとなった。

(9) 開発期間中の出炭(クレジットコール)

開発期間中の1984年および1985年における446千tの出炭はクレジットコールとして30年間の山元平均コスト359 Rs/tで1986年に販売可能なものとして計算した。

(10) 輸送費

輸送費は輸送コスト、償却費、金利を含むものとした。平均輸送コストは17 Rs/tとなった。減価償却費、減耗費、金利はそれぞれ3 Rs/t、2 Rs/t、4 Rs/tとなった。

営業費の詳細はTable 3-1から3-20に示すとおりである。

### 3-2 発電原価

発電原価はLakhra石炭火力発電所にて発生した電力と発電所に係る諸経費を考慮した送電端でのkWh当りの発電原価であって、下記の条件のもとに算出した。

・年間プラント稼働率	70% (50%, 60%, 70%)
・プラントの耐用年数	30年
・所内率	9%
・償却費	3.5%
・運転および修繕費	3%
・燃料費	381 Rs/t
	(到着炭ベース)

以上の条件のもとに算定した発電原価は93.5 Rs/kWhである。発電原価の内訳は、Table 3-21に示すとおりである。



TABLE 3-1  
SUMMARY OF OPERATING COST  
(000's) RUPEES

Sheet 1

Description	Currency	Year															
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Mine	Foreign	139,654	156,831	154,916	154,484	156,210	154,010	153,907	152,807	153,014	155,815	156,963	150,531	144,194	144,467	141,948	141,577
	Local	156,120	179,747	182,154	182,140	183,010	182,063	183,052	182,704	182,290	183,397	184,058	177,309	171,431	171,759	168,933	168,742
	Total	295,774	336,578	337,070	336,624	339,220	336,073	336,959	335,511	335,304	339,212	341,021	327,840	315,625	316,226	310,881	310,319
Depreciation on Assets	Local	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010
Amortization	Local	19,776	26,009	32,430	32,565	32,754	33,104	33,266	33,482	33,104	32,835	32,889	32,808	32,835	33,051	33,024	33,374
Interest on Loan	Local	228,900	205,975	183,050	160,125	137,200	114,275	91,420	68,565	45,710	22,855	-	-	-	-	-	-
Sub-Total	Foreign	139,654	156,831	154,916	154,484	156,210	154,010	153,907	152,807	153,014	155,815	156,963	150,531	144,194	144,467	141,948	141,577
	Local	442,816	449,741	435,644	412,840	390,974	367,452	345,748	322,761	299,114	277,097	254,957	248,127	242,276	242,820	239,967	240,126
	Total	582,460	606,572	590,560	567,324	547,184	521,462	499,655	475,568	452,128	432,912	411,920	398,658	386,470	387,287	381,915	381,703
Railway	Foreign	667	1,560	1,561	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454
	Local	7,015	10,275	18,034	18,446	18,481	18,546	18,576	18,616	18,546	18,496	18,506	18,491	18,496	18,536	18,531	18,596
	Total	7,682	11,835	19,595	20,900	20,935	21,000	21,030	21,070	21,000	20,950	20,906	20,945	20,950	20,990	90,985	21,050
Depreciation on Assets	Local	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991
Amortization	Local	1,143	1,504	1,875	1,883	1,894	1,914	1,923	1,936	1,914	1,899	1,902	1,897	1,899	1,911	1,909	1,930
Interest on Loan	Local	32,613	28,313	24,013	19,713	15,413	11,113	8,890	6,668	4,445	2,223	-	-	-	-	-	-
Sub-Total	Foreign	667	1,560	1,561	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454
	Local	44,762	44,083	47,913	44,033	39,779	35,564	33,380	31,211	28,896	26,609	24,399	24,379	24,386	24,438	24,431	24,517
	Total	45,429	45,643	49,474	46,487	42,238	38,018	35,834	33,665	31,350	29,063	26,853	26,833	26,840	26,892	26,885	26,971
TOTAL	Foreign	140,321	158,391	156,477	156,938	158,664	156,464	156,361	155,261	155,468	158,269	159,417	152,985	146,648	146,921	144,402	144,031
	Local	487,568	493,824	483,557	456,873	430,753	403,016	379,128	353,972	328,010	303,706	279,356	272,506	266,662	267,258	264,398	264,643
	Total	627,889	652,215	640,034	613,811	589,417	559,480	535,489	509,233	483,478	461,975	438,773	425,491	413,310	414,179	408,800	408,674
Credit Coal	Local	(160,114)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	Foreign	140,321	158,391	156,477	156,938	158,664	156,464	156,361	155,261	155,468	158,269	159,417	152,985	146,648	146,921	144,402	144,031
	Local	327,454	493,824	483,557	456,873	430,753	403,016	379,128	353,972	328,010	303,706	279,356	272,506	266,662	267,258	264,398	264,643
	Total	467,775	652,215	640,034	613,811	589,417	559,480	535,489	509,233	483,478	461,971	438,773	425,491	413,310	414,179	408,800	408,674

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-1  
SUMMARY OF OPERATING COST  
(000's) RUPEES

(Continued)

Sheet 2

Description	Currency	Year														Total	Average
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Mine	Foreign	141,564	141,636	151,584	151,775	151,224	151,013	151,204	144,709	144,642	99,638	96,257	94,166	91,716	68,694	4,191,150	139,705
	Local	168,760	168,814	181,000	181,058	181,661	180,453	180,741	177,862	177,561	156,324	153,163	130,628	125,987	87,977	5,089,898	169,663
	Total	310,324	310,450	332,584	332,833	331,885	331,466	331,945	322,571	322,203	255,962	249,420	224,794	217,703	156,671	9,281,048	309,368
Depreciation on Assets	Local	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,010	38,006	1,140,296	38,010
Amortization	Local	33,401	33,374	33,617	33,239	33,320	33,239	33,590	33,590	33,185	32,835	30,029	25,928	25,928	25,928	948,509	31,617
Interest on Loan	Local	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,258,075	41,936
Sub-Total	Foreign	141,564	141,636	151,584	151,775	151,224	151,013	151,204	144,709	144,642	99,638	96,257	94,166	91,716	68,694	4,191,150	139,705
	Local	240,171	240,198	252,627	252,307	251,991	251,702	252,341	249,462	248,756	227,169	221,202	194,566	189,925	151,911	8,436,778	281,226
	Total	381,735	381,834	404,211	404,082	403,215	402,715	403,545	394,171	393,398	326,807	317,459	288,732	281,641	220,605	12,627,928	420,931
Railway	Foreign	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	667	667	667	667	667	61,111	2,037
	Local	18,601	18,596	18,641	18,571	18,586	18,571	18,636	18,636	18,561	17,720	17,200	16,440	16,440	16,440	527,826	17,594
	Total	21,055	21,050	21,095	21,025	21,040	21,025	21,090	21,090	21,015	18,387	17,867	17,107	17,107	17,107	588,937	19,631
Depreciation on Assets	Local	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,991	3,984	119,723	3,991
Amortization	Local	1,931	1,930	1,944	1,922	1,927	1,922	1,942	1,942	1,919	1,899	1,736	1,499	1,499	1,499	54,844	1,828
Interest on Loan	Local	-	-	-	-	-	-	-	-	-	-	-	-	-	-	153,404	5,113
Sub-Total	Foreign	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	667	667	667	667	667	61,111	2,037
	Local	24,523	24,517	24,576	24,484	24,504	24,484	24,569	24,569	24,471	23,610	22,927	21,930	21,930	21,923	855,797	28,527
	Total	26,977	26,971	27,030	26,938	26,958	26,938	27,023	27,023	26,925	24,277	23,594	22,597	22,597	22,590	916,908	30,564
TOTAL	Foreign	144,018	144,090	154,038	154,229	153,678	153,467	153,658	147,163	147,096	100,305	96,924	94,833	92,383	69,361	4,252,261	141,742
	Local	264,694	264,715	277,203	276,791	276,495	276,186	276,910	274,031	273,227	250,779	244,129	216,496	211,855	173,834	9,292,575	309,753
	Total	408,712	408,805	431,241	431,020	430,173	429,653	430,568	421,194	420,323	351,084	341,053	311,329	304,238	243,195	13,544,836	451,495
Credit Coal	Local	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(160,114)	(5,338)
GRAND TOTAL	Foreign	144,018	144,090	154,038	154,229	153,678	153,467	153,658	147,163	147,096	100,305	96,924	94,833	92,383	69,361	4,252,261	141,742
	Local	264,694	264,715	277,203	276,791	276,495	276,186	276,910	274,031	273,227	250,779	244,129	216,496	211,855	173,834	9,132,461	304,415
	Total	408,712	408,805	431,241	431,020	430,173	429,653	430,568	421,194	420,323	351,084	341,053	311,329	304,238	243,195	13,384,722	446,157

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-2  
OPERATING COST  
SUMMARY  
(000's) RUPEES

Sheet 1

Description	Currency	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
		Underground Mine	Foreign	13,238	16,241	13,493	13,327	15,233	12,971	11,972	11,027	11,254	13,995	14,880	13,324	10,449	10,774
	Local	26,750	30,039	28,895	28,992	29,929	28,803	28,719	28,482	28,103	29,241	29,700	29,021	27,285	27,537	27,591	27,335
	Total	39,988	46,280	42,388	42,319	45,162	41,774	40,691	39,509	39,357	43,236	44,580	42,345	37,734	38,311	38,041	37,462
Open Pits	Foreign	123,447	137,621	138,454	138,188	138,008	138,070	138,966	138,811	138,791	138,851	139,114	134,238	130,776	130,724	128,529	128,481
	Local	117,031	135,080	136,794	136,661	136,561	136,680	137,725	137,523	137,607	137,619	137,815	131,758	127,609	127,648	124,774	124,781
	Total	240,478	272,701	275,248	274,849	274,569	274,750	276,691	276,384	276,398	276,470	276,929	265,996	258,385	258,372	253,303	253,262
Surface Facilities	Foreign	890	890	890	890	890	890	890	890	890	890	890	890	890	890	890	890
	Local	6,856	7,824	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196
	Total	7,746	8,714	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086
Preparation Plant	Foreign	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079
	Local	3,503	4,197	5,024	5,033	5,047	5,072	5,084	5,101	5,072	5,054	5,057	5,051	5,054	5,070	5,067	5,091
	Total	5,582	6,276	7,103	7,112	7,126	7,151	7,163	7,180	7,151	7,133	7,136	7,130	7,133	7,149	7,146	7,170
General Expense	Local	1,100	1,451	1,803	1,810	1,820	1,840	1,849	1,862	1,840	1,826	1,828	1,824	1,826	1,838	1,836	1,855
Sub-Total	Foreign	139,654	156,831	154,916	154,484	156,210	154,010	153,907	152,807	153,014	155,815	156,963	150,531	144,194	144,467	141,948	141,587
	Local	155,240	178,591	180,712	180,692	181,553	180,591	181,573	181,214	180,818	181,936	182,596	175,850	169,970	170,289	167,464	167,258
	Total	294,894	335,422	335,628	335,176	337,763	334,601	335,480	334,021	333,832	337,751	339,559	326,381	314,164	314,756	309,412	308,835
Head Office Over Head	Local	880	1,156	1,442	1,448	1,457	1,472	1,479	1,490	1,472	1,461	1,462	1,459	1,461	1,470	1,469	1,484
MINE TOTAL	Foreign	139,654	156,831	154,916	154,484	156,210	154,010	153,907	152,807	153,014	155,815	156,963	150,531	144,194	144,467	141,948	141,577
	Local	156,120	179,747	182,154	182,140	183,010	182,063	183,052	182,704	182,290	183,397	184,058	177,309	171,431	171,759	168,933	168,742
	Total	295,774	336,578	337,070	336,624	339,220	336,073	336,959	335,511	335,304	339,212	341,021	327,840	315,625	316,226	310,881	310,319
Railway	Foreign	667	1,560	1,561	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454
	Local	7,015	10,275	18,034	18,446	18,481	18,546	18,576	18,616	18,546	18,496	18,506	18,491	18,496	18,536	18,531	18,596
	Total	7,682	11,835	19,595	20,900	20,935	21,000	21,030	21,070	21,000	20,950	20,960	20,945	20,950	20,990	20,985	21,050
GRAND TOTAL	Foreign	140,321	158,391	156,477	156,938	158,664	156,464	156,361	155,261	155,468	158,269	159,417	152,985	146,648	146,921	144,402	144,031
	Local	163,135	190,022	200,188	200,586	201,491	200,609	201,628	201,320	200,836	201,893	202,564	195,800	189,927	190,295	187,464	187,338
	Total	303,456	348,413	356,665	357,524	360,155	357,073	357,989	356,581	356,304	360,162	361,981	348,785	336,575	337,216	331,866	331,369

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-2  
OPERATING COST  
SUMMARY  
(000's) RUPEES

(Continued)

Sheet 2

Description	Currency	Year														Total	Average
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Underground Mine	Foreign	10,128	10,130	10,130	10,128	10,129	9,982	10,127	3,653	3,650	3,408	2,180	-	-	-	286,400	9,547
	Local	27,354	27,355	27,322	27,260	27,267	27,126	27,300	24,431	24,323	22,245	20,685	-	-	-	739,090	24,636
	Total	37,482	37,485	37,452	37,388	37,396	37,108	37,427	28,084	27,973	25,653	22,865	-	-	-	1,025,490	34,183
Open Pits	Foreign	128,467	128,537	138,485	138,678	138,448	138,384	138,430	138,409	138,345	93,721	93,780	93,869	91,419	68,642	3,828,683	127,623
	Local	124,774	124,833	137,009	137,194	136,912	136,860	136,912	136,902	136,780	117,740	117,697	117,768	113,127	75,227	3,873,451	129,115
	Total	253,241	253,370	275,494	275,872	275,360	275,244	275,342	275,311	275,125	211,461	211,477	211,637	204,546	143,869	7,702,134	256,738
Surface Facilities	Foreign	890	890	890	890	890	890	890	890	890	752	297	297	297	52	23,945	798
	Local	8,195	8,195	8,195	8,195	8,195	8,195	8,195	8,195	8,195	8,135	7,896	6,785	6,785	6,675	239,455	7,982
	Total	9,085	9,085	9,085	9,085	9,085	9,085	9,085	9,085	9,085	8,887	8,193	7,082	7,082	6,727	263,400	8,780
Preparation Plant	Foreign	2,079	2,079	2,079	2,079	1,757	1,757	1,757	1,757	1,757	1,757	-	-	-	-	52,122	1,737
	Local	5,094	5,092	5,110	5,082	4,952	4,946	4,972	4,972	4,942	4,917	3,881	3,480	3,480	3,480	142,977	4,766
	Total	7,173	7,171	7,189	7,161	6,709	6,703	6,729	6,729	6,699	6,674	3,881	3,480	3,480	3,480	195,099	6,503
General Expense	Local	1,857	1,855	1,869	1,848	1,853	1,848	1,868	1,868	1,845	1,826	1,669	1,442	1,442	1,442	52,740	1,758
Sub-Total	Foreign	141,564	141,636	151,584	151,775	151,224	151,013	151,204	144,709	144,642	99,638	96,257	94,166	91,716	68,694	4,191,150	139,705
	Local	167,274	167,330	179,505	179,579	179,179	178,975	179,247	176,368	176,085	154,863	151,828	129,475	124,834	86,824	5,047,713	168,257
	Total	308,838	308,966	331,089	331,354	330,403	329,988	339,451	321,077	320,727	254,501	248,085	223,641	216,550	155,518	9,238,863	307,962
Head Office Over Head	Local	1,486	1,484	1,495	1,479	1,482	1,478	1,494	1,494	1,476	1,461	1,335	1,153	1,153	1,153	42,185	1,406
MINE TOTAL	Foreign	141,564	141,636	151,584	151,775	151,224	151,013	151,204	144,709	144,642	99,638	96,257	94,166	91,716	68,694	4,191,150	139,705
	Local	168,760	168,814	181,000	181,058	180,661	180,453	180,741	177,862	177,561	156,324	153,163	130,628	125,987	87,977	5,089,898	169,663
	Total	310,324	310,450	332,584	332,833	331,885	331,466	331,945	322,571	322,203	255,962	249,420	224,794	217,703	156,671	9,281,048	309,368
Railway	Foreign	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	667	667	667	667	667	61,111	2,037
	Local	18,601	18,596	18,641	18,571	18,586	18,571	18,636	18,636	18,561	17,720	172,000	16,440	16,440	16,440	527,826	17,594
	Total	21,055	21,050	21,095	21,025	21,040	21,025	21,090	21,090	21,015	18,387	17,867	17,107	17,107	17,107	588,937	19,631
GRAND TOTAL	Foreign	144,018	144,090	154,038	154,229	153,678	153,467	153,658	147,163	147,096	100,305	96,924	94,833	92,383	69,361	4,252,261	141,742
	Local	187,361	187,410	199,641	199,629	199,247	199,024	199,377	196,498	196,122	174,044	170,363	147,068	142,427	194,417	5,617,724	187,257
	Total	331,379	331,500	353,679	353,858	352,925	352,491	353,035	343,661	343,218	274,349	267,287	241,901	234,810	173,778	9,869,985	328,999

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-3  
OPERATING COST  
SUMMARY OF MINE  
(000's) RUPEES

Sheet 1

Description	Currency	Year															
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Wages	Local	8,513	10,393	10,902	10,902	10,902	10,902	10,902	10,902	10,902	10,902	10,902	10,902	10,630	10,630	10,630	10,630
Salaries	Local	3,719	4,034	4,077	4,077	4,077	4,077	4,077	4,077	4,077	4,077	4,077	4,077	4,035	4,035	4,035	4,035
Power	Local	5,599	6,149	6,300	6,338	6,323	6,304	6,422	6,432	6,367	6,358	6,466	6,365	6,251	6,269	6,247	6,288
Replacement & Improvement	Foreign	54,945	54,945	54,945	54,945	54,945	54,945	54,945	54,945	54,945	54,945	54,945	54,945	54,945	54,945	54,945	54,945
	Local	24,439	24,439	24,439	24,439	24,439	24,439	24,439	24,439	24,439	24,439	24,539	24,439	24,439	24,439	24,439	24,439
	Total	79,384	79,384	79,384	79,384	79,384	79,384	79,384	79,384	79,384	79,384	79,384	79,384	79,384	79,384	79,384	79,384
Material & Supplies	Foreign	51,481	63,030	60,518	60,157	61,937	59,675	59,126	58,181	58,391	61,171	62,215	57,624	52,569	52,867	51,196	50,834
	Local	95,652	114,568	115,330	115,277	116,151	115,173	115,955	115,585	115,275	116,409	116,935	110,661	105,473	105,767	103,136	102,872
	Total	147,133	177,598	175,848	175,434	178,088	174,848	175,171	173,766	173,666	177,580	179,150	168,285	158,042	158,634	154,332	153,706
Maintenance	Foreign	33,228	38,856	39,453	39,382	39,328	39,390	39,746	39,681	39,678	39,699	39,803	37,962	36,680	36,655	35,807	35,798
	Local	16,110	17,406	17,710	17,698	17,790	17,705	17,778	17,766	17,767	17,774	17,798	17,431	17,176	17,171	17,001	16,999
	Total	49,338	56,262	57,163	57,080	57,018	57,095	57,524	57,447	57,445	57,473	57,601	55,393	53,856	53,826	52,808	52,747
Others	Local	2,088	2,758	3,396	3,409	3,428	3,463	3,479	3,503	3,463	3,438	3,441	3,434	3,427	3,448	3,445	3,479
TOTAL	Foreign	139,654	156,831	154,916	154,484	156,210	154,010	153,907	152,807	153,014	155,815	156,963	150,531	144,194	144,467	141,948	141,577
	Local	156,120	179,747	182,154	182,140	183,010	182,063	183,052	182,704	182,290	183,397	184,058	177,309	171,431	171,759	168,933	168,742
	Total	295,774	336,578	337,070	336,624	339,220	336,073	336,959	335,511	335,304	339,212	341,021	327,840	315,625	316,226	310,881	310,319

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-3  
OPERATING COST  
SUMMARY OF MINE  
(000's) RUPEES

Sheet 2

(Continued)		Y e a r														Total	Average
Description	Currency	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Wages	Local	10,630	10,630	10,630	10,630	10,630	10,630	10,630	10,630	10,630	10,630	9,362	5,973	5,973	5,526	302,312	10,077
Salaries	Local	4,035	4,035	4,035	4,035	4,035	4,035	4,035	4,035	4,035	3,951	3,951	3,096	3,096	2,995	118,067	3,936
Power	Local	6,276	6,284	6,449	64,58	6,450	6,440	6,443	6,365	6,242	5,842	5,119	2,795	2,683	1,884	176,168	5,872
Replacement & Improvement	Foreign	54,945	54,945	54,945	54,945	54,623	64,623	54,623	50,348	50,348	50,348	50,348	50,348	50,348	50,326	1,615,183	53,839
	Local	24,438	24,438	24,438	24,438	24,301	24,301	24,301	22,467	22,467	22,467	22,467	22,467	22,467	22,430	718,911	23,964
	Total	79,383	79,383	79,383	79,383	78,924	78,924	78,924	72,815	72,815	72,815	72,815	72,815	72,815	72,815	2,334,094	77,803
Material & Supplies	Foreign	50,831	50,877	57,051	57,170	57,021	56,836	57,003	56,991	56,976	39,900	38,959	36,861	34,764	14,516	1,586,818	52,893
	Local	102,901	102,946	114,187	114,258	114,014	113,831	114,075	114,053	113,926	94,582	93,553	85,377	81,201	47,367	3,186,490	106,217
	Total	153,732	153,823	171,238	171,428	171,035	170,667	171,078	171,044	170,902	134,482	132,512	122,238	115,965	61,883	4,773,308	159,110
Maintenance	Foreign	35,788	35,814	39,588	39,660	39,580	39,554	39,578	37,370	37,318	9,390	6,950	6,957	6,604	3,852	989,149	32,973
	Local	16,997	17,002	17,757	17,772	17,756	17,750	17,755	16,810	16,800	16,744	15,618	8,325	7,972	5,220	489,258	16,307
	Total	52,785	52,816	57,345	57,432	57,336	57,304	57,333	54,180	54,118	26,134	22,568	15,282	14,576	9,072	1,478,407	49,280
Others	Local	3,483	3,479	3,504	3,467	3,475	3,466	3,502	3,502	3,461	3,376	3,093	2,595	2,595	2,595	98,692	3,290
TOTAL	Foreign	141,564	141,636	151,584	151,775	151,224	151,013	151,204	144,709	144,642	99,638	96,257	94,166	91,716	68,694	4,191,150	139,705
	Local	168,760	168,814	181,000	181,058	180,661	180,453	180,741	177,862	177,561	156,324	153,163	130,628	125,987	87,977	5,089,898	169,663
	Total	310,324	310,450	332,584	332,833	331,885	331,466	331,945	322,571	322,203	255,962	249,420	224,794	217,703	156,671	9,281,048	309,368

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No. escalation.

TABLE 3-4  
OPERATING COST  
UNDERGROUND MINE  
(000's) RUPEES

Sheet 1

Description	Currency	Year															
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Wages	Local	2,986	4,055	4,055	4,055	4,055	4,055	4,055	4,055	4,055	4,055	4,055	4,055	3,783	3,783	3,783	3,783
Salaries	Local	689	773	773	773	773	773	773	773	773	773	773	773	731	731	731	731
Power	Local	3,144	3,264	3,328	3,401	3,408	3,391	3,473	3,491	3,443	3,433	3,515	3,519	3,493	3,534	3,534	3,580
Replacement & Improvement	Foreign	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275
	Local	1,834	1,834	1,834	1,834	1,834	1,834	1,834	1,834	1,834	1,834	1,834	1,834	1,834	1,834	1,834	1,834
	Total	6,109	6,109	6,109	6,109	6,109	6,109	6,109	6,109	6,109	6,109	6,109	6,109	6,109	6,109	6,109	6,109
Materials & Supplies	Foreign	6,679	9,652	6,883	6,707	8,606	6,329	5,320	4,370	4,595	7,325	8,195	6,630	3,747	4,072	3,748	3,425
	Local	9,816	11,772	10,558	10,577	11,503	10,389	10,219	9,962	9,629	10,772	11,143	10,457	9,069	9,280	9,334	9,032
	Total	16,495	21,424	17,441	17,284	20,109	16,718	15,539	14,332	14,224	18,097	19,338	17,087	12,816	13,352	13,082	12,457
Maintenance	Foreign	2,284	2,314	2,335	2,345	2,352	2,367	2,377	2,382	2,384	2,395	2,410	2,419	2,427	2,427	2,427	2,427
	Local	8,173	8,190	8,196	8,201	8,205	8,210	8,214	8,216	8,218	8,223	8,229	8,232	8,235	8,235	8,235	8,235
	Total	10,457	10,504	10,531	10,546	10,557	10,577	10,591	10,598	10,602	10,618	10,639	10,651	10,662	10,662	10,662	10,662
Absenteeism	Local	108	151	151	151	151	151	151	151	151	151	151	151	140	140	140	140
TOTAL	Foreign	13,238	16,241	13,493	13,327	15,233	12,971	11,972	11,027	11,254	13,995	14,880	13,324	10,449	10,774	10,450	10,127
	Local	26,750	30,039	28,895	28,992	29,929	28,803	28,719	28,482	28,103	29,241	29,700	29,021	27,285	27,537	27,591	27,335
	Total	39,988	46,280	42,388	42,319	45,162	41,774	40,691	39,509	39,357	43,236	44,580	42,345	37,734	38,311	38,041	37,462

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

\* Average (1) for 27 years  
Average (2) for 30 years

TABLE 3-4  
OPERATING COST  
UNDERGROUND MINE  
(000's) RUPEES

(Continued)

Sheet 2

Description	Currency	Year														Total	Average (1)	Average (2)
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015			
Wages	Local	3,783	3,783	3,783	3,783	3,783	3,783	3,783	3,783	3,783	2,515	2,515	-	-	-	101,800	3,771	3,393
Salaries	Local	731	731	731	731	731	731	731	731	731	647	647	-	-	-	19,989	740	666
Power	Local	3,573	3,573	3,490	3,490	3,482	3,482	3,475	3,401	3,284	2,882	2,238	-	-	-	91,321	3,382	3,044
Replacement & Improvement	Foreign	4,275	4,275	4,275	4,275	4,275	4,275	4,275	-	-	-	-	-	-	-	98,325	3,642	3,278
	Local	1,834	1,834	1,834	1,834	1,834	1,834	1,834	-	-	-	-	-	-	-	42,182	1,562	1,406
	Total	6,109	6,109	6,109	6,109	6,109	6,109	6,109	-	-	-	-	-	-	-	140,507	5,204	4,684
Materials & Supplies	Foreign	3,426	3,428	3,428	3,426	3,427	3,280	3,425	3,428	3,425	3,183	2,180	-	-	-	132,339	4,901	4,411
	Local	9,058	9,059	9,109	9,047	9,062	8,921	9,102	9,085	9,094	8,821	8,001	-	-	-	261,871	9,699	8,729
	Total	12,484	12,487	12,537	12,473	12,489	12,201	12,527	12,513	12,519	12,004	10,181	-	-	-	394,210	14,600	13,140
Maintenance	Foreign	2,427	2,427	2,427	2,427	2,427	2,427	2,427	225	225	225	-	-	-	-	55,736	2,064	1,858
	Local	8,235	8,235	8,235	8,235	8,235	8,235	8,235	7,291	7,291	7,291	7,195	-	-	-	218,160	8,080	7,272
	Total	10,662	10,662	10,662	10,662	10,662	10,662	10,662	7,516	7,516	7,516	7,195	-	-	-	273,896	10,144	9,130
Absenteeism	Local	140	140	140	140	140	140	140	140	140	89	89	-	-	-	3,767	140	126
TOTAL	Foreign	10,128	10,130	10,130	10,128	10,129	9,982	10,127	3,653	3,650	3,408	2,180	-	-	-	286,400	10,607	9,547
	Local	27,354	27,355	27,322	27,260	27,267	27,126	27,300	24,431	24,323	22,245	20,685	-	-	-	739,090	27,374	24,636
	Total	37,482	37,485	37,452	37,388	37,396	37,108	37,427	28,084	27,973	25,653	22,865	-	-	-	1,025,490	37,981	34,183

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

\* Average (1) for 27 years  
Average (2) for 30 years

TABLE 3-5  
OPERATING COST  
OPEN PITS  
(000's) RUPEES

Sheet 1

Description	Currency	Year															
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Wages	Local	2,492	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538
Salaries	Local	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936
Power	Local	1,723	1,992	1,971	1,934	1,909	1,901	1,934	1,912	1,912	1,917	1,942	1,839	1,750	1,723	1,702	1,692
Replacement & Improvement	Foreign	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286
	Local	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393
	Total	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679
Material and Supplies	Foreign	44,567	53,143	53,400	53,215	53,096	53,111	53,661	53,576	53,561	53,611	53,785	50,759	48,587	48,560	47,213	47,174
	Local	83,692	100,306	101,925	101,846	101,783	101,900	102,843	102,717	102,762	102,767	102,920	97,336	93,534	93,605	90,922	90,941
	Total	128,259	153,449	155,325	155,061	154,879	155,011	156,504	156,293	156,323	156,378	156,705	148,095	142,121	142,165	138,135	138,115
Maintenance	Foreign	28,594	34,192	34,768	34,687	34,626	34,673	35,019	34,949	34,944	34,954	35,043	33,193	31,903	31,878	31,030	31,021
	Local	5,796	6,915	7,031	7,014	7,002	7,012	7,081	7,067	7,066	7,068	7,086	6,716	6,458	6,453	6,283	6,281
	Total	34,390	41,107	41,799	41,701	41,628	41,685	42,100	42,016	42,010	42,022	42,129	39,909	38,361	38,331	37,313	37,302
TOTAL	Foreign	123447	137,621	138,454	138,188	138,008	138,070	138,966	138,811	138,791	138,851	139,114	134,238	130,776	130,724	128,529	128,481
	Local	117,031	135,080	136,794	136,661	136,561	136,680	137,725	137,573	137,607	137,619	137,815	131,758	127,609	127,648	124,774	124,781
	Total	240,478	272,701	275,248	274,894	274,569	274,750	276,691	276,384	276,398	276,470	276,929	265,996	258,385	258,372	253,303	253,262

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-5  
 OPERATING COST  
 OPEN PITS  
 (000's) RUPEES

(Continued)

Sheet 2

Description	Currency	Year														Total	Average
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Wages	Local	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,091	75,647	2,522
Salaries	Local	936	936	936	936	936	936	936	936	936	936	936	936	936	835	27,979	933
Power	Local	1,686	1,964	1,938	1,953	1,952	1,943	1,947	1,943	1,944	1,952	1,964	1,976	1,864	1,025	55,543	1,851
Replacement & Improvement	Foreign	50,286	20,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,286	50,274	1,508,568	50,286
	Local	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,393	22,366	671,763	22,392
	Total	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,679	72,640	2,180,331	72,678
Material and Supplies	Foreign	47,170	47,214	53,388	53,509	53,359	53,321	53,343	53,328	53,316	36,482	36,544	36,626	34,529	14,516	1,447,664	48,255
	Local	90,942	90,988	102,165	102,320	102,055	102,018	102,061	102,056	101,943	82,891	82,839	82,891	78,715	44,981	2,840,664	94,689
	Total	138,112	138,202	155,553	155,829	155,414	155,339	155,404	155,384	155,259	119,373	119,383	119,517	113,244	59,497	4,288,328	142,944
Maintenance	Foreign	31,011	31,037	34,811	34,883	34,803	34,777	34,801	34,795	34,743	6,953	6,950	6,957	6,604	3,852	872,451	29,082
	Local	6,279	6,284	7,039	7,054	7,038	7,032	7,037	7,036	7,026	7,030	7,027	7,034	6,681	3,929	201,855	6,728
	Total	37,290	37,321	41,850	41,937	41,841	41,809	41,838	41,831	41,769	13,983	13,977	13,991	13,285	7,781	1,074,306	35,810
TOTAL	Foreign	128,467	128,537	138,485	138,678	138,448	138,384	138,430	138,409	138,345	93,721	93,780	93,869	91,419	68,642	3,828,683	127,623
	Local	124,774	124,833	137,009	137,194	136,912	136,860	136,912	136,902	136,780	117,740	117,697	117,768	113,127	75,227	3,873,451	129,115
	Total	253,241	253,370	275,494	275,872	275,360	275,244	275,342	275,311	275,125	211,461	211,477	211,637	204,546	143,869	7,702,134	256,738

Freight, taxes and duty included.  
 The estimates reflect 1980 June price levels.  
 No escalation.

TABLE 3-6  
OPERATING COST  
SURFACE FACILITIES  
(000's)RUPEES

Sheet 1

Description	Currency	Y e a r															
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Wages	Local	2,558	3,240	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569
Salaries	Local	1,898	2,129	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172
Power	Local	401	456	456	456	456	456	456	456	456	456	456	456	456	456	456	456
Replacement & Improvement	Foreign	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
	Local	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
	Total	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137
Materials & Supplies	Foreign	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235
	Local	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044
	Total	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279
Maintenance	Foreign	593	593	593	593	593	593	593	593	593	593	593	593	593	593	593	593
	Local	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880
	Total	1,473	14,73	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473
TOTAL	Foreign	890	890	890	890	890	890	890	890	890	890	890	890	890	890	890	890
	Local	6,856	7,824	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196	8,196
	Total	7,746	8,714	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086	9,086

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-6  
OPERATING COST  
SURFACE FACILITIES  
(000's) RUPEES

(Continued)

Sheet 2

Description	Currency	Year														Total	Average
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Wages	Local	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	2,695	2,695	2,695	103,108	3,437
Salaries	Local	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	1,964	1,964	1,964	64,219	2,141
Power	Local	456	456	456	456	456	456	456	456	456	456	412	383	383	383	13,362	445
Replacement & Improvement	Foreign	62	62	62	62	62	62	62	62	62	62	62	62	62	52	1,850	62
	Local	74	74	74	74	74	74	74	74	74	74	74	74	74	64	2,226	74
	Total	136	136	136	136	136	136	136	136	136	136	136	136	136	116	4,076	136
Material & Supplies	Foreign	235	235	235	235	235	235	235	235	235	235	235	235	235	-	6,815	227
	Local	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	944	31,220	1,041
	Total	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	1,279	944	38,035	1,268
Maintenance	Foreign	593	593	593	593	593	593	593	593	593	455	-	-	-	-	15,280	509
	Local	880	880	880	880	880	880	880	880	880	820	625	625	625	625	25,320	844
	Total	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,275	625	625	625	625	40,600	1,353
TOTAL	Foreign	890	890	890	890	890	890	890	890	890	752	297	297	297	52	23,945	798
	Local	8,195	8,195	8,195	8,195	8,195	8,195	8,195	8,195	8,195	8,135	7,896	6,785	6,785	6,675	239,455	7,982
	Total	9,085	9,085	9,085	9,085	9,085	9,085	9,085	9,085	9,085	8,085	8,887	8,193	7,082	7,082	6,727	263,400

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-7  
OPERATING COST  
PREPARATION PLANT  
(000's) RUPEES

Sheet 1

Description	Currency	Year															
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Wages	Local	477	560	740	740	740	740	740	740	740	740	740	740	740	740	740	740
Salaries	Local	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196
Power	Local	332	437	545	547	550	556	559	563	556	552	553	551	552	556	555	560
Replacement & Improvement	Foreign	322	322	322	322	322	322	322	322	322	322	322	322	322	322	322	322
	Local	137	137	137	137	137	137	137	137	138	137	137	137	137	137	137	137
	Total	459	459	457	457	457	457	457	457	457	457	457	457	457	457	457	457
Materials and Supplies	Local	1,100	1,446	1,803	1,810	1,821	1,840	1,849	1,862	1,840	1,826	1,828	1,824	1,826	1,838	1,836	1,855
Maintenance	Foreign	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757
	Local	1,261	1,421	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603
	Total	3,018	3,178	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360
TOTAL	Foreign	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079	2,079
	Local	3,503	4,197	5,024	5,033	5,047	5,072	5,084	5,101	5,072	5,054	5,507	5,051	5,054	5,070	5,067	5,091
	Total	5,582	6,276	7,103	7,112	7,126	7,151	7,163	7,180	7,151	7,133	7,136	7,130	7,133	7,149	7,146	7,170

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-7  
OPERATING COST  
PREPARATION PLANT  
(000's) RUPEES

Sheet 2

(Continued)		Y e a r														Total	Average
Description	Currency	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Wages	Local	740	740	740	740	740	740	740	740	740	740	740	740	740	740	21,757	725
Salaries	Local	196	196	196	196	196	196	196	196	196	196	196	196	196	196	5,880	196
Power	Local	561	561	565	559	560	559	565	565	558	552	505	436	436	436	15,942	531
Replacement & Improvement	Foreign	322	322	322	322	-	-	-	-	-	-	-	-	-	-	6,440	214
	Local	137	137	137	137	-	-	-	-	-	-	-	-	-	-	2,740	92
	Total	457	457	457	457											9,180	206
Materials and Supplies	Local	1,857	1,855	1,869	1,847	1,853	1,848	1,868	1,868	1,845	1,826	1,669	1,442	1,442	1,442	52,735	1,756
Maintenance	Foreign	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	1,757	-	-	-	-	45,682	1,523
	Local	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	1,603	771	666	666	666	43,923	1,464
	Total	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	3,360	771	666	666	666	89,605	2,987
TOTAL	Foreign	2,079	2,079	2,079	2,079	1,757	1,757	1,757	1,757	1,757	1,757	-	-	-	-	52,122	1,737
	Local	5,094	5,092	5,110	5,082	4,952	4,946	4,972	4,972	4,942	4,917	3,881	3,480	3,480	3,480	142,977	4,766
	Total	7,173	7,171	7,189	7,161	6,709	6,703	6,729	6,729	6,699	6,674	3,881	3,480	3,480	3,480	195,099	6,503

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No. escalation.

TABLE 3-8  
OPERATING COST  
RAILWAY  
(000's) RUPEES

Sheet 1

Description	Currency	Year															
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Wages	Local	64	127	382	382	382	382	382	382	382	382	382	382	382	382	382	382
Power	Local	35	70	176	176	176	176	176	176	176	176	176	176	176	176	176	176
Replacement & Improvement	Foreign	667	667	667	667	667	667	667	667	667	667	667	667	667	667	667	667
	Local	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285
	Total	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952	952
Material & Supplies	Local	1,620	3,240	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100
Maintenance	Foreign	-	893	894	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787
	Local	1,346	1,733	3,081	3,468	3,468	3,468	3,468	3,468	3,468	3,468	3,468	3,468	3,468	3,468	3,468	3,468
	Total	1,346	2,626	3,975	5,255	5,255	5,255	5,255	5,255	5,255	5,255	5,255	5,255	5,255	5,255	5,255	5,255
TOTAL	Foreign	667	1,560	1,561	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454
	Local	3,350	5,455	12,024	12,411	12,411	12,411	12,411	12,411	12,411	12,411	12,411	12,411	12,411	12,411	12,411	12,411
	Total	4,017	7,015	13,585	14,865	14,865	14,865	14,865	14,865	14,865	14,865	14,865	14,865	14,865	14,865	14,865	14,865
Existing Railway	Local	3,665	4,820	6,010	6,035	6,070	6,135	6,165	6,205	6,135	6,085	6,095	6,080	6,085	6,125	6,120	6,185
GRAND TOTAL	Foreign	667	1,560	1,561	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454
	Local	7,015	10,275	13,034	18,446	18,481	18,546	18,576	18,616	18,546	18,496	18,506	18,491	18,496	18,536	18,531	18,596
	Total	7,682	11,835	19,595	20,900	20,935	21,000	21,030	21,070	21,000	20,950	20,960	20,945	20,950	20,990	20,985	21,050

Freight, taxes and duty included.

The estimates reflect 1980 June price levels.  
No escalation.

\* Average (1) for 27 years  
Average (2) for 30 years

TABLE 3-8  
OPERATING COST  
RAILWAY  
(000's) RUPEES

Sheet 2

(Continued)

Description	Currency	Year														Total	Average*
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Wages	Local	382	382	382	382	382	382	382	382	382	382	382	382	382	382	10,887	363
Power	Local	176	176	176	176	176	176	176	176	176	176	176	176	176	176	5,033	168
Replacement & Improvement	Foreign	667	667	667	667	667	667	667	667	667	667	667	667	667	667	20,010	667
	Local	285	285	285	285	285	285	285	285	285	285	285	285	285	285	8,550	285
	Total	952	952	952	952	952	952	952	952	952	952	952	952	952	952	28,560	952
Materials & Supplies	Local	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	231,660	7,722
Maintenance	Foreign	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787	-	-	-	-	-	41,101	1,370
	Local	3,468	3,468	3,468	3,468	3,468	3,468	3,468	3,468	3,468	2,692	2,692	2,692	2,692	2,692	195,916	3,197
	Total	5,255	5,255	5,255	5,255	5,255	5,255	5,255	5,255	5,255	2,692	2,692	2,692	2,692	2,692	137,017	4,567
TOTAL	Foreign	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,667	667	667	667	667	61,111	2,037
	Local	12,411	12,411	12,411	12,411	12,411	12,411	12,411	12,411	12,411	11,635	11,635	11,635	11,635	11,635	352,046	11,735
	Total	14,865	14,865	14,865	14,865	14,865	14,865	14,865	14,865	14,865	14,865	12,302	12,302	12,302	12,302	413,157	13,772
Existing Railway	Local	6,190	6,185	6,230	6,160	6,175	6,160	6,225	6,225	6,150	6,085	5,565	4,805	4,805	4,805	175,780	5,859
GRAND TOTAL	Foreign	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	2,454	667	667	667	667	667	61,111	2,037
	Local	18,601	18,596	18,641	18,571	18,586	18,571	18,636	18,636	18,561	17,720	17,200	16,440	16,440	16,440	527,826	17,594
	Total	21,055	21,050	21,095	21,025	21,040	21,025	21,090	21,090	21,015	18,387	17,867	17,107	17,107	17,107	588,937	19,631

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-9  
SUMMARY OF OPERATING COST  
PER CLEAN COAL TONNE  
(RUPEE)

Description	Currency	Y F A R																											Average			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		2013	2014	2015
Mine	Foreign	190	163	129	128	128	126	125	123	125	128	129	124	118	118	116	115	115	115	122	123	123	123	122	116	118	82	86	98	95	71	119
	Local	213	186	151	151	151	148	148	147	148	151	151	146	141	140	138	136	136	136	145	147	146	146	145	143	144	128	138	136	131	92	145
	Total	403	349	280	279	279	274	273	270	273	279	280	270	259	258	254	251	251	251	267	270	269	269	267	259	262	210	224	234	226	163	264
Depreciation on Assets	Local	52	39	32	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	34	40	40	40	32
Amortization	Local	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
Interest on Loan	Local	312	214	152	133	113	93	74	55	37	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36
Mine Sub-Total	Foreign	190	163	129	128	128	126	125	123	125	128	129	124	118	118	116	115	115	115	122	123	123	123	122	116	118	82	86	98	95	71	119
	Local	604	466	362	342	322	299	280	260	243	228	209	204	199	198	196	194	194	194	203	205	204	204	203	201	202	186	199	203	198	159	240
	Total	794	629	491	470	450	425	405	383	368	356	338	328	317	316	312	309	309	309	325	328	327	327	325	317	320	268	285	301	293	230	359
Rail	Foreign	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2
	Local	9	11	16	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	17	17	17	15
	Total	10	12	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16	16	18	18	18	17
Depreciation on Assets	Local	5	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	3	
Amortization	Local	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Interest on Loan	Local	44	29	20	16	13	9	7	5	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Railway Sub-Total	Foreign	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2
	Local	60	46	41	36	33	29	27	25	24	22	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	21	23	23	23	24
	Total	61	47	42	38	35	31	29	27	26	24	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	22	24	24	24	26
TOTAL	Foreign	191	164	130	130	130	128	127	125	127	130	131	126	120	120	118	117	117	117	124	125	125	125	124	118	120	83	87	99	96	72	121
	Local	664	512	403	378	355	328	307	285	267	250	229	224	219	218	216	214	214	214	223	225	224	224	223	221	222	206	220	226	221	182	264
	Total	855	676	533	508	485	456	434	410	394	380	360	350	339	338	334	331	331	331	347	350	349	349	347	339	342	289	307	325	317	254	385
Credit Coal	Local	(218)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	( 4)
GRAND TOTAL	Foreign	191	164	130	130	130	128	127	125	127	130	131	126	120	120	118	117	117	117	124	125	125	125	124	118	120	83	87	99	96	72	121
	Local	446	512	403	378	355	328	307	285	267	250	229	224	219	218	216	214	214	214	223	225	224	224	223	221	222	206	220	226	221	182	260
	Total	637	676	533	508	485	456	434	410	394	380	360	350	339	338	334	331	331	331	347	350	349	349	347	339	342	289	307	325	317	254	381

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-10  
OPERATING COST  
SUMMARY  
RUPEES PER CLEAN COAL TONNE

Description	Currency	Year																											Average			
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		2013	2014	2015
Underground Mine	Foreign	18	17	11	11	11	10	10	8	9	11	12	11	8	9	8	8	8	8	8	8	8	8	8	3	3	3	2	-	-	-	8
	Local	36	31	24	24	26	24	23	23	23	24	25	24	23	22	23	22	22	22	22	22	22	22	22	20	18	19	-	-	-	21	
	Total	54	48	35	35	37	34	33	31	32	35	37	35	31	31	31	30	30	30	30	30	30	30	30	23	23	21	21	-	-	-	29
Open Pits	Foreign	168	143	115	114	114	113	112	112	113	114	114	110	107	106	105	104	104	104	111	112	112	112	111	111	113	77	84	98	95	71	108
	Local	160	140	114	114	112	111	112	111	112	113	113	109	105	105	102	101	101	101	101	112	111	111	110	111	111	97	106	122	117	78	111
	Total	328	283	229	228	226	224	224	223	225	227	227	219	212	211	207	205	205	205	221	224	223	223	221	221	224	174	190	220	212	149	219
Surface Facilities	Foreign	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	1	
	Local	9	8	6	6	6	6	6	6	6	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	6
	Total	10	9	7	7	7	7	7	7	7	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Preparation Plant	Foreign	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	-	-	-	-	2	
	Local	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4
	Total	8	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	3	4	4	4	6
General Expenses	Local	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Sub-Total	Foreign	190	163	129	128	128	126	125	123	125	128	129	124	118	118	116	115	115	115	122	123	123	123	122	116	118	82	86	98	95	71	119
	Local	212	185	150	150	150	147	147	146	147	150	150	145	140	139	137	135	135	135	144	146	145	145	144	142	143	127	137	135	130	91	144
	Total	402	348	279	278	278	273	272	269	272	278	279	269	258	257	253	250	250	250	266	269	268	268	266	258	261	209	223	233	225	162	263
Head Office Overhead	Local	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MINE TOTAL	Foreign	190	163	129	128	128	126	125	123	125	128	129	124	118	118	116	115	115	115	122	123	123	123	122	116	118	82	86	98	95	71	119
	Local	213	186	151	151	151	148	148	147	148	151	151	146	141	140	138	136	136	136	145	147	146	146	145	143	144	128	138	136	131	92	145
	Total	403	349	280	279	279	274	273	270	273	279	280	270	259	258	254	251	251	251	267	270	269	269	267	259	262	210	224	234	226	163	264
Railway	Foreign	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2	
	Local	9	11	16	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	17	17	17	15	
	Total	10	12	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16	16	18	18	18	17	17
GRAND TOTAL	Foreign	191	164	130	130	130	128	127	125	127	130	131	126	120	120	118	117	117	117	124	125	125	125	124	118	120	83	87	99	96	72	121
	Local	222	197	167	166	166	163	163	162	163	166	166	161	156	155	153	151	151	151	160	162	161	161	160	158	159	143	153	153	148	109	160
	Total	413	361	297	296	296	291	290	287	290	296	297	287	276	275	271	268	268	268	284	287	286	286	284	276	279	226	240	252	244	181	281

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-11  
OPERATING COST  
SUMMARY OF MINE  
(RUPEES PER CLEAN COAL TONNE)

Description	Currency	Year																												Average		
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		2014	2015
Wages	Local	12	11	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	6	6	6	9
Salaries	Local	5	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	
Power	Local	8	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Replacement & Improvement	Foreign	75	57	46	46	45	45	45	44	45	45	45	45	45	45	45	45	45	45	44	45	45	45	44	41	41	45	53	52	52	46	
	Local	33	25	19	20	20	20	20	20	20	20	20	20	20	20	20	20	19	19	20	20	20	20	19	18	18	20	23	23	24	20	
	Total	108	82	65	66	65	65	65	64	65	65	65	65	65	65	65	65	64	64	64	65	65	65	63	58	59	65	76	75	76	66	
Materials & Supplies	Foreign	70	66	50	49	51	49	48	47	48	50	51	48	43	43	42	41	41	41	46	46	46	46	46	46	46	33	35	38	36	15	45
	Local	130	119	96	96	96	94	94	93	94	96	96	91	87	86	84	83	83	83	91	93	92	92	92	92	93	77	84	89	85	49	91
	Total	200	185	146	145	147	143	142	140	142	146	147	139	130	129	126	124	124	124	137	139	138	138	138	138	139	110	119	127	121	64	136
Maintenance	Foreign	45	40	33	33	32	32	32	32	32	33	33	31	30	30	29	29	29	29	32	32	32	32	30	31	8	6	7	7	4	28	
	Local	22	18	15	15	15	14	14	14	14	15	15	15	14	14	14	13	14	14	14	14	14	14	14	13	13	14	14	9	8	5	14
	Total	67	58	48	48	47	46	46	46	46	48	48	46	44	44	43	42	43	43	46	46	46	46	46	46	43	44	22	20	16	9	42
Others	Local	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
TOTAL	Foreign	190	163	129	128	128	126	125	123	125	128	129	124	118	118	116	115	115	115	122	123	123	123	122	116	118	82	86	98	95	71	119
	Local	213	186	151	151	151	148	148	147	148	151	151	146	141	140	138	136	136	136	145	147	146	146	145	143	144	128	138	136	131	92	145
	Total	403	349	280	279	279	274	273	270	273	279	280	270	259	258	254	251	251	251	267	270	269	269	267	259	262	210	224	234	226	163	264

Freight, taxes and duty included.  
The estimates reflect 1980 June price levels.  
No escalation.





TABLE 3-13

DEPRECIATION SCHEDULE  
(000'S) RUPEES

Mine

A. Depreciation

Description	Total Value
Land	293
Factory Buildings	42,246
Roads	71,118
Machinery & Equipments	1,137,762
Electrical Installation	61,621
Office Buildings, Warehouse, etc.	14,103
Furniture & Fixture	8,974
Transport Assets	2,289
<b>Total</b>	<b>1,274,406</b>

Total Value excluding Land & Roads 1,266,995  
 Less Residual value @ 10% 126,700  
 Net Cost 1,140,295  
 Annual Depreciation 1,140,295 ÷ 30 years = 38,010

B. Development Expenditure

Description	Total Value
1. Preliminary Expenses	31,157
2. Construction & Development	433,257
3. Administration	54,000
4. Deferred Revenue Expenses	24,148
5. Interest	339,000
6. Engineering Fee	67,000
<b>Total</b>	<b>948,562</b>

948,562 ÷ 35,156 = 26.98 Rs./Ton  
 \* 35,156... Total production from 1986 to 2015.

Railway

A. Depreciation

Description	Total Value
Roads	111,053
Machinery & Equipments	116,696
Electrical Installation	13,957
Office Buildings	
Warehouse, etc.	2,372
<b>Total</b>	<b>244,078</b>

Total Value excluding roads 133,025  
 Less Residual value @10% 13,303  
 Net Cost 119,722  
 Annual Depreciation 119,722 ÷ 30 years = 3,991

B. Development Expenditure

Description	Total Value
1. Administration	8,000
2. Interest	37,000
3. Engineering fee	10,000
<b>Total</b>	<b>55,000</b>

55,000 ÷ 35,156 = 1.56 Rs./Ton  
 \* 35,156... Total production from 1986 to 2015.

TABLE 3-14

## SCHEDULE FOR REPAYMENT OF LOAN AND INTEREST

(000 'S) RUPEES

## Mine

Foreign Loan Rs. 1,306,000  
Interest 8.75%

Year	Principal	Interest	Total Payment	Balance
1986	-	114,275	114,275	1,306,000
1987	-	114,275	114,275	1,306,000
1988	-	114,275	114,275	1,306,000
1989	-	114,275	114,275	1,306,000
1990	-	114,275	114,275	1,306,000
1991	261,200	114,275	375,475	1,044,800
1992	261,200	91,420	352,620	783,600
1993	261,200	68,565	329,765	522,400
1994	261,200	45,710	306,910	261,200
1995	261,200	22,855	284,055	-
Total	1,306,000	914,200	2,220,200	-

## Railway

Foreign Loan Rs. 127,000  
Interest 8.75%

Year	Principal	Interest	Total Payment	Balance
1986	-	11,113	11,113	127,000
1987	-	11,113	11,113	127,000
1988	-	11,113	11,113	127,000
1989	-	11,113	11,113	127,000
1990	-	11,113	11,113	127,000
1991	25,400	11,113	36,513	101,600
1992	25,300	8,890	34,290	76,200
1993	25,400	6,668	32,068	50,800
1994	25,400	4,445	29,845	25,400
1995	25,400	2,223	27,623	-
Total	127,000	88,904	215,904	-

Local Loan Rs. 917,000  
Interest 12.5%

Year	Principal	Interest	Total Payment	Balance
1986	183,400	114,625	298,025	733,600
1987	183,400	91,700	275,100	550,200
1988	183,400	68,775	252,175	366,800
1989	183,400	45,850	229,250	183,400
1990	183,400	22,925	206,325	-
Total	917,000	343,875	1,260,875	-

Local Loan Rs. 172,000  
Interest 12.5%

Year	Principal	Interest	Total Payment	Balance
1986	34,400	21,500	55,900	137,600
1987	34,400	17,200	51,600	103,200
1988	34,400	12,900	47,300	68,800
1989	34,400	8,600	43,000	34,400
1990	34,400	4,300	38,700	-
Total	172,000	64,500	236,500	-

TABLE 3-15  
OPERATING COST  
SALARIES AND WAGES SCALE  
(000'S) RUPEES

Section	Description	Year												Total	Average
		1983-1985	1986	1987	1988-1997	1998-2010	2011-2012	2013-2014	2015						
Underground Mine	Officers	-	689	773	773	731	647	-	-	-	-	-	-	19,989	667
	Workers	-	2,986	4,055	4,055	3,783	2,515	-	-	-	-	-	-	101,800	3,394
	Sub-Total	-	3,675	4,828	4,828	4,514	3,162	-	-	-	-	-	-	121,789	4,061
Open Pit	Officers	-	936	936	936	936	936	936	936	936	936	936	835	27,979	935
	Workers	-	2,492	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,091	75,647	2,522
	Sub-Total	-	3,428	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	2,926	103,626	3,457
Administration	Officers	-	1,898	2,129	2,172	2,172	2,172	1,964	1,964	1,964	1,964	1,964	1,964	64,219	2,141
	Workers	-	2,558	3,240	3,569	3,569	3,569	3,569	3,569	3,569	3,569	3,569	2,695	103,108	3,438
	Sub-Total	-	4,456	5,369	5,741	5,741	5,741	5,741	4,659	4,659	4,659	4,659	4,659	167,327	5,579
Preparation Plant	Officers	-	196	196	196	196	196	196	196	196	196	196	196	5,880	196
	Workers	-	477	560	740	740	740	740	740	740	740	740	740	21,757	725
	Sub-Total	-	673	756	936	936	936	936	936	936	936	936	936	27,637	921
TOTAL	Officers	-	3,719	4,034	4,077	4,035	3,951	3,096	3,096	3,096	3,096	3,096	2,995	118,067	3,939
	Workers	-	8,513	10,393	10,902	10,630	9,362	5,973	5,973	5,973	5,973	5,973	5,526	302,312	10,079
	Sub-Total	-	12,232	14,427	14,979	14,665	13,313	9,069	9,069	9,069	9,069	9,069	8,521	420,379	14,018

The estimates reflect 1980 June price levels.

No escalation.

TABLE 3-16

OPERATING COST  
SALARIES  
(000'S) RUPEES

Section	Description	Salary*	Year												Total	Average
			1983-1985	1986	1987	1988-1997	1998-2010	2011-2012	2013-2014	2015						
Underground Mine	Mine Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	43	1,161	39
	Deputy Mine Manager	3,055	-	73	73	73	73	73	73	73	73	73	73	73	1,971	66
	Assistant Mining Engineer	2,545	-	92	92	92	92	92	92	92	92	92	92	92	2,484	83
	Longwall Face Foremen	1,155	-	83	167	167	83	83	83	83	83	83	83	83	4,257	142
	Pillar Splitting Foremen	1,155	-	-	167	167	42	42	42	42	42	42	42	42	630	21
	Road Heading Foremen	1,155	-	-	167	167	83	83	83	83	83	83	83	83	3,249	108
	Ventilation Foremen	1,155	-	14	14	14	14	14	14	14	14	14	14	14	378	13
	Road Maintenance Foremen	1,155	-	56	56	56	56	56	56	56	56	56	56	56	1,512	50
	Haulage Foremen	1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,134	38
	Electrical & Mechanical Foremen	1,155	-	97	97	97	97	97	97	97	97	97	97	97	2,619	87
	Safety Lamp Room Foremen	1,155	-	14	14	14	14	14	14	14	14	14	14	14	378	13
	Office Clerk	645	-	8	8	8	8	8	8	8	8	8	8	8	216	7
	Sub-Total			-	689	773	773	731	647	647	647	647	647	647	19,989	667
	West Open Pit	Mine Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	43	1,290
Deputy Mine Manager		3,055	-	73	73	73	73	73	73	73	73	73	73	73	2,190	73
Assistant Mining Engineer		2,545	-	92	92	92	92	92	92	92	92	92	92	92	2,729	91
Stripping Foremen		1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,246	42
Bankshooting Foremen		1,155	-	28	28	28	28	28	28	28	28	28	28	28	826	28
Parting & Coal Loading Foremen		1,155	-	28	28	28	28	28	28	28	28	28	28	28	840	28
Haulage Foremen		1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,246	42
Road Grading Foremen		1,155	-	14	14	14	14	14	14	14	14	14	14	14	420	14
Reclamation Foremen		1,155	-	14	14	14	14	14	14	14	14	14	14	14	420	14
Electrical Foremen		1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,246	42
Mechanical Foremen		1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,246	42
Office Clerk		645	-	8	8	8	8	8	8	8	8	8	8	8	240	8
Sub-Total				-	468	468	468	468	468	468	468	468	468	468	13,939	467
East Open Pit		Mine Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	43	1,290
	Deputy Mine Manager	3,055	-	73	73	73	73	73	73	73	73	73	73	73	2,190	73
	Assistant Mining Engineer	2,545	-	92	92	92	92	92	92	92	92	92	92	92	2,760	92
	Stripping Foremen	1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,260	42
	Bankshooting Foremen	1,155	-	28	28	28	28	28	28	28	28	28	28	28	840	28
	Parting & Coal Loading Foremen	1,155	-	28	28	28	28	28	28	28	28	28	28	28	840	28
	Haulage Foremen	1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,260	42
	Road Grading Foremen	1,155	-	14	14	14	14	14	14	14	14	14	14	14	420	14
	Reclamation Foremen	1,155	-	14	14	14	14	14	14	14	14	14	14	14	420	14
	Mechanical Foremen	1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,260	42
	Electrical Foremen	1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,260	42
	Office Clerk	645	-	8	8	8	8	8	8	8	8	8	8	8	240	8
	Sub-Total			-	468	468	468	468	468	468	468	468	468	468	14,040	468
	Total			-	936	936	936	936	936	936	936	936	936	936	27,979	935

\* Rs./man/month

The estimates reflect 1980 price levels.  
No escalation.

TABLE 3-16

OPERATING COST  
SALARIES  
(000'S) RUPEES

Sheet 2

(Continued)

Section	Description	Salary*	Year												Total	Average
			1983-1985	1986	1987	1988-1997	1998-2010	2011-2012	2013-2014	2015						
<u>Management</u>	General Manager	5,650	-	68	68	68	43	43	68	68	68	68	68	2,040	68	
	Deputy General Manager	5,090	-	122	122	122	33	33	122	122	122	122	122	3,560	122	
	Clerks/Tyrist	645	-	23	23	23	7	7	23	23	23	23	23	690	23	
	Sub-Total	-	-	213	213	213	213	213	213	213	213	213	213	6,390	213	
<u>General Affairs</u>	Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	1,290	43	
	Deputy Manager	2,715	-	33	33	33	33	33	33	33	33	33	33	990	33	
	Clerks/Tyrist	590	-	14	21	28	28	28	14	14	14	14	14	777	26	
	Deputy Manager Security	2,715	-	33	33	33	33	33	33	33	33	33	33	990	33	
<u>Accounting</u>	Security Inspectors	1,130	-	41	41	41	41	41	41	41	41	41	41	1,230	41	
	Clerk	565	-	7	7	7	7	7	7	7	7	7	7	210	7	
	Pesh Imams	645	-	15	23	31	31	31	15	15	15	15	15	858	29	
	Sub-Total	-	-	186	201	216	216	216	216	216	216	216	216	6,345	216	
<u>Labour &amp; Social Welfare</u>	Accountant	3,055	-	37	37	37	37	37	37	37	37	37	37	1,110	37	
	Assistant Accountant	1,630	-	20	20	20	20	20	20	20	20	20	20	600	20	
	Account Assistants	1,155	-	56	70	70	70	70	56	56	56	56	56	2,044	68	
	Cashier	565	-	14	14	14	14	14	14	14	14	14	14	420	14	
<u>Civil &amp; Water Supply</u>	Clerks	2,545	-	31	31	31	31	31	31	31	31	31	31	930	31	
	Deputy Manager Store	1,155	-	42	70	70	70	70	42	42	42	42	42	1,958	66	
	Store Keepers	565	-	214	256	256	256	256	214	214	214	214	7,512	250		
	Sub-Total	-	-	43	43	43	43	43	43	43	43	43	43	1,290	43	
<u>Electrical &amp; Mechanical</u>	Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	1,290	43	
	Assistant Civil Engineer	2,715	-	33	33	33	33	33	33	33	33	33	33	990	33	
	Overseer Civil	1,155	-	11	11	11	11	11	11	11	11	11	11	330	11	
	Assistant Surveyor	2,715	-	34	34	34	34	34	34	34	34	34	34	1,020	34	
<u>Labour &amp; Social Welfare</u>	Deputy Manager, Fairprice Shop	1,630	-	20	20	20	20	20	20	20	20	20	20	600	20	
	Sales Supervisors	860	-	10	21	21	21	21	10	10	10	10	10	586	20	
	Account Assistant	590	-	7	7	7	7	7	7	7	7	7	210	7		
	Clerk/Cashier	565	-	7	7	7	7	7	7	7	7	7	210	7		
<u>Civil &amp; Water Supply</u>	Office Clerk	565	-	175	186	186	186	186	186	186	186	186	186	5,536	185	
	Sub-Total	-	-	43	43	43	43	43	43	43	43	43	43	1,290	43	
	Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	1,290	43	
	Assistant Civil Engineer	2,715	-	33	33	33	33	33	33	33	33	33	33	990	33	
<u>Electrical &amp; Mechanical</u>	Overseer Civil	1,155	-	14	14	14	14	14	14	14	14	14	14	420	14	
	Assistant Surveyor	2,715	-	33	33	33	33	33	33	33	33	33	33	990	33	
	Deputy Manager Water Supply	1,155	-	56	56	56	56	56	56	56	56	56	56	1,680	56	
	Water Supply Foremen	565	-	7	7	7	7	7	7	7	7	7	7	210	7	
<u>Electrical &amp; Mechanical</u>	Office Clerk	565	-	206	206	206	206	206	206	206	206	206	206	6,180	206	
	Sub-Total	-	-	43	43	43	43	43	43	43	43	43	43	1,290	43	
	Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	1,290	43	
	Assistant Engineers	2,715	-	66	66	66	66	66	66	66	66	66	66	1,980	66	
<u>Electrical &amp; Mechanical</u>	General Foreman, Work Shop	1,115	-	33	33	33	33	33	33	33	33	33	33	990	33	
	Electrical & Mechanical Foreman	1,155	-	56	56	56	56	56	56	56	56	56	56	1,680	56	
	Clerk Shop Foreman	565	-	28	28	28	28	28	28	28	28	28	28	1,540	51	
	Office Clerk	565	-	7	7	7	7	7	7	7	7	7	7	210	7	
<u>Electrical &amp; Mechanical</u>	Sub-Total	-	-	233	261	261	261	261	261	261	261	261	261	7,690	255	

\* Rs/man/month

The estimates reflect 1980 June price levels.

No escalation.

TABLE 3-16

OPERATING COST  
SALARIES  
(000'S) RUPEES

Sheet 3

(Continued)

Section	Description	Salary*	Year												Total	Average	
			1983-1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996			
System	Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	43	43	1,290	43
	Analyst/Clerk	645	-	8	8	8	8	8	8	8	8	8	8	8	8	240	8
	Sub-Total		-	51	51	51	51	51	51	51	51	51	51	51	51	1,530	51
Training	Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	43	43	1,290	43
	Trainer	1,155	-	83	83	83	83	83	83	83	83	83	83	83	83	2,325	83
	Office Clerk	565	-	7	7	7	7	7	7	7	7	7	7	7	210	7	
	Sub-Total		-	133	133	133	133	133	133	133	133	133	133	133	3,825	128	
Planning	Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	43	43	1,290	43
	Assistant Engineer	2,715	-	65	65	65	65	65	65	65	65	65	65	65	1,950	65	
	Junior Engineer	1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,260	42	
	Explosive Foreman	1,155	-	14	14	14	14	14	14	14	14	14	14	14	420	14	
	Geologist	3,065	-	37	37	37	37	37	37	37	37	37	37	37	1,110	37	
	Assistant Geologists	1,155	-	28	28	28	28	28	28	28	28	28	28	28	840	28	
	Drilling Foremen	1,155	-	28	28	28	28	28	28	28	28	28	28	28	840	28	
	Surveyor	2,545	-	31	31	31	31	31	31	31	31	31	31	31	930	31	
	Assistant Surveyor	1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,260	42	
	Office Clerk	565	-	7	7	7	7	7	7	7	7	7	7	7	210	7	
	Sub-Total		-	337	337	337	337	337	337	337	337	337	337	337	10,110	337	
Safety	Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	43	1,290	43	
	Safety Crew	1,155	-	14	14	14	14	14	14	14	14	14	14	14	420	14	
	Office Clerk	565	-	7	7	7	7	7	7	7	7	7	7	7	210	7	
	Sub-Total		-	64	64	64	64	64	64	64	64	64	64	64	3,012	64	
Medical	Medical Officer	3,645	-	44	44	44	44	44	44	44	44	44	44	44	1,320	44	
	Assistant Medical Officers	2,840	-	34	34	34	34	34	34	34	34	34	34	34	2,006	34	
	Lady Assistant Medical Officers	3,645	-	87	87	87	87	87	87	87	87	87	87	87	2,523	87	
	Office Clerk	645	-	8	8	8	8	8	8	8	8	8	8	8	240	8	
	Sub-Total		-	86	86	86	86	86	86	86	86	86	86	86	6,089	86	
	Total		-	1,898	2,129	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	64,219	2,141	
Coal Preparation & Transport	Manager	3,620	-	43	43	43	43	43	43	43	43	43	43	43	1,290	43	
	General Foreman Plant	2,545	-	31	31	31	31	31	31	31	31	31	31	31	930	31	
	Plant Foremen	1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,260	42	
	Deputy Manager, Transport	2,545	-	31	31	31	31	31	31	31	31	31	31	31	930	31	
	Transport Foremen	1,155	-	42	42	42	42	42	42	42	42	42	42	42	1,260	42	
	Office Clerk	565	-	7	7	7	7	7	7	7	7	7	7	210	7		
	Total		-	196	196	196	196	196	196	196	196	196	196	196	5,880	196	
	Grand Total		-	3,719	4,034	4,077	4,035	4,035	4,035	3,951	3,096	2,995	2,995	118,057	3,939		

The estimates reflect 1980 June price levels.  
No escalation.

\*Rs/man/month

TABLE 3-17  
OPERATING COST  
RATES  
(000'S) RUPEES

Sheet 1

Section	Description	Wage	Year											Total	Average		
			1983-1985	1986	1987	1988	1989	1990	2001	2002	2003	2004	2005				
Underground Mine	Longwall Face Workers	*	-	843	1,685	1,551	843	-	-	-	-	-	-	-	41,227	1,374	
	Pillar Splitting Workers	*	-	-	135	135	-	-	-	-	-	-	-	-	2,025	68	
	Road Heading Workers	*	-	547	547	274	274	-	-	-	-	-	-	-	10,674	356	
	Ventilation Workers	*	-	109	128	128	83	-	-	-	-	-	-	-	3,347	112	
	Maintenance Workers	*	-	423	423	423	212	-	-	-	-	-	-	-	10,999	367	
	Haulage Workers	*	-	418	607	607	418	-	-	-	-	-	-	-	15,822	527	
	Electrical & Mechanical Foremen	*	-	210	210	210	114	-	-	-	-	-	-	-	5,478	182	
	Machine Operators	*	-	153	172	172	153	-	-	-	-	-	-	-	4,587	153	
	Safety Lamp Room Workers	*	-	70	70	70	70	-	-	-	-	-	-	-	1,890	63	
	Electrical & Mechanical Store Workers	*	-	53	53	53	53	-	-	-	-	-	-	-	1,431	48	
	Office Workers	*	-	160	160	160	160	-	-	-	-	-	-	-	4,320	144	
	Total			-	2,986	4,055	4,055	3,783	2,515	-	-	-	-	-	101,800	3,394	
	West Open Pit	Stripping Workers	*	-	173	173	173	173	-	-	-	-	-	-	-	5,103	170
Bankshooting Workers		*	-	145	145	145	145	-	-	-	-	-	-	-	4,280	143	
Parting & Coal Loading Workers		*	-	128	128	128	128	-	-	-	-	-	-	-	3,840	128	
Haulage Workers		*	-	417	417	417	417	-	-	-	-	-	-	-	12,371	412	
Road Grading Workers		*	-	70	70	70	70	-	-	-	-	-	-	-	2,100	70	
Reclamation Workers		*	-	73	73	73	73	-	-	-	-	-	-	-	2,190	73	
Electrical Workers		*	-	42	42	42	42	-	-	-	-	-	-	-	1,246	42	
Mechanical Workers		*	-	42	42	42	42	-	-	-	-	-	-	-	1,246	42	
Office Workers		*	-	207	207	207	207	-	-	-	-	-	-	-	6,133	204	
Sub-Total				-	1,297	1,297	1,297	1,297	1,297	1,297	1,297	1,297	1,297	1,297	38,509	1,284	
East Open Pit		Stripping Workers	*	-	173	173	173	173	-	-	-	-	-	-	-	5,190	173
		Bankshooting Workers	*	-	145	145	145	145	-	-	-	-	-	-	-	4,350	145
		Parting & Coal Loading Workers	*	-	115	115	115	115	-	-	-	-	-	-	-	3,450	115
	Haulage Workers	*	-	340	386	386	386	-	-	-	-	-	-	-	11,488	383	
	Road Grading Workers	*	-	64	64	64	64	-	-	-	-	-	-	-	1,920	64	
	Reclamation Workers	*	-	67	67	67	67	-	-	-	-	-	-	-	2,010	67	
	Electrical Workers	*	-	42	42	42	42	-	-	-	-	-	-	-	1,260	42	
	Mechanical Workers	*	-	42	42	42	42	-	-	-	-	-	-	-	1,260	42	
	Office Workers	*	-	207	207	207	207	-	-	-	-	-	-	-	6,210	207	
	Sub-Total			-	1,195	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,241	37,138	1,238	
	Total			-	2,492	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	2,538	75,647	2,522	

\* Shown in Tables 3-18 to 3-20

The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-17

OPERATING COST  
WAGES  
(000'S) RUPEES

(Continued)

Sheet 2

Section	Description	Wage *	Year												Total	Average
			1983- 1985	1986	1987	1988- 1997	1998- 2010	2011- 2012	2013- 2014	2015	2019	2019	2019	2019		
<u>Management</u>	Office Attendants	530	-	19	19	19	19	19	19	19	19	19	19	19	570	19
<u>General Affairs</u>	Head Telephone Operator	645	-	8	8	8	8	8	8	8	8	8	8	240	8	
	Telephone Operators	590	-	21	21	21	21	21	21	21	21	21	21	630	21	
	Cooks	545	-	7	13	13	13	13	13	13	13	13	13	384	13	
	Vehicle Drivers	545	-	154	154	154	154	154	154	154	154	154	154	4,620	154	
	Security Guards	530	-	38	38	38	38	38	38	38	38	38	38	1,140	38	
	Armed Guards	530	-	58	58	58	58	58	58	58	58	58	58	1,740	58	
	Junior Clerks	590	-	43	57	57	57	57	57	57	57	57	57	1,675	57	
	Watchmen	545	-	137	273	273	273	273	273	273	273	273	273	7,373	273	
	Office Attendants	530	-	70	83	83	83	83	83	83	83	83	83	2,438	83	
	Sub-Total		-	536	705	705	705	705	705	705	705	705	705	20,240	705	
<u>Accounting</u>	Junior Clerks	590	-	107	178	178	178	178	178	178	178	178	178	5,161	178	
	Office Attendants	530	-	13	13	13	13	13	13	13	13	13	13	390	13	
	General Workers	530	-	26	32	32	32	32	32	32	32	32	32	915	32	
	Sub-Total		-	146	223	223	223	223	223	223	223	223	223	6,466	223	
<u>Labour &amp; Social Welfare</u>	Junior Clerks	590	-	43	50	50	50	50	50	50	50	50	50	1,472	50	
	Salesmen	545	-	13	26	26	26	26	26	26	26	26	26	728	26	
	Cooks	545	-	7	13	13	13	13	13	13	13	13	13	366	13	
	Office Attendants	530	-	32	32	32	32	32	32	32	32	32	32	960	32	
	General Workers	530	-	19	38	38	38	38	38	38	38	38	38	1,064	38	
	Sub-Total		-	114	159	159	159	159	159	159	159	159	159	4,590	159	
<u>Civil &amp; Water Supply</u>	Draftmen/Surveyor/Assistants	860	-	21	21	21	21	21	21	21	21	21	21	630	21	
	Civil Workers	590	-	28	57	57	57	57	57	57	57	57	57	1,594	57	
	Carpenter Shop Workers	590	-	21	21	43	43	43	43	43	43	43	43	1,180	43	
	Pump Station Workers	590	-	128	128	128	128	128	128	128	128	128	128	3,840	128	
	Plumbers	590	-	14	14	14	14	14	14	14	14	14	14	420	14	
	Sewage Station Workers	590	-	-	64	64	64	64	64	64	64	64	64	1,856	64	
	Junior Clerks	590	-	14	14	21	21	21	21	21	21	21	21	595	21	
	Office Attendants	530	-	26	26	26	26	26	26	26	26	26	26	780	26	
	General Workers	530	-	115	115	128	128	128	128	128	128	128	128	3,736	128	
	Sub-Total		-	367	460	502	502	502	502	502	502	502	502	14,631	502	
<u>Electrical &amp; Mechanical</u>	Electrical Workers	645	-	31	54	77	77	77	77	77	77	77	77	2,172	77	
	Mechanical Workers	645	-	31	62	92	92	92	92	92	92	92	92	2,579	92	
	Substation Workers	590	-	42	42	42	42	42	42	42	42	42	42	1,260	42	
	Power House Workers	590	-	42	42	42	42	42	42	42	42	42	42	1,260	42	
	Work Shop Workers	590	-	425	497	724	724	724	724	724	724	724	724	20,514	724	
	Junior Clerk	530	-	13	19	26	26	26	26	26	26	26	26	739	26	
	Office Attendants	530	-	32	32	32	32	32	32	32	32	32	32	960	32	
	Sub-Total		-	617	748	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	29,484	1,035	
<u>System</u>	Key Punchers	590	-	14	21	21	21	21	21	21	21	21	21	623	21	
	Junior Clerk	530	-	6	6	6	6	6	6	6	6	6	6	180	6	
	Office Attendants	530	-	6	13	13	13	13	13	13	13	13	13	383	13	
	Sub-Total		-	26	40	40	40	40	40	40	40	40	40	1,186	40	

\* Rs/man/month

The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-17  
OPERATING COST  
WAGES  
(000'S) RUPEES

Sheet 3.

(Continued)

Section	Description	Wage *	Year											Total	Average	
			1983-1985	1986	1987	1988-1989	2011-2012	2013-2014	2015							
Training	Training Assistants	590	-	85	85	85	85	85	85	28	28	28	28	2,379	79	
	Junior Clerks	530	-	13	13	13	13	13	13	13	13	13	13	390	13	
	Office Attendants	530	-	19	19	19	19	19	19	19	19	19	19	570	19	
	Sub-Total		-	117	117	117	117	117	117	60	60	60	60	3,339	111	
Planning	Explosive Carriers	530	-	58	58	58	58	58	58	58	58	58	58	1,740	58	
	Explosive Truck Drivers	645	-	23	23	23	23	23	23	23	23	23	23	690	23	
	Drillers	565	-	27	27	27	27	27	27	20	20	20	20	789	26	
	Draftsmen	790	-	29	29	29	29	29	29	29	29	29	29	870	29	
	Junior Clerks	530	-	26	26	26	26	26	26	26	26	26	26	780	26	
	Drilling Helpers	530	-	77	77	77	77	77	77	38	38	38	38	2,193	73	
	Survey Helpers	530	-	77	77	77	77	77	77	38	38	38	38	2,193	73	
	Office Attendants	530	-	32	32	32	32	32	32	32	32	32	32	960	32	
	Sub-Total		-	349	349	349	349	349	349	264	264	264	264	10,215	340	
	Safety	Safety Assistants	530	-	13	26	26	26	26	26	13	13	13	13	728	24
Junior Clerks		530	-	6	13	13	13	13	13	6	6	6	6	362	12	
Office Attendants		530	-	19	19	19	19	19	19	19	19	19	19	570	19	
Sub-Total			-	38	58	58	58	58	58	38	38	38	38	1,660	55	
Medical	Head Nurse	645	-	8	8	8	8	8	8	8	8	8	8	240	8	
	Nurses	530	-	38	64	64	64	64	64	64	64	64	64	1,894	63	
	Health Visitor	600	-	7	7	7	7	7	7	7	7	7	7	203	7	
	Midwives	530	-	13	13	13	13	13	13	13	13	13	13	377	13	
	Head Compounder	645	-	8	8	8	8	8	8	8	8	8	8	240	8	
	Compounders	645	-	15	23	23	23	23	23	23	23	23	23	682	23	
	Sanitary Inspectors	645	-	15	15	15	15	15	15	15	15	15	15	435	15	
	Junior Clerks	530	-	13	13	13	13	13	13	13	13	13	13	390	13	
	First Aid Attendants	645	-	23	23	23	23	23	23	23	23	23	23	690	23	
	Ambulance Driver	645	-	8	8	8	8	8	8	8	8	8	8	240	8	
	Sweepers	530	-	64	128	128	128	128	128	128	128	128	128	3,776	126	
	First Aid Helpers	545	-	39	39	39	39	39	39	39	39	39	39	1,170	39	
	Cook	545	-	13	13	13	13	13	13	13	13	13	13	390	13	
	Sub-Total		-	229	362	362	362	362	362	362	362	362	362	10,727	359	
	Total		-	2,558	3,240	3,569	3,569	3,569	3,569	2,695	2,695	2,695	2,695	103,108	3,438	
	Coal Preparation & Transport	Patrols	530	-	13	13	13	13	13	13	13	13	13	13	390	13
		Central Control Men	645	-	15	15	15	15	15	15	15	15	15	15	450	15
Other Plant Workers		590	-	128	128	128	128	128	128	128	128	128	128	3,840	128	
Transport Workers		590	-	21	21	21	21	21	21	21	21	21	21	630	21	
Junior Clerks		530	-	51	51	51	51	51	51	51	51	51	51	1,530	51	
Office Attendants		530	-	38	38	38	38	38	38	38	38	38	38	1,168	38	
Hand Pickers		530	-	77	102	102	102	102	102	256	256	256	256	7,347	245	
General Workers		530	-	134	192	192	192	192	192	192	192	192	192	5,702	190	
Sub-Total			-	477	560	740	740	740	740	740	740	740	740	21,757	725	
Grand Total			-	8,513	10,393	10,902	10,630	9,362	5,973	5,526	5,526	5,526	5,526	302,312	10,079	

The estimates reflect 1980 June price levels.

\* Rs/man/month

No escalation.

TABLE 3-18

OPERATING COST UNDERGROUND  
WAGES  
(000'S) RUPEES

Sheet 1

Description	Wage*	Year											Total	Average		
		1983-1985	1986	1987	1988-1997	1998-2010	2011	2012	2013	2014	2015					
<u>Longwall Face Workers</u>																
Chief Workers	645	15	31	31	31	31	15	-	-	-	-	-	-	-	789	26
Miners	530	499	998	998	883	883	499	-	-	-	-	-	-	-	23,954	798
Prop Drawers	590	85	170	170	170	170	85	-	-	-	-	-	-	-	4,335	145
Stabblers	590	57	114	114	114	114	57	-	-	-	-	-	-	-	2,907	97
Prop Checkers	530	13	26	26	26	26	13	-	-	-	-	-	-	-	663	22
Packers	530	51	102	102	102	102	51	-	-	-	-	-	-	-	1,302	87
Pullbackmen	530	26	51	51	51	51	26	-	-	-	-	-	-	-	1,302	43
Face Maintenance	530	64	128	128	128	128	64	-	-	-	-	-	-	-	3,264	109
Shot-Firers	545	33	65	65	65	65	33	-	-	-	-	-	-	-	1,412	47
Sub-Total		843	1,685	1,685	1,551	1,551	843	-	-	-	-	-	-	-	41,227	1,374
<u>Pillar Splitting Workers</u>																
Miners	530	-	-	-	115	115	115	-	-	-	-	-	-	-	1,725	58
Shot-Firers	545	-	-	-	20	20	20	-	-	-	-	-	-	-	300	10
Sub-Total		-	-	-	135	135	135	-	-	-	-	-	-	-	2,025	68
<u>Road-Heading Workers</u>																
Miners	530	384	384	384	192	192	192	-	-	-	-	-	-	-	7,488	250
Loaders	590	85	85	85	43	43	43	-	-	-	-	-	-	-	1,665	56
Shot-Firers	545	78	78	78	39	39	39	-	-	-	-	-	-	-	1,521	50
Sub-Total		547	547	547	274	274	274	-	-	-	-	-	-	-	10,674	356
<u>Ventilation Workers</u>																
Bratticemen	530	64	64	64	64	64	38	-	-	-	-	-	-	-	1,676	56
Flyash Packer	530	26	26	26	26	26	26	-	-	-	-	-	-	-	702	23
Gas Patrol	530	19	38	38	38	38	19	-	-	-	-	-	-	-	969	33
Sub-Total		109	128	128	128	128	83	-	-	-	-	-	-	-	3,347	112
<u>Entry Maintenance Workers</u>																
Panel Maintenance	530	38	38	38	38	38	19	-	-	-	-	-	-	-	988	33
Track Maintenance	530	64	64	64	64	64	64	-	-	-	-	-	-	-	1,728	58
Gate Maintenance (include rock-duster)	530	282	282	282	282	282	109	-	-	-	-	-	-	-	7,268	242
Shot-Firers	545	39	39	39	39	39	20	-	-	-	-	-	-	-	1,015	34
Sub-Total		423	423	423	423	423	212	-	-	-	-	-	-	-	10,999	367

\*Rs./man/month

The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-18

OPERATING COST - UNDERGROUND  
WAGES  
(000'S) RUPEES

Sheet 2

(Continued)

Description	Wage *	Year											Total	Average			
		1983-1985	1986	1987	1988-1989	1988-1990	1991-1992	1993-1994	1995	1996	1997	1998-2000			2001-2002	2003-2004	2005
<u>Haulage Workers</u>																	
Surface Workers	590		36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
Diesel Locomotive Driver	545		33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Shunters	590		14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Tippler men	530		38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Tippler Helpers																	
Underground Workers	590		107	192	192	192	192	192	192	192	192	192	192	192	192	192	192
Battery Locomotive Drivers	545		98	176	176	176	176	176	176	176	176	176	176	176	176	176	176
Shunter Battery Locomotive	545		33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Shunter Pit Mouth	545		33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Shunter Pit Bottom	545		33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Shunter Junction & Each Panel	530		26	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Sub-Total			418	607	607	607	607	607	607	607	607	607	607	607	607	607	607
<u>Electrical/Mechanical Workers</u>																	
Electricians	645		54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Electricians Apprentices	530		51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
Mechanics	645		54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Mechanics Apprentices	530		51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
Sub-Total			210	210	210	210	210	210	210	210	210	210	210	210	210	210	210
<u>Machine Operators</u>																	
Surface Workers	590		21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Air Compressor Operators	550		19	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Air Compressor Helpers	590		21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Main Stop Hoist Operators	530		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Main Stop Hoist Helpers																	
Underground Workers	590		14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Chain Conveyor Operators	590		21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
B.L. Battery Charger	590		38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
B.L. Battery Charger Assistant	530		153	172	172	172	172	172	172	172	172	172	172	172	172	172	172
Sub-Total			153	172	172	172	172	172	172	172	172	172	172	172	172	172	172
<u>Safety Lamp Room Workers</u>																	
Safety Lamp Issuers	550		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Safety Lamp Workers	530		19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Gas Detector Supervisor	903		11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Gas Detector Repair Men	590		21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Sub-Total			70	70	70	70	70	70	70	70	70	70	70	70	70	70	70

The estimates reflect 1980 June price levels.

No escalation.

\* Rs/man/month

TABLE 3-18  
OPERATING COST UNDERGROUND  
WAGES  
(000'S) RUPEES

(Continued)

Description	Wage *	Year										Total	Average		
		1983-1985	1986	1987	1988-1997	1998-2010	2011	2012	2013	2014	2015				
<u>Electrical &amp; Mechanical Store Workers</u>															
Issuers	530	-	19	19	19	19	19	19	19	19	19	-	-	-	17
Supervisors	930	-	34	34	34	34	34	34	34	34	34	-	-	-	31
Sub-Total		-	53	53	53	53	53	53	53	53	53	-	-	-	48
<u>Office Workers</u>															
Junior Clerks	530	-	58	58	58	58	58	58	58	58	58	-	-	-	52
Office Attendants/Oilermen	530	-	64	64	64	64	64	64	64	64	64	-	-	-	58
Checkmen	530	-	38	38	38	38	38	38	38	38	38	-	-	-	34
Sub-Total		-	160	160	160	160	160	160	160	160	160	-	-	-	144
Total		-	2,986	4,055	4,055	4,055	3,783	2,515	-	-	-	-	-	-	3,394

The estimates reflect 1980 June price levels.

No escalation.

\* Rs/man/month.

TABLE 3-19

OPERATING COST - WEST OPEN PIT  
WAGES  
(000 \$) RUPEES

Sheet 1

(Local Currency)

Description	Wage*	Year												Total	Average	
		1983-1985	1986	1987	1988-1997	1989-2010	2011	2012	2013-2014	2015						
<b>Stripping</b>																
Shovel Operator	645	-	46	46	46	46	46	46	46	46	46	46	46	46	1,357	45
Helpers	530	-	38	38	38	38	38	38	38	38	38	38	38	38	1,121	37
Oilers	590	-	43	43	43	43	43	43	43	43	43	43	43	43	1,268	43
Groundmen	645	-	46	46	46	46	46	46	46	46	46	46	46	46	1,357	45
Sub-Total		-	173	173	173	173	173	173	173	173	173	173	173	173	5,103	170
<b>Bankshooting</b>																
Drillers	645	-	31	31	31	31	31	31	31	31	31	31	31	31	914	30
Helpers	530	-	51	51	51	51	51	51	51	51	51	51	51	51	1,505	51
Dozer Operators	645	-	31	31	31	31	31	31	31	31	31	31	31	31	914	30
Shooters	530	-	32	32	32	32	32	32	32	32	32	32	32	32	947	32
Sub-Total		-	145	145	145	145	145	145	145	145	145	145	145	145	4,280	143
<b>Parting Coal Loading</b>																
Drillers	645	-	15	15	15	15	15	15	15	15	15	15	15	15	450	15
Helpers	530	-	26	26	26	26	26	26	26	26	26	26	26	26	780	26
Dozer Operators	645	-	15	15	15	15	15	15	15	15	15	15	15	15	450	15
Scrapper Operators	645	-	31	31	31	31	31	31	31	31	31	31	31	31	930	31
Hydraulic Excavator Operators	645	-	15	15	15	15	15	15	15	15	15	15	15	15	450	15
Shooters	530	-	26	26	26	26	26	26	26	26	26	26	26	26	780	26
Sub-Total		-	128	128	128	128	128	128	128	128	128	128	128	128	3,840	128
<b>Haulage</b>																
Truck Drivers 120 t	645	-	231	231	231	231	231	231	231	231	231	231	231	231	6,791	226
Truck Drivers 46 t	645	-	77	77	77	77	77	77	77	77	77	77	77	77	2,310	77
Greasemen	530	-	32	32	32	32	32	32	32	32	32	32	32	32	960	32
Machinist & Welders Helper	530	-	26	26	26	26	26	26	26	26	26	26	26	26	780	26
Crossing Watchmen	530	-	38	38	38	38	38	38	38	38	38	38	38	38	1,140	38
Motor Patrols	530	-	13	13	13	13	13	13	13	13	13	13	13	13	390	13
Sub-Total		-	417	417	417	417	417	417	417	417	417	417	417	417	12,371	412
<b>Road Grading</b>																
Grader Operators	645	-	15	15	15	15	15	15	15	15	15	15	15	15	450	15
Dozer Operators	645	-	15	15	15	15	15	15	15	15	15	15	15	15	450	15
Sprinkler	645	-	8	8	8	8	8	8	8	8	8	8	8	8	240	8
General Workers	530	-	32	32	32	32	32	32	32	32	32	32	32	32	960	32
Sub-Total		-	70	70	70	70	70	70	70	70	70	70	70	70	2,100	70

\* Rs/man/month

The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-19  
OPERATING COST WEST OPEN PIT  
WAGES  
(000'S) RUPEES

Description	Wage *	Year										Total	Average		
		1983-1985	1986	1987	1988-1989	1998-2010	2011-2012	2013-2014	2015						
<u>Reclamation</u>															
Dozer Operators	645	-	15	15	15	15	15	15	15	15	15	15	15	450	15
Scraper Operators	645	-	8	8	8	8	8	8	8	8	8	8	8	240	8
Crush Operators	645	-	15	15	15	15	15	15	15	15	15	15	15	450	15
Front End Loaders	645	-	8	8	8	8	8	8	8	8	8	8	8	240	8
Trucks 45 t	645	-	8	8	8	8	8	8	8	8	8	8	8	240	8
General Workers	530	-	19	19	19	19	19	19	19	19	19	19	19	570	19
Sub-Total		-	73	73	73	73	73	73	73	73	73	73	73	2,190	73
<u>Electrical Workers</u>															
Electricians	645	-	23	23	23	23	23	23	23	23	23	23	23	682	23
Helpers	530	-	19	19	19	19	19	19	19	19	19	19	19	564	19
Sub-Total		-	42	42	42	42	42	42	42	42	42	42	42	1,246	42
<u>Mechanical Workers</u>															
Mechanics	645	-	23	23	23	23	23	23	23	23	23	23	23	682	23
Helpers	530	-	19	19	19	19	19	19	19	19	19	19	19	564	19
Sub-Total		-	42	42	42	42	42	42	42	42	42	42	42	1,246	42
<u>Office Clerk</u>															
Junior Clerks	530	-	83	83	83	83	83	83	83	83	83	83	83	2,490	83
Attendants	530	-	26	26	26	26	26	26	26	26	26	26	26	780	26
Time Keepers	590	-	21	21	21	21	21	21	21	21	21	21	21	630	21
Apprentices	530	-	77	77	77	77	77	77	77	77	77	77	77	2,233	74
Sub-Total		-	207	207	207	207	207	207	207	207	207	207	207	6,133	204
Total		-	1,297	1,297	1,297	1,297	1,297	1,297	1,297	1,297	1,297	1,297	1,297	38,509	1,284

The estimates reflect 1980 June price levels.

No escalation.

\*Rs/man/month

TABLE 3-20  
OPERATING COST EAST OPEN PIT  
WAGES  
(000'S) RUPEES

Sheet 1

(Local Currency)

Description	Wage*	Year												Total	Average	
		1983-1986	1986	1987	1988-1997	1998-2010	2011-2012	2013-2014	2015							
<b>Stripping</b>																
Shovel Operator	645	-	46	46	46	46	46	46	46	46	46	46	46	46	46	46
Helpers	530	-	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Oilers	590	-	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Groundmen	645	-	46	46	46	46	46	46	46	46	46	46	46	46	46	46
Sub-Total		-	173	173	173	173	173	173	173	173	173	173	173	173	173	173
<b>Bankshooting</b>																
Drillers	645	-	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Helpers	530	-	51	51	51	51	51	51	51	51	51	51	51	51	51	51
Dozer Operators	645	-	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Shooters	530	-	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Sub-Total		-	145	145	145	145	145	145	145	145	145	145	145	145	145	145
<b>Parting Coal Loading</b>																
Drillers	645	-	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Helpers	530	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Dozer Operators	645	-	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Scrapper Operators	645	-	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Hydraulic Excavator Operators	645	-	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Shooters	530	-	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Sub-Total		-	115	115	115	115	115	115	115	115	115	115	115	115	115	115
<b>Haulage</b>																
Truck Drivers 120 t	645	-	185	231	231	231	231	231	231	231	231	231	231	231	231	231
Truck Drivers 46 t	645	-	46	46	46	46	46	46	46	46	46	46	46	46	46	46
Greasemen	530	-	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Machinist & Welders	530	-	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Helpers	530	-	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Crossing Watchmen	530	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Motor Patrols	530	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Sub-Total		-	340	386	386	386	386	386	386	386	386	386	386	386	386	386
<b>Total</b>		-	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360
<b>Average</b>		-	46	46	46	46	46	46	46	46	46	46	46	46	46	46
<b>Total</b>		-	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360	1,360
<b>Average</b>		-	46	46	46	46	46	46	46	46	46	46	46	46	46	46

\* Rs/man/month  
The estimates reflect 1980 June price levels.  
No escalation.

TABLE 3-20

OPERATING COST - EAST OPEN PIT  
WAGES  
(000'S) RUPEES

Sheet 2

(Continued)

Description	Wage*	Year											Total	Average				
		1983	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994			1995			
<u>Road Grading</u>																		
Grader Operators	645	-	-	15	15	15	15	15	15	15	15	15	15	15	15	15	450	15
Dozer Operators	645	-	-	15	15	15	15	15	15	15	15	15	15	15	15	15	450	15
Sprinkler	645	-	-	8	8	8	8	8	8	8	8	8	8	8	8	8	240	8
General Workers	530	-	-	26	26	26	26	26	26	26	26	26	26	26	26	26	780	26
Sub-Total		-	-	64	64	64	64	64	64	64	64	64	64	64	64	64	1,920	64
<u>Reclamation</u>																		
Dozer Operators	645	-	-	15	15	15	15	15	15	15	15	15	15	15	15	15	450	15
Scraper Operators	645	-	-	8	8	8	8	8	8	8	8	8	8	8	8	8	240	8
Crush Operators	645	-	-	15	15	15	15	15	15	15	15	15	15	15	15	15	450	15
Front End Loaders	645	-	-	8	8	8	8	8	8	8	8	8	8	8	8	8	240	8
Trucks - 45 t	645	-	-	8	8	8	8	8	8	8	8	8	8	8	8	8	240	8
General Workers	530	-	-	13	13	13	13	13	13	13	13	13	13	13	13	13	390	13
Sub-Total		-	-	67	67	67	67	67	67	67	67	67	67	67	67	67	2,010	67
<u>Electrical Workers</u>																		
Electricians	645	-	-	23	23	23	23	23	23	23	23	23	23	23	23	23	690	23
Helpers	530	-	-	19	19	19	19	19	19	19	19	19	19	19	19	19	570	19
Sub-Total		-	-	42	42	42	42	42	42	42	42	42	42	42	42	42	1,260	42
<u>Mechanical Workers</u>																		
Mechanics	645	-	-	23	23	23	23	23	23	23	23	23	23	23	23	23	690	23
Helpers	530	-	-	19	19	19	19	19	19	19	19	19	19	19	19	19	570	19
Sub-Total		-	-	42	42	42	42	42	42	42	42	42	42	42	42	42	1,260	42
<u>Office Clerk</u>																		
Junior Clerks	530	-	-	83	83	83	83	83	83	83	83	83	83	83	83	83	2,490	83
Attendants	530	-	-	26	26	26	26	26	26	26	26	26	26	26	26	26	780	26
Time Keepers	530	-	-	21	21	21	21	21	21	21	21	21	21	21	21	21	630	21
Apprentices	530	-	-	77	77	77	77	77	77	77	77	77	77	77	77	77	2,310	77
Sub-Total		-	-	207	207	207	207	207	207	207	207	207	207	207	207	207	6,210	207
Total		-	-	1,195	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,195	37,138	1,238

The estimates reflect 1980 June price levels.

No escalation.

\* Rs/man/month

TABLE 3-21. COST PER UNIT SOLD

Items	Remarks		
1. Installed Capacity	300 MW		
2. Plant Factor (%)	70	60	50
3. Unit Generated (GWh)	1,839.6	1,576.8	1,314
4. Unit Consumed in Auxiliaries (90%)	165.6	141.9	118.3
5. Unit Sent Out (GWh)	1,674	1,434.9	1,195.7
6. Cost of Coal (Million Rs) (381 Rs/ton as received)	426.4	365.5	304.6
7. Interest F.C. (Million Rs) (8.75 %) L.C. (Million Rs) (12.5 %)	328.5	328.5	328.5
8. Depreciation (Million Rs) (3.5 %)	217.9	217.9	217.9
9. Operation and Maintenance Cost (3 %)	186.8	186.8	186.8
Total Cost (Million Rs) (6 to 9)	1,564.6	1,503.7	1,442.8
Cost/Unit Sold (Paisas)	93.5	104.8	120.7

Exclude escalation  
Price of June, 1980

