REPORT
OF THE
COMPTROLLER
AND
AUDITOR GENERAL
OF
INDIA

[FO]R THE YEAR

1976-77

(COMMERCIAL)

GOVERNMENT
OF
ORISSA

Report Copy
Section

REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA

FOR THE YEAR 1976-77

(COMMERCIAL)

GOVERNMENT OF ORISSA

Page	Para	Further reference	For	Read
62	3.15.2	last line	5 HP 17·5 HP	5 HP/7·5 HP
66	3.15.6	3rd and 12th lines	As on	As in
66	3.15.8	1st line	Physicial	Physical
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68	3.16	7th line	divisionsal	divisional
74	4.8.1	6th line	revison	revision
74	4.8.2	Table last column heading	asssigned	assigned
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84	4.11.2 (A)	Table—2nd item 1st column	Tomko	Tomka
87	Sub-para (4)	1st line below table	resasons	reasons
90	4.11.2(A) (10)	1st line	actual	actual cost
90	4.11.2(A) (10)	1st line	176-77	1976-77
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93	Sub-para (b)	6th and 7th lines	supplementtary	supplementary
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106	4.11.3(B) (3)	5th line from the top	Chairman	Chairmen
108		2nd table—2nd column 1st item	Rs. 52·60	Rs. 52·50
120	6.1	8th line	turck	truck
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183	Appendix III	Last column 3rd item	Depoisted	Deposited

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iv	5	Table heading	Rupess	Rupees
iv	5	Table column 3	17·5	17·3
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3	Section II	Heading	OR	ORISSA
4	2.1.3	Table 1st column	November 976	November 1976
6	2.1.5	Table last item under 1973-74	(+)15·5	(+)15·05
6	2.1.6	4th line	tax and	tax but
9	Sub-para (4)	4th line	may 1976	May 1976
10	Sub-para (5)	Table—2nd item 3rd column	1,961·18	1,964·18
11	2.1.9	Table—3rd item under "percentage of" at middle of the page—	(ii)	(iii)
11	2.1.9	Ditto, last column	217·8	217·9
14	Sub-para (2)	17th line	1977-76	1976-77
16	Sub-para (5)	3rd line	Obiligatory	Obligatory
16	Sub-para (5)	6th line	11.097	11,097
18	Sub-para (2)	Table column (1) 1st item	November 1976	November 1975
20	Sub-para (4)	last line	Apirl 1978	April 1978
20	2.1.14	5th line	Products from	Products in/ from
21	Sub-para (3)	13th line	Octobr 1976	October 1976
22	Sub-para (5)	5th line	Indigeneous	Indigenous
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PREFATORY REMARKS

Government commercial concerns, the accounts of which are subject to audit by the Comptroller and Auditor General of India, may be categorised as:—

(*i*) Government Companies ;

(*ii*) Statutory Corporations ; and

(*iii*) Departmentally managed commercial and *quasi*-commercial undertakings.

2. This Report deals with the results of audit of the accounts of Government Companies and Statutory Corporations including the Orissa State Electricity Board. The Report of the Comptroller and Auditor General of India (Civil) contains the results of audit relating to the departmentally managed Commercial and *quasi*-commercial undertakings.

3. The cases mentioned in the Report are those which came to the notice of Audit during the year 1976-77 as well as those which had come to notice in earlier years but could not be dealt with in the previous Reports ; matters relating to the period subsequent to 1976-77 have also been included, wherever considered necessary.

4. In the case of Government Companies, audit is conducted by professional auditors appointed on the advice of the Comptroller and Auditor General but the latter is authorised under section 619 (3) of the Companies Act, 1956 to conduct a supplementary or test audit. He is also empowered to comment upon or supplement the report submitted by the professional auditors. The Companies Act further empowers the Comptroller and Auditor General to issue directives to the auditors in regard to the performance of their functions. In November 1962, such directives were issued to the auditors for looking into certain specific aspects of the working of Government Companies. These were revised in December 1965 and in February 1969.

5. There are certain companies wherein Government has invested funds but the accounts of which are not subject to audit by the Comptroller

and Auditor General. Names of two such companies in each of which Government investment was more than Rs. 10 lakhs as on the 31st March 1977 are given below :—

Name		Investment	Percentage of Government investment to the total paid-up capital
		(Rupess in lakhs)	
Orissa Cement Limited, Rajgangpur	..	40·00	12·9
Orissa Textile Mills Limited, Choudwar, Cuttack	..	12·75	17·5

6. The Comptroller and Auditor General is the sole auditor of the Orissa State Electricity Board and the Orissa State Road Transport Corporation, which are Statutory Corporations, while he has the right to conduct audit of the Orissa State Financial Corporation and the Orissa State Warehousing Corporation independently of the audit conducted by professional auditors appointed under the respective Acts.

7. The points brought out in this Report are those which have come to notice during the course of test audit of the accounts of the above undertakings. They are not intended to convey or to be understood as conveying any general reflection on the financial administration of the undertakings concerned.

CHAPTER I

GOVERNMENT COMPANIES

SECTION I

1.1. Introduction

There were 47 Government Companies (including two subsidiaries) in the State at the end of March 1977 with an aggregate investment of Rs. 42,64·73* lakhs by Government as share capital (excluding two subsidiaries) as summarised below :—

	Number of Companies	Government investment
	(Rupees in lakhs)	
(*i*) Companies wholly owned by Government (excluding subsidiaries)	11	40,72·58
(*ii*) Companies partly owned by Government—		
(*a*) Companies floated under the Pilot Project Scheme started in 1958 to promote small scale industries.	31	53·06
(*b*) Other than those floated under the Pilot Project Scheme.	3	1,39·09
Total		42,64·73

1.2. During 1976-77, Government paid a loan of Rs. 5 lakhs to one Government Company. The amount received by Government from Government Companies during the year, on account of repayment of principal of loans, was Rs. 74·18 lakhs. At the end of the year, loans from Government, amounting to Rs. 11,60·09 lakhs, were outstanding.

1.3. Out of the outstanding balance of Rs. 11,60·09 lakhs against Government Companies on 31st March 1977, Rs. 1,83·14 lakhs were on account of overdue principal and Rs. 1,10·89 lakhs were on account of overdue interest from one Company, according to the information received from one department. Information in respect of five departments is awaited (April 1978.)

1.4. Guarantees by Government

As on 31st March 1977, Government had guaranteed the repayment of loans raised by ten Government Companies, against which Rs. 9,32·87 lakhs were outstanding as shown below :—

		Number of Companies	Amount of loans sanctioned	Amount outstanding
			(Rupees in lakhs)	
Wholly owned Companies	..	5	14,36·47	9,20·87
Partly owned Pilot Project Companies	..	5	12·00	12·00
Total	..	10	14,48·47	9,32·87

* As per the Companies' records. Differs from the details of investments shown in the Finance Accounts. The difference is under reconciliation.

The Companies are required to pay to Government guarantee commission at rates ranging from 0.01 *per cent* to one *per cent* of the outstanding amount of guarantee. All the ten Companies defaulted in payment of the guarantee commission. The aggregate amount of guarantee commission outstanding from these ten Companies and seven other Companies (in respect of which the guarantee liability was liquidated by Government in 1971-72) was Rs. 40·70 lakhs on 31st March 1977.

1.5. Accounts in arrears

The accounts of all Government Companies except two, *viz.* Rourkela Fabrications Limited and Industrial Promotion and Investment Corporation Limited, were in arrears (January 1978). The particulars of the Companies in respect of which accounts were in arrears and the extent of arrears (as on 31st January 1978) are given in Appendix I.

1.6. Return on investment

During 1976-77, Government received dividend of Rs. 3·70 lakhs on its investments (Rs. 42,64·73 lakhs) in the share capital and Rs. 90·71 lakhs as interest on loans to Government Companies.

1.7. A synoptic statement showing the summarised financial results of 21 Government Companies (including one subsidiary), on the basis of the latest available accounts, is given in Appendix II.

Mention was made in paragraph 1.8 of the Report of the Comptroller and Auditor General of India for the year 1975-76 (Commercial) about two Companies coming under Section 619-B of the Companies Act, 1956.

On 31st March 1977 also, there were two Section 619-B Companies in the State, *viz.* East Coast Brewaries and Distilleries Limited, Cuttack and Mamta Drinks and Industries Limited, Rourkela with an aggregate paid-up capital of Rs. 85·43 lakhs, of which Rs. 67·04 lakhs were held by the State Government and Companies and Corporations owned or controlled by Government.

The East Coast Brewaries and Distilleries Limited, Cuttack had not started production (April 1978). During its six years of working up to October 1976, Mamta Drinks and Industries Limited, Rourkela had an accumulated loss of Rs. 22·10 lakhs.

SECTION II

INDUSTRIAL DEVELOPMENT CORPORATION OF ORISSA LIMITED

RE-ROLLING MILL, HIRAKUD

2.1.1. Introduction

A project report for setting up a re-rolling mill at Hirakud with an annual capacity of 25,000 tonnes of steel products, *viz.* rods, squares, flats, angles, channels, *etc.*, estimated to cost Rs. 59·06 lakhs, was prepared by a firm in Calcutta in May 1962. The Company decided (November 1963) to produce non-ferrous rods (aluminium and copper) also to cater to the requirement of a cable factory, which was being set up by the Company at Hirakud. Work on the Mill commenced in 1964 and was scheduled to be completed by October 1965. Mention was made in paragraph 114 (2) of the Audit Report 1966 about the delay in commissioning the Mill. The Mill went into commercial production from July 1968.

2.1.2. Capital cost

Mention was also made in the Audit Report, 1966 about revision of the capital estimates to Rs. 80·00 lakhs in June 1964. The capital estimates were further revised in October 1965 to Rs. 82·70 lakhs and in March 1967 to Rs. 1,04·44 lakhs, which included working capital of Rs. 1·00 lakh and Rs. 3·25 lakhs respectively. The revisions made in 1965 and 1967 (excluding the working capital) and the actual cost are indicated below :—

Item	Revised estimates		Actual cost
	October 1965	March 1967	
	(Rupees in lakhs)		
Land and site development ..	3·50	4·64	3·82
Buildings ..	17·96	23·39	20·86
Plant and machinery including erection charges.	49·27	57·58	78·29
Other fixed assets ..	4·37	5·27	7·02
Preliminary expenses ..	1·00	..	..
Deferred revenue expenses ..	5·60	10·31	merged in the assets.
Total ..	81·70	1,01·19	1,09·99

The increase in the capital estimates was attributed by the Management to :

(a) effect of devaluation (1966) on the cost of imported plant and machinery (Rs. 3·42 lakhs) ;

(b) increase in development expenses consequent on shifting of the date of commissioning from December 1966 to December 1967 (Rs. 4·71 lakhs); and

(c) increase due to rise in the prices of industrial commodities and on account of additional machinery, spares, *etc.* (Rs. 11·36 lakhs).

Approval of the State Government is required for projects costing more than Rs. 2·5 lakhs in terms of the existing orders of Government. The estimates were recommended by the Board of Directors of the Company to the State Government in April 1968. Approval of the State Government was awaited (April 1978).

2.1.3. Borrowings

The Mill had a current account and a cash credit account in a nationalised bank at Sambalpur and a current account with another nationalised bank at Hirakud. The receipts of the Mill were credited direct to the cash credit account, withdrawals from the cash credit account through self cheques being credited to the current accounts to meet day to day cash requirements. The following were the balances in the current account in the bank at Sambalpur and the cash credit account during different periods in 1976-77 :—

Period		Debit balance in current account			Credit balance in cash credit account		
		(In lakhs of rupees)					
April 1976	..	3·93	to	6·20	0·49	to	6·49
8th June 1976 to 27th June 1976		8·89	to	30·81	2·61	to	13·54
9th July 1976 to 19th July 1976		23·52	to	30·36	0·99	to	3·99
4th August 1976 to 31st August 1976.		14·16	to	16·60	2·94	to	9·37
September 1976	..	13·45	to	16·47	2·94	to	6·65
October 1976	..	13·95	to	15·67	6·65	to	7·44
November 1976	..	12·79	to	15·67	7·44	to	9·44
December 1976	..	13·24	to	14·68	8·86		..
January 1977	..	12·97	to	14·78	5·88	to	8·80
1st February 1977 to 9th February 1977		11·74	to	12·90	2·76	to	5·88

The balance in the current account was always higher than the withdrawal from the cash credit account during the periods mentioned above. As such, there was no necessity of resorting to withdrawals from the cash credit account during these periods. The amount of interest paid during 1976-77 on these withdrawals amounted to Rs. 1·87 lakhs.

2.1.4. Financial position

The financial position of the Mill for the three years up to 1974-75 was as under :—

		1972-73	1973-74	1974-75
		(Rupees in lakhs)		
Liabilities				
(a) Investment of head office	..	1,09·15	1,38·32	1,72·50
(b) Reserves	..	19·98	20·00	20·00
(c) Borrowing (secured and unsecured loans).		15·45	9·23	18·31
(d) Current liabilities and provisions		56·03	38·62	1,06·36
		2,00·61	2,06·17	3,17·17
Assets :				
(e) Gross block	..	1,07·86	1,09·97	1,09·99
(f) Less: depreciation	..	16·50	20·76	24·34
(g) Net fixed assets	..	91·36	89·21	85·65
(h) Works-in-progress	..	0·55	..	..
(i) Investments	..	0·05	0·05	0·05
(j) Current assets loans and advances		76·47	95·59	2,05·85
(k) Losses	..	32·18	21·32	25·62
		2,00·61	2,06·17	3,17·17
Capital employed	..	1,11·80	1,46·18	1,85·14
Net worth	..	96·95	1,37·00	1,66·87

NOTE : 1. Capital employed represents net fixed assets *plus* working capital

2. Net worth represents paid-up capital *plus* reserves *less* intangible assets (*i.e.*, losses).

2.1.5. Working results

In a profitability study made by the Management in March 1967 at the time of revising the capital estimates, the following return was anticipated on the capital cost of Rs. 1,04·44 lakhs.

Year		Profit	Interest added back	Total return anticipated	Percentage of return on investment
		(Rupees in lakhs)			
I	..	3·87	4·57	8·44	8·8
II	..	7·58	3·61	11·19	10·6
III	..	10·36	2·63	12·99	12·4
IV	..	13·07	1·65	14·72	14·1
V	..	15·42	0·57	15·99	15·3

The Mill made a cumulative loss of Rs. 36·28 lakhs upto March 1972. The following table indicates the working results of the Mill for the three years ended March 1975.

	1972-73	1973-74	1974-75
	(Rupees in lakhs)		
Sales ..	1,27·37	1,55·93	1,11·29
Cost of manufacture ..	1,12·21	1,31·89	1,02·48
Gross profit ..	(+)15·16	24·04	8·81
Percentage of gross profit to sales ..	11·9	15·4	7·9
Net profit (+) / Net loss (—) after adjustment of development rebate reserve and expenditure for earlier years and before adjustment of taxes.	(+)4·11	(+)10·85	(—)1·30
Interest on long term loans ..	2·86	4·20	2·09
Total return ..	(+)6·97	(+)15·5	(—)2·21

The rate of return to capital employed was 6·2 *per cent* in 1972-73 and 10·3 *per cent* in 1973-74.

The accumulated loss up to March 1975 was Rs. 25·62 lakhs. The accounts of the Mill from 1975-76 onwards were in arrears (April 1978).

2.1.6. Purchase of raw materials

(1) A purchase order was placed in December 1974 on a firm 'D' of Calcutta for supply of 2,000 tonnes of tested mild steel cast billet ingots at Rs. 1,423 per tonne (lowest rate), inclusive of sales tax and excluding central excise duty . The delivery was to be made at the rate of 500 tonnes each in December 1974 and January 1975 and 1,000 tonnes in February 1975. The purchase order specifically provided for cancellation of the purchase order in the case of delay.

The firm did not make any supply in December 1974, but supplied 241 tonnes in January 1975, 173 tonnes in February 1975 and 1,083 tonnes during March to May 1975, after which the Mill refused to accept any further quantities. The Mill had paid Rs. 24·29 lakhs by March 1977 in instalments for the entire quantity received (1,497 tonnes). As per an offer by another firm 'I' (February 1975), the price was Rs. 1,248 per tonne, including sales tax. Computed with reference to this rate the Mill incurred an extra expenditure of Rs. 1·90 lakhs by accepting supply of 1,083 tonnes of ingots after the stipulated date of delivery.

(2) *Transportation of goods* —According to the project report, the most economic means for movement of incoming billets, finished products for sale, accumulated scrap, *etc.*, were railway wagons, provided the plant site was located near a railway siding. The Mill is situated 3·5 Kms. away from the Hirakud railway siding. A broad gauge track was laid for connecting the mill stockyard with the railway siding. In the capital cost estimates of November 1962 and November 1963, provision of Rs. 3 lakhs was made for construction of a railway siding at the plant site. However, in the subsequent estimates, this was omitted for reasons not on record.

The Mill had estimated (June 1976) that besides minimising demurrage (Rs. 1·30 lakhs paid during April 1975 to April 1977) a saving of Rs. 7 to Rs. 8 per tonne would be effected in the handling of raw materials and Rs. 15 to Rs. 20 per tonne in respect of finished goods if it had a railway siding at the plant site. Hence, the Mill again proposed to the Company in June 1976 the construction of a railway siding at the plant site. The proposal had not been approved by the Company (April 1978). Transportation to and from the railway siding was being effected through trucks.

2.1.7. Consumption of furnace oil

According to the project report, the consumption of furnace oil was estimated at 60 litres per tonne of production of mild steel rods, including consumption during idle shift. An estimate made by the Mill (July 1977) confirmed the same norm. Against these estimates, the actual consumption ranged from 114 litres to 208 litres per tonne of production during the four years up to 1976-77. The following table indicates the position :—

Year	Production (In tonnes)	Actual consumption of furnace oil	Consumption as per norm	Excess consumption
		(In lakh litres)		
1973-74 ..	7,990	11·86	4·79	7·07
1974-75 ..	6,793	14·18	4·07	10·11
1975-76 ..	6,381	8·38	3·83	4·55
1976-77 ..	4,673	5·34	2·80	2·54

The value of excess consumption during these years worked out to Rs. 20·43 lakhs.

The Mill Management attributed (July 1977) the excess consumption of furnace oil mainly to :

(a) lack of operating skill of the attendants ;

(b) flow of excess air in burner, leading to dilution of heat to be made up with extra oil ; and

(c) under-utilisation and frequent firing of the furnace.

The Management stated (September 1977) further that incentives were being given to workers from July 1977 to economise in consumption and that these had shown results by way of declining trend of consumption.

2.1.8. Production performance

(1) The Mill comprises mainly two furnaces, a roughing mill and a finishing mill. In the furnaces, billets of sizes 60 to 100 mm dia. and 1·5 metres length are heated to a rollable temperature and fed in to the roughing mill. In the finishing mill, the roughed materials are rolled into mild steel sections in the range of 8 mm to 40 mm dia. and ribbed bars in the range of 8 mm to 32 mm. The ribbed bars are twisted to tor-steel sections in separate twisting machines. The installed capacity of the Mill is 30,000 tonnes per annum while the licensed capacity according to the industrial licence obtained from the Government of India in July 1962 is 15,000 tonnes per annum. Installed capacity of the twisting machines is 14,000 tonnes per annum.

(2) While commercial production of mild steel rods started in July 1968, the production of ribbed bars commenced in 1972-73. The total production of the Mill up to 31st March 1977 was as shown below :—

Item	Period	Total production (In tonnes)
Mild steel rods of sizes 8 mm and above (including ribbed bars).	1968-69 to 1976-77	47,083
Aluminium and copper rods ..	1969-70	260
Mild steel flats ..	1974-75 to 1975-76	902
		48,245

The average annual production worked out to 5,514 tonnes. The Mill did not work at its licensed capacity during any year after it went into commercial production.

The targeted and actual production and the utilisation of capacities during the five years up to 1976-77 are shown below :—

Year	Targeted production	Actual production	Percentage of actual production to		
			Targeted production	Installed capacity	Licensed capacity
	(In tonnes)				
1972-73 ..	10,000	6,405	64·1	21·4	42·7
1973-74 ..	12,000	7,990	66·6	26·6	53·3
1974-75 ..	12,000	6,793	56·6	22·6	45·2
1975-76 ..	10,000	6,381	63·8	21·3	42·5
1976-77 ..	7,500	4,673	62·3	15·6	31·2

The Management attributed the shortfall in production to non-availability of billets till 1974-75 and lack of demand thereafter.

(3) *Mild steel rod section*.—As per the project report, mild steel rods, squares, angles, channels and flats, aluminium rods and copper rods of different sizes were to be produced in the Mill. The Mill did not produce squares and channels but started production of angles from October 1977. Six mm mild steel rods could not be drawn owing to inadequacy of the machinery supplied by a Japanese firm. The matter was taken up with the Japanese firm in January 1967 but it was not pursued, notwithstanding the reply of the suppliers (April 1967) that "the agreement specified a production range of each machinery and guaranteed its performance but it did not specify performance of plant production" had not been accepted by the Management.

(4) *Tor-steel section*.—The Company entered into an agreement with a firm of Luxembourg, in April 1971, for obtaining technical know-how and drawings for manufacture of tor-steel in the Mill. As per the agreement technical fees at Rs. 14 per tonne were payable till may 1976 on despatches of the tor-steel produced.

Three twisting machines (Value : Rs. 3·72 lakhs) were installed in 1971-72 and 1972-73.

The Company obtained orders for twisting ribbed bars of Hindustan Steel Limited (HSL) into tor-steel sections under an agreement entered into with HSL in September 1971. Production against the work orders of HSL commenced in January 1972. The Mill commenced its own production of ribbed bars and tor-steel in December 1972.

The following table indicates the actual production of tor-steel compared to the installed capacity of the twisting machines (14,000 tonnes per annum) and the targets of production for the period 1972-73 to 1976-77:

Year	Targeted production	Actual production against: Own ribbed bars	HSL's work orders	Total	Percentage of production to: Targets	Installed capacity
		(In tonnes)				
1972-73 ..	Not available	396	4,089	4,485	..	32·0
1973-74 ..	12,000	1,382	3,419	4,801	40·0	34·3
1974-75 ..	12,000	434	4,203	4,637	38·6	33·1
1975-76 ..	7,445	3,619	712	4,331	58·2	30·9
1976-77 ..	7,500	2,738	816	3,554	47·4	25·4

The actual production fell short of the targeted production by 42 *per cent* to 62 *per cent*. The performance did not exceed 35 *per cent* of the installed capacity in any year.

The Management attributed (May 1977) the shortfall in production mainly to non-availability of raw materials up to 1974-75 and lack of demand thereafter.

(5) *Break-even analysis*—The Mill made a break-even study in July 1977 with a view to ascertaining the products which would give more contribution per tonne. The following are the details of the study :

Product	Plain-round: 8—12mm.	14 mm and above	Tor-steel: 8—12 mm.	14 mm and above
Section (Tested)				
Average sale price per tonne at HSL rates (Rupees)	2,035·00	1,875·00	2,260·00	2,100·00
Variable cost (Rupees) ..	1,964·18	1,961·18	2,033·76	2,033·76
Contribution (Rupees) ..	70·82	(—)89·18	226·24	66·24
Total fixed cost (Rupees in lakhs)..	29·90	29·90	29·90	29·90
Break-even production (Tonnes)	42,220	Production of this section not economic	13,216	45,140

The study revealed that manufacture of higher section plain rounds would lead to cash loss at the prevalent selling prices. To reduce the loss *i.e.* to cover some portion of fixed expenses, lower section plain rounds and higher section tor-steel had to be produced alongwith smaller section tor-steel.

2.1.9. Machine utilisation

(1) The mild steel rod section worked in two shifts of eight hours each, while the tor-steel section worked in two or three shifts. The following table indicates the utilisation of the steel furnace, the roughing mill and finishing mill in mild steel rod section and of twisting machines in tor-steel sections :—

	1973-74	1974-75	1975-76	1976-77
Mild steel rod section				
Estimates				
(*a*) Available hours ..	4,800	5,800	4,816	4,800
(*b*) Working hours ..	3,060	3,314	2,857	3,055
(*c*) Stoppages, repairs, maintenance and idle time	1,740	1,486	1,959	1,745
Actuals				
(*a*) Available hours ..	4,864	5,532	5,020	4,896
(*b*) Working hours ..	1,898	1,914	1,462	1,094
(*c*) Stoppages, repairs, maintenance and idle time.	2,966	3,618	3,558	3,802
Percentage of :				
(*i*) Actual working hours to the actual available hours.	39·0	34·6	29·1	22·3
(*ii*) Actual working hours to the estimated working hours.	62·0	57·7	51·2	35·8
(*ii*) Actual idle hours to the estimated idle hours.	170·5	243·5	181·6	217·8
Tor-steel section				
Estimates				
(*a*) Available hours ..	15,000	21,960	14,640	14,640
(*b*) Working hours ..	8,112	15,000	10,980	12,500
(*c*) Stoppages, repairs, maintenance and idle time.	6,888	6,960	3,660	2,140
Actuals				
(*a*) Available hours ..	21,888	21,480	14,240	14,688
(*b*) Working hours	6,567	5,192	4,700	3,520
(*c*) Stoppages, repairs, maintenance and idle time.	15,321	16,288	9,540	11,168
Percentage of :				
(*i*) Actual working hours to the actual available hours	30·0	24·2	33·0	24·0
(*ii*) Actual working hours to the estimated working hours.	80·9	34·6	42·8	28·2
(*iii*) Actual idle hours to the estimated idle hours.	222·4	234·0	260·7	521·9

The Management attributed (April 1977) the low utilisation of machinery to stoppages due to power breakdown, shortage of raw materials, *etc.*

The Mill produced 260 tonnes of aluminium and copper rods in 1968-69 and 1969-70, which had not been disposed of (January 1978). Further production was discontinued as it was found uneconomical and unsuitable for the cable factory of the Company. The machines (cost : Rs. 1·86 lakhs) have been lying idle since 1969-70.

(2) *Machine efficiency*

(*a*) *Mild steel rods section*—The average guaranteed capacity and the expected capacity of the machinery, as per the specifications of the suppliers, were 8 tonnes and 10 tonnes per hour respectively. The actual production per hour obtained during the four years up to 1976-77 is shown below :—

Year	Number of hours worked	Total production	Hourly rate of production	Hourly shortfall in production	
				From guaranteed capacity (In tonnes)	From expected capacity
1973-74 ..	1,898	7,990	4·2	3·8	5·8
1974-75 ..	1,914	6,793	3·5	4·5	6·5
1975-76 ..	1,462	6,381	4·4	3·6	5·6
1976-77 ..	1,094	4,673	4·3	3·7	5·7

(*b*) *Tor-steel section*—As per the specifications of the machinery suppliers, the minimum and the maximum performance achievable per hour in the tor-steel section are 1·8 tonnes and 3·2 tonnes respectively. The actual performance per hour obtained during the four years up to 1976-77 is shown below :—

Year	Number of hours worked	Total production	Hourly rate of production	Short fall from	
			(In tonnes)	Minimum capacity	Maximum capacity
1973-74 ..	6,567	4,801	0·7	1·1	2·5
1974-75 ..	5,192	4,637	0·9	0·9	2·3
1975-76 ..	4,700	4,331	0·9	0·9	2.3
1976-77 ..	3,520	3,554	1·0	0·8	2·2

The Mill had not analysed the reasons for the shortfall in the rate of production (April 1978).

2.1.10. Scrap arisings

The project report envisaged scrap arisings around 5 *per cent.* The Billet Re-Rollers Committee (BRC) had allowed (July 1971) 10 *per cent* towards scrap arisings.

The details of scrap arisings during the four years up to 1976-77 are indicated below :—

	1973-74	1974-75	1975-76	1976-77
			(In tonnes)	
Input of raw materials ..	9,547	8,562	7,364	5,113
Output ..	7,990	6,793	6,381	4,673
Standard scrap arising as per the project report.	477	428	368	256
Standard scrap arising as per BRC limit	955	856	737	511
Total scrap arising (actual) ..	1,557	1,769	983	440
Percentage of actual to input ..	16·3	20·7	13·3	8·6
Excess scrap—				
Compared to project report ..	1,080	1,341	615	184
Compared to BRC limit ..	602	913	246	(—)71

The value of production lost on account of excess scrap worked out to Rs. 36·88 lakhs and Rs. 19·65 lakhs during the four year period, taking the standard scrap arisings at 5 *per cent* and 10 *per cent* respectively. Reasons for the excess scrap arisings, called for in August 1977, have not been furnished (April 1978). The Mill has no facilities to use scrap for drawing smaller section rods.

2.1.11. Sales performance

(1) The Mill has a sales organisation headed by a Sales Officer under the direct control of the General Manager. The project report did not contain any market survey of the product-mix, nor was any survey conducted by the Mill subsequently.

The following table indicates the production and sales of the products manufactured by the Mill from 1968-69 to 1976-77 :—

Year	Production	Sales
	(In tonnes)	
1968-69 ..	901	647
1969-70 ..	4,226	3,879
1970-71 ..	3,833	3,526
1971-72 ..	7,043	5,927
1972-73 ..	6,405	7,001
1973-74 ..	7,990	6,490
1974-75 ..	6,793	4,463
1975-76 ..	6,381	3,582
1976-77 ..	4,673	7,876

NOTE :—(*i*) The figures for the years 1975-76 and 1976-77 are provisional.
(*ii*) Production figures include production of ribbed bars.

In 1968, when the Mill went into production, marketing of re-rolled products was found difficult and the Mill depended on the State Government for the disposal of its products. The State Government had directed (July 1968) all the departments to purchase their requirements from the Mill at the prices fixed by Government but outside market for the Mill products was not developed. As the prices of re-rolled products fell sharply in early 1975 due to glut in the steel market, the State Government departments restricted their purchases from the Mill to items not available in the open market. Accumulation of stock increased gradually from 2,493 tonnes at the end of 1973-74 to 6,805 tonnes at the end of 1975-76 and the Mill faced a crisis in the disposal of its products. On a request by the Mill,Government again directed (October 1975 and December 1976) Government departments to purchase their requirements exclusively from the Mill at the rates to be fixed by Government.

(2) The sale price to Government departments was fixed by the State Purchase Organisation in 1968, effective from 15th July 1968, after taking into account the estimated cost of production of the Mill and the prevailing market price. The price circular was withdrawn by Government in December 1970 in view of non-availability of billets at JPC prices and higher prices in the open market.

In December 1976, the State Government directed that the stocks produced earlier should be sold to Government departments at Rs. 2,200 per tonne for mild steel rods and Rs. 2,400 per tonne for tor-steel. Subsequent production was to be sold at the prevailing stockyard prices of Hindustan Steel Limited (HSL) *ex*Hirakud, which were Rs. 1,802 to Rs. 2,050 per tonne for mild steel rods and Rs. 1,992 to Rs. 2,138 per tonne for tor-steel. Up to 1974-75, the Mill prepared cost sheets indicating the average cost of production of all sizes together and costs of mild steel rods and tor-steel sections were not worked out separately.

The average cost of production and the selling prices during 1975-76 and 1977-76 are given below :—

	Average cost price	Average selling price	Difference (Loss)
	(Rupees per tonne)		
Mild steel rods—			
1975-76	2,310	2,163	147
1976-77	2,588	2,193	395
Tor-steel—			
1975-76	2,446	2,383	63
1976-77	2,655	2,392	263

The loss amounted to Rs. 30·44 lakhs on 11,097 tonnes despatched during 1975-76 and 1976-77. As, however, the cost of production of different sections either of mild steel rods or of tor-steel was not worked out separately, it could not be ascertained which sections were profitable and which were non-profitable items.

(3) According to the instructions of the State Government (December 1976), the selling price applicable was the HSL stockyard price prevailing on the date of payment of the bill by the consuming department. A test check showed that in respect of 887 tonnes of mild steel and tor-steel of different sizes supplied by the Mill to nine Executive Engineers of the Public Works Department, the Mill had applied the HSL stockyard prices prevailing on the dates of billing (February and March 1977) and did not prefer supplementary claims amounting to Rs. 0·59 lakh on the basis of the HSL stockyard prices prevailing on the dates of payment (February to May 1977), which were more by Rs. 40 to Rs. 218 per tonne than the rates prevailing on the dates of billing. On this being pointed out in audit the Mill asked (January 1978) to the concerned consignees to pay the difference. Report regarding recovery is awaited (April 1978).

(4) *Twisting of ribbed bars*—Under an agreement entered into in September 1971 with HSL, the Mill twisted during September 1971 to October 1976 the ribbed bars supplied by HSL. The rates for twisting the ribbed bars including bending and bundling charges were as under :—

Period	Rate per tonne (In rupees)
Up to October 1972	102
November 1972 and onwards—	
(*i*) for straight length	77
(*ii*) for coils	92

The prices that obtained during 1975-76 and 1976-77, compared with the cost of twisting (information in respect of earlier years being not available with the Mill), were as follows :—

Year	Cost of twisting	Average price obtained	Difference (loss)
	(Rupees per tonne)		
1975-76	97·79	92·00	5·79
1976-77	98·70	91·39	7·31

For 712 tonnes and 816 tonnes twisted during 1975-76 and 1976-77 respectively, the excess of cost of twisting over the prices obtained from HSL worked out to Rs. 0·10 lakh.

The following other points were noticed :—

(a) According to the terms of the agreement, the Mill was to prefer bills on the basis of the quantities lifted by HSL and the entire stock was to be lifted within a period of three months from the date of termination of the contract. In December 1977, 1,082 tonnes of tor-steel were awaiting lifting although the contract had expired in October 1976. Twisting cost of Rs. 0·99 lakh for 1,082 tonnes remained unbilled and unrealised (April 1978).

(b) The agreement with HSL provided that the permissible loss of material during and after processing, including transit losses, should be 2 *per cent* and for losses above 2 *per cent* HSL was entitled to recover the prevailing stockyard price of the material. In October 1974, HSL deducted an amount of Rs. 0·47 lakh on account of excessive losses during March to August 1974. The Mill did not investigate the reasons for the excessive losses. The extent of losses, if any, for the subsequent periods had not also been assessed (April 1978).

(5) *Quality control*—The Mill is a 'B' class licensee of the Indian Standards Institution (ISI) since March 1971. In terms of the licence, it is obligatory on the part of the Mill to offer all the production for ISI certification before despatch. The Mill did not, however, have chemical testing facilities up to April 1977. Further, physical testing facilitiy is not available for tor-steel above 25 mm dia. The Mill despatched 11·097 tonnes of mild steel rods and tor-steel to various users during 1975-76 and 1976-77 without ISI certification. A test check showed the following cases of rejection of off-grade materials :—

(i) In February 1974, the Mill received three orders from a firm for supply of 700 tonnes of mild steel flats; supplies against two orders were to be effected immediately and against the third by May 1974. The Mill produced 902·03 tonnes of flats and supplied 793·58 tonnes during the years 1974-75 and 1976-77. The remaining 108·45 tonnes were not lifted by the firm on the ground that these did not conform to the specifications. Out of 793·58 tonnes supplied, the firm rejected (December 1974) 4·1 tonnes as being unsuitable. The value of the quantities rejected/not lifted was Rs. 2·82 lakhs. No steps were taken to dispose of these stocks lying in the Mill since December 1975.

(ii) Against a work order received (December 1975) from an Executive Engineer, Roads and Buildings Division of the Public Works Department, the Mill despatched 50 tonnes of 28 mm tor-steel during December 1975 to January 1976, of which the consignee rejected (February 1976) 27·80 tonnes (constituting 55 *percent* of the supply) on the ground that these did

not conform to ISI specifications. The Mill replaced (March 1976) the rejected quantity by supplying 13·72 tonnes from its own stock and 14·08 tonnes purchased from HSL. The value of the rejected materials lying (March 1978) with the Mill since March 1976 was Rs. 0·67 lakh.

(*iii*) The Mill supplied 68 tonnes of 40 mm dia. mild steel rods to the same Executive Engineer during March / April 1977 for Rs. 1·31 lakhs. The consignee got the rods tested (August 1977) by the Central Research Laboratory at Bhubaneswar, which showed that the rods did not conform to ISI specifications as they were deficient in tensile strength and weld.

(*iv*) The Mill offered 676 tonnes of mild steel rods of12 mm dia. for sample test to ISI in July 1977. Of this, 394 tonnes (58 *per cent*) were found to be not conforming to ISI specifications. A total quantity of 1,432 tonnes of this material had been despatched by the Mill to various Executive Engineers of the State during May 1976 to July 1977 prior to ISI certification.

The production and supply of off-grade material had not been investigated (April 1978).

2.1.12. Manpower

(1) The project report had estimated the manpower requirement of the Mill at 101 at the production level of 15,000 tonnes per annum on the basis of two shifts per day. In 1965, the Management had again assessed the staff requirement under different categories at the same production level at 130. The Mill commenced production of tor-steel in 1971-72; for this section three posts were created. The sanctioned strength and the actual strength at the close of each of the five years up to 1976-77, along with the assessed manpower, are given below:—

Category of post	Assessment made in 1965	March 1973		1974		1975		1976		1977	
		S	A	S	A	S	A	S	A	S	A
Managerial ..	1	1	1	1	1	1	1	1	1	1	1
Supervisory Technical	6	12	8	13	8	13	9	13	8	13	8
Non-technical	4	10	6	11	9	11	9	11	9	11	9
Operational Technical	32	39	33	40	37	41	38	42	38	42	40
Non-technical	18	25	20	27	25	28	26	30	25	30	23
Skilled ..	40	71	49	72	77	74	83	74	81	74	81
Un-skilled ..	29	60	109	67	95	67	97	67	104	67	102
Badli workers	..	..	..	..	20	..	24	..	27	..	12
Total ..	130	218	226	231	272	235	287	238	293	238	276

(S=Sanctioned strength A=Actual strength)

It would be seen from the above table that in respect of skilled workers during 1973-74 onwards and in respect of unskilled workers in all the years the actual strength exceeded the sanctioned strength. The Mill had engaged the excess staff including the *badli* (reserve) workers on its own without obtaining the sanction of the competent authority, *viz.* the Managing Director and the Board of Directors of the Company.

The Management stated (February 1976) that the sanctioned strength was less than the actual requirements as there was no leave reserve.

(2) The Mill remained closed for various periods during 1975-76 and 1976-77 for following reasons :

Period		Number of days closed	Reasons for closure as stated by the Mill Management
19th October 1975 to 30th November 1976	..	43	Shortage of raw materials
2nd February 1976 to 23rd February 1976	..	22	Shortage of raw materials
8th April 1976 to 23rd April 1976	..	16	Shortage of raw materials
14th February 1977 to 28th February 1977	..	15	Shortage of raw materials
21st September 1976 to 31st December 1976	..	102	Want of work orders

The workers remained idle during the periods of closure.

2.1.13. Inventory control

(1) *Finished goods*—The following table indicates the position of finished goods at the close of each of the four years up to 1976-77 :—

Year		Plain rounds			Tor-steel		
		Closing stock	Production during the year	Closing stock in terms of number of months' production	Closing stock	Production during the year	Closing stock in terms of number of months' production
		(In tonnes)			(In tonnes)		
1973-74	..	2,035	7,990	3·1	458	1,382	4·0
1974-75	..	4,154	6,793	7·3	449	434	12·4
1975-76	..	4,378	6,381	8·2	2,427	3,619	8·1
1976-77	..	1,946	4,673	5·0	2,117	2,738	9·3

NOTE: Production figures in plain rounds include production of ribbed bars for twisting into tor-steel.

The value of the closing stock at the end of March 1976 and March 1977 was Rs. 1,66·18 lakhs and Rs. 92·32 lakhs respectively. The closing stocks included (*i*) 2,216 tonnes (value : Rs. 45 lakhs) of plain rounds and tor-steel lying undisposed for over two years and (*ii*) 175 tonnes of ribbed bars (value : Rs. 4·09 lakhs) which could not be twisted being off-grade.

(2) *Raw materials and scrap*—The following table indicates the stock of raw materials and scrap at the end of each of the four years up to 1976-77 and the corresponding consumption / sales during each of the years :—

Year		Raw materials		Scrap	
		Closing stock	Consumption during the year	Closing stock	Sales including consumption during the year
		(In tonnes)			
1973-74	..	Nil	9,547	1,029	1,812
1974-75	..	2,359	8,562	1,426	984
1975-76	..	77	7,364	360	1,649
1976-77	..	80	5,113	290	610

According to the project report, raw materials sufficient for three months' consumption were to be kept as buffer stock. No separate minimum and maximum stock limits were fixed by the Mill after it went into production. The closing stock of raw materials was less than even one month's consumption except in the year 1974-75.

The value of the closing stock (290 tonnes) of scrap in terms of the average selling price in the year 1976-77 was Rs. 2·32 lakhs.

(3) *Stores and spares*—The following table indicates the value of consumption of stores during the year and the closing stock held at the end of each of the four years up to 1976-77:—

Year	Value of closing stock	Consumption during the year	Stock in terms of months' turnover
	(Rupees in lakhs)		
1973-74	9·46	0·71	158
1974-75	13·36	1·73	95
1975-76	16·48	4·48	45

No minimum and maximum limits of stock were fixed by the Management (April 1978). The closing stock included 22 items of stores valued at Rs. 1·54 lakhs, which had not moved for six years. No action had been taken to dispose of these materials. In addition, copper flats valued at Rs. 0·60 lakh, procured from Kalinga Iron Works, a sister unit, in March 1972, were lying unutilised (April 1978).

(4) *Physical verification of stocks*—Physical verification of finished goods, conducted by the Management in May 1977 on the basis of weight of representative pieces of each section taken from the lots and multiplying it by the number of bundles available, revealed shortages of approximately 389 tonnes of plain rounds and 176 tonnes of tor-steel. The value of the shortages was Rs. 12·73 lakhs. The shortages were under investigation (Apirl 1978).

2.1.14. Other points of interest

(1) *Injudicious purchase of a mobile crane*—The Mill invited quotations from six parties in May 1973 for supply of one mobile crane of two to five tonnes capacity for the purpose of loading and unloading steel products from railway wagons. Firm 'P' submitted an offer (June 1973) for Rs. 2·98 lakhs for one model and Rs. 3·61 lakhs for another model. No action was taken thereon as it was a single offer. In June 1975, quotations were again invited from five firms for supply of one 5 to 10 tonnes capacity mobile crane. Reasons for changing the capacity of the crane required were not on record. Two firms 'P' and 'R' submitted their offers. Firm 'P' quoted (July 1975) Rs. 3·67 lakhs for five tonnes capacity and Rs. 5·87 lakhs for 12·5 tonnes capacity crane. Firm 'R' quoted (July 1975) Rs. 8 lakhs for crane of 12·5 tonnes capacity. In preference to these offers, the General Manager of the Mill asked (August 1975) two other firms 'S' and 'T' to submit their offers. Firm 'S' did not quote. Firm 'T' quoted (November 1975) Rs. 2·38 lakhs exworks Calcutta for a mobile crane of eight tonnes capacity. The head office of the Company placed a letter of intent (December 1975) on the firm without verifying its suitability for handling BKC steel wagons and directed the Mill to place a formal order. Accordingly, the Mill placed an order in December 1975 and the mobile crane was received in April 1976. The total price was Rs. 2·51 lakhs, including excise duty, central sales tax and insurance charges.

There was, however, no occasion to handle BKC wagons till December 1976. When two wagons of this type were unloaded in January 1977, it was done with difficulty and the crane got damaged during the operations. The Mill Management observed (January 1977) that the crane was so designed that it was unsuitable to handle steel

materials. The crane has been lying idle since then. A proposal (January 1977) to transfer it to a sister unit under the Company was awaiting decision (April 1978).

(2) *Preparation of pre-investment report*—The Company engaged in May 1976 firm 'Y' for preparation of a pre-investment report for optimisation and modification of the existing re-rolling mill. The firm, in its report of July 1976, proposed two alternatives, namely, (*i*) carrying out modifications to the existing mill and (*ii*) to instal a new mill for breaking ingots of silico manganese spring steel. The estimated capital cost was Rs. 5·7 lakhs and Rs. 21·60 lakhs for the first and second alternatives respectively. The firm was paid Rs. 0·50 lakh in two equal instalments in June 1976 / February 1977 according to the terms of engagement for preparation of the report. The Board of Directors of the Comapany decided (August 1977) not to pursue the recommendations in view of the heavy capital investment involved.

(3) *Payment of electricity charges*—(i) Mention was made in paragraph 91 (7) (iv) of the Report of the Comptroller and Auditor General of India for the year 1970-71 about the extra expenditure of Rs. 1·15 lakhs in payment of electricity charges by the Mill during 1969-70 owing to the consumption being less than the contracted load of 1800 KVA which was revised to 1400 KVA from August 1970. The Management had explained to the Committee on Public Undertakings in January 1973 that the power supply was contracted as per the requirement indicated in the project report and that, owing to non-availability of raw materials, the actual consumption of power was less than the contracted demand. The contract demand was further revised (November 1976) to 1200 KVA, effective from 30th July 1975. The Board, however, preferred bills on the basis of 1400 KVA till Octobr 1976. The excess amount paid on account of minimum charges on 1400 KVA instead of 1200 KVA amounted to Rs. 0·48 lakh for the period August 1975 to October 1976. Refund of the excess payment, claimed in December 1976, is awaited by the Mill (April 1978).

(*ii*) A test check of the energy bills for the period from August 1970 to August 1977 showed that the Mill was not able to utilise even the reduced demand of 1200 KVA and the maximum demand ranged from 80 KVA to 840 KVA during this period.

The difference between the charges as per the contracted demand of 1400 KVA/1200 KVA and those as per the actual maximum demand amounted to Rs. 2·10 lakhs during the period August 1970 to August 1977.

(4) *Loss in supply of electricity to residential colony*—The Mill has been supplying energy purchased from the Orissa State Electricity Board to its employees, co-operative stores and club and for street lighting. The total energy for colony consumption was metered by the Board at a single point and billed accordingly. The Mill had installed separate meters in the individual quarters for the purpose of recovering energy charges on unit basis, except in 12 'D' type quarters where the recovery was made at flat rates. A test check of energy bills for consumption in the colony during the period from April 1972 to August 1977 showed that the aggregate of colony consumption as recorded by individual meters was 2·72 lakh Kwh while according to the main meter of the Board the colony consumption was 4·23 lakh Kwh. Thus, there was a shortfall of 1·51 lakh Kwh valuing Rs. 0·31 lakh.

The Mill Management stated (July 1976) that meters were fixed inside the rooms and that it was not possible to detect unauthorised consumption by surprise check. It was also stated (September 1977) that an iron box had been made for each meter and these boxes were sealed (August/September 1976) to check power pilferage.

(5) *Observations of the Statutory Auditors*—The Statutory Auditors in their special report (May 1977) on the accounts of the Mill for 1974-75 made, *inter alia*, the following observations:—

(*i*) Property and plant register maintained by the Mill did not indicate the particulars of the foreign and indigeneous machinery and expenses on their installation.

(*ii*) There was no system of internal audit.

(*iii*) There was no proper planning in the matter of purchase of stores, spare parts, *etc*.

(*iv*) Separate manufacturing account had not been prepared.

(*v*) Cost control account or ledger was not maintained.

(*vi*) The books of accounts, bank accounts and other subsidiary accounts were not reconciled periodically.

The above matters were reported to the Management of the Company/ Government in November 1977; replies are awaited (April 1978).

KALINGA IRON WORKS

2.2.1. Purchase of grabbing cranes

For unloading raw materials from wagons and for feeding raw materials from the stockyard to the conveyor system, an order was placed (September 1970) by the Kalinga Iron Works, a unit of the Company, on a firm in Calcutta against limited quotations for supply of a 5 tonne grabbing crane at a cost of Rs. 4·05 lakhs (excluding sales tax) to be supplied within 16 months from the date of receipt of the order. The price was subject to escalation in wages. Rupees 1·22 lakhs, being 30 *per cent* of the cost of the crane, were paid (September 1970) to the firm as advance in terms of the order; the order was acknowledged by the firm in January 1971. The firm was requested in January 1971 to improve the period of delivery as the crane was required urgently. The firm stated in June and again in December 1971 that in view of its inability to procure steel required for manufacture of the crane from indigenous sources, it would use imported steel and asked (January 1972) the Unit to reimburse to it the extra cost involved (Rs.0·38 lakh). The Unit agreed (February 1972) and asked the firm to deliver the crane within the shortest possible time. The firm went on extending the delivery period from time to time unilaterally on grounds of delay in import of steel and load shedding by the electricity authorities and in November 1974 sent a demand for a total amount of Rs. 6·81 lakhs being the balance cost of the crane (Rs.3·24 lakhs) including sales tax and escalation in wages (Rs.3·15 lakhs) and extra cost of imported steel including sales tax (Rs.0·42 lakh). The Unit, while agreeing in November 1974 to payment of the claim under wage escalation clause up to April 1972 (16 months from January 1971, the date of acknowledgement of order), refused to accept the claim for the extended delivery period. The firm informed (January 1975) the Company that, unless the amount was paid by January 1975, it would treat the purchase order as cancelled and divert the crane to others after adjusting the cancellation charges and other related expenses incurred by it against the advance.

The Unit did not pay the amount nor did it take delivery of the crane (January 1978). The firm had also not refunded the advance (January 1978).

The matter was reported to Government in November 1977; Government confirmed the facts (March 1978).

2.2.2. Payment of fine

An order for supply of ten items of spare parts required for plant and equipment (value: DM 27,065 *f. o. b.* West German port) was placed (January 1975) by the Kalinga Iron Works on a firm of West Germany. The purchase was to be financed out of West German credit and made against import licence issued in January 1975, valid for twelve months from the date of issue. The consignment reached the Calcutta Port in December 1975. The customs authorities held that six out of the ten items of spares (value: DM 9,210 or Rs. 36,387 *f. o. b.* West German port) were non-permissible items as these related to pipe line accessories and, hence, their import was unauthorised. They confiscated (October 1976) the goods under the provision of Customs Act, 1962 and in lieu of disposal of the spare parts the Customs authorities gave option to the importer to clear the goods on payment of a fine of Rs. 36,000. Though the Unit Management held that the spare parts actually related to turbine and boiler accessories and were thus authorised by the import licence, it cleared the consignments on payment of the fine in October 1976 on the ground that the accessories were required urgently to avert break-down of the plant. The spare parts were, however, not used till January 1978. In January 1978, some spares like screw oil pump and main top valve were used and other spares were lying in stores (February 1978).

The matter was reported to the Management of the Company/Government in January 1978; Government stated (March 1978) that the Company was pursuing with the Collector of Customs for disposal of the case.

2.2.3. Sale of runner iron

The Unit disposes of its scrap items, such as runner iron, cut runner, heavy runner, *etc.* at rates fixed each time after taking into account the market conditions and the prices of Hindustan Steel Limited. On 26th June 1976, an order was released by the Unit for sale of 500 tonnes of cut runner to a firm 'K' of Calcutta at Rs. 630 per tonne, *ex* Shalimar. No stipulation was made in the release order for revision of the price during the period of the contract in the event of variation in market price, although such a clause was included in a subsequent order released to another firm in July 1976. In July 1976, by which time only 47·4 tonnes out of 500 tonnes had been supplied to the Calcutta firm, the Unit increased the price of the runners to Rs. 710 per tonne. On 22nd July 1976, the Unit proposed to the firm incorporation of an amendment in the sale order to the effect that the seller reserved the right to revise the price at any time during the period of the contract. The firm did not accept the amendment at that stage and the Unit supplied the balance 452·6 tonnes at the agreed rate of Rs. 630 per tonne. Non-inclusion of a price variation clause in the release order, thus, resulted in a loss of Rs. 0·36 lakh.

The matter was reported to the Management of the Company/Government in December 1977; replies are awaited (April 1978).

2.2.4. Irrecoverable claims

(*i*) The Unit despatched from Barbil (November 1970) by train 23·9 tonnes of pig iron (value: Rs. 0·11 lakh) to a firm 'A' in Calcutta at Railway risk. The documents sent to the party through the bank reportedly reached it after 11 days, and owing to demurrage charges claimed by the Railways, the party refused to take delivery. The Unit itself took delivery of the material on 28th June 1971. When the material was weighed there was shortage of 22·935 tonnes. A claim for Rs. 0·11 lakh preferred on the Railways on 28th June 1971 had not been settled. In February 1977, the Unit Management sought the approval of the Company for writing off the loss after obtaining legal advice. Further developments are awaited (April 1978).

(*ii*) Another consignmnt of 23·2 tonnes of pig iron was despatched to the same firm on 31st July 1971 and the despatch documents were sent through the bank on 4th August 1971. The wagon also reached the destination on 4th August 1971. However, the bank was stated to have presented the despatch documents to the party on 8th Novermber 1971. Neither the party nor the Unit took delivery of the material. The Unit requested the Railways on 16th March 1972 to waive the demurrage and wharfage charges. The Railways had, in the meantime, sold the material by public auction. The claim of the Unit for compensation against the Railways for Rs. 0·12 lakh, lodged on 13th June 1972, was stated by the Unit Management to have been rejected (October 1972) by the Railway authorities. The Board of Directors of the Company approved (December 1977) the write off of the amount. No action was, however, taken against the bank for the delay in presentation of the despatach documents.

(*iii*) Against an order received (February 1972) from firm 'B' of Calcutta, the Unit despatched 94·6 tonnes (value: Rs. 0·43 lakh) of pig iron in four wagons in March 1972. The firm reported on 24th April 1972 that it did not receive the despatch documents in time, and refused to take delivery of the consignment unless the Unit agreed to bear the demurrage and wharfage charges. The Unit took delivery of the wagons (April 1972) and diverted them to another customer after paying demurrage and wharfage charges and freight totalling Rs. 0·16 lakh. Attempts made to recover this amount from firm 'B' having failed, the Unit sought (February 1977) the approval of the Company to write off the amount. The Board of Directors approved (December 1977) the write off of the amount.

The matter was reported to the Management of the Company/Government in December 1977. Government confirmed (January 1978) the factual position of the above cases.

HIRA CEMENT WORKS

2.3.1. The project report prepared in July 1964 for manufacture of cement in the Hira Cement Works, Bargarh, an unit run by the Company, envisaged use of local clay as corrective material to control the other components in the raw-mix. When the cement plant was commissioned in 1968, the local clay was found to contain higher percentage of sand, which caused difficulties in pumping. In early 1969, local clay was substituted by *moorum*, which was locally available and which could be fed directly into the feed table of the mill. Consequently, the plant and machinery, acquired in 1966-67 for handling clay at a cost of about Rs. 7·21 lakhs (two narrow gauge diesel locomotives : Rs. 2·03 lakhs, 3 km. of track : Rs. 0·61 lakh, wash mill and twin silos : Rs. 4·57 lakhs), could not be utilised fully. The utilisation of the clay mill in the three years ended 1976-77 was as under :—

1974-75	156 hours
1975-76	375 hours
1976-77	300 hours

The Management of the Unit stated (September 1977) that the twin silos could not be put to any use, that the locomotives were being used to transport set slurry and chimney dust from the dumps to the clay mill and that the vibrating screen of the clay mill was proposed to be used in a modification work elsewhere.

The entire plant and machinery costing Rs. 7·21 lakhs was redundant since the silos remained idle (April 1978) and the other items were being put to only limited use.

Government endorsed the Management's reply of September 1977.

2.3.2. Penalty for low power factor

The Unit has been drawing power from the Orissa State Electricity Board as a large industrial consumer. The tariff prescribed by the Board to this category of consumers stipulated that the consumer should maintain a particular level of power factor, which was 80 *per cent* up to 31st December 1974 and 90 *per cent* from 1st January 1975. The tariff schedule effective from 1st January 1975 further stipulated that the monthly charges for factory consumption should be increased by 0·5 *per cent* for each *per cent* or part thereof by which the power factor during a month fell below 90 *per cent*.

In January 1973, the Unit installed four capacitors to improve the power factor in the factory to a level of over 90 *per cent*, at a cost of Rs. 0·78 lakh. The capacitors, however, attained only 85 to 89 *per cent* and two of the capacitors failed in January 1975. An inspection by the firm which supplied the capacitors, arranged in February 1975, *i. e.*, after the guarantee period of 12 months was over revealed that the capacitors had failed owing to manufacturing defects and they were beyond repairs. The capacitors were lying idle (April 1978). During the period between January 1975 and November 1975, the power factor of the supply in the Unit ranged between 80 and 88 *per cent* as a result of which an amount of Rs. 1·32 lakhs had to be paid towards power factor surcharge. The power factor continued to be low thereafter and Rs. 14,850 were paid during December 1975 to May 1976 as power factor surcharge.

VIJAYAWADA

The matter was reported to the Management and Government in March 1977 ; replies are awaited (April 1978).

FERRO-CHROME PLANT

2.4.1. Sale of Chrome ores

The Unit sold (April 1974) 60 tonnes of lumpy chrome ore (50 *per cent* Cr. 203) and 40 tonnes of chrome ore fines (50 *per cent* Cr 203) to a private firm at the provisional rates of Rs. 180 per tonne and Rs. 170 per tonne respectively pending fixation of the final rate by the Company's head office. The supply was made to the firm on credit basis, as a special case, without executing any agreement on the understanding that there would not be any delay in releasing payment to the Unit. During January 1975 to June 1976, further quantities of 217·160 tonnes of chrome ore fines were sold to the same firm on the same basis at the provisional rate of Rs. 300 per tonne. The firm made advance payment of Rs. 0·22 lakh in January 1975 (Rs. 0·12 lakh) and in February 1976 (Rs. 0·10 lakh) against the provisional bills preferred by the Unit in January and February 1975.

The Company's head office fixed in March 1977 the sale price at Rs. 415 per tonne. Final bills were sent to the firm in March 1977 for Rs. 1·29 lakhs after adjusting the advance payment of Rs. 0·22 lakh. Meanwhile, a new managment took over the firm in January 1977 and called for (May 1977) receipted challans for the dues claimed. The Unit furnished (June 1977) copies of the receipted challans and was awaiting payment (March 1978).

The matter was reported to the Management/Government in October 1977 ; their replies are awaited (April 1978).

2.4.2. Sales to Alloy Steel Plant, Durgapur

Against ten purchase orders placed by the Alloy Steel Plant, Durgapur (ASP) between January 1972 and January 1977 for supply of ferro chrome (low carbon and highcarbon) and siloco chrome, the Unit supplied 5,388 tonnes of the material during the period 1973-74 to 1976-77. According to the terms and conditions of the purchase orders, the weight as per railway receipts was to be accepted provided it was based on actual weighment and was not the chargeable weight. The quantities billed for by the Unit were also on the basis of the actual weight as indicated in the railway receipts. Instead of accepting the weight as indicated in the railway receipts in terms of the purchase orders, ASP acknowledged the consignments after weighment at its end from time to time. In June 1976, ASP asked the Unit for weighment again of the consignments supplied, which were stated to be available in its store. The Unit declined (July 1976) to do so and insisted on ASP making payment in terms of the purchase orders.

In respect of the ten orders (5,388 tonnes), a total quantity of 5,291 tonnes was acknowledged by ASP and payments were made accordingly. The value of 97 tonnes of the material not acknowledged and paid for was Rs. 5·76 lakhs. The Unit Management stated in October 1977 that the matter had been taken up with the higher authorities of ASP for settlement. Further developments are awaited (April 1978).

The matter was reported to the Management/Government in December 1977 ; replies are awaited (April 1978).

HIRA CABLE WORKS

2.5. Supply of conductors

In response to a tender notice by the Punjab State Electricity Board, the Hira Cable Works offered (May 1970) to supply 300 Kms. of conductors, as detailed below:—

Type of conductor		Quantity (In kilometres)	Rate per kilometre *f. o. r.* destination (Rupees)
'Dog'	..	100	3,192
'Tiger'	..	100	4,652
'Panther'	..	100	7,275

The rates were subject to variation in excise duty on raw materials and were exclusive of excise duty and Central sales tax on finished goods which were payable extra on actuals.

The Board accepted the offer and placed a purchase order on the Unit in October 1970 according to which delivery was to commence from March 1971 and was to be completed by June 1971 at the rate of 100 Km. per month. Extension of the delivery period was permissible only on the ground of 'force majeure'. The Unit did not commence the supply till May 1972 for different reasons at different times, such as non-finalisation of terms of payment, difficulty in procurement of raw materials and conductors, when offered, not being inspected by the Board in time. The Unit, however, supplied the entire quantity during June 1972 to July 1973 against 98 *per cent* advance payment, without obtaining prior extension of the delivery period.

The request of the Unit (September 1973) to extend the delivery period *post-facto* and to release the remaining 2 *per cent* payment (Rs. 0·29 lakh) was not accepted by the Board (November 1974) on the ground that the delay in delivery was not covered under the 'force majeure' clause. The Board also rejected (August 1975) the claim of the Unit (October 1973) for reimbursement of Rs. 0·72 lakh incurred by it on account of increase in excise duties on raw materials used in the manufacture of conductors.

Government, while accepting the factual position, stated (October 1977) that the Company was pursuing the case with the Punjab State Electricity Board.

OTHER TOPICS OF INTEREST

2.6.1. Investment in a private Company

In pursuance of a decision (May 1970) of the State Government, the Company decided (December 1970) to invest in the equity share capital of a private company formed in October 1970 to take up export promotion business in the State, to the extent of 25 *per cent* of the subscribed capital. Government sanctioned, in March and December 1971, Rs. 0·50 lakh and Rs. 0·15 lakh respectively to the Company for investment in the share capital of the private company. A sum of Rs. 32,500 being 25 *per cent* of the reported subscribed capital of Rs. 1·30 lakhs, had, however, already been paid by the Company to the private company in December 1970. The balance amount of Rs. 32,500 received by the Company was retained by it. Two Directors, one from the Company and the other from Government, were nominated (May 1971) to the Board of Directors of the newly formed private Company.

The Company reported to Government in October 1976 that the private Company which had obtained a certificate of commencement of business in October 1970, had not done any export business, lacked organisation for export and it did not inform the Company about the meetings of its Board of Directors and formulation of Export Promotional Programme.

The latest available accounts of the private Company for the period ended 30th September 1974, indicated an accumulated loss amounting to Rs. 0·90 lakh, which was mainly on account of expenditure on office staff and establishment.

According to a review of the investment, conducted jointly by the Secretary to the Industries Department and the representatives of the Company in November 1976, the private Company had become defunct as its Board of Directors did not meet after 1973. It was also found by the Company in November 1976 that it was not possible to activise the private Company again. It was decided that the Company should examine the matter further for recovery of its investment and formulate its proposal for submission to Government. Further action is awaited (April 1978).

Government stated (January 1978) that the Company had been taking steps to sell its shares in the private Company to private parties but no party had shown interest in purchasing these shares.

2.6.2. Loss of rebate in payment of sales tax

For the purpose of assessment of sales tax, the Company furnishes to the Sales Tax authorities a consolidated return showing the taxable turnover of each of the Company's constituent units. Each unit of the Company is required to deposit separately into the treasury sales tax due from it as per instructions of the head office. If any of the units defaults in making payment by the due date, the rebate otherwise admissible for timely payment of the tax by other units of the Company is also not available.

It was noticed during test audit (July 1976) that the Company could not avail of rebates aggregating Rs. 0·87 lakh in respect of the assessment years 1967-68 to 1972-73 owing to belated payment of admitted tax by its seven units. The Management stated (May 1977) that the admitted tax was not deposited in time by the units owing to paucity of funds with those units.

Government also stated (January 1978) that the reba te was lost due to paucity of funds.

SECTION III

ORISSA LIFT IRRIGATION CORPORATION LIMITED

3.1. Introductory

Prior to June 1963, the lift irrigation activity of Government was confined to hiring of pumps to cultivators by the Directorate of Agriculture. In June 1963, a separate Directorate of Lift Irrigation was established under the Irrigation Department to deal with the execution of lift irrigation programmes. The Directorate installed 1,236 lift irrigation projects in the State up to September 1973.

Government had estimated in November 1972 that by harnessing the flow water and by exploiting the underground water through lift appliances, 5·01 million acres of land could be irrigated with a capital investment of Rs. 280 crores. A corporate type of organisation, which could arrange funds not only from Government but also from financial institutions, was considered suitable for handling such a massive programme. Accordingly, the Orissa Lift Irrigation Corporation Limited was incorporated as a wholly-owned Government Company on 21st September 1973.

3.2. Objects

The main objects of the Company are to :

(*i*) investigate and develop ground water and surface water resources by executing, establishing and improving lift irrigation projects (tubewells and direct lift projects) by availing of loan assistance from financial institutions and managing these ;

(*ii*) take over from the State Government the existing lift irrigation projects and incomplete projects along with connected buildings, assets, works, *etc*. and carry out, on agency basis on behalf of Government, all kinds of ground water exploration business ; and

(*iii*) undertake hiring of pumps to individuals, institutions, local bodies and departments of Government at rates determined by the Company and to assess and collect economic water rates and charges along with surcharge, penalties, *etc*.

Presently, the Company is engaged in the following activities:

(*i*) Survey of ground water resources;

(*ii*) operation and maintenance of lift irrigation projects owned by the State Governemtnt;

(iii) construction of lift irrigation projects of its own and on behalf of agencies like Tribal Development Agency, Drought Prone Area Programme Agencies, *etc.* and operation and maintenance thereof ;

(iv) operation of diesel pump hiring scheme ; and

(v) manufacture of spun pipes in the factory at Pratapnagar.

3.3. Organisational set-up

The overall management of the Company vests in a Board of Directors headed by a part-time Chairman. The day-to-day affairs are managed by a Managing Director, who is assisted by two Superintending Engineers and a Financial Adviser and Chief Accounts Officer. There are 15 field divisons (9 lift irrigation, 2 mechanical and 4 hydrological), each under the charge of an Executive Engineer. One Executive Engineer (Electrical) is stationed at the headquarters office to deal with all matters relating to electricity.

3.4. Capital structure

(a) *Equity capital*—The authorised capital of the Company is Rs. 2,500 lakhs divided into 25 lakh equity shares of Rs. 100 each. The paid-up capital of the Company as on 30th June 1977 was Rs. 262·05 lakhs, wholly contributed by the State Government.

(b) *Borrowings*—The Company has obtained loans from commercial banks for financing its projects. In February 1976, a tripartite agreement was entered into among the Company, the State Government and the Agriculture Refinance and Development Corporation (ARDC) according to which ARDC is to finance the construction programme of the Company through interest bearing loans to be guaranteed by Government. The following table shows the borrowings from different sources since inception, repayments made and the balance outstanding as on 31st March 1977:—

Source		Borrowings	Repayments	Balance outstanding as on 31st March 1977
		(Rupees in lakhs)		
A commercial bank	..	246·09	86·52	159·57
State Bank of India	..	20·00	20·00	..
ARDC	..	231·19	..	231·19
State Government	..	5·00	..	5·00
Total	..	502·28	106·52	395·76

3.5. Financial position

The Company has prepared annual accounts for the year 1973-74 only ; even provisional accounts for the subsequent years have not been compiled (April 1978). According to the Management, the arrears were due to the time taken in the preparation of accounts for the first year after formation of the Company and introduction of commercial accounting system.

The following table indicates the financial position of the Company as on 30th June 1974:—

		(Rupees in lakhs)
Liabilities		
(a) Paid-up capital	..	78·53
(b) Borrowings	..	46·06
(c) Current liabilities	..	420·18
Total		544·77
Assets		
(d) Gross block	..	114·35
(e) *Less* : depreciation	..	11·65
(f) Net fixed assets	..	102·70
(g) Capital work-in-progress	..	68·92
(h) Current assets, loans and advances	..	341·51
(i) Miscellaneous expenditure	..	3·41
(j) Loss	..	28·23
Total	..	544·77
Capital employed	..	24·03
Net worth	..	46·89

Note : (i) Capital employed represents net fixed assets *plus* working capital.

(ii) Net worth represents paid-up capital *plus* reserves and surplus *less* intangible assets.

Mention was made in paragraph 4.5 of the Report of the Comptroller and Auditor General of India for the year 1973-74 (Civil) about the take over of the Lift Irrigation programme by the Company from the Directorate of Lift Irrigation. On the formation of the Company, all the lands, buildings, stores, tools and plants, materials, *etc.* of the Directorate of Lift Irrigation and the offices subordinate thereto were deemed to have been transferred to the Company at the value to be agreed upon between the Company and the State Government. The value of the transferred assets was to be treated as equity share capital contribution of the State Government and loan to the Company in such proportion as would be determined by the State Government. Government appointed (May 1975) a committee, consisting of the Managing Director, the Financial Adviser and Chief Accounts Officer of the Company and the Financial Adviser and Deputy Secretary, Department of Irrigation and Power for valuation of the assets. Valuation of the assets had not been finalised by the committee (January 1978). Pending finalisation, the Company adopted its own valuation of the assets for inclusion in the accounts for 1973-74.

The Company took over all the liabilities of the Directorate of Lift Irrigation and the offices subordinate thereto without any condition and, as such, was responsible for their clearance. The total liabilities transferred to the Company were Rs. 70·20 lakhs as per the accounts for 1973-74.

3.6. **Working results**

The working results of the Company for the period October 1973 to June 1974 are indicated below:—

	(Rupees in lakhs)
Income	
Subsidy from Government ..	118·40
Water rate receipts ..	1·33
Miscellaneous receipts ..	8·87
Total ..	128·60
Expenditure	
Establishment ..	59·07
Operation of lift irrigation projects ..	88·62
Interest ..	2·93
Miscellaneous ..	6·21
Total ..	156·83
Loss ..	28·23

Note : Subsidy taken credit for in the accounts of the Company was provisional subject to approval of Government.

3.7. *Construction* **of projects**

3.7.1. The Company took over from Government the management of 1,236 projects having irrigation potential of 72,830 acres. During ... irrigation potential of

7,255 acres. In 1974-75 and 1975-76, 390 and 750 projects respectively were added raising the total number of projects to 2,538 and the irrigation potential to 1,36,715 acres.

The terms and conditions of management of the projects taken over from Government have not been finalised (April 1978).

3.7.2. *Projects assisted by ARDC*—Against the schemes sanctioned by ARDC, the Company gets loan assistance to the extent of 90 *per cent* of the sanctioned amount from the Commercial banks and the State Bank of India on the basis of the expenditure statements submitted to them. The banks get 90 *per cent* of the amounts disbursed by them as loan from the ARDC, the remaining 10 *per cent* being financed from each bank's own resources. Up to April 1977, out of 69 schemes consisting of 2,459 projects (1,499 tubewells and 960 direct lift points) proposed, execution of 2,174 projects (1,245 tubewells and 929 direct lift points) had been approved by ARDC. Of these, 1,108 tubewells and 424 direct lift points were completed by the Company till September 1977.

A test check of the records in respect of 30 schemes for 997 projects (882 tubewells and 115 direct lift points) showed the following:—

(*i*) The schemes were sanctioned by ARDC between February 1975 and June 1976 and were to be completed within six months from the date of sanction, *i.e.* latest by December 1976. The position of execution of the schemes as on 31st July 1977 is indicated below:—

Number of projects energised ..	424
Number of projects installed but not energised ..	177
Number of projects failed ..	64
Number of projects not taken up ..	332

The number of projects energised was 42 *per cent* of the number targeted. Due to lack of co-ordination between the Company and the State Electricity Board, a large number of projects installed were not energised by the target dates. These included 20 projects installed prior to the receipt of approval from ARDC.

(*ii*) Out of 601 projects installed, in 241 cases the time lag between the dates of installation and the dates of energisation was more than one month, (normally reckoned as the time required for the purpose), as indicated below:—

	Number of projects
More than one month but less than six months ..	52
Between six and twelve months ..	159
More than twelve months ..	30

The delay in the energisation of 177 projects was attributed by the Management (May to August 1977) to late installation of necessary transmission lines by the State Electricity Board due to onset of rains, project areas not being developed and certain projects found later to be unremunerative.

(*iii*) Three hundred and thirty two projects were not taken up for execution even after lapse of 16 to 30 months from the date of sanction. The reasons for not taking up the projects, mentioned (May and August 1977) by the Divisional Officers, were *inter alia*: command areas of some projects fell under the *ayacut* of flow irrigation in the vicinity, *ayacut* was sand cast, cultivators were not interested in lift irrigation and tubewells in some cases would have to be sunk deeper than the designed depth.

(*iv*) The various scheme reports prepared by the Company indicated that the areas had sandy acquifers charged with fresh water, that these had high lands in adjacent plateau and that floods in the rivers in the proximity would contribute to recharging the acquifers. Out of 64 projects which failed, eight failed due to occurrence of saline water, 55 failed because either no acquifer was found after boring or the acquifer was inadequate to give sufficient discharge of water. Of the latter category, incidence of failure was high in Ganjam district, where in one scheme 24 out of 55 projects taken up failed because of insufficient discharge of water from acquifer; in another scheme, 8 out of 9 projects taken up failed because the strata contained sandy, sticky or white clay with *canker moorum* and rock, *etc.* which rendered execution of the work difficult. The Divisional Officer stated (March 1977) that in Ganjam district correct projection of the geological/hydrological data was difficult and that the projects were sanctioned experimentally to ascertain the future prospects.

An aggregate amount of Rs. 3·56 lakhs had been spent on the failed projects.

(*v*) In Ganjam district, one tubewell sunk and energised in December 1975 to January 1976 was not put to any use (March 1978) as the discharge of the well at 2,400 gallons per hour was not adequate for irrigation purposes. The well was completed and energised despite indication in the strata chart that coarse sand was not available in the bed of the well for a flawless acquifer. The Divisional Officer stated (March 1977) that charging of tubewells did not depend on strata alone and that poor discharge was noticed after installation only on account of lack of proper instruments for determining feasibility. Rupees 13,740 had been spent on the tubewell.

(*vi*) The sanctioned estimate for the 997 projects was Rs. 568·02 lakhs of which Rs.337·74 lakhs were in respect of 601 projects installed. The actual expenditure booked against these projects up to May 1977 (for which data were compiled) was Rs. 230·27 lakhs. In respect of 124 projects (out of 601), the expenditure (Rs.70·66 lakhs) had exceeded the sanctioned estimate (Rs.65·95 lakhs), the excess ranging up to 175 *per cent* as shown below:—

Range of variation (*per cent*)		Number of projects
1— 25	..	69
26— 50	..	37
51— 75	..	15
76—100	..	2
Above 100	..	1

In 67 other projects (out of 601), the aggregate expenditure booked was Rs.7·78 lakhs against the total estimated cost of Rs. 49·54 lakhs as no expenditure was booked against items like pumps, panels, pipes and fittings although the projects had been energised. The Divisional Officer stated (May 1977) that with a view to adhering to the energisation programme, pumps, panels, *etc.* of old projects were removed and fitted to the new projects as new pumps and panels were not available in stock.

(*vii*) The estimates contained costs under each item like civil works, installation, pipes and fittings, distribution system, pump chamber electrification, overhead charges, *etc.* About 45 *per cent* of the total estimated cost was towards installation including drilling, reaming, pipes, gravel, *etc.* In 270 cases, the actual expenditure on installation exceeded the estimated cost, the ranges of variation being up to 204 *per cent* as shown below:—

Range of variation (*per cent*)		Number of projects
1— 50	..	129
51—100	..	91
101—150	..	35
Over 150	..	15

Revised estimates were stated to be under preparation to regularise the excesses.

(*viii*) The sanctioned estimates provided for installation of tubewells of dimensions 8"x6" and 10"x6". In eight schemes (Lift Irrigation Division, Balasore), tube-wells of dimension 12"x6" were installed for reasons not on record. The extra expenditure involved has not been intimated by the Divisional Officer concerned (April 1978).

(*ix*) Except in a few cases, construction of distribution system had not been taken up. As a result, water was supplied through earthen channels with high seepage.

3.7.3. *Schemes for irrigation in drought prone areas*—

The State Government launched in April 1970 a drought prone area programme (Centrally sponsored) in the districts of Phulbani and Kalahandi with the object of executing works like minor irrigation projects, soil conservation, afforestation and roads to provide employment in rural areas and simultaneously mitigate, if not totally eradicate, drought in drought prone blocks. From September/October 1974, the implementation was entrusted to DPAP agencies registered under the Societies Registration Act. The Company proposed (December 1974 and November 1975) to instal 14 direct pumping projects in Kalahandi district (estimated cost: Rs.8·73 lakhs) and 16 direct pumping projects in Phulbani district (estimated cost: Rs. 17 lakhs). The DPAP agencies, which wanted to cover these projects under their programme and get them executed by the Company, approved the execution of 12 projects in Phulbani (estimated cost: Rs.13·07 lakhs) and 8 projects in Kalahandi district (estimated cost: Rs.5·15 lakhs). Fifty *per cent* of the actual expenditure to be incurred on the 20 projects was to be contributed by DPAP, the remaining 50 *per cent* being borne by the Company itself.

The projects were completed during the period from May 1975 to April 1977. The Company incurred a total expenditure of Rs. 8·46 lakhs and received Rs. 4·62 lakhs from DPAP agencies as indicated in the following sub-paragraph. In respect of the projects in Kalahandi district, the Company received contribution in anticipation of expenditure while it received short contribution in respect of the projects in Phulbani district.

Some important features of the schemes are indicated below:—

	Kalahandi	Phulbani
Number of Projects taken up under DPAP ..	8	12
Estimated cost (Rupees in lakhs)	5·15	13·07
Actual expenditure up to March 1977 (Rupees in lakhs).	2·58	5·88
Amount contributed by DPAP (Rupees in lakhs)	2·60	2·02
Cost of irrigation per acre-inch (Rupees) ..	9·60	6·83
Benefit-cost ratio ..	4·12:1	7·23:1
Irrigation potential estimated (acre-inches) ..	16,854	67,176

3.7.4. *Schemes for irrigation in tribal areas*—The projects executed by the Company, the actual expenditure incurred and the amount of total deposits received up to September 1977 in respect of schemes of three tribal development agencies are indicated below :—

Agency	Number of projects executed	Actual expenditure	Amount of deposit received
		(In lakhs of rupees)	
Tribal Development Agency, Keonjhar	3	4·32	5·77
Tribal Development Agency, Ganjam (Parlakhemundi)	7	10·66	12·99
Tribal Development Agency, Koraput (Gunupur)	9	8·95	12·58
	19	23·93	31·34

In the execution of Dambapur Lift Irrigation project, Parlakhemundi the following points were noticed:—

(*i*) Against the requisition (January 1972) of the Tribal Development Agency, Ganjam (Parlakhemundi), the Lift Irrigation Division of the Company at Berhampur framed (April 1972) an estimate for Rs. 2·47 lakhs, to which administrative approval was accorded by the Agency in May 1972. The estimate was revised in July 1972 to Rs. 4·03 lakhs on the ground of increase in the cost of materials and provision for RCC intake well. The estimate was further revised to Rs. 5·79 lakhs in September 1975 on account of change of design of the pump chamber and design and alignment of the distribution system, provision of a well mouth and higher rates tendered. Technical sanction to the revised estimate was obtained on 6th November 1975 and revised administrative approval was obtained on 19th November 1975.

(*ii*) The work had commenced in January 1973. The work of fitting delivery pipe line to one of the pumps (60 H. P.) and construction of 3,900 rft. of brick channel as extension to the main brick channel had not been completed (April 1978).

(*iii*) The agency deposited Rs. 5·12 lakhs between May 1972 and April 1976. Expenditure incurred up to November 1976 was Rs. 5·01 lakhs.

3.7.5. *Construction of deep tubewells in areas affected by flood and cyclone*—Mention was made in paragraphs 3.12 (Part I) of the Report of the Comptroller and Auditor General of India for the year 1973-74 (Civil)—Supplementary about energisation of 40 deep tubewells out of 55 tubewells drilled (including 5 failures) by August 1975 against 56 tubewells to be completed by March 1972, for which Rs. 50 lakhs were sanctioned by Government in March 1972. Five more tubewells were energised between August 1975 and January 1976.

A tubewell was commissioned on 2nd September 1974 with a 15 H. P. pump having discharge capacity of 1·8 cusecs. After operation for 1,804 hours, the Company replaced the 15 H. P. pump with a 35 H. P. pump in December 1975. The tubewell, after operating 12 hours with the 35 H. P. pump, discharged saline water unsuitable for irrigation purposes. The Director, Central Ground Water Board, to whom the matter was referred for advice, is reported to have attributed (March 1976) the failure of the tubewell to structural defects resulting from installation of a 35 H. P. pump. Expenditure incurred in the project was Rs. 1·56 lakhs.

The Company and the officers of the Central Ground Water Board had agreed in December 1976 to the following course of action :—

(*a*) Sounding of tubewell should be taken up after removal of the submersible pump;

(*b*) Gravel, clay or any other foreign materials which filled up the tubewell should be baled out;

(*c*) The depth at which the failure occurred should be identified;

(*d*) In case there was no suspicion of any defect right up to the bottom, assistance of the officers of Central Ground Water Board should be sought.

While item (*a*) was stated (May 1977) by the Divisional Officer at Kendrapara to have been completed, no progress in regard to (*b*) to (*d*) was reported.

3.7.6. *Performance of rigs*—(*i*) The Company took over 14 serviceable rigs (depreciated value : Rs. 17·50 lakhs) and two unserviceable rigs (depreciated value : Rs. 2·50 lakhs) from the Directorate of Lift Irrigation. Ten new rigs were purchased for Rs. 55·95 lakhs between February 1974 and May 1976 along with ancillary equipment. The Company prepared a drilling programme for 1975-76 with 21 rigs available during the year. The performance of the rigs was as follows:—

Number of tubewells programmed	..	495
Number of tubewells bored	..	283
Shortfall	..	212
Total available hours	..	31,000*
Actual hours operated	..	17,720
Shortfall	..	13,280

* Available operational hours : 1,500 per rig per year except for one where the figure was 1,000 hours (rig operated for four out of six available working months

Of the 283 tubewells bored, 250 were successful and 33 failed. The actual performance of the rigs was 57 *per cent* of the available hours. The shortfall was attributed (June 1976) by the Management to frequent breakdown of the old rigs non-availability of ancillary equipment such as welding sets, trucks, water tankers, drilling materials, *etc.* and dispute in regard to boring sites.

(*ii*) The rigs were operated and maintained by the division under whose jurisdiction these were programmed to work. The operation and maintenance cost of the rig was charged to each job on the basis of predetermined hourly rates fixed by the Company and not on the basis of expenditure actually incurred. The hourly rate fixed in April 1976 was Rs. 176, which included fixed expenses of Rs. 93·46 for 1,500 working hours per annum. The cost for 13,280 idle hours of the rigs during 1975-76 amounted to Rs. 12·41 lakhs.

OPERATION OF PROJECTS

3.8. Utilisation

3.8.1. While proposing the fixation of economic water rate for supplying water, both from the Company's own projects and the Government projects managed by the Company, utilisation was estimated by the Company at 70 *per cent* of the existing and potential irrigation projects. The number of lift irrigation projects operated by the Company, the irrigation potential programmed and the actual utilisation during *Kharif* and *rabi* seasons during the three years up to 1976-77 are given below :—

Year	Number of lift irrigation projects programmed		Irrigation potential (acres)		Number of lift irrigation projects operated		Actual irrigation (acres)	
	Kharif	*Rabi*	*Kharif*	*Rabi*	*Kharif*	*Rabi*	*Kharif*	*Rabi*
1974-75 ..	1,503	1,674	85,325	56,315	432 (29%)	1,238 (74%)	5,968 (7%)	29,393 (52%)
1975-76 ..	1,889	2,198	1,04,840	72,736	355 (19%)	1,621 (74%)	4,356 (4%)	36,395 (50%)
1976-77 ..	1,764	2,172	1,42,561	85,537	1,134 (64%)	1,972 (91%)	22,058 (15%)	45,250 (53%)

3.8.2. A study made by Audit of 823 projects in four divisions of the Company showed the following results, even after three years of completion of the projects :—

Percentage of utilisation of *ayacut* to designed *ayacut*	1973-74 Number of projects in existence for			1974-75 Number of projects in existence for			1975-76 Number of projects in existence for		
	5 years and more	4 to 5 years	3 to 4 years	5 years and more	4 to 5 years	3 to 4 years	5 years and more	4 to 5 years	3 to 4 years
KHARIF									
Above 70	1	4	..	5	..	1	1	..	..
51 to 70 ..	4	..	..	7	..	..	6	1	7
26 to 50 ..	13	2	..	15	1	..	12	..	4
11 to 25 ..	13	2	1	15	..	2	10	1	3
1 to 10 ..	8	2	..	11	1	1	1	..	..
'Nil' utilisation ..	123	22	10	141	9	16	175	18	154
Total projects ..	162	32	11	194	11	20	205	20	168
RABI									
Above 70 ..	26	6	2	58	3	5	60	5	52
51 to 70 ..	24	8	1	21	2	4	31	4	28
26 to 50 ..	46	4	3	45	..	4	44	3	44
11 to 25 ..	28	3	..	25	2	3	22	5	8
1 to 10 ..	2	1	1	3	..	1	1	..	.
'Nil' utilisation ..	36	10	4	42	4	3	47	3	36
Total projects ..	162	32	11	194	11	20	205	20	168

The State Evaluation Organisation of the State Government, which reviewed (1968-69 to 1971-72) the performance and progress of the projects in its report (1976), attributed the under-utilisation to poor development of *ayacut*, non-drawal of water by cultivators, less dischrage of water from some projects than expected and lack of interest on the part of the cultivators in taking up intensive cultivation.

An analysis made (September 1977) by the Company of the under-utilisation in *rabi* 1976-77 showed that 449 projects (249 owned by Government and 200 owned by the Company) were not utilised in full for the reasons given below :—

Reasons	Projects not utilised Number	Irrigation potential (acres)
Lack of interest on the part of the beneficiaries	255	10,605
Unpaid arrears of water tax ..	35	2,050
Theft of motor, electric line, conductors ..	18	690
Want of distribution system/defective distribution system	15	535
Break-down of motor or transformer ..	6	300
Projects coming under flow *ayacut* ..	6	165
Scarcity of water or change of river course and sand casting of *ayacut*.	83	3,400
Salinity of water ..	8	360
Choking of tubewell or low discharge ..	23	680
Total ..	449	18,785

About 56 *per cent* of the potential created was not utilised as the beneficiaries did not reportedly evince any interest in utilising the projects.

3.8.3. A study made by Audit (July-August 1977) of the extent of working of some of the projects in Bhubaneswar and Balasore Lift Irrigation divisions for the years 1975-76 and 1976-77, showed the following results:—

Days worked in a year	Number of Projects: Bhubaneswar Division 1975-76	Bhubaneswar Division 1976-77	Balasore Division 1975-76	Balasore Division 1976-77
0— 30 ..	19	15	4	16
31— 60 ..	31	37	6	12
61—120 ..	30	47	43	51
121—180 ..	19	27	5	10
181—240 ..	4	4	Nil	Nil
240 and above ..	1	Nil	Nil	1
Total ..	104	130	58	90

Further analysis of hours of working showed that majority of the projects worked only for 3 to 9 hours on a working day.

The Divisional Officers stated (August 1977) that the projects were operated according to the demand of cultivators.

3.8.4. A test check made in the Berhampur and Bhubaneswar Lift Irrigation divisions, regarding the extent to which the operation and maintenance expenses incurred covered the water rates recovered, indicated the following.:—

	Berhampur Division			Bhubaneswar Division		
	1973-74	1974-75	1975-76	1973-74	1974-75	1975-76
1. Number of projects subjected to test check	152	182	217	165	216	242
2. Projects where all direct expenses were covered	7	5	22	25	22	25
3. Projects where all direct expenses were not covered	113	147	169	104	143	174
4. Projects where even energy charges were not covered	43	70	33	22	12	51
5. Projects which yielded nil revenue	32	30	26	36	51	43

Note:—(1) The figures against item 4 are included in figures against item 3.

(2) Direct expenses include pay of operators, energy charges and miscellaneous expenses directly connected with operation.

(*i*) In these two divisions, Rs. 2·02 lakhs (wages of operators : Rs. 1·06 lakhs, energy charges : Rs. 0·36 lakh and other charges : Rs. 0·60 lakh) were spent on operation and maintenance of 68 projects in 1973-74, 81 projects in 1974-75 and 69 projects in 1975-76, which did not return any revenue. The number of projects, where direct expenses were not covered, where even the energy charges were not covered and which did not return any revenue, continuously for all the three years up to 1975-76, are given below:—

	Berhampur	Bhubaneswar	Total
Number of projects where direct expenses were not covered	40 (Revenue : Rs. 1·85 lakhs) (Direct expenses : Rs. 5·03 lakhs)	81 (Revenue: Rs. 3·85 lakhs) (Direct expenses : Rs. 8·56 lakhs)	121
Number of projects where even energy charges were not covered	8 (Revenue:Rs. 0·26lakh) (Energy charges : Rs. 0·50 lakh)	3 (Revenue : Rs. 0·10 lakh) (Energy charges : Rs. 0·23 lakh)	11
Number of projects which did not return any revenue	5	4	9

(*ii*) The average revenue earned and the average direct expenditure incurred per project by the two divisions during the three years up to 1975-76, on the basis of the data collected in respect of the projects subjected to test check, are given below:—

	Average revenue earned per project		Average direct expenditure incurred per project	
	Berhampur	Bhubaneswar	Berhampur	Bhubaneswar
	(Figures in rupees)			
1973-74	1,195	1,244	3,647	2,316
1974-75	1,080	1,434	3,559	2,666
1975-76	965	1,485	2,598	3,040

3.8.5. Schemes assisted by ARDC

(*i*) In respect of 424 projects envisaged under 30 ARDC schemes (*vide* paragraph 3.7.2), the *ayacut* developed up to *rabi* season 1976-77 was 41 *per cent* of the total *ayacut* designed. In the case of 125 projects energised between February 1974 and July 1977, there was no development of *ayacut* against the designed *ayacut* of 7,912 acres. Rupees 44·70 lakhs were spent on these projects (May 1977). The total *ayacut* developed in respect of the remaining 299 projects constituted 25·5 *per cent* of the designed *ayacut*.

(*ii*) The scheme reports had indicated a good benefit-cost ratio on the basis of which the economic viability of the schemes had been decided. An analysis made by the Company (January 1975) in respect of 48 schemes showed that the cost of irrigation per acre-inch ranged between Rs. 5·91 and Rs. 12·31 against the prevailing water rate of Rs. 6·20. Calculated at the weighted average cost of irrigation (Rs. 9·88 per acre-inch) worked out by the Company, the total cost of irrigation for the 48 schemes worked out to Rs. 383·10 lakhs per annum, against which the water rate recoverable from the beneficiaries and the subsidy recoverable from the State Government worked out to Rs. 93·50 lakhs and Rs. 1,24·67 lakhs respectively, resulting in an operational loss of Rs. 1,64·93 lakhs per annum.

3.8.6. Schemes under DPAP

(*i*) Nineteen out of the 20 projects constructed under DPAP, were energised between May 1975 and March 1977, of which five were not available for utilisation during the 1976-77 season. Of the remaining 14 projects, utilisation of the irrigation potential was as under:—

	Potential created		Actual irrigation	
	Kharif	*Rabi*	*Kharif*	*Rabi*
	(Figures in acres)			
Kalahandi (Five projects) ..	250	250	123	99
Phulbani (Seven projects) ..	725	725	136	152

There was no irrigation from the remaining two projects.

(*ii*) Although the initial capital outlay was to be partly financed out of the funds of DPAP, the responsibility of operating and maintaining the projects vested in the Company. The economic viability of operating the projects was as under:—

	Kalahandi	Phulbani
Number of projects ..	8	12
Cost of irrigation per acre-inch (rupees)	9·60	6·83
Water requirement at 100 *per cent* utilisation (acre-inches)	16,854	67,176
Cost of water supply (rupees) ..	1,61,798	4,58,812
Amount realisable at Rs. 6·20 per acre-inch (rupees)	1,04,495	4,16,491

Thus, even at 100 *per cent* utilisation of the irrigation potential the Company was expected to incur operational losses.

3.8.7. Schemes under tribal development agencies

(*i*) The following table gives the details of the projects executed for tribal development agencies, their months of energisation, the irrigation potential created and that utilised for the *rabi* season 1976-77:—

Name of the project	Month of energisation	Irrigation potential created for *rabi* 1976-77	Irrigation potential utilised for *rabi* 1976-77	Percentage of utilisation
		(In acres)		
Keonjhar				
Danala ..	August 1975	185	49	26
Khajurimundi ..	July 1976	30	27	90
Tentali ..	November 1976	25	9	36
Ganjam				
Dambapur ..	November 1974	300	103	34
Kantaikoli ..	February 1974	30	11	37
Gontami ..	April 1975	48	9	19
Bahukasahi ..	April 1975	48	8	17
Burasahi ..	April 1975	48	16	33
Lukasahi ..	April 1975	48	14	29
Sundarbed ..	June 1975	30	14	47
Koraput				
Rupapadar ..	July 1974	50	27	54
Mukudipadar ..	January 1975	60	5	8
Bheja ..	January 1975	190	13	7
Kenduguda ..	August 1974	150	30	20
Bankili ..	March 1975	30	17	57
Neelamguda ..	January 1975	50	51	102
Bhangi I ..	January 1975	20	15	75

The overall utilisation of irrigation potential in *rabi* 1976-77 in respect of the completed projects was 30 *per cent* of the designed potential.

(*ii*) The entire capital cost of the projects was borne by the tribal development agencies and the projects on completion were passed on to the Company as its own assets for operation and maintenance. The estimated economic viability of one such project (Danala Direct Pumping Project) is mentioned below:—

Benefit cost-ratio ..	5·8:1
Cost of irrigation per acre-inch (rupees) ..	8·62
Requirement of water (acre-inches) at 100 *per cent* utilisation	6,150
Cost of water supply (rupees) ..	53,123
Revenue (rupees):	
Water rate (Rs. 2·40 per acre-inch)	31,682
Subsidy (Rs. 3·80 per acre-inch)	

Even at 100 *per cent* development/utilisation of *ayacut*, the operation was estimated to result in a loss of Rs. 21,441.

3.8.8. Projects executed in cyclone/flood affected areas

The following table gives the details of *ayacut* developed against these projects during the three years ended June 1977:—

	Designed *ayacut*		Actual *ayacut*		Percentage	
	kharif	*rabi*	*kharif*	*rabi*	*kharif*	*rabi*
	(Figures in acres)					
1974-75 ..	480 (6)	1,770 (31)	176 (6)	850 (31)	37	48
1975-76 ..	160 (2)	1,620 (31)	72 (2)	766 (31)	45	47
1976-77 ..	1,130 (13)	1,410 (25)	415 (13)	548 (25)	37	39

Note—(1) Designed *ayacut* is with reference to the projects operated.

(2) Figures in brackets indicate the number of projects operated,

Six projects (Karisahi, Malisahi, Baharpal, Madhupura, Charkanda and Matto) did not develop any *ayacut* since inception. Even in respect of the projects which had developed an *ayacut*, the results were below expectations.

3.9. Abandoned projects

According to the information received by the Company's head office from five lift irrigation divisions, between August 1976 and May 1977, 103 projects (91 owned by Government and 12 owned by the Company) were proposed by the Divisional Officers for abandonment. The division-wise break-up is shown below:—

Name of the division	Number of projects proposed to be abandoned		
	Tubewells	Direct pumping projects	Total
Balasore ..	9	19	28
Kendrapara and Jajpur Road ..	4	20	24
Dhenkanal ..	Not available		17
Bolangir ..	..	7	7
Berhampur ..	25	2	27
Total ..			103

The projects were proposed to be abandoned as these were not utilised for one or more of the following reasons:—

(*i*) Lack of demand from cultivators,
(*ii*) change of river course,
(*iii*) *ayacut* being sand cast,
(*iv*) theft of electric line or motor,
(*v*) drying of river or lack of strata,
(*vi*) choking of tubewell, and
(*vii*) *ayacut* falling under the command area of flow irrigation system.

The Company has not taken a decision on the proposal (April 1978).

These projects were installed between 1961 and 1976 —91 prior to formation of the Company and 12 after. Rupees 10·19 lakhs were invested on 71 projects, including Rs. 1·22 lakhs on 12 projects installed after formation of the Company. Information about expenditure incurred in respect of the remaining 32 projects is awaited (April 1978).

OPERATIONAL ECONOMICS

3.10. Economic rates

3.10.1. Prior to the formation of the Company, the Lift Irrigation Directorate was charging water rate at Rs. 1·40 per acre-inch of water supplied to the beneficiaries from the lift irrigation projects. This rate was fixed by the State Government in May 1969 at about 50 *per cent* of the actual cost of operation, both as an incentive to encourage utilisation of lift irrigation and as a measure of subsidy.

The Company operates two kinds of projects, *viz*, projects owned by Government but managed by the Company and projects owned by the Company. While forming the Company, Government had stipulated that in respect of projects managed by the Company, it would be reimbursed the cost of operation and maintenance in accordance with terms and conditions to be agreed between Government and the Company. As already stated, these terms and conditions have not been fixed (April 1978).

3.10.2. As per Government decision of September 1973, the Company is required to fix the charges for water at economic rates ; where the rates are fixed below the economic rate under specific direction of Government, the difference is to be reimbursed by Government as subsidy.

3.10.3. In regard to the Company's projects, the Board of Directors of the Company had fixed, in October 1973, the economic water rate at Rs. 6·20 per acre-inch of water supplied. The assumptions underlying the fixation of the rate were (*i*) utilisation of 70 *per cent* of the existing and potential irrigation facilities, (*ii*) repayment of capital investment in 15 years, (*iii*) payment of interest on capital at 8½ *per cent* per annum, (*iv*) recovery of the cost of establishment employed on opertaion and maintenance of the projects and (*v*) the entire operation being run on "no profit no loss" basis. The Company suggested a rate of Rs. 5·06 per acre-inch of water to be supplied from the projects owned by Government and approached (October 1973) Government for approval of rates for both kinds of projects.

Government decided (November 1973) to enhance the water rate in a phased manner to reach the economic level of Rs. 6·20 per acre-inch before the end of 1978-79 and to compensate the Company by grant of subsidy to the extent of the difference between the economic rate and the actual rate fixed. The water rate was fixed at Rs. 2·40 per acre-inch for the year 1973-74. On this basis, Government fixed in November 1973 the following water rates per acre for different crops raised in the *ayacuts* of lift irrigation projects transferred to the Company to be operated by it and also in *ayacuts* of projects to be constructed by the Company, effective from 15th November 1973 :—

Name of the crop		Water rate per crop-acre (In rupees)
Paddy (*Kharif*)	..	28·80
Paddy (*Rabi*)	..	120·00
Tobacco	..	57·60
Potato	..	57·60
Vegetables	..	72·00

Name of the crop		Water rate per crop-acre (In rupees)
Onion	..	48·00
Wheat	..	36·00
Hybrid Maize	..	57·60
Mung	..	9·60
Groundnut	..	36·00
Orchard	..	72·00
Sugarcane	..	108·00
Jute	..	24·00
Fodder	..	48·00
Pulses	..	12·00
Cotton	..	48·00
Oil-seeds	..	19·20
Betel leaf	..	192·00
Arhar	..	36·00
Sunhemp	..	24·00
Chilly	..	57·60
Saru	..	216·00
Ragi	..	14·40
Mustard	..	7·20

Certain assumptions made by the Company in proposing the fixation of economic water rate at Rs. 6·20 per acre-inch were found to be unrealistic. The assumption of 70 *per cent* utilisation of the irrigation potential was not based on the actual utilisation at that time. During 1972-73, the utilisation was 40 *per cent* which was reported (October 1973) to be the highest achieved till then. In 1973-74, the utilisation was 39 *per cent*. On the basis of 40 *per cent* utilisation, the economic rate as worked out by Audit was Rs. 8·62 per acre-inch. With reference to the actual expenditure in the year 1973-74, the cost of irrigation per acre-inch excluding depreciation and interest charges, worked out to Rs. 14·20 in respect of projects owned by the Company. The period of repayment of loan investment was 9 years against 15 years assumed. The rate of interest was 10½ *per cent* per annum. Thus, the rate proposed was not on "no profit no loss" basis.

3.10.4. In March 1975, the Company proposed revision of the economic water rate to Rs. 8·32 per acre-inch in respect of Government's as well as the Company's projects for Government approval.

This rate had been worked out on the basis of estimated figures as follows :—

Estimated quantity of water to be used in acre-inches per annum at 100 *per cent* utilisation.		59·57 lakhs
Expenditure	..	(In lakhs of rupees)
Repayment of loan component	..	1,51·56
Interest on loan (10½ *per cent* per annum)	..	79·27
Expenditure on repairs and maintenance	..	71·79
Pay of work charged staff	..	54·13
Pay of maintenance and headquarters staff	..	56·55
Energy charges	..	71·33
Miscellaneous expenditure	..	10·91
Total expenditure	..	4,95·54
Water rate per acre-inch	..	$\frac{4{,}95{\cdot}54}{59{\cdot}57}$ =Rs. 8·32

Calculations for the proposed rate were based on estimates and not on actual expenditure. The level of utilisation of irrigation was assumed at 100 *per cent* against the highest achievement of 40 *per cent* in 1972-73. The rate at 40 *per cent* utilisation, computed with reference to the same cost data as adopted by the Company, works to Rs. 15·50 per acre-inch.

3.10.5. In August 1976, Government appointed a committee under the chairmanship of the Commissioner, Command Area Development to examine and recommend (*i*) the economic cost per acre-inch of water for lift and flow irrigation in respect of completed and on-going projects up to 1st September 1974 based on 100 *per cent* utilisation of designed *ayacut*, (*ii*) the quantum of subsidy in each type of irrigation to be allowed to the cultivators, and (*iii*) the principles of depreciation to be applied in computing the cost. The committee's report submitted to Government in April 1977 was under examination (April 1978).

3.10.6. An analysis of the crop acre rates fixed in November 1973 on the basis of the approved water rates showed the following :—

(*i*) On the basis of the standrad requirement of water for paddy (*Kharif*), *i. e.*, 17 acre-inches of water, the rate at Rs. 2·40 per acre-inch worked out to Rs. 40·80 per crop-acre as against the rate of Rs. 28·80 per crop-acre fixed by Government. It was not known whether Government had agreed to reimbruse the difference by way of subsidy.

(*ii*) According to an assessment made by the Company (November 1975) in consultation with the Agriculture Department, the actual requirement of water in respect of *ragi* and sugarcane crops was more than the requirement adopted for fixation of the rates in November 1973 and thus, the rates needed upward revision as shown below :—

Crop		Requirement adopted	Revised requirement	Existing water rate fixed	Revised rate proposed
		(In acre-inches)		(In rupees)	
Ragi	..	6	20	14·40	48·00
Sugarcane	..	45	80	108·00	192·00

Decision of Government on the Company's proposal in March 1976 to revise the rate was awaited (April 1978).

(*iii*) In respect of the following crops for which no water rates had been fixed by Government, the Company suggested in March 1976 for fixation of the rates mentioned against each :—

Crop		Water requirement (in acre-inches)	Water rate suggested at Rs. 2·40 per acre-inch
			(Rupees)
Jowar	..	14	33·60
Sunflower	..	18	43·20
Safflower	..	10	24·00
Peas	..	9	21·60
Soyabean	..	24	57·60
Barley	..	10	24·00
Sathei paddy			
(*a*) Early	..	30	72·00
(*b*) Medium	..	42	100·80
(*c*) Late	..	48	1,15·20

Government's approval was awaited (April 1978). The Management stated that the concerned Field Officers were fixing the water rates in consultation with local agricultural authorities.

3.11. Subsidy

3.11.1. The difference between the economic water rate of Rs. 6·20 per acre-inch in respect of the Company's own projects and Rs.5·06 per acre-inch in respect of Government projects and the water rate actually levied from the cultivators at Rs. 2·40 per acre-inch is paid by Government to the Company in the form of subsidy. The collections of water rate at Rs. 2·40 per acre-inch made from the cultivators in respect of Government owned projects are to be remitted to Government by the Company. Such collections in respect of the Company's own projects are to be retained by it. The economic water rate as also the subsidy is calculated with reference to the standard requirement of water to be supplied as fixed by the Agriculture Department. The field offices of the Company did not, however, have any record of the quantity of water actually supplied for different crops.

3.11.2. The procedure prescribed (June 1974) for release of subsidy by Government envisaged that in the first quarter of the financial year one-fourth of the amount provided in the budget would be released as interim subsidy and the subsidy for subsequent quarters would be released on receipt of information from the Company regarding the quantum of water supplied for irrigation, the cost as per the economic water rate and the amount actually levied as per the subsidised rate. The Company did not, however, furnish the information. The water rates in respect of Government projects collected by the Company from the cultivators and due to be remitted to Government were also not remitted. Instead Government adjusted the same from time to time against the amounts of subsidy released to the Company as detailed below:—

Date of adjustment		Amount (In lakhs of rupees)	Remarks
March 1975	..	34·46	Towards collections made by the Company up to February 1975
July 1975	..	3·16	Towards collections in March 1975
January 1976	..	4·85	Towards collections from April 1975 to September 1975
March 1976	..	14·00	Towards collections from October 1975 to February 1976

3.11.3. According to the figures of water supply furnished to Audit by the Company in August 1977, the correctness of which could not be verified in the absence of initial records, there was excess receipt of subsidy of Rs. 69·01 lakhs by the Company during the three years up to 1975-76, as follows :—

	1973-74	1974-75	1975-76
Water supplied (in acre-inches)—			
(a) Government projects	7,97,025	13,62,510	6,94,360
(b) Company's projects			4,40,090
Total subsidy receivable at rates indicated by Government (In lakhs of rupees)	40·33	68·94	35·13 27·28
Total subsidy actually received (In lakhs of rupees).	25·84	1,01·00	1,13·85
Subsidy received short (—)/ excess (+) (In lakhs of rupees)	(—)14·49	(+)32·06	(+)51·44

NOTE—(i) In respect of the years 1973-74 and 1974-75 break-up between Government projects and the Company's projects was not available (March 1978). As Goverment projects formed the majority during these years, computation of subsidy has been made at Rs. 5·06 per acre-inch.

(ii) The figures were in respect of period April to March except for 1973-74 where it was for October 1973 to March 1974.

3.11.4. Although it was envisaged at the time of the formation of the Company that the projects completed by Government would be transferred to the Company for "management" and that agreements stipulating the terms and conditions of operation and maintenance and collection of water charges would be entered into by Government with the Company, neither the procedure to be followed in this regard has been laid down nor has any agreement been entered into (March 1978).

3.12. Collection of water charges

3.12.1. The technical staff of the Lift Irrigation divisions collect water charges, in addition to their normal work. The Section Officers are in direct charge of collection of water rates from the beneficiaries, which they remit to the concerned Sub-divisional Officers. The Sub-divisions directly remit the collections to the head office of the Company under intimation to the Divisional office. Agreements are entered into with the beneficiaries indicating the particulars of the land to which water is to be supplied, crop proposed to be grown and the water rates applicable. Prior to the formation of the Company, water rates were not collected in advance. After October 1973, water rates are normally collected in advance, except on occasions when Government decide to collect the same in instalments during the periods of drought, *etc.*

The following table gives the details of demand, collection and balance of water charges from lift irrigation projects, for the six years up to 1976-77 (including pre-Company periods):—

Year		Demand during the year	Collection including arrears	Balance at the end of the year
		(In lakhs of rupees)		
1971-72	..	6·23	3·42	7·29*
1972-73	..	11·56	11·48	7·37
1973-74	..	19·48	17·54	9·31
1974-75	..	21·20	25·36	5·15
1975-76	..	28·38	29·17	4·36
1976-77	..	42·45	39·67	7·14

3.12.2. In May 1976, the Managing Director of the Company proposed to Government write-off of Rs. 2·28 lakhs being the arrears of revenue outstanding in five divisions. These arrears pertained to the pre-Company period. It was stated by the Managing Director (May 1977) that the defaulters were not willing to pay the arrears inspite of repeated attempts at persuasion directly and through the Block Development Officers. The Company had no powers to institute proceedings for realisation of arrears. It was also stated by the Managing Director (May 1977) that the defaulters being either dead or untraceable or too poor to pay the dues, the arrears could not be realised. Final orders of Government in the matter were awaited (January 1978).

3.12.3. As per the instructions of the Company issued in November 1974, the Assistant Engineer incharge of a sub-division was to make 100 *per cent* inspection of the *ayacut* of each project in his sub-division before the close of the cropping season and record a certificate to that effect in the register of demand, collection and balance. The Executive Engineers were to inspect 50 *per cent* of the projects in the division to satisfy themselves about the correctness of the area covered by different projects and to record the results of such inspection in the log book of the project. A test check of the records of the Sub-divisions in three lift irrigation divisions (Bhubaneswar, Berhampur and Kendrapara) showed no evidence to the effect that such inspections had been conducted by the Sub-divisional and Divisional officers.

3.13. Supplies and recoveries

3.13.1. The terms and conditions stipulated in the agreements entered into with the beneficiaries stipulated that the Company would give water at the supply head, according to requirement, up to the standard requirement for each crop and that supply of water for any special demand over and above the maximum requirement would be given, if water was available, for which extra charges were to be levied as decided by the Company.

(* Arrears recoverable as on 31st March 1971 were Rs. 4·48 lakhs)

Information, got compiled from 15 sub-divisions under the jurisdiction of the divisional offices at Berhampur, Bhubaneswar, Kendrapara and Balasore in respect of 1,149 projects for the year 1975-76, about the actual volume of water supplied *vis-a-vis* the standard requirement showed that in 378 cases, water had been supplied in excess. The total excess supply in the four divisions for the year was 66,820 acre-inches as shown below:—

Division		Number of cases	Water supplied in excess (In acre-inches)
Berhampur	..	86	22,126
Bhubaneswar	..	122	11,890
Kendrapara	..	116	22,353
Balasore	..	54	10,451

(*i*) Extra charges for supply in excess of the standard requirement, in terms of the provision in the agreement, were not levied and collected by the divisional offices from the beneficiaries concerned. The water rates that the Company could have collected at Rs. 2·40 per acre-inch worked out to Rs. 1·60 lakhs.

(*ii*) The Company was not entitled to any subsidy from Government towards supply of excess water, since subsidy was to be paid with reference to the volume of water for which water rates, were collected from beneficiaries. Computed with reference to the economic water rate of Rs. 6·20 per acre-inch the subsidy lost worked out to Rs. 2·54 lakhs (approximately).

3.13.2. *Measurement of Water Supplied*—In the lift irrigation projects, no regular system for measuring the water released for irrigation had been introduced. Different procedures were stated to have been adopted by different field officers of the Company. At some points, 'V. notches' were fitted to measure the flow and volume of water released. In some cases, the delivery tank was emptied of water left in it at a particular point of time ; water was released afresh from the pump and the time taken by the pump to fill the tank was observed to decide the capacity of discharge. The volume of water supplied was then worked out reckoning the time for which the pump had worked. In a few cases, release of water was increased by adding 20 *per cent* of the standard requirement to cover losses in transmission. There was no recorded evidence available at the sub-divisional or sectional level in support of the practice followed.

3.14. Scheme of hiring of diesel pumps

3.14.1. The scheme of hiring diesel pumps to agriculturists was operated by two divisions of the Company, located at Cuttack and Sambalpur, each under the charge of an Executive Engineer. As per records of the head office of the Company, the Company took over 1,242 pumps (value : Rs. 31·11 lakhs) from Government, of which 389 pumps of different capacities ranging

from 5 to 35 H. P. (value : Rs. 2·24 lakhs) had been condemned (prior to the formation of the Company) as these were considered to be beyond economic repair. Of the remaining 853 pumps, 585 (value : Rs. 15·07 lakhs) were of low capacity (5 H. P. to 7·5 H. P.) and 268 (value : Rs. 13·80 lakhs) were of high capacity (10 H. P. and above). The position of availability of pumps as on the date of formation of the Company, according to the details collected from the field offices, was as under:—

Name of the division		Number of pumps available		
		Serviceable	Unserviceable	Total
Mechanical Division, Cuttack	..	539	201	740
Mechanical Division, Sambalpur		355	122	477
Total	..	894	323	1,217

(*i*) The discrepancy of 41 and 66 pumps between the number of serviceable and unserviceable pumps taken over and those reported as available with divisions as indicated above had not been reconciled (April 1978).

(*ii*) Of the 894 serviceable pumps, 30 petrol pumps could not be put into operation by the Company due to high cost of operation, 51 diesel pumps remained idle due to overheating during operation and 25 pumps of old imported variety could not be used on account of non-availability of spare parts.

3.14.2. The following table gives the details of the diesel pump hiring scheme for the four years ended 1976-77:—

	1973-74	1974-75	1975-76	1976-77
Total pumps available at the beginning of the year	894	881	852	896
Total pumps hired out during the year	417	673	485	550
Percentage of pumps hired out	46·6	76·4	56·9	61
Total area irrigated with the pumps taken on hire (acres)	11,829	7,723	3,888	16,316
Total revenue earned (In lakhs of rupees)	1·40	3·23	1·65	1·75
Total expenditure incurred (In lakhs of rupees)	20·16	29·52	26·00	20·19
Average revenue earned per pump (Rupees)	336	479	340	318
Average expenditure per pump (Rupees)	4,834	4,386	5,361	3,671

NOTE :—(*i*) The figures are as compiled by the Management of the Company.

(*ii*) The figures of expenditure do not include the elements of depreciation and interest.

(*iii*) The figures for the years 1974-75 to 1976-77 are provisional.

3.14.3. The position of the number of serviceable pumps available, pumps out of order and pumps in working order as at the beginning of each of the four years up to 1976-77 is given below:—

At the beginning of the year	Name of the division	Number of serviceable pumps available	Pumps in working order	Pumps out of order	Percentage of pumps out of order
1973-74 (From October 1973)	Cuttack	539	279	260	48
	Sambalpur	355	293	62	17
	Total	894	572	322	36
1974-75	Cuttack	526	369	157	30
	Sambalpur	355	215	140	39
	Total	881	584	297	33
1975-76 ..	Cuttack	470	177	293	62
	Sambalpur	382	274	108	28
	Total	852	451	401	47
1976-77 ..	Cuttack	626	210	416	66
	Sambalpur	270	122	148	55
	Total	896	332	564	63

(*i*) The actual availability of pumps for operating the pumps hiring scheme was around 37 to 67 *per cent* in the two divisions. The Divisional Officers stated (November 1977) that owing to paucity of funds the pumps could not always be kept in working condition.

(*ii*) While the available pumps were not utilised fully, the Company purchased 140 new (5 H.P.) diesel pumps valued at Rs. 6·10 lakhs during November 1976, of which 95 pumps were allotted to the Cuttack Division and 45 pumps to the Sambalpur Division. It was noticed that the Cuttack Division operated, out of the 95 new pumps, only 60 pumps on hire during 1976-77; in the Sambalpur Division, only 22 out of 45 new pumps were operated.

The Divisional Officer stated (September 1977) that as sufficient time was not available to repair the pumps which went out of order, new pumps were purchased to fight the prevailing drought situation.

3.14.4. *Utilisation of pumps*.—(*i*) The hire charges of pumps of different capacities were fixed assuming the working period to be 125 days in a year per pump. An analysis of the utilisation of pumps in the Cuttack Division, during the three years up to 1975-76, showed that out of 103, 207 and 232 pumps actually hired out during the respective

years, only 5 pumps in 1973-74 and 3 pumps in 1975-76 had been hired out for 125 days or more. No pump was hired out for 125 days during 1974-75.

(*ii*) A further analysis of the availability and hiring out of pumps of higher capacity in the Cuttack Division during the four years up to 1976-77 showed the following position:—

Year	Number of pumps available						Number of pumps hired out					
	15 HP	16 HP	20 HP	30 HP	35 HP	Total	15 HP	16 HP	20 HP	30 HP	35 HP	Total
1973-74	40	10	4	10	28	92	10	Nil	1	Nil	7	18
1974-75	40	10	4	10	28	92	15	Nil	Nil	1	6	22
1975-76	40	10	4	10	28	92	13	2	Nil	1	2	18
1976-77	40	10	4	22	11	87	24	9	Nil	3	12	48

The percentage of hiring out of the higher capacity pumps was up to 37·5. The Divisional Officer stated (October 1977) that higher capacity pumps were not generally in demand by the cultivators.

(*iii*) The Company had 28 tractor mounted pumps in the Cuttack Division. Of these, seventeen pumps were separated from the tractors and the latter were utilised for transportation work in the lift irrigation divisons. The pumps so separated remained idle (April 1978), except one pump utilised in 1976-77 by borrowing a tractor from another division.

(*iv*) (*a*) The divisional office at Cuttack had 4 sub-divisions and 17 sections under its jurisdiction for operating the hiring scheme. An analysis of the operations in the Sub-division at Cuttack showed the following position as at the end of March 1976 :—

Name of the Section		Number of serviceable pumps available	Number of pumps operated	Pump days available	Total pump days actually operated
Cuttack Sadar	..	64	19	2,375	495
Dhenkanal	..	14	2	250	7
Angul	..	13	1	125	17
Nayagarh	..	7	4	500	45
Athagarh	..	11	3	375	34
Bhubaneswar	..	36	16	2,000	278
Total	..	145	45	5,625	876

(*b*) Hire charges realised by the Sub-division during 1975-76 were Rs. 14,523. The Sub-division, however, incurred the following expenditure on its establishment during the year on the hiring operations of pumps:—

Category of staff		Number employed	Expenditure (Rupees)
Mechanics	..	21	99,843
Pump Drivers	..	25	84,171
Helpers	..	23	56,830
Total	..	..	2,40,844

No standards for staff and other requirements on the hiring operations of pumps in a section or a sub-division had been prescribed (April 1978).

3.14.5. *Fixation of hire charges*—According to the instructions of Government (September 1973), the Company is to Charge hire charges at economic rates; where, however, Government gives a specific direction to levy a rate less than the economic rate, the difference would be reimbursed by Government, as subsidy. The economic rate has not been worked out (April 1978).

The prevailing rate of hire charges of pumps was fixed by the Company and approved by Government in October 1973, taking into account the fixed and running costs. Only a part of the establishment cost was envisaged to be recovered through hire charges; the cultivator was to bear the cost of fuel, lubricants and local transportation.

The following table gives the details of the hire charges of pumps of different capacities and the elements of costs, based on which the hire charges were fixed:—

Pump capacity	Pay of operator	Fixed charges (depreciation and interest)	Total (Columns 2+3)	Establishment (10 *per cent* of column 4)	Cost of repairs	Rate per day	Total charges per year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				(Figures in rupees)			
5 HP ..	750	507	1,257	125	600	16·00	1,982
7·5 HP ..	750	696	1,446	144	800	19·00	2,390
10 HP ..	750	1,018	1,768	177	1,200	26·00	3,145
15 HP ..	750	1,270	2,020	202	1,500	31·00	3,722
20 HP ..	750	1,622	2,372	237	1,800	36·70	4,409
30 HP ..	750	1,965	2,715	271	2,250	79·20	5,236
40 HP ..	750	5,070	5,820	582	6,000	104·00	12,402

The following points were noticed:—

(*i*) The hire charges were fixed on the assumption that all the serviceable pumps available with the Company for operation of the scheme would be hired for 125 days in a year. However, as per the records, the overall percentage of pumps hired out during the three years preceding the formation of the Company varied from 11 to 35 only. The overall hiring out during the three years after the formation of the Company varied from 47 to 57 *per cent*.

While the charges proposed to be covered by the Company per pump per year ranged between Rs. 1,982 and Rs. 12,402, the average recovery per pump was Rs. 503 in 1973-74, Rs. 318 in 1974-75 and Rs. 257 in 1975-76.

(*ii*) A test check of records in respect of the pumps operated in the Cuttack Division in 1973-74, 1974-75 and 1975-76 showed the following position:—

Year	Number of pumps operated	Number of pumps that covered			Number of pumps that did not cover even the running costs
		Running costs	Running costs *plus* a portion of fixed costs	Running costs *plus* fixed costs	
(1)	(2)	(3)	(4)	(5)	(6)
1973-74 ..	103	1	13	5	84
1974-75 ..	207	Nil	4	Nil	203
1975-76 ..	232	1	12	3	216

(Note: Running costs included pay of operator, cost of office establishment and cost of repair charges.)

3.14.6. *Collection of hire charges*—The details of demand, collection and balance of hire charges of diesel pumps during the three years up to 1976-77 are indicated below:—

		1974-75	1975-76	1976-77
		(In lakhs of rupees)		
Arrears (1st April)	..	7·91	8·83	7·63
Demand	..	3·23	1·65	1·75
Total	..	11·14	10·48	9·38
Collection:				
Out of demand	..	2·18	1·65	1·66
Out of arrears	..	0·13	1·20	0·02
Total	..	2·31	2·85	1·68
Balance:				
Out of demand	..	1·05	Nil	0·09
Out of arrears	..	7·78	7·63	7·61
Total arrears	..	8·83	7·63	7·70

3.14.7. *Subsidy on pump hiring scheme*—Principles for regulating the payment of subsidy by Government have not been decided. Meanwhile, Government released subsidy with reference to the provision made in the State budget from year to year on *ad hoc* basis.

(*i*) The following table gives the figures of expenditure incurred in implementing the hiring scheme, hire charges earned and subsidy received from Government during the three years up to 1975-76:—

Year		Expenditure	Hire charges earned	Subsidy received
		(In lakhs of rupees)		
1973-74	..	20·16	1·40	4·83
1974-75	..	29·52	3·23	17·53
1975-76	..	26·00	1·65	15·00
1976-77	..	25·21	1·75	15·00

(Figures for 1974-75 to 1976-77 are provisional)

(*ii*) In October 1976, the Company represented to Government that expenditure in excess of the subsidy received should be reimbursed. Decision of Government is awaited (April 1978).

3.15. Stores control

3.15.1. *Purchases*—In February 1974, the Board of Directors of the Company prescribed the procedure to be followed in regard to purchase of stores, equipment, machinery, tools, *etc*., and delegated powers to the different officers of the Company. The Executive Engineers are empowered to purchase stores and small materials for construction/maintenance of projects up to a limit of Rs. 50,000 per year. All purchases exceeding Rs. 50,000 per year are centralised and these are to be made after calling for tenders.

The Managing Director is empowered to make purchases up to Rs. 2·00 lakhs in each case. An internal purchase committee finalises purchases of over Rs. 2·00 lakhs but up to Rs. 10·00 lakhs in each case. Purchases exceeding Rs. 10·00 lakhs are finalised by a sub-committee of the Board of Directors.

3.15.2. *Purchase of diesel pumps*—To meet the drought situation in the State, the Company decided (October 1976) to buy 350 diesel pumps and supply them to the farmers to save the *kharif* crop, 1976. Sealed quotations were invited (14th October 1976) from 28 firms for supply of 5 HP 17·5 HP diesel pump sets, to be submitted not later than

21st October 1976. It was indicated in the letter inviting quotations that the pumps were required to be supplied in the drought affected areas; preference was to be given to those who were prepared to supply them within three days from the date of placing the order. Offers were received from 23 firms, of which 18 were found to be valid, having fulfilled all the conditions prescribed.

The rate offered by firm 'V' was the lowest at Rs. 4,050 *f. o. r.* destination and it was subject to quantity discount at the following rates on price quoted:—

25 sets	..	2½ *per cent*
26 to 50 sets	..	5 *per cent*
51 and above	..	7½ *per cent*

The firm offered to supply 250 pump sets—60 sets *ex*stock Calcutta within three days, 50 sets within a week and the balance (within three to four weeks. The Company, on grounds of urgency, however, placed orders (1st November 1976) on two other firms as follows:—

Firm	Quantity	Rate per pump (In rupees *f. o. r.* destination)
'E'	80	4,440
'GC'	60	4,250

The pump sets were required to be delivered by 4th November 1976. While firm 'GC' supplied the entire quantity by the due date, firm 'E' delivered 20 sets on 4th, 50 sets on 5th and 10 sets on 8th November 1976. Non-availment of the offer of firm 'V' for supply of 110 sets to be delivered within a week resulted in an extra expenditure of Rs. 0·65 lakh.

3.15.3. *Purchase of polythene pipes*—The Executive Engineer, Lift Irrigation Division, Kendrapara placed eleven orders between 6th March 1973 and 20th March 1973 on firm 'OP' of Balasore for supply of the following quantities of polythene pipes and joints:—

110 mm outer diameter polythene low density pipes	4,000 metres at Rs. 33·60 per metre
63 mm. outer diameter polythene low density pipes	4,000 metres at Rs. 9·05 per metre
Straight joints	1,000 pieces at Rs. 4·25 per piece

The orders were placed at rates contained in the rate contract of the Director General, Supplies and Disposals, which had expired on 14th February 1973. The total value of the orders was Rs. 5·00 lakhs.

No estimate had been prepared for the purchase and no tenders had been invited. Approval of the Director of Lift Irrigation prior to formation of the Company or of Managing Director thereafter, for the purchase, had not been obtained (April 1978). The reasons for making such bulk purchases were not on record.

The materials on order were consigned to the Assistant Engineers, Lift Irrigation at Kendrapara, Jajpur, Pattamundai and Aul. Delivery was to be completed by the end of March 1973. The firm supplied 29,500 metres of pipes and 1,000 joints (value: Rs. 3·99 lakhs) between 26th March 1973 and 13th July 1973 to the Assistant Engineers at Kendrapara, Jajpur and Pattamundai. Five thousand eight hundred metres of pipes (value: Rs. 73,151) were reported (March 1975) to have been delivered (March and May 1973) during late hours in the night to the work-charged watchmen of two sub-divisions (Jajpur and Pattamundai), who were not authoriesed to receive such consignments. It was also stated that the firm did not inform the concerned Assistant Engineers about the supply. The firm did not also furnish the manufacturer's test certificate and guarantee certificate as provided in the purchase orders. Samples of pipes tested (April 1975) in the testing laboratory of the Industries Department at Cuttack were found to conform to ISI standards. The consignees, however, reported that some pipes had cracked and broken. Even unused pipes stacked were reported to be breaking when handled.

Out of 29,500 metres supplied, 13,050 metres (value: Rs. 1·81 lakhs) were lying in stock (January 1978) without any use. The Company had assessed (June 1975) its remaining liability to the firm at Rs. 1·90 lakhs considering the amount already paid (Rs. 0·58 lakh), penalty of Rs. 0·78 lakh for delay in supply and disallowance of Rs. 0·73 lakh on account of unauthorised delivery. The amount had not been paid (April 1978).

The firm filed (September 1975) a suit in the court of Subordinate Judge, Balasore for recovery of Rs. 3·72 lakhs being the value of the materials supplied (Rs. 3·99 lakhs) less payment received (Rs. 0·58 lakh) *plus* interest at 12 *per cent* per annum (Rs. 0·31 lakh). The matter was pending in the court (September 1977). Further developments are awaited (April 1978).

3.15.4. *Excessive stock of mild steel pipes*—The Lift Irrigation division at Bhubaneswar procured 20,527 rft. of mild steel pipes (value: Rs. 11·42 lakhs) from Hindustan Steel Limited between October 1974 and February 1975. At the time of procuring these materials, the Division had a stock of 522 rft. of pipes since November 1973. Out of the total quantity of 21,049 rft. available, only 11,462 rft. were issued up to January 1978 (1,010 rft. for consumption in the Division and 10,452 rft. transferred to other divisions). The remaining 9,587 rft. (value: Rs. 4·38 lakhs) have been lying in stock (March 1978). The Divisional office stated (September 1977) that although it had no requirement of these pipes, it acted as a central store against orders placed by the headquarters of the Company. Reasons for procuring quantities in excess of requirement were not available on record.

3.15.5. *Piecemeal purchase of stores*—During 1975-76, the Executive Engineer, Kendrapara Lift Irrigation Division made purchases of stores like electrical materials, G. I. fittings, stationery, materials for repairs of rigs, air compressors and welding sets. According to the delegation of power, an Executive Engineer can make purchases of materials valued up to Rs. 50,000 in a year in respect of reserve stock. However, materials for day to day consumption valued at Rs. 5·26 lakhs were purchased against 169 purchase orders. A test-check of these purchase orders showed the following:—

(*a*) 120 orders (value: Rs. 3·39 lakhs) were placed without calling for quotations.

(*b*) In 37 cases (value: Rs. 1·44 lakhs), purchases were made against quotations collected from two to five firms.

(*c*) In eight cases (value: Rs. 0·42 lakh), repeat orders were placed on the basis of quotations received against earlier orders and fresh quotations were not obtained.

(*d*) In 16 cases (value: Rs. 0·72 lakh), the Divisional Accountant did not check the rates indicated in the comparative statement prepared with reference to the quotations.

(*e*) In a number of cases, the quotations reportedly received from firms were not available on record for scrutiny and verification.

(*f*) In seven cases, material alterations (*e. g.* in dates and rates) of the quotations were found to have been made.

(*g*) More than one purchase order for identical material were placed on the same firm on the same day, indicating splittin up of the purchase (value: Rs. 2·80 lakhs).

The Divisional Officer stated (June 1977) that the purchases made in view of urgency of the situation after ascertaining the rates by personal contact.

3.15.6. *Excess procurement of stores*—The following points were noticed in Kendrapara Lift Irrigation Division:—

(*i*) *G. I. wiremesh*—As on April 1975, there was an opening balance of 4,500 sft of G. I. wiremesh in store. Between December 1975 and September 1976, 25,200 sft of wiremesh were purchased. As against 29,700 sft. of wiremesh thus available, only 4,475 sft. were issued between January 1976 and November 1976, leaving an unutilised balance of 25,225 sft. (value: Rs. 0·50 lakh) as in May 1977.

(*ii*) *Cement*—Cement had been procured from time to time and stocked in Pattamundai Sub-division. The Sub-division had no storage facilities with the result that 104 bags of cement (Value : Rs. 0.02 lakh) got clodded. As on April 1977, 475 bags of cement (value : Rs. 0·10 lakh) were lying in stock. The Divisional Officer stated (May 1977) that cement was procured and stocked in anticipation of the works programmed, but that the works were not taken up in time and as such the cement remained unutilised.

3.15.7. *Idle stores*—A review of the half yearly registers of stock in respect of the following sub-divisions showed cases of stock materials not moving for a considerable time:—

Sub-division		Number of items of stores	Value (Rupees)	Idle months (as in May 1977) ranged between
Kendrapara (Electrical)	..	42	3,75,363	36 to 48
Aska (Civil)	..	7	13,432	53

The materials included pumps, panels, transformer starters, main switches, *etc.*

3.15.8. *Physical verification of stores*—In November 1974, the Board of Directors of the Company approved the constitution of a stores verification unit in its Finance and Accounts Wing, under the supervision of an Assistant Engineer (Mechanical). The unit started functioning from November 1975. The work entrusted to the unit was (*i*) to find out the correct book balance and the physical balance as on the date of inspection on a cent *per cent* check of all the purchase vouchers and issues with reference to acknowledgements obtained from the concerned officials since 1970 (the date up to which the accounts were earlier checked by the stores verification party of the Irrigation and Power Department), (*ii*) to conduct physical verification of stock and stores by visiting the field divisions and (*iii*) to pursue and settle the reports issued by the unit. Up to September 1977, the unit had covered verification of three divisions (Bhubaneswar, Kendrapara and Balasore) out of 15 field divisions.

The physical verification of stores of the divisions by the unit revealed shortages of stores valued at Rs. 26·42 lakhs as detailed below:—

Name of the division		Period covered by verification	Period of verification	Shortages			Total
				Stock	Tools and plant	Site materials	
(1)		(2)	(3)	(4)	(5)	(6)	(7)
				(In lakhs of rupees)			
Bhubaneswar	..	October 1970 to September 1976	November 1975 to March 1976	6·62	5·40	Nil	12·02
Kendrapara	..	April 1973 to June 1976	May 1976 to September 1976	3·81	3·12	2·27	9·20
Balasore	..	June 1971 to January 1977	November 1976 to February 1977	Break up not available			5·20

Shortages of Rs. 10,000 and more in individual items of stock were reported in 44 cases in the three divisions. Results of the physical verification had been intimated to the divisions; follow up action was awaited (April 1978).

3.15.9. *Stock position of pumps and panels*—A study of the stock records of electrical pumps (submersible and monoblock) and panels in the Kendrapara, Bhubaneswar and Berhampur lift irrigation divisions showed discrepancies in the physical stock position as detailed below:—

		Kendrapara Division		Bhubaneswar Division		Berhampur division Pumps
		Pumps	Panels	Pumps	Panels	
Opening balance as on the date of formation of the Company		1,202	953	937	402	73
Receipts	..	347	293	819	387	128
Total	..	1,549	1,246	1,756	789	201
Issues	..	1,312	1,144	1,328	413	133
Balance as per the books	..	237	102	428	376	68
Physical balance	..	55	18	185	77	38
Shortages	..	182	84	243	299	30

(The position of panels in the Berhampur Division was not available.)

The total shortages were 455 pumps (value : Rs. 17·31 lakhs) and 383 panels (value ; Rs. 3·45 lakhs). The shortages have not been reconciled (April 1978).

3.16. Internal audit

The company has an internal audit branch which functions as part of the Finance and Accounts Wing. The branch consists of one Audit Siuperintendent who is assisted by five Accounts Supervisors and six Accountants. The work of the branch is supervised by an Accounts Officer. The procedure for internal audit and its periodicity have not been prescribed. The branch conducts audit of receipts and expenditure in the divisional office in a general way besides attending to other items of work, like clearance of amounts outstanding against abstract contingent bills, audit objections, *etc*. During the period from January 1975 to August 1977, the internal audit branch covered audit of transactions in respect of eight out of 15 divisions for different periods between October 1973 and September 1976.

The Company has not evolved a procedure by which important irregularities noticed in internal audit are reported periodically to the Board of Directors.

3.17. Other points of interest

3.17.1. *Flood damage repairs in the Kendrapara Lift Irrigation Division*—In August 1975, vast areas under the jurisdiction of the Kendrapara Lift Irrigation Division were flooded, causing extensive damages to the lift irrigation projects and other properties belonging to the Company. To enable the Company to repair the damage the State Government released Rs. 17·68 lakhs as grant to the Kendrapara Lift Irrigation Division, comprising Rs. 11·23 lakhs for repair of 281 Government projects, Rs. 2·62 lakhs for repair of 185 projects owned by the Company and Rs. 3·83 lakhs for repair of stores buildings. The Divisional Officer reported (February/March 1977) to the Managing Director expenditure of Rs. 11·50 lakhs for restoring 431 lift irrigaion projects (266 Government projects and 165 projects owned by the Company) and repairing stores buildings. The remaining Rs. 6·18 lakhs were utilised for operation and maintenance of projects, repairs and maintenance of vehicles, tools and plant and to liquidate pre-Company liabilities. Some points noticed in the course of test audit (May 1977) are mentioned below :—

(*a*) In nine cases, Rs. 1·50 lakhs were spent towards construction of original works like staff quarters, stores sheds, compound walls, *etc*., but were shown as under repairs to lift irrigation projects.

(*b*) In four cases, Rs. 0·41 lakh spent on repair works executed before the occurrence of the flood were shown as repairs to damage caused by flood, by scoring out the dates on which measurements had been taken earlier and putting in their place dates subsequent to the date of occurrence of the flood.

(*c*) The Company had given instructions in December 1975 to the Executive Engineer of the Division to keep the expenditure on individual works within the sanctioned estimates. However, in the case of 201 projects, the expenditure was found to have exceeded the estimates. The excess up to March 1977 aggregated Rs. 5·81 lakhs. Reasons for the excess expenditure over the sanctioned amounts were not available.

(*d*) The work 'Laying of RCC hume pipes with jointing materials including cost of all materials,' which was connected with flood damage repairs, was got done against piece-work/item rate agreements. The rate per rft. was Rs. 3·99. The analysis of the rate for this item of work provided the requirement of wiremesh as 6 to 8 sft. per pipe of 6 to 8 rft. for jointing them and the price of wiremesh as Rs. 2 per sft. The requirement of wiremesh was erroneously worked out on the length of the hume pipes instead of on the diameter of the pipe (15 inches); the correct requirement being 2½ sft. per joint, which was also provided in the estimates prepared for other works of similar nature. During April 1976 and May 1976, the Division paid the contractors for laying and jointing 20,754 rft. of pipes at the rate of Rs. 3·99 per rft. While the requirement of wiremesh for laying 20,754 rft. of hume pipe was 20,754 sft. according to the erroneous estimated rate, only 1,813 sft. of wiremesh had been issued from the departmental stores and its cost had been recovered from the contractor. Payment at Rs. 3·99 per rft. for 20,754 rft. of pipes resulted in an extra payment of Rs. 37,882.

The Divisional Officer stated (May 1977) that the case would be investigated. Further developments are awaited (April 1978).

(*e*) As per the agreements entered into with different contractors who executed the works, hume pipes, wiremesh and cement required by the contractors were to be supplied by the Company and the contractor was to be paid at Rs. 3·99 per rft. (including cost of jointing materials) towards laying and jointing the hume pipes. In respect of 13 works involving 5,302 rft. of laying work, there was no evidence to show that the Company had supplied the required hume pipes and jointing materials to the contractors concerned. Amounts totalling Rs. 20,625 were paid to different contractors towards laying and jointing. The Divisional Officer stated (April 1977) that the contractors might have laid pipes dismantled from other projects; no entries, however, existed in the stock registers nor did the bills submitted by the contractors indicate that they had used dismantled pipes. There was also no evidence to show that instructions had been given to the contractors asking them to use dismantled pipes in executing the works.

(*f*) In 34 cases, excess payments aggregating Rs. 13,278 were made due to mistakes in calculation (Rs. 3,935), payments without proof of work done or material supplied by contractors (Rs. 4,300) and wrong computation of leads and payments beyond scope of agreements (Rs. 5,043). The Divisional Officer stated (May 1977) that the amounts were being recovered. Information about recovery is awaited (January 1978).

3.17.2. *Ground water survey*—The Company has a separate wing for ground water survey under the charge of a Superintending Engineer. There are four hydrological divisions located at Bhubaneswar, Baripada, Bolangir and Jeypore exclusively engaged on survey work. The expenditure incurred on this wing including the field divisions is reimbursed to the Company as an outright grant by the State Government. The following table shows the area programmed for survey, the area covered, the shortfall and the expenditure incurred during the three years up to 1975-76:—

Year		Area programmed for survey	Area covered under survey	Shortfall	Expenditure
		(Figures in Sq. km.)			(In lakhs of rupees)
1973-74	..	29,459·52	23,949·00	5,510·52	20·94
1974-75	..	33,589·79	24,191·00	9,398·79	33·10 (Provisional)
1975-76	..	31,561·50	21,172·00	10,389·50	40·60 (Provisional)
1976-77	..	33,906·14	24,844·50	9,061·64	71·50 (Provisional)

(*a*) The expenditure per sq. km. of area surveyed varied from Rs. 87 in 1973-74 to Rs. 288 in 1976-77.

(*b*) The shortfall in the progress of survey work was attributed (October 1977) by the Management to the following:—

(*i*) Fixation of high targets for obtaining best results.

(*ii*) Lack of communication and work facilities in the areas surveyed.

(*iii*) Break-down of transport vehicles attached to the survey parties and non-availability of trucks at certain localities delayed transportation of necessary drilling equipment.

(*iv*) Longer spell of monsoon hindering the progress of work.

(*v*) Delay in purchase of equipment and in appointment of technical staff in the newly created divisions.

3.18. The above matters were reported to the Management/Government in December 1977; replies are awaited (April 1978).

SECTION IV

THE ORISSA MINING CORPORATION LIMITED

4.1. Introduction

In March 1956, the Government of India suggested to the State Government that exploitation of iron ore deposits in the State be undertaken for large scale export. Based on a study of suitable areas by the representatives of the Government of India and the State Government, the latter decided (May 1956) to set up a Company for the purpose with equal participation by the Central and State Governments. The Orissa Mining Corporation Limited was, accordingly, incorporated on 16th May 1956 as a wholly-owned Government Company.

4.2. Objects

The main objects of the Company are :

(*i*) raising, assembling and transporting iron ore and other minerals in such areas in the State as the Company may determine from time to time for the purpose of sale or export, and

(*ii*) to carry on in the State or elsewhere the trade or business of proprietors of mines or merchants in mineral ores or exporters of ores.

Mention was made in paragraph 7 of the Report of the Comptroller and Auditor General of India for the year 1973-74 (Commercial) about some aspects of the working of the Company.

4.3. Organisational set-up

The Management of the Company is vested in a Board of Directors. The Chief Executive of the Company is the Chairman who is assisted in technical matters by a Mining Consultant and in financial affairs by a Financial Adviser-*cum*-Chief Accounts Officer.

As on 31st August 1977, the Company operated 20 mines ; the largest mine, *viz*. Daitari Iron Ore Mine, being under a General Manager and the other mines being under Mine Managers. There were two Regional Managers one at Barbil and another at Jajpur-Keonjhar Road, to supervise the work of the Mine Managers.

4.4. Activities

Since its inception in May 1956, the Company has raised mainly three minerals, *viz*. iron, chrome and manganese ores ; the raisings centered around (*i*) Daitari, Gandhamardan and Banspani group of mines for iron ore, (*ii*) Kaliapani, Kalarangi, Katpal and Sukrangi for chrome ore, and (*iii*) Dubna, Kadodihi and Nishikhal for manganese ore. The mines are open cast and the operations are carried out manually by engaging labour through job workers/contractors. Mechanical appliances like power drills, compressors and shovels are made available by the Company to the contractors on hire basis. Transportation of ores to mine-heads is made by dumpers and from the mine-heads to the rail/port-head through hired trucks.

A sizable portion of the iron and chrome ores raised by the Company was exported to foreign countries—iron ore to Japan and East European countries through the Minerals and Metals Trading Corporation of India Limited (MMTC, a Government of India undertaking) and chrome ore directly to Japan and West Germany. Export of manganese ore to Japan was started in April 1977.

4.5. Capital structure

The Company commenced its operation with an initial paid-up capital of Rs. 7·50 lakhs, increased to Rs. 15·00 lakhs in 1960-61, contributed by the Government of India and the State Government in equal proportion. In January 1962, the State Government purchased the shares held by the Government of India. The authorised and paid-up capital of the Company as on 31st March 1977 were Rs. 10,00·00 lakhs and Rs. 9,42·62 lakhs respectively and the entire share capital was contributed by the State Government.

4.6. Borrowings

Up to 1976-77, the Company obtained from time to time long-term loans from the Government of India and the State Government, deferred credit from a foreign supplier and short-term finance from banks and other institutions aggregating Rs. 20,24·05 lakhs and also issued debentures of Rs. 2,00·00 lakhs—Rs. 1,00·00 lakhs in 1962-63 and 1972-73 each. The following table indicates the details of the borrowings made since inception from different agencies, repayments made and the balance as on 31st March 1977:—

Sources of loan		Aggregate loan obtained	Repayments made up to March 1977	Balance as on 31st March 1977
		(Rupees in lakhs)		
Government of India	..	2,66·00	1,78·10	87·90
State Government	..	1,82·50	1,40·11	42·39
Banks	..	14,25·67	14,25·67	..
Deferred credit from a foreign supplier.		1,43·88	1,43·88	..
MMTC	..	6·00	6·00	..
Debentures	..	2,00·00	1,00·00	1,00·00
Total	..	22,24·05	19,93·76	2,30·29

Instalments of the following loans obtained from the Government of India and the State Government and interest thereon which fell due between 1970-71 and 1975-76 were repaid by the Company in 1976-77 :—

		Principal	Interest
		(Rupees in lakhs)	
Government of India	..	1,03·73	1,30·34
State Government	..	57·69	17·02

Defaults in making payment on due dates made the Company liable for payment of penal interest of Rs. 160·53 lakhs during the period from 1970-71 to 1976-77 as noted below:—

		(Rupees in lakhs)
Government of India	..	1,57·80
State Government	..	2·73

4.7. Prospecting licences

Grant of prospecting licences for exploration, location and proving of mineral deposits and issue of mining leases by the State Government are regulated by the Mines and Minerals (Regulation and Development) Act, 1957 and the Minerals Concession Rules, 1960. The Company applies for a prospecting licence for detailed investigation, whenever a mineral bearing area is located by it or whenever a particular area is referred to it by Government. Application for grant of mining lease is made after examining the economics of working.

(*i*) Since its inception up to August 1977, the Company applied for 68 prospecting licences, of which 31 were granted by Government. Eight applications were rejected by Government and seven were withdrawn by the Company. Reasons for rejection/withdrawal called for in November 1977, are awaited (April 1978). Information about disposal of 22 applications is awaited (April 1978).

(*ii*) Out of 31 prospecting licences granted, the Company has worked (March 1978) 20 licences. The Management stated (December 1977) that the remaining 11 licences were not worked as these were found not worth taking.

4.8. Mining leases

4.8.1. Up to August 1977, the Company applied for 129 mining leases, of which four were rejected by Government as these were not available for grant and one was withdrawn by the Company ; 34 applications made by the Company between September 1968 and April 1976 are time-barred under the Minerals Concession Rules, 1960 as the Company did not file revison applications within three months after the expiry of twelve months from the date of application. The Company had incurred Rs. 0·23 lakh in aggregate towards payment of application fees, *etc.* for these (39) applications. Against the remaining 90 applications, 42 leases were obtained by the Company between June 1957 to October 1967. Information about the disposal of 48 applications was awaited (April 1978).

4.8.2. The 42 leases so obtained in seven districts covered a total area of 26,175 hectares constituting 24 *per cent* of the total area (1,11,181 hectares) leased by the State Government to various parties for mining purposes. In addition, the Company received for operation six mines (area : 4,880 hectares) on the basis of working permits (without entering into mining lease) issued by the State Government. The position of the working of these 48 mines as on August 1977 is indicated below :—

Status of lease	Number of mining leases/ working permits	Area (in hectares)	Percentage to total area asssigned to the Company
(*i*) Worked by the Company (including the six mines held under working permits).	20	15,839	51
(*ii*) Not operated ..	13	7,256	23
(*iii*) Closed ..	8	5,131	17
(*iv*) Determined ..	6	2,329	7
(*v*) Transferred in June 1969 to the Industrial Development Corporation of Orissa Limited.	1	500	2
Total ..	48	31,055	100

In this connection, the following points were noticed :—

(*i*) The Company did not operate 13 leases obtained between August 1963 and November 1976 covering 7,256 hectares (iron ore : 409 hectares, chrome ore : 1,089 hectares, manganese ore : 351 hectares, iron and manganese ore combined : 2,760 hectares, lime stone : 1,300 hectares and venadiferrous magnetite : 1,347 hectares) ; of these four leases were not operated for over ten years, five for periods ranging from five to ten years and the balance four up to five years. An aggregate expenditure of Rs. 16·71 lakhs has been incurred by way of dead/surface rent (Rs. 10·80 lakhs) and development expenditure (Rs. 5·91 lakhs) in respect of these leases. The Management stated (March 1976) that lease of potential areas was obtained with the intention of expanding mineral exploitation but due to change of mineral policy of the Government of India and lack of adequate transport facilities the areas had to be kept idle.

(*ii*) Eight mines (iron ore : 4, iron and manganese ore combined:2 and chrome ore : 2), taken up on lease between December 1959 and October 1971, were closed by the Company owing reportedly to non-availability of suitable sale contracts. Particulars in respect of five mines are given below :—

Name of the mine	Date of opening	Date of closing	Quantity of ore produced (In lakh tonnes)	Value (Rupees in lakhs)
Champajhar (Iron ore) ..	May 1972	January 1976	1·00	10·83
Sekradihi (Iron ore) ..	December 1969	April 1972	1·70	7·34
Gurubeda (Iron and Manganese)	April 1965	November 1967	1·22	5·82
Moulabhanja (Chrome ore)	May 1963	April 1964	0·04	0·38
Boula (Chrome ore) ..	March 1970	August 1976	0·27	13·05

The leases were not determined and Rs. 8·25 lakhs were paid to Government as dead/surface rent from the date of closure to December 1977. Information in respect of the remaining three mines was awaited (April 1978).

Advisability of keeping a number of mines unexploited for long period does not seem to have been examined.

(iii) The Company determined the leases of six mines (iron ore : 5 and manganese : 1) after working for 3 to 128 months, as noted below, as their operation was found (between February 1963 and April 1976) to be uneconomical.

Name of the mine		Total period of lease (Years)	Total period for which the mines were worked (Years and months)	Total ore produced (In lakhs of tonnes)	Value (Rupees in lakhs)
Bamnipal (Iron ore)	..	30	0—3	0·23	1·67
Maharajpur (Iron ore)	..	30	6—4	1·00	Not available
Tungeisuni (Iron ore)	..	30	10—8	0·57	Ditto
Pandalposi (Iron ore)	..	20	5—3	0·75	8·17
Khandadera (Iron ore)	..	30	2—0	Not available	
Uliburu (Manganese)	..	20	4—3	0·17	4·19

(a) There were delays ranging from 2 to 84 months in making applications for determining the leases of the six mines for which dead/ surface rent of Rs. 1·49 lakhs had been paid to Government for different periods between October 1963 and April 1977.

(b) Compensation paid to Government in respect of the five mines amounted to Rs. 1·27 lakhs. Information regarding one mine was awaited (March 1978). Prospecting of reserves and profitability studies had not been made before taking up the leases.

(c) In the case of four mines (Bamnipal, Maharajpur, Uliburu and Pandalposi), the expenditure on assets (Rs. 1·65 lakhs) in the nature of buildings, hutments, roads, *etc.* and the development expenditure (Rs. 2·54 lakhs) incurred in five mines prior to April 1976 amounted to Rs. 4·19 lakhs, out of which Rs. 3·64 lakhs remained to be written-off in the accounts (March 1978).

(d) Between October 1963 and March 1969, 8,028 tonnes of iron ore and 1,537 tonnes of manganese ore were left at the site of the mines as transportation was considered uneconomical. Of these, the entire quantity of iron ore and 1,289 tonnes of manganese ore were written-off the stock accounts. Disposal of 248 tonnes of manganese ore was awaited (April 1978).

(e) In the case of Bamnipal iron ore mine, surface rights were obtained (September 1966) by the Company over an area of 447·39 hectares. Mining was, however, limited to an area of 1·92 hectares thereby entailing unfruitful annual payment of Rs. 0·33 lakh by way of surface rent up to 1976-77.

(f) The Tungeisuni iron ore mine, opened in July 1957, was surrendered in February 1974. It was operated for two brief spells—July 1957 to December 1960 and February 1972 to December 1973. The amount of dead/surface rent paid for the period for which the mine was not operated was Rs. 0·36 lakh.

4.9. Working results

The accounts of the Company for 1976-77 are in arrears (March 1978). The accounts for 1975-76 indicated an accumulated loss of Rs. 537·27 lakhs.

The following table indicates the working results of the Company during the three years up to 1975-76 :—

		For the year ended 31st March		
		1974	1975	1976
Income—		(Rupees in lakhs)		
Sales	..	6,16·25	9,02·02	18,04·83
Other income	..	43·33	5·13	13·32
* Stock adjustments	..	27·09	0·34	1,16·96
Total	..	6,86·67	9,07·49	19,35·11
Expenditure—				
Trading expenses	..	7,11·53	10,67·36	16,58·30
Other expenses	..	25·01	42·15	2,16·63
Development rebate reserve	..	2,13·47	0·14	..
Total	..	9,50·01	11,09·65	18,74·93
Net profit (+)/Net loss (—) during the year.	..	(—)2,63·34	(—)2,02·16	(+)60·18
Cumulative loss at the end of the year after prior-year adjustments and write-backs of development rebate reserve.		3,21·26	5,88·46	5,37·27

The accumulated loss of Rs. 5,88·46 lakhs as on 31st March 1975 constituted about 50 *per cent* of the paid-up capital (Rs. 9,42·62 lakhs) and reserves (Rs. 2,27·73 lakhs). The main reasons for the heavy losses in 1973-74 and 1974-75 were large provision for development rebate

* Represents difference between opening and closing stocks.

reserve made in 1973-74, increase in transportation cost by 56 *per cent* in 1974-75 increase in cost of repairs to machinery and buildings (Rs. 11·00 lakhs), increase in pay and allowances (Rs. 15·00 lakhs) and loss in a fire (Rs. 11·54 lakhs) charged to revenue. During 1975-76, the Company made a profit of Rs. 60·18 lakhs, mainly due to increased sales realisation from chrome ores, despite an increase of Rs. 328·19 lakhs (1792 *per cent*) in agency fees payable to Government in respect of mines being operated on working permit basis owing to revison made by Government in the rate of agency fees.

4.10. Financial position

4.10.1. The table below indicates the financial position of the Company for the three years up to 1975-76 :—

	As on 31st March		
	1974	1975	1976
	(Rupees in lakhs)		
Liabilities			
Paid-up capital ..	9,29·62	9,42·62	9,42·62
Reserves and surplus ..	2,39·26	2,27·73	2,36·13
Borrowings ..	4,75·58	4,49·87	4,24·15
Trade dues and other liabilities (including provisions)	4,93·28	6,46·48	10,73·33
Total ..	21,37·74	22,66·70	26,76·23
Assets			
Gross block ..	16,65·35	16,94·85	17,72·41
Less : depreciation ..	3,38·43	4,93·42	6,45·98
Net fixed assets ..	13,26·92	12,01·43	11,26·43
Capital work-in-progress ..	7·23	7·18	8·07
Investments ..	0·82	0·50	10·89
Current assets, loans and advances	3,73·18	4,35·34	9,59·87
Miscellaneous expenses ..	1,08·33	33·79	33·70
Loss ..	3,21·26	5,88·46	5,37·27
Total ..	21,37·74	22,66·70	26,76·23
Capital employed ..	12,06·82	9,90·29	10,12·97
Net worth ..	7,39·29	5,48·10	6,07·78

Note : (*a*) Capital employed represents net fixed assets *plus* working capital.

(*b*) Net worth represents paid-up capital *plus* reserves *minus* intangible assets.

4.10.2. *Investments*—The company invested Rs. 3,78·00 lakhs during different periods between 31st July 1975 and 17th May 1977 in term deposits in banks for periods ranging from one month to twelve months, earning interest ranging from 3 to 8 *per cent.* The deposits were renewed from time to time for different terms. At the instance of the State Government (January 1977), the Company also deposited between March and May 1977 Rs. 2,60·00 lakhs of its surplus funds in a deposit account in the Public Account of the State for periods not exceeding 90 days, earning interest of 3½ *per cent* per annum. The deposits were renewed from time to time for 90 days on each occasion.

A table showing the details of surplus funds and the manner of their investment from time to time is given in Appendix III. The investment of funds in term deposits was not made on the basis of any cash flow analysis.

4.10.3. *Sundry debtors*—The Company extends credit sale facilities to the undertakings of the Government of India and of the State Government. In other cases, the buyers are required to open letters of credit for full value. The following table indicates the details of book debts at the end of each of the five years up to 1975-76 :—

Year	Debts at the end of the year: Considered good	Considered doubtful	Total	Sales during the year	Percentage of total debts to sales
	(Rupees in lakhs)				
1971-72 ..	25·52	6·96	32·48	5,32·54	6
1972-73 ..	73·79	6·96	80·75	6,70·44	12
1973-74 ..	74·88	6·96	81·84	6,16·25	13
1974-75 ..	1,16·94	6·96	1,23·90	9,02·02	14
1975-76 ..	2,24·50	6·96	2,31·46	18,04·81	13

Category-wise and age-wise break-up of the debts as on 31st March 1976 is indicated below :—

	Debts outstanding for less than one year	Debts outstanding for more than one year but less than two years	Debts outstanding for two years and above	Total
	(Rupees in lakhs)			
Quasi-Government bodies, Government Companies and Corporations.	1,63·71	0·42	4·07	1,68·20
Others ..	58·04	2·25	2·97	63·26
Total ..	2,21·75	2·67	7·04	2,31·46

4.10.4. *Advances*—(*i*) The following are the details of the advances recoverable from different parties at the end of each of the five years up to 1975-76:—

Year		Contractors	Others	Staff	Total
		(Rupees in lakhs)			
1971-72	..	19·59	5·14	2·68	27·41
1972-73	..	31·98	5·15	2·04	39·17
1973-74	..	25·78	5·24	1·73	32·75
1974-75	..	30·78	4·60	1·46	36·84
1975-76	..	30·65	4·60	1·59	36·84

Besides, Rs. 27·60 lakhs representing the aggregate of advances granted from 1963-64 onwards to staff and others through camp/regional offices were awaiting recovery on 31st March 1976. Detailed accounts of advances granted by camps or regional offices have not been reconciled with the head office accounts since 1963-64.

The Management stated (July 1977) that reconciliation of accounts was complete in respect of 10 out of 38 such subordinate offices and reconciliation in respect of four others was in progress. Reconciliation in respect of 24 offices had not been taken up (March 1978) for 14 years.

(*ii*) Rupees 1·75 lakhs were advanced to two co-operative societies during 1965-66 and 1966-67 for civil works of the Company taken up by them for execution at the Daitari township. An amount of Rs. 0·57 lakh towards work done was adjusted (March 1970) by the Company against the advance leaving a balance of Rs. 1·18 lakhs. The Management stated (July 1977) that both the societies were under liquidation and that soon after the proceedings of liquidation were fiinalised necessary action for recovery/write-off would be taken. Further developments are awaited (April 1978).

4.11. Performance analysis

The 14 leases worked by the Company comprised seven iron ore mines, three chrome ore mines, three manganese ore mines and one manganese and iron (combined) mine. The areas worked in respect of iron, chrome, manganese and iron-manganese combined constituted 21, 9, 7 and 5 *per cent* respectively of the total areas taken on lease.

4.11.1. Construction performance

(*I*) *Daitari Iron ore project*—In June 1965, the Company took up construction of a mechanical ore handling plant and ancillary works for mining of iron ore at Daitari, scheduled to go into commercial production by October 1967. Mention was made in paragraphs 88 and 28 of the Reports of the Comptroller and Auditor General of India for the year 1970-71 and for the year 1972-73 (Commercial) about non-completion of works of the ore handling plant by the contractors, disputes in court of law and commissioning of the plant in January 1974.

The Company carried out improvements/modifications to the plant; the following points were noticed:—

(*a*) *Repair rectifications to motors in the crushers*—Two 250 HP second hand motors purchased in 1963-64 from Nagarjuna Sagar Dam Project for use in primary crushers were found defective. The Company got them repaired from a firm in Calcutta in September 1968 and installed them in September 1969, but they remained idle for several years as the ore handling plant was not ready. During trial run in January 1974, the performance of the motors was found to be unsatisfactory. This was not rectified by the Calcutta firm as the guarantee period had expired. Both the motors were got rectified/modified by a firm at Chowdwar between February 1974 and September 1975 at a cost of Rs. 1·30 lakhs.

(*b*) *Installation of apron feeder*—The crushing plant was designed without a built-in-arrangement for regulated feed to the conveyor system starting from the primary crusher. Without a regulated feeding system, serious constraints, such as momentary overloading of the gathering belt as well as equipment ahead like scalping screen, secondary crusher and belt conveyor classifiers were reported by the Plant Engineer during trial run in September/October 1970 and also after final commissioning of the plant due to presence of higher percentage of fines in the run-of-mine ore. In February 1973, an *ad hoc* committee consisting of the Company officers suggested modification of the feeding system from the primary crusher and in August 1973 the designer of the plant (a Hungarian firm) agreed to supply design drawings for installation of feeders to be manufactured in India. In March 1974, an Engineer from Hungary, who had come in connection with the operation of the plant, prepared a design for reciprocating feeders to be installed in both the lines of crushers for smooth operation. These feeders were estimated to cost Rs. 10·00 lakhs. In December 1974, at the instance of the State Government, the Company consulted two private firms which suggested (January 1975/February 1975) installation of apron feeders which would give better performance and could be imported at the same cost. In June 1975, the Company decided to provide apron feeders and to prepare design and drawings indigenously.

The Regional Research Laboratory (RRL), Bhubaneswar offered (August 1975) to prepare the design and drawing for the apron feeders for a fee of Rs. 0·35 lakh. The offer was not considered as the RRL did not agree to give design guarantee. In October 1975, the Company entrusted the work to a firm at Chowdwar at a fee of Rs. 0·60 lakh which had given design guarantee, on the basis of limited enquiries made from nine firms. RRL, whose offer was not considered earlier, was appointed (October 1975) to render consultancy service, fees in respect of which were fixed (February 1976) at Rs. 0·20 lakh. The firm delivered the design and drawings in January 1976, duly approved by RRL as well as by the Hungarian Engineer who had come in January 1976 in connection with the operation of the plant. In order to ensure the suitability of the design and the drawings to the existing civil structure, the Company got those checked again (March 1976) by a firm in Calcutta at a fee of Rs. 0·20 lakh, and spent Rs. 0·05 lakh on modification of the design (May 1976) as suggested by the Calcutta firm. Thus, a sum of Rs. 1·05 lakhs was spent on design and drawings as against RRL 's offer of Rs. 0·35 lakh for the job.

(c) *Fabrication, erection and commissioning*—In December 1975, the Company invited open tenders for fabrication, supply, erection and commssioning of apron feeders in both the lines of crusher plant. The tender scheduled for opening on 30th January 1976 was opened on 15th June 1976 after three extensions due to delay in the preparation of design and specifications.

Of the four tenders received, the tender of a firm of Chowdwar was the lowest (Rs. 48 lakhs) while that of a firm of Hirakud was the second lowest (Rs. 51·66 lakhs). The offers, though valid for 120 days, were not accepted (March 1978) pending re-check of the technical soundness of the design by a suitable agency. In the meantime, the plant is working without the apron feeders (April 1978).

(d) *Installation of thickeners*—To minimise water consumption in the iron ore washery, the original design of the plant envisaged provision of two thickeners (a device by which the water is re-circulated into the

washery for repeated use). At the time the plant was commissioned (January 1974), the installation works in respect of both the thickeners, on which Rs. 0·54 lakh were spent towards inatallation charges, was incomplete. One of them was completed (August 1974) by a contractor at a cost of Rs. 0·69 lakh and commissioned in December 1975 only due to lack of operational know-how. The thickener stopped functioning from 15th July 1976 as the pumps went out of order and were awaiting repairs (April 1978).

Completion of the second thickener was entrusted to the same contractor in February 1974 at Rs. 0·49 lakh. The contractor suspended the work on 9th September 1974 after receiving Rs. 0·35 lakh on running account bills due to delay in supply of materials by the Company. The work was not proceeded further (April 1978).

(e) *Stock pile*—In order to ensure supply of iron ore to the washing plant in case of dislocation in the working of the belt conveyor, which was provided for haulage of crushed iron ore from crushers to the washing plant, a stock pile of 15,000 tonnes capacity at the end of the belt conveyor was contemplated in the project report. At the time the Company took possession (February 1973) of the ore handling plant, the work on the stock pile was incomplete and Rs. 15·04 lakhs (earth work : Rs. 1·39 lakhs ; R. C. C. work : Rs. 13·65 lakhs) had been spent. The Company had not taken up (October 1977) the balance portion of the work. Further developments are awaited (April 1978).

(2) *Construction of permanent dam at Daitari*—With a view to supplying water to the Daitari iron ore project, Government took up (April 1966) construction of a permanent dam on a *nallah* at Daitari and entrusted the work to the Company. Administrative approval for the work was given by Government in December 1965 for Rs. 14·80 lakhs. The Company spent Rs. 42·53 lakhs on construction of the dam but did not obtain the approval of Government or of its Board of Directors for exceeding the amount for which administrative approval had been accorded. The claim preferred (May 1970) by the Company for reimbursement of Rs. 27·73 lakhs was rejected (July 1970) by Government on the ground that the expenditure incurred was in excess of the estimate.

The Management attributed (February 1978) the excess over the estimated cost to revision in the requirement of water and consequently in the design of the dam.

4.11.2. Production performance

The table below indicates the quantities planned for production/raising and the actual production for the five years up to 1976-77:—

(Figures in '000 tonnes)

		1972-73		1973-74		1974-75		1975-76		1976-77	
		Planned	Actuals	Planned	Actuals	Planned	Actuals	Planned	Actuals	Planned	Actuals
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Iron ore	..	1032	913	934	827	890	847	1449	1467	1530	1423
		..	(88)	..	(89)	..	(95)	..	(101)	..	(93)
Chrome ore	..	140	149	100	107	160	168	185	223	150	158
		..	(106)	..	(107)	..	(105)	..	(121)	..	(105)
Manganese ore	..	60	32	37	30	40	25	46	33	146	146
		..	(53)	..	(81)	..	(63)	..	(72)	..	(100)

Note :—1. Figures in the brackets indicate percentage of actuals to the production planned.

2. Figures for 1976-77 are provisional.

(A) Production of iron ore

The table below indicates the group-wise targets fixed and the progress made in the production of iron ore for the five years ended 31st March 1977:—

(Figures in '000 tonnes)

Mine group		1972-73		1973-74		1974-75		1975-76		1976-77	
		Planned	Actuals	Planned	Actuals	Planned	Actuals	Planned	Actuals	Planned	Actuals
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Daitari	..	600	583	500	444	600	636	800	825	700	701
Tomko	..	NA	30	NA	40	NA	22	20	24	100	50
Gandhamardan		150	52	180	150	100	77	180	173	250	220
Khandadhar	..	120	61	54	13	50	10	117	124	190	145
Banspani	..	162	187	200	180	140	102	332	321	290	307
Total	..	1032	913	934	827	890	847	1449	1467	1530	1423

(NA—Not available)

There was an increase in the production of iron ore from 8·47 lakh tonnes in 1974-75 to 14·67 lakh tonnes in 1975-76. This was due to increase in the off-take of ore by internal purchasers and also by MMTC for foreign buyers.

Production of iron ore from the Daitari mines ranged from 49 to 74 *per cent* of the total iron ore production of the Company during the period 1972-73 to 1973-74. On a study of the working of the mines, the follwoing points were noticed:—

(1) Mining operations at Daitari were done manually from 1966-67 by engaging job workers and contractors. From 1974-75, mining was done both mechanically and by manual labour. The following are the details of the production of iron ore mined mechanically and manually during the three years up to 1976-77:—

(Figures in '000 tonnes)

		1974-75	1975-76	1976-77
Rated capacity of the ore handling plant		800	800	800
Total production of ore as budgeted		600	800	700
By ore handling plant	..	150	300	300
By manual labour	..	450	500	400
Total ore produced	..	636	825	701
Ore produced by the ore handling plant		148	320	301
Ore produced manually	..	488	505	400
Percentage of actual production by ore handling plant to its rated capacity		19	40	38
Percentage of actual production by ore handling plant to budgeted production		99	107	100
Percentage of manual production to budgeted production		108	101	100

Note—(*i*) Rated capacity and actual production are based on single shift working.

(*ii*) The plant commissioned in January 1974 was under trial run till March 1974.

The level of budgeted production by the ore handling plant was kept low reportedly owing to:

(*i*) absence of control feeding system (apron feeders) to overcome frequent jamming of chutes and over loading of gathering belt conveyor due to presence of higher percentage of fines in the crusher plant leading to stoppage of the crusher plant;

(*ii*) non-installation of higher capacity classifiers to accommodate higher percentage of fines;

(*iii*) absence of end storage stock pile and non-completion of 5,000/15,000 tonnes stock piles; and

(*iv*) lack of adequate demand for washed iron ore from buyers.

(2) *Generation of iron ore fines*—The ore handling plant was designed to yield sized lump ore of +12 mm to —100 mm to the extent of 64 *per cent* of the input (run-of-mine ore) and the balance 36 *per cent* in fines (—12 mm to +65 mesh). The following table gives the details of ore handled and lump ore obtained during the three years up to 1976-77:—

(Figures in '000 tonnes)

	1974-75	1975-76	1976-77
Ore handled ..	230	466	522
Lump ore produced ..	148	320	301
Percentage of lump ore produced to ore handled	64	69	57

The plant accumulated 4·71 lakh tonnes of fines up to September 1977. No value was assigned to the fines on the assumption that there was no market for the same. The Company, however, sold (September 1977) 0·88 lakh tonnes of fines for Rs. 26·11 lakhs (Rs. 29·67 per tonne) to the Durgapur and Bokaro Steel Plants. Negotiations to export iron ore fines to a foreign firm were in progress (February 1978). The Company was also negotiating with three institutions regarding the feasibility of setting up a pelletisation plant.

(3) *Loss of iron ore fines (slurry)*—The washing plant had no system for storage of slurry which contained iron ore fines; consequently, the fines were not collected but allowed to flow into the valley. A test check showed that 0·74 lakh tonnes of fines constituting 5·2 *per cent* of the input were lost during April 1974 to September 1977. A feasibility study in regard to storage of slurry does not seem to have been made.

(4) *Utilisation of plant and equipment*—The ore handling plant is run for one shift of 8 hours per day and is designed to handle 800 tonnes of run-of mine ore per hour. The table below indicates the average number of hours of running per shift and the quantity of ore handled per hour for the three years up to 1976-77:—

Year	Total hours worked		Average hours of operation per day		Quantity of ore handled		Quantity of ore handled per hour	
	Crusher plant	Was-hery	Crusher plant	Was-hery	Crusher plant	Washery	Crusher plant	Was-hery
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
					(In tonnes)			
1974-75 ..	947	950	4·0	4·0	2,30,516	2,29,460	243	242
1975-76 ..	1,397	1,216	4·8	4·2	4,64,533	4,66,000	333	383
1976-77 ..	1,622	1,498	5·3	5·0	5,16,519	5,22,290	318	348

The Company had not analysed the resasons for low utilisation of the plant.

(5) There was complete stoppage of the plant for 110 days during the three years. Cause-wise details are given below:—

	Number of days of stoppage
Repair and realignment ..	44
Mechanical breakdown ..	48
Power failure ..	9
Other reasons like non-availability of ore, bad weather, labour unrest, *etc.*	9
Total ..	110

The loss of production as a result of stoppage of the plant worked out to 1·28 lakh tonnes of crushed ore computed with reference to the average production of the plant per day.

(6) *Equipment utilisation*—Drills, shovels, dumpers, dozers and traxcavators are some of the important heavy earthmoving equipment used at Daitari. The table below indicates the particulars of equipment

required for the project as per the project report, equipment acquired and its utilisation by the Company up to 1976-77:—

Particulars of equipment		Requirement as provided in the project report	Number in possession			Number in actual use		
			1974-75	1975-76	1976-77	1974-75	1975-76	1976-77
Drills	..	4	4	4	4	2	2	2
Shovels	..	5	4	4	4	2	3	3
Dumpers	..	14	16	18	18	11	10	11
Dozers	..	2	9	10	10	2	3	3
Traxcavator	..	2	2	2	2	2	2	2

The following equipment was lying idle for the period noted against each:—

Equipment		Number	Value (In lakhs of rupees)	Idle period (Years)
Drills	..	2	3·32	10 (From 1967-68)
Shovel	..	1	9·33	10 (From November 1967)
Dumpers	..	7	26·08	1 to 8
Dozers	..	4	6·53	1 to 4

(7) Till September 1976, records of expected hours, available hours and actual hours of utilisation were not maintained at the mines. Records maintained since October 1976 show the percentages of availability and utilisation of expected hours for the period from October 1976 to March 1977 as follows:—

Equipment		Expected hours in the half year	Available hours	Utilised hours	Percentage of availability	Percentage of utilisation
Drills	..	2,389	916	787	38·34	32·94
Shovels	..	3,584	1,900	1,360	53·01	37·94
Dumpers	..	12,303	7,134	6,018	57·98	48·91
Dozer	..	3,119	927	600	29·72	19·23
Traxcavator	..	2,288	899	559	39·29	24·43

Note—Expected hours are based on number of available working days X number of machines expected to be operated X working hours per shift of operation.

Low availability was owing to frequent breakdowns requiring repairs, and the shortfall in actual utilisation was reported to be due to intermittent stoppages of the crusher plant.

(8) *Turn round time of dumper*—While assesing (December 1967) the requirement of dumpers, it was estimated by the Management that each dumper would take 20 minutes to complete one cycle of journey from the mining face to the crusher plant and back. In practice, the time taken to complete one cycle of journey per dumper varied between 58 and 60 minutes. The Management had not analysed (April 1978) the reasons for the excess time taken by the dumpers for a round trip.

(9) *Manpower analysis*—The following are the details of personnel employed under different categories in the plant during the three years up to 1976-77 :—

		1974-75	1975-76	1976-77
Officers	..	29	28	34
Monthly rated employees	..	614	702	699
Daily rated workers	..	153	92	95
Casual workers	..	220	234	309
Total	..	1,016	1,056	1,137

Of these, 55 personnel were employed in manual mining. The project report envisaged a total staff strength of 650 at the rated capacity of 1·6 million tonnes of sized ore per annum by mechanical means on two shift basis. The Board of Directors, however, sanctioned (September 1970) a strength of 831 employees. A study was conducted (at the instance of the Company) in May 1971 by a Senior Industrial Engineer of the National Minerals Development Corporation Limited, who also recommended a strength of 830 employees with slight additions in future to provide for any unforeseen contingencies. The actual staff strength in the project was more than that sanctioned by the Board of Directors, even though the level of production in the plant ranged between 1·48 lakh tonnes and 3·20 lakh tonnes per annum during 1974-75 to 1976-77 against the annual output of 16 lakh tonnes envisaged in the project report.

(10) *Cost analysis and profitability*—

Mechanised mining—The table below gives the cost of production per tonne as estimated on the basis of the budgeted level of production and the actual of production during 1974-75 to 176-77:—

	1974-75		1975-76		1976-77*	
	Estimated cost at a production level of 6·50 lakh tonnes	Actual cost at a production level of 1·48 lakh tonnes	Estimated cost at a production level of 3·00 lakh tonnes	Actual cost at a production level of 3·20 lakh tonnes	Estimated cost at a production level of 3·00 lakh tonnes	Actual cost at a production level of 3·01 lakh tonnes
			** (Cost per tonne in rupees)			
Direct mining ..	9·70	17·44	19·78	17·21	19·78	17·05
Service cost ..	4·05	11·10	6·08	8·65	5·64	7·37
Transportation and delivery charges (export Paradeep)	37·80	35·90	35·90	35·90	33·90	33·90
Depreciation ..	17·43	67·55	48·00	46·64	41·12	46·98
Interest Charges ..	4·20	40·90	18·60	20·43	..	23·11
Royalty and cess ..	1·75	1·75	1·75	1·75	1·75	1·75
Sales Tax ..	..	4·78	5·20	5·74	..	..
Total cost ..	74·93	179·42	135·31	136·32	102·19	130·16
Sales realisation (average per tonne)	59·15	59·73	70·49	71·73	72·51	73·23
Loss ..	15·78	119·69	64·82	64·59	29·68	56·93

The Company sustained losses aggregating Rs. 5,56·48 lakhs in respect of 7·71 lakh tonnes of ore raised during the years 1974-75 to 1976-77.

The Management attributed the high cost of production as compared to the sales realisation to (*i*) non-attainment of rated production, (*ii*) increase in capital investment in the project leading to higher incidence of depreciation charges, (*iii*) higher incidence of interest charges due to delay in repayment of loans, (*iv*) payment of sales tax, and (*v*) high cost of transportation of ore to the port.

Manual mining.—The cost per tonne of ore raised manually worked out to Rs. 57·16, Rs. 58·71 and Rs. 59·89 as against sales realisation of Rs. 53·22, Rs. 59·43 and Rs. 64·60 in 1974-75, 1975-76 and 1976-77 respectively.

* Figures are provisional.

** Does not include value of fines.

(B) Production of chrome ore

The table below indicates the mine-wise targets and the actual production of chrome ore for the five years up to 1976-77:—

(Figures in '000 tonnes)

Mine	1972-73		1973-74		1974-75		1975-76		1976-77	
	Target	Actual production	Target	Actual production	Target	Actual production	Target	Actual production	Target	Actual production
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Kalarangi	21	8	6	6	50	27	40	53	40	38
Sukrangi	54	59	32	37	50	55	50	63	40	14
Kathpal	8	11	*	*	9	9	20	18	10	13
Boula ..	7	5	3	3	1	1	*	*	*	*
Kaliapani	50	66	59	61	50	76	75	89	60	93
Total ..	140	149	100	107	160	168	185	223	150	158

The principal mines of the Company are located at Kaliapani where high grade chrome ore fines are raised for export. Production from those mines constituted 59 *per cent* of the total production of chrome ore by the Company during 1976-77.

(1) *Removal of overburden*—In May 1967, the Company invited open tenders for cutting and removal of overburden of 0·8 lakh cubic metres (estimated cost : Rs. 3·20 lakhs) at quarry I at Kaliapani. Later, tender schedules were prepared in June 1967 indicating the quantity as 1·75 lakh cum (estimated cost : Rs. 25·04 lakhs) for removal of overburden up to depth of 7·5 metres in all kinds of soil, based on bore hole data compiled by the Geological Survey of India. Out of four tenders received, the first and the second lowest offers were as follows :—

	Within lead of 100 metres	Within lead of 1 Km.
	(Rate per 100 cum)	
Firm 'J' (Lowest) ..	520	375
Firm 'H' (2nd lowest) ..	620	725

* The mines were not operated during the period.

In the meantime, the Mines Manager intimated (June 1967) that the depth should be 16 metres against 7·5 metres indicated in the tender schedule. The tenders were not considered as the lowest tenderer did not turn up and the work was put to re-tender in August 1967 revising the depth of overburden to six metres and the quantity to 1·12 lakh cum, the cost being estimated at Rs. 5·85 lakhs. It was considered at that time that tender for the remaining work (*i. e.* up to the depth of 16 metres) could be invited later. Out of eight tenders received, the offer of firm 'B' for Rs. 4·13 lakhs, which was the lowest was accepted (September 1967) at the following rates :—

Item of work		Rate for 100 cum (Rupees)
Within lead of 100 metres	..	185
Within lead of 1 kilometre	..	430

A work order was issued to firm 'B' in September 1967 for completion of the work before September 1969. Detailed drilling operations started in January 1968 indicated that excavation of overburden was to be done up to depth of 45 metres in all kinds of rock. Fresh tenders were not invited on the ground that it would lead to stoppage of work for 2 to 3 months and, instead, the additional work was entrusted to firm 'B', without approval of the Board of Directors, in three supplementary agreements in August 1969, March 1970 and February 1972 for excavation of 2·92 lakh cum of overburden in all kinds of rock to the depth of 15 metres, 15—35 metres and 35—45 metres at the negotiated rate of Rs.3,400, Rs. 3,600 and Rs. 3,600 per 100 cum respectively. The work was completed in June 1975. In all, the contractor excavated overburden of 5·16 lakh cum. (value: Rs. 149 lakhs) against estimated quantity of 4·04 lakh cum. for Rs. 131·28 lakhs. Firm 'B' was paid Rs. 131·49 lakhs up to July 1975. Final settlement was awaited (April 1978) pending detailed check of the final bill submitted in April 1977 and approval of the Board of Directors.

The following points were noticed in this connection :—

(*a*) The proportion of soil to rock, according to the geological estimates prepared by the Company, was 1:3. The proportion in actual execution covered by the three supplementary agreements was as follows :—

(Quantity in lakh cum.)

		Total	Soil	Rock	Ratio
1st supplementary	..	1·64	0·55	1·09	1:2
2nd supplementary	..	1·57	0·25	1·32	1:5
3rd supplementary	..	1·95	0·39	1·56	1:4

The additional cost, consequent on the higher proportion of rock, amounted to Rs. 7·61 lakhs. The variations in ratio were not investigated (April 1978).

(*b*) The first supplementary agreement provided for separate rates for excavation and transportation while the second and third supplementary agreements provided a composite rate for excavation and transportation. As compared to the rates of the second/third supplementary agreement, the work done under the first supplementary agreement resulted in an extra expenditure of Rs. 4·20 lakhs even though the lift as per the first supplementary agreement was less by 20—30 metres. The Management stated (March 1976) that since a road had been constructed up to 20 metres depth by the time the second supplementary agreement was executed the rate in the latter agreement was reduced in negotiation.

In the third supplementary agreement, a road extended upto 30 metres depth was to be provided. The extension of the road up to 30 metres depth was completed in June 1972 and Rs. 0·56 lakh were paid to the contractor towards lifts exceeding 15 metres (45—30 metres depth, up to which the road was to be provided) for the work done between February and June 1972.

The Company did not work out the economics of laying a road beyond 30 metres depth.

(*c*) The quantity of overburden transported as per the third running account bill (0·45 lakh cum.) of the contractor was not deducted from the quantity shown in the fourth running account bill, which was paid in January 1969. As a result, there was an over-payment of Rs. 2·12 lakhs to the contractor. Recovery of the amount was awaited (April 1978).

(2) *Raising of chrome ore*—Open tenders for raising chrome ore in quarry I at Kaliapani, consisting of the following three items, were invited in November 1967 :—

(*a*) Lead : 30 metres.
Lift : 5 metres (average).

(*b*) Lead : 60 metres.
Lift : 5 metres (average).

(*c*) Lead : 60 metres.
Lift : 5—8 metres (average).

Assessment of excavation was to be made as per section measurement at the site of excavation and payment was to be made per cubic metre of excavation (compact volume by section measurement) after deducting a percentage towards ores rejected as being below specifications on the basis of analysis done by a recognised chemist.

Only one tender from firm 'B' who was executing removal of overburden was received; its rates were Rs. 14, Rs. 16 and Rs. 17 per cubic metre for the three items respectively. This was a single tender and re-invitation of tender was considered necessary. It was, however, decided by the Company (December 1967) to raise 10,000 to 15,000 tonnes of ore through firm 'B' at the tendered rates to ensure continuity of raising ore. Work order for one month for raising 10,000 to 15,000 tonnes of ore was issued on 21st December 1967, an agreement incorporating the above conditions was also entered into with the contractor on 21st December 1967.

The work was re-tendered on 21st December 1967. It was decided (December 1967) that the rate for excavation would be based not on the amount of permissible grade of ore which would be recovered but on the Public Works Department's principle of sectional measurement of the excavation done and the tender schedule was amended accordingly. The lowest offer of firm 'B', out of the four tenders received, was accepted and the work was awarded to it on 21st January 1968. The rates agreed to be paid were Rs. 10, Rs. 12 and Rs. 20 per cubic metre respectively for items (*a*), (*b*) and (*c*) mentioned above.

The following points were noticed :—

(*a*) The initial order to commence work was given to firm 'B' on 21st December 1967 and the contract was to run for one month, *i. e.* up to 20th January 1968. For raising ore at an average lead up to 60 metres and lift of 5 metres the contractor was paid Rs. 2·94 lakhs for 18,355·18 cum. at Rs.16 per cubic metre, though the quantity comprised 5,500 cum. measured on 22nd January 1968 and 12,855·18 cum. measured on 9th and 10th February 1968, without indicating the period of execution.

The same volume of 18,355·18 cum. of work was again measured on 16th April 1968 on the ground that the contractor had disputed the measurements taken earlier although the contractor had signed the measurement books in token of having accepted the measurements on the earlier occasion. The revised measurement increased the volume by 1,232 cum. and the contractor was paid Rs. 0·20 lakh more on this account.

(*b*) In November 1967, *i. e.* before calling for tenders, estimates drawn by the Senior Geologist of the Company, on the basis of rates prevailing in the area, showed that the cost for raising ore with a lead of 60 metres and lift of 5—8 metres would be Rs. 7·60 per cubic metre.

(*c*) The work was to be completed by July 1968. The contractor was given work order for raising additional quantities of ore from time to time by way of supplementary agreements on six occasions, between September

1968 and February 1972, to go up to the depth of 45 metres. The extensions were given on the basis of negotiations with out inviting tenders and without obtaining the approval of the Board of Directors. The value of work so given was Rs. 39·94 lakhs.

The Management stated (March 1976) that had fresh tenders been called for after the initial work was over or before giving extensions it would have led to almost stoppage of work for two to three months by which time the quarry would have been flooded. Reasons for not taking sufficient advance action were not intimated.

(*d*) The final bill of Rs. 17·70 lakhs for the ore raising work submitted in April 1977 has not been settled (April 1978).

(3) The chrome ore reserved at quarry II at Kaliapani were estimated (October 1969) by the Company at 2·44 lakh tonnes up to a depth of 50 metres. Open tenders for raising the ore were called for in October 1969. As only one tender was received fresh tenders were invited in January 1970 reducing the depth for excavation to 30 metres and the quantity to 1·15 lakh tonnes. Again, only one tender was received and the work was re-tendered in April 1970. Three tenders were received, of which the lowest offer of firm 'B' at Rs. 16·15 per tonne of permissible grade of ore (+52 *per cent* Cr 203) was accepted and an agreement was concluded (August 1970) with it. The estimated value of the work at the tendered rate was Rs. 10·29 lakhs for raising 63,706 tonnes of permissible grade.

After working the quarry up to a depth of 15 metres, the contractor complained (February 1971) that the availability of chrome ore was much less than that indicated in the geological data given by the Company with the tender schedule (which was confirmed in March 1971 by the Chief Geologist after a spot study) and requested revision of the rates provided in the agreement. The Management decided (March 1971) to pay the contractor at the rate of Rs. 16·15 per tonne, irrespective of the grade of ore, up to a total quantity of 28,598 tonnes estimated to be raised up to a depth 20 metres and to review the position for the slab 20—30 metres after the excavation reached 20 metres depth. As excavation of the quarry to about 20 metres depth was also stated to have shown less availability of ore, the contractor again requested revision of the rates. A Committee of officers consisting of the Company's Mining Consultant, Chief Geologist, Production Co-ordinator, Chief Accounts Officer, Officer-in-charge of Planning and Engineering and the Mines Manager, Kaliapani examined the matter (November 1971) and recommended revision of the contract; based on this the tender committee of the Company recommended (9th December 1971) revision of the terms of the agreement, as detailed below :—

(*a*) The existing basis of payment per tonne of chrome ore at Rs. 16·15 be terminated after "winning" about 10,000 tonnes of chrome ore by total excavation of 75,000 cum. of overburden up to 20 metres depth.

(*b*) Work beyond 20 metres and up to 40 metres depth be allotted to the contractor on the modified basis of excavation of ore and overburden of 2·61 lakh cum. The rate of payment was to be as follows :—

(*i*) Excavation of overburden and ore of all sizes at Rs. 25·10 per cubic metre.

(*ii*) Removal of excavated ore, sizing and sorting at Rs. 10·00 per cubic metre.

The revision was made effective from 14th December 1971 and the contractor was allowed 6 months' time from the date of revision. The contractor completed the work in March 1974; the delay was regularised by grant of extension and the final bill was paid in August 1974.

A comparative study of the geological data at the time of tendering in 1969-70 and as brought out in an analysis made by Audit on the basis of the quantity executed as per the final bill of the contractor indicated a minor divergence as noted below :—

	Volume of ore at the depth of		Volume of overburden up to the depth of		Ratio of ore to overburden	
	20—30 metres	20—40 metres	20—30 metres	20—40 metres	20—30 metres	20—40 metres
	(in cubic metres)					
According to the geological data indicated at the time of tendering	24,608	54,336	1,10,604	2,52,877	1:4:5	1:5
According to data revealed on actual execution	24,400	42,900	1,23,000	2,61,112	1:5	1:6

The difference in payment made to the contractor for raising 0·61 lakh tonnes of ore between 20 and 30 metres depth worked out to Rs. 23·46 lakhs over the original rate of Rs. 16·15 per tonne.

(4) *Transportation of ore*—(*i*) The Company entered into several agreements with private transport contractors and with the Orissa State Commercial Transport Corporation Limited for transportation of ore between different points. During the period from 1970-71 to 1974-75, 13,890 tonnes of chrome ore raised and transported initially to Jajpur-Keonjhar Road railhead point from the mines at Kaliapani (5,919 tonnes) and Kathpal (7,971 tonnes) were again transported to Paradip port. The direct distance between the mine heads and the Paradip port was less than the distance between the mine head and the port via Jajpur-Keonjhar road. The extra expenditure on transportation amounted to Rs. 1·40 lakhs for 13,890 tonnes of ore thus taken by the longer route, as detailed below :—

Mine head	Year	Quantity of ore (tonnes)	Rate between mine head and Jajpur Keonjhar Road	Rate between Jajpur Keonjhar road and Paradip	Rate between mine head and Paradip	Difference	Total difference (Rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			(Per tonne in rupees)				
Kaliapani	.. 1970-71	5,919	18·50	23·20	31·15	10·55	62,445
Kathpal	.. 1971-72	5,077	15·75	21·99	32·00	5·74	29,142
Kathpal	.. 1973-74	610	16·75	30·00	34·75	12·00	7,320
Kathpal	.. 1974-75	2,284	26·10	35·40	43·60	17·90	40,884
					Total ..		1,39,791

(*ii*) According to the terms and conditions of the agreements for transportation of chrome ore from the mines, ore lost in transit, consequent on any break-down, accident, unloading enroute due to negligence on the part of the contractor etc. was to be made good by him. Three contractors engaged in the transportation of ores from Kathpal/Kalarangi mines delivered short 75·873 tonnes of ore between November 1975 and March 1977. Cost (Rs. 0·50 lakh at sale value) of the quantity short delivered was not recovered from the contractors.

(C) Production of manganese ore

The initial production of manganese ore started in 1962-63 with 1,100 tonnes, which gradually increased to 6·100 tonnes during 1965-66. Thereafter, there was a steady fall in production till 1970-71 (499 tonnes). The table below indicates the mine-wise details of production planned and the quantities actually produced during the five years upto 1976-77 :—

Mine	1972-73		1973-74		1974-75		1975-76		1976-77	
	Planned	Actuals	Planned	Actuals	Planned	Actuals	Planned	Actuals	Planned	Actuals
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	(In thousand tonnes)									
Dubna ..	30	24	20	19	20	13	23	17	42	41
Kadedihi ..	22	8	17	11	20	11	15	12	30	25
Nishikhal ..	..	..	..	..	..	1	..	..	5	4
Dalki ..	..	..	..	..	..	..	..	..	21	18
Rolda ..	..	..	..	..	..	..	..	..	24	35
Seramda Bhadrasahi ..	..	..	..	..	..	..	8	4	24	23
Total ..	60	32	37	30	40	25	46	33	146	146

The production was highest during 1976-77

(D) Lime stone

The Company obtained the lease of a lime stone quarry at Dungri (Sambalpur District) in August 1965 and transferred it in June 1969 to the cement factory of the Industrial Development Corporation of Orissa Limited (IDCOL—A State Government Company), at the instance of the State Government, after production of 3·95 lakh tonnes of lime stone. Thirteen 'Maghurt' dumpers acquired in December 1964 (3) and April 1967 (10) at a cost of Rs. 11·99 lakhs for use in the quarry but not transferred to IDCOL were lying idle (April 1978). Book value of the 13 dumpers as at March 1977 was Rs. 1·44 lakhs.

4.11.3. Sales performance

Bulk of the iron ore and chrome ore raised by the Company is exported. While the iron ore is sold to MMTC for eventual export, chrome ore is sold on the basis of global tenders. Sizeable quantities of iron ore and chrome ore are also sold to Hindustan Steel Limited (HSL) and IDCOL respectively. Manganese ore is sold to other parties besides MMTC. The prices of iron ore and manganese ore sold to MMTC are fixed from time to time on the basis of negotiations. The price of chrome ore sold to IDCOL is determined by a High Power Committee on Industries of the State Government.

(A) Sales of iron ore

The following table gives the details of sales of iron ore during the five years up to 1976-77 :—

Year	Total production	Total sales	Export sales	Value of sales	Value of export sales
(1)	(2)	(3)	(4)	(5)	(6)
	(In '000 tonnes)			(In lakhs of rupees)	
1972-73 ..	913	1,011	770	416·29	368·55
1973-74 ..	827	776	587	320·83	283·57
1974-75 ..	847	939	811	524·42	495·85
1975-76 ..	1,467	1,440	1,022	819·57	712·61
1976-77 ..	1,423	1,342	901	761·29	639·77

(Figures for 1976-77 are provisional)

The percentage of export sales to total sales ranged between 67 and 85

(1) Till September 1971, the Company was supplying iron ore to MMTC for export on free-on-board trimmed (FOBT) at Paradip port basis and as such, the Company was responsible for loading of ore into ships and to bear the expenses connected therewith. Mention was made in paragraph 88 (*a*) of the Report of the Comptroller and Auditor General of India for the year 1970-71 about the loss of Rs. 65·16 lakhs on the export of 5·43 lakh tonnes of iron ore up to June 1970 through MMTC. The Company sustained a further loss of Rs. 77·01 lakhs in respect of 5·12 lakh tonnes of ore sold to MMTC during July 1970 to September 1971 as shown below :—

Period	Actual cost of Iron ore FOBT Paradip per dry tonne	Average price realised per dry tonne	Loss per dry tonne	Quantity exported through MMTC (In lakhs of tonnes)	Loss (In lakhs of rupees)
	(In rupees)				
(1)	(2)	(3)	(4)	(5)	(6)
July 1970 to March 1971	69·56	54·49	15·07	2·24	33·76
April 1971 to September 1971	69·51	54·49	15·02	2·88	43·25
Total ..	..	..	..	5·12	77·01

The total loss of Rs.1,42·17 lakhs was reduced by Rs. 37·93 lakhs, on receipt by the Company (April/September 1973) of 50 *per cent* of the export subsidy given to MMTC by the Government of India.

For delay in loading of ore into the ships, the Company had to reimburse demurrage charges to the buyer. In case ore was loaded before the scheduled time, the Company earned despatch money. During the period between April 1969 and September 1971, the Company incurred Rs. 13·13 lakhs towards demurrage charges, while it earned Rs. 1·98 lakhs as despatch money. The Management stated (March 1976) that the payment of demurrage charges was due to lack of control over iron ore shipment schedules.

(2) From October 1971, the terms of supply were changed to explot at Paradip to avoid incidence of payment of demurrage, shipment charges, *etc*. The rate on explot Paradip basis was fixed at Rs. 50 per dry tonne. The revised price was estimated (December 1971) to result in a saving of Rs. 7·98 per dry tonne as against the average loss of Rs. 9·88 per tonne under FOBT basis, after accounting for the subsidy received. The price was further revised to Rs. 62 per dry tonne applicable to supplies made in 1974-75. The quantity of manually raised ore supplied, the cost incurred for explot supply, the net sales realisation per tonne of ore and the loss per tonne during the period from October 1971 to March 1975 are given below :—

Period	Quantity supplied (dry tonne)	Total cost explot (In rupees per dry tonne)	Net sales realisation (In rupees per dry tonne)	Loss per dry tonne (Rupees)	Total loss (Rupess in lakhs)
(1)	(2)	(3)	(4)	(5)	(6)
October 1971 to March 1972	2,35,840	54·34	44·04	10·34	24·39
1972-73 ..	6,14,624	45·35	43·94	1·41	8·67
1973-74 ..	4,46,805	46·83	43·50	3·33	14·88
1974-75 ..	5,01,246	57·16	53·22	3·94	19·75

The Company incurred a total loss of Rs. 67·69 lakhs on 17·99 lakh dry tonnes of manually raised ore supplied during the period. The average loss per tonne on the explot supplies worked out to Rs. 3·76.

(3) After commissioning the mechanical ore handling plant and the washing plant, the company commenced supply of washed ore for export. The following are the details :—

Period	Quantity of washed ore supplied (Dry tonnes)	Total ex plot cost (In rupees per dry tonne)	Net sale price realised (In rupees per dry tonne)	Loss per dry tonne (Rupees)	Total loss (Rupees in lakhs)
(1)	(2)	(3)	(4)	(5)	(6)
January 1974 to March 1974	15,620	713·56	47·08	684·48	106·92
1974-75 ..	1,48,978	179·42	59·73	119·69	178·31
1975-76 ..	2,95,677	136·32	71·73	64·59	190·98

There was a total loss of Rs. 4,76·21 lakhs in the sale of 4·60 lakhs dry tonnes of washed iron ore from January 1974 to March 1976.

(4) *Delay in preferring final bills*—According to the agreements entered into from time to time with MMTC for supply of iron ore, the Company could prefer provisional bills for 90 *per cent* of the sale value immediately after delivery of materials at the Company's plot at Paradip and final bills for the remaining 10 *per cent* of sale value after receipt of analysis reports indicating the actual specification of the ore supplied. A review (June 1976) of the final bills preferred by the Company for supply of iron ore to MMTC during 1974-75 and 1975-76 showed that in 39 out of 137 cases there were delays ranging from 16 to 347 days in preferring the final bills after receipt of the analysis reports. This resulted in corresponding delay in realisation of sale proceeds aggregating Rs. 63·65 lakhs from MMTC.

The Management had stated (August 1976) that vigorous steps would be taken to avoid delay in preferring the final bills. A test check in November 1977, however, showed delays ranging from 72 to 218 days in 4 out of 15 cases during 1976-77 resulting in delay of realisation of sale proceeds aggregating Rs. 7·02 lakhs.

(5) *Supply of off-grade ore*—An agreement, entered into by the Company with MMTC on 20th August 1975, for supply of 5 lakh dry tonnes of ore from Daitari stipulated the basis as 62 *per cent* of iron content. The price was Rs. 70 per dry tonne which was subject to adjustment of *unitage at Rs. 1·20 per unit of Fe content above or below to that specified. If, however, the ore supplied was of below 60 *per cent* Fe content, the buyer could reject the material or accept it at a revised price to be decided as follows :—

(*i*) For ore with Fe content below 60 *per cent* and up to 59 *per cent*, deduction was to be made at double the unit rate, fraction *pro rata*; and

* Extra or less amount to be charged per unit of Fe content above or below 62 *per cent* against which price of Rs. 70 was specified in the agreement.

(*ii*) for ore with Fe content below 59 *per cent* the rate for deduction was to be mutually agreed upon.

During 1975-76, the Company supplied 20,683 dry tonnes of ore with 59 to 60 *per cent* Fe content and 9,548 dry tonnes of ore below 59 *per cent*, resulting in reduction of sales realisation by Rs. 1·35 lakhs notwithstanding the facility available at the mines to control the quality by blending ores of different grades.

(6) The Company entered into a contract with MMTC in February 1973 for supply of iron ore with 65—63 *per cent* Fe content on *explot/f.o.r.* Banspani/Bolani/Barbil. The quantities to be supplied and the price thereof were to be settled by negotiation each year. The quantities to be supplied and the prices for the years 1974-75 to 1976-77 are given below :—

Year		Quantity (in dry tonnes)	Price per dry tonne *f.o.r.* basis (Rupees)	Price per dry tonne explot basis (Rupees)
1974-75	..	85,232	22·20 (till September 1974)	21·20
			22·70 (from October 1974)	21·70
1975-76	..	2,54,440	26·20	25·20
1976-77	..	1,98,600	25·85	24·85

The Company did not work out the cost of supply of the ore for fixing the prices.

A comparison of the average cost of sales with the average sale realisation during the three years ended 1976-77 showed that the Company had incurred more expenditure than the income earned as per the details given below :—

Mine head (1)	Year (2)	Average cost of sales (3)	Average sale realisation (4)	Difference (Loss+) (5)	Quantity sold (Dry tonnes) (6)	Profit(+)/ Loss (—) (In lakhs of rupees) (7)
		(Figures in rupees per dry tonne)				
Banspani	1974-75	22·44	20·88	1·56	75,784	(—)1·18
	1975-76	24·64	24·14	0·50	1,91,714	(—)0·96
	1976-77	24·31	24·78	(—)0·47	1,25,946	(+)0·59
Barbil	1975-76	24·64	23·43	1·21	45,919	(—)0·56
	1976-77	24·31	25·25	(—)0·94	35,252	(+)0·33
Bolani	1974-75	22·44	19·00	3·44	3,606	(—)0·12
	1976-77	24·31	23·71	0·60	40,023	(—)0·24

Note—There were no supplies from Barbil in 1974-75 and Bolani in 1975-76.

(7) *Sale of high grade and blast furnace grade iron ore*—The Company supplied high grade (65 *per cent* Fe) ores and blast furnace grade (60—63 *per cent* Fe) ore to HSL at Rourkela. The rates fixed from time to time after negotiation were as follows :—

	Rate (f.o.r. despatching station) per dry tonne — High grade ore (In rupees)	Rate (f.o.r. despatching station) per dry tonne — Blast furnace ore (In rupees)
November 1973 to September 1974	28·50 (Unitage Re. 0·74 per unit up to 63 *per cent*)	..
October 1974 to March 1975	32·50 (Unitage Re. 0·75 per unit up to 63 *per cent*)	..
April 1975 to June 1976	34·00 (Unitage Re. 0·75 per unit up to 63 *per cent*)	26·25 (Unitage Re. 0·49 up to 63 *per cent*)
July 1976 to March 1977	34·75 (Unitage Re. 0·75 per unit up to 63 *per cent*)	26·25 (Unitage Re. 0·49 up to 63 *per cent*)

A comparison of the average sale price realised with the average cost of production per dry tonne of ore supplied (high grade and blast furnace grade ore) during the period from 1974-75 to 1976-77 showed that the Company sustained a total loss of Rs. 12·35 lakhs as shown below :—

Grade (1)	Year (2)	Average cost of production per dry tonne (3)	Average sales realisation per dry tonne (in rupees) (4)	Difference per dry tonne (5)	Quantity sold (in tonnes) (6)	Total loss (in lakhs of rupees) (7)
High grade	1974-75	59·50	26·33	33·17	17,082	5·66
	1975-76	30·61	29·97	0·64	79,549	0·51
	1976-77	34·52	32·78	1·74	1,00,548	1·75
Blast furnace grade	1975-76	30·61	24·60	6·01	41,707	2·51
	1976-77	30·42	25·91	4·51	42,606	1·92
	Total	..	..	..	2,81,492	12·35

(8) *Rejection of ore*—As per an agreement entered into (October 1973) with HSL for sale of iron ore, sampling of ore was to be done before despatch by the public analyst selected by the Company. HSL was not made responsible for returning the rejected materials nor was it made liable to make payment for such supplies. Sampling was not, however, done in terms of the agreement for reasons not on record. Out of 23,031 dry tonnes of ore supplied during the period from November 1973 to October 1974, HSL rejected 1023 dry tonnes (value : Rs. 0·57 lakh) due to higher percentage of silica and alumina and paid Rs. 0·02 lakh only as token price. Standard agreements entered into by the Company with the ore raising contractors provided for recovery of such short payments made by the purchaser from them. Such recovery was not made (April 1978) in this case.

The Management stated (July 1976) that the matter regarding realisation of the amount from the ore raising contractor was under consideration and that the question regarding suitable modification of the agreement providing for return of rejected materials to safeguard the interest of the Company was also being taken up with HSL. Further developments are awaited (April 1978).

(B) Sales of chrome ore

(1) The following table gives the particulars of sales of chrome ore during the five years ended 1976-77 :—

Year	Total production	Total sales	Export sales	Value of total sales	Value of export sales
	(In thousand tonnes)			(Rupees in lakhs)	
1972-73	149	123	112	243·61	223·71
1973-74	107	126	115	278·16	258·97
1974-75	168	165	146	362·59	328·68
1975-76	223	156	131	958·53	886·69
1976-77	158	201	151	1554·37	1391·93

Export sales ranged between 75 *per cent* (1976-77) and 92 *per cent* (1972-73) of the total sales. The value of total sales increased by 164 *per cent* and 62 *per cent* during 1975-76 and 1976-77 as compared to the earlier year consequent mainly on increased realisation of sale prices in export contracts.

Note—Figures for 1976-77 are provisional.

(2) *Sales to firm 'O'*—(*a*) The Company entered (November 1969) into an agreement with firm 'O' for supply of 10,000 tonnes of hard lumpy chrome ore (Cr_2O_3—40 *per cent*) at Rs. 61 per tonne *ex*Ranital plot at 1,000 tonnes per month, to be completed by October 1970. A price increase of Rs. 5 per tonne was allowed by firm 'O' for 1849 tonnes supplied during 1973. The Company supplied 8187 tonnes up to March 1976 for Rs. 4·99 lakhs; the cost of production of the ore supplied worked out to Rs. 6·68 lakhs resulting in a loss of Rs. 1·69 lakhs.

(*b*) The Company entered into another agreement (May 1976) with firm 'O' to supply 46—48 *per cent* Cr_2O_3 chrome ore lumps at Rs. 525 per tonne. No premium for supply of ore above 48 *per cent* Cr_2O_3 content was provided as the firm did not agree to pay any unitage for higher content. The Company decided (June 1976) to limit the supply to the contracted grade and instructed the field office accordingly. During the period from August to December 1976, the field office delivered 3001 tonnes of chrome ore to the firm, of which 1585 tonnes were of higher grade, as noted below :—

Percentage of Cr_2O_3 content	Quantity (Tonnes)
48—49	936
49—50	399
50 and above	250

Computed with reference to the rate contracted by the Company in November 1976 with another firm 'T', the difference between the sale price realised and that realisable on account of supply of higher grade ores to firm 'O' worked out to Rs. 0·62 lakh.

(3) *Supply of chrome ore to Industrial Development Corporation of Orissa Limited (IDCOL)* —(*a*) The Company was supplying chrome ore to the Ferro-chrome Plant of IDCOL at Jajpur-Keonjhar Road since September 1969. The price of the ore supplied up to 31st March 1974, was fixed (October 1970) by the High Power Committee on Industries of the State Government, as below:—

Lumpy ore : Rs. 149 per tonne

Fine ore : Rs. 135 per tonne

(Basis 50 *per cent* Cr_2O_3; unitage for both the rates at Rs. 2·50 per unit.)

During 1972, in view of the then prevailing high market price and increase in the cost of raisings, the Company took up with the State Government the issue of revision of the price. The High Power Committee confirmed in September 1973 the earlier prices and decided that the Chairman of both the Companies should decide the price by mutual negotiations for supplies to be made after 1st April 1974. The Committee further decided that both the Chairmen should fix a level of profit for manufacture of ferro chrome by IDCOL and if extra profit was earned beyond that level, due to escalation of ferro chrome price, the surplus could be shared by the Company and the IDCOL. The Chairmen of both the Companies met and discussed the matter on 3rd April 1974. No decision in respect of the matter could be taken.

In July 1974, the Company requested IDCOL to pay for the ore supplied from 1st April 1974 at the following rates :—

		Rate per tonne, *ex*-plant Jajpur-Keonjhar Road (in rupees)
Lumpy ore :	..	274·75
Fines :	..	259·00

(Basis 50 *per cent* Cr_2O_3; unitage Rs. 5·25 for each percentage above or below 50 *per cent*, fraction *pro rata*.)

IDCOL continued to pay at the rates fixed earlier. A meeting was held on 2nd July 1976 wherein the Secretary, Finance Department and the Managing Director of IDCOL were present. It was decided that the price should be fixed on the basis of actual cost of production plus 12·5 *per cent* profit, besides transportation and handling charges which should be at actuals from the mines to the plant and that the price should be fixed accordingly for the period from 1st April 1974 to 31st March 1976 ; the price for supplies to be made thereafter was to be discussed at a later date. This decision was also not implemented by the Companies. At a meeting of the High Power Committee held on 29th January 1977, it was decided that the margin of profit should be 10 *per cent* of the cost of raising the ore ; besides, cost of transportation, incidental charges, taxes and royalty as per actuals were to be reimbursed by IDCOL. The formula was agreed to by both the parties. It was also decided in the meeting held in January 1977 that (*i*) the Cost Accounts Officers of IDCOL and the Company would work out the price of chrome ore on the above lines by 30th April 1977 and the revised price should be valid for the period from 1st April 1974 to 31st March 1978, (*ii*) the position would be reviewed in January 1978 for finalisation of price for supplies from 1st April 1978 and (*iii*) pending fixation of price, IDCOL should make extra payment of Rs. 20 per tonne over and above the existing price. Although the provisional extra payment was made by IDCOL, the actual price of chrome ore for supplies from 1st April 1974 and onwards has not been fixed (April 1978).

(*b*) The price of chrome ore was subject to adjustment on account of unitage in respect of ore having Cr_2O_3 above 50 *per cent*, at Rs. 2·50 for each *per cent* according to the price fixed in October 1970. Pending finalisation of the price of chrome ore effective from 1st April 1974, the Company has been billing IDCOL from that date at the base price *plus* Rs. 20 per tonne as decided in January 1977 only without claiming any unitage.

A study of the chemical analysis reports pertaining to the period 1975-76 and 1976-77, covering supply of 15,276 tonnes of ore, showed that claims on account of unitage (at Rs. 2·50 for each *per cent*) amounting to Rs. 2·06 lakhs had not been prepared (April 1978).

(C) Sales of manganese ore—

The following table indicates the details of sales of manganese (Mn) ore during the five years up to 1976-77:—

Year	Total production	Total sales	Total value of sales
	(In '000 tonnes)		(In lakhs of rupees)
1972-73	32	25	10·53
1973-74	30	39	17·26
1974-75	25	29	15·01
1975-76	33	41	26·73
1976-77	146	79	43·72

The sales were mainly made to consumers within the country through MMTC. The following points were noticed in regard to the sales :—

(1) In accordance with an agreement entered into with MMTC in May 1974, the Company was to supply manganese ore, as per the details given below :—

Grade of ore	Rate	Schedule of delivery
35—37 *per cent* Mn	Rs. 49·65 per D.M.T. (basis 37 *per cent*) *f. o. r.* loading station	2500 / 3000 tonnes per month from 1st April 1974 to 31st March 1975
38—40 *per cent* Mn	Rs. 60·65 per D.M.T. (basis 40 *per cent*) *f. o. r.* loading station	1500 tonnes per month from 1st April 1974 to 31st March 1975

During the course of execution of the contract, the Company requested MMTC in February 1975 for increase in the prices as detailed below on the ground of rise in the costs of production and transport :—

Grade of ore	Rate per dry tonne
35—37 *per cent* Mn	Rs. 52·60 up to December 1974
	Rs. 63·50 from January 1975
38—40 *per cent* Mn	Rs. 62·00 up to December 1974
	Rs. 72·00 up to January 1975

MMTC agreed (March 1975) to increase the prices to Rs. 57·50 per dry tonne for 35—37 *per cent* Mn grade ore and Rs. 68·50 per dry tonne for 38—40 *per cent* Mn grade ore effective from 1st January 1975 and indicated that 25,000 tonnes of 35—37 *per cent* Mn grade ore and 12,000 tonnes of 38—40 *per cent* Mn grade ore should be supplied during January 1975 to March 1976.

Ore supply against these sales contracts was made from the mines at Kadodihi and Dubna. The Management assessed in April 1975 the cost of production at Rs. 49·65 and Rs. 53·70 per tonne respectively for the two grades and considered the sales to be remunerative. A study of the average cost of production and the average sale price realised per tonne during 1974-75 to 1976-77, as per the records at Kadodihi and Dubna mines, showed that the Company sustained loss of about Rs. 5·12 lakhs in respect of 42,047 tonnes of ore supplied by it.

The details are given below :—

Grade of ore	Year		Average cost of production per tonne	Average sale realisation per tonne	Difference per tonne	Quantity sold	Loss
(1)	(2)		(3)	(4)	(5)	(6)	(7)
				(In rupees)		(In tonnes)	(In lakhs of rupees)
35—37 *per cent* Mn	1974-75	..	58·57	42·00	16·57	6,148	1·02
	1975-76	..	66·09	47·11	18·98	9,078	1·72
	1976-77	..	65·27	49·28	15·99	5,869	0·94
38—40 *per cent* Mn	1974-75	..	58·57	52·15	6·42	7,837	0·51
	1975-76	..	66·09	58·42	7·67	8,477	0·65
	1976-77	..	65·27	59·20	6·07	4,638	0·28
	Total		..	..	..	42,047	5·12

(2) An agreement was entered into (February 1975) with MMTC for sale of (30—37 *per cent* Mn) manganese ore for supply to steel mills during the three years up to 1976-77. According to the agreement, 9,000 tonnes of ore were to be supplied at Rs. 43 per tonne *f. o. r.* loading station, at 750 tonnes per month to be completed by March 1977.

From 12th June 1976, the minimum wages for the manganese mine workers were increased. The Chairman of the Company raised (June 1976) the matter regarding revision of price with MMTC authorities and suggested a price of Rs. 64 per tonne. In a joint meeting of the representatives of steel mills, MMTC and mine owners, held at New Delhi in January 1977, it was agreed to give an increase of Rs. 6·80 (Rs. 5·40 from June 1976 and Rs. 1·40 from July 1976) per tonne over the prevailing price of Rs. 43 per tonne.

The Company completed the supply by July 1976 but continued to supply further quantities of ore on the basis of mutual negotiation at the rate of Rs. 49·80 per tonne.

In March 1977, the Management informed the Board of Directors that, at the price of Rs. 49·80 (Rs. 43+Rs. 6·80) per tonne, the Company was sustaining a loss of Rs. 12 to Rs. 15 per tonne depending on the mine from which the supplies were made during 1976-77. The Board of Directors decided to continue the supply at 10,000 tonnes per month till 31st May 1977 and desired that the actual cost of production should be worked out in respect of each of the mines, that the average cost should be calculated thereafter and that the matter should be brought before the Company's tender committee for a decision regarding stoppage of supply of ore from June 1977 onwards in case MMTC and the steel mills did not agree to give a remunerative price by that time. The cost of production in respect of each mine was not worked out and instead, the supply was continued beyond June 1977 on MMTC agreeing (July 1977) to pay at Rs. 62 per tonne from April 1977.

(3) The Company entered into a package deal with firm 'J' in January 1974 for supply of 6,000 tonnes of 42—44 *percent* Mn grade manganese ore from its mines at Banspani (Keonjhar district) provided the firm took delivery of 3,600 tonnes of 48—50 *per cent* Mn grade manganese ore from its mine at Nishikhal (Koraput district). The price per tonne of ores Banspani mines was fixed in November 1973 at Rs. 76 *f. o. r.* Barbil on the basis of negotiations and that of the ores of Nishikhal mine at Rs. 137 for delivery at the plant of the firm. According to the delivery schedule, the company was to despatch from January 1974 at the rate of 500 tonnes of ores from Banspani mines and 300 tonnes of ores from Nishikhal mine each month and to complete the despatch in December 1974. The Company did not despatch ores from Banspani mine till October 1974 on the ground of non-availability of railway wagons. The firm did not agree to receive ores from Nishikhal mine on the ground that the Company had not supplied ores from Banspani mines with which the ores from the Nishikhal mine were to be blended. During November to December 1974, however, the company despatched to the firm 829 tonnes of ores from Banspani mines (against no acceptance by the firm from Nishikhal mine) at the contracted price of Rs. 76 per tonne, while the ore from Banspani was being sold at that time at Rs. 95 per tonne to other private parties.

A fresh contract was made with the same firm in March 1976 for supply of the balance of 5,171 tonnes of ores from Banspani mines provided the firm lifted 3,600 tonnes of ore from the Nishikhal mine. The price of the ores from Nishikhal mine was fixed at Rs. 147 per tonne for delivery at the plant of the firm and that of the ore from Banspani mines was fixed at Rs. 100 per tonne *f. o. r.* Banspani; the sale price of ores of

Banspani mines to other parties at that time was Rs. 110 per tonne f. o. r. Banspani. Supplies were to commence in March 1976 and to be made at the same rate as provided in the earlier contract and completed in a year in February 1977. Actual supplies during this period were 2,287 tonnes from Banspani mines and 1,292 tonnes from Nishikhal mine. Compared to the quantity accepted by the firm from Nishikhal mine, supply from Banspani mines was in excess by 134 tonnes.

Computed with reference to the prevailing sale prices, the loss in sale of 963 tonnes of Banspani ore amounted to Rs. 0·17 lakh.

4.12. Inventory

(1) The Company had a transit store at Jajpur Road and three zonal stores at Daitari, Barbil and Gandhamardan to deal with receipt, custody and issue of stores. There were also stores at different mines. The estimated value of stores held at Daitari was Rs. 166 lakhs (August 1977).

The table below indicates the value of closing stock of various categories of stores held by the Company at the end of each of the five years up to 1976-77 compared to the consumption during each of the years :—

Year	Closing stock of					
	Building materials	Drilling accesories	Tools and implements	Miscellaneous stores	Total	Consumption* during the year
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(In lakhs of rupees)					
1971-72 ..	10·52	7·28	1·31	27·19	46·30	3·56
1972-73 ..	10·66	7·23	1·18	29·68	48·75	7·83
1973-74 ..	9·91	7·16	1·62	40·04	58·73	5·69
1974-75 ..	11·61	7·83	2·77	48·76	70·97	6·39
1975-76 ..	12·90	12·13	3·05	66·98	95·06	12·74

* Value of stores charged to revenue.

The stock at the end of 1975-76 was, thus, equivalent to 90 months' consumption as against 134 months in 1974-75.

A review (October 1977) of the stores records maintained by the Company showed the following points :—

(*i*) Maximum, minimum and ordering levels of stores had not been fixed,

(*ii*) receipts were taken into account at their cost price without adding proportionate incidental expenses *viz.* freight, carriage, sales tax, etc.,

(*iii*) non-assessment of requirement of materials for different works by the indenting officers resulted in overdrawal of materials by them,

(*iv*) spare parts had not been segregated into different categories, such as fast moving, slow moving and non-moving items,

(*v*) bin cards were not maintained at the stores,

(*vi*) individual items of stores were not priced at the time of issue,

(*vii*) priced stores ledgers were not maintained and it was not possible to ensure that stores materials issued to contractors were correctly charged and recovered.

(*viii*) items of stores materials had not been segregated into capital and other consumable stores, and

(*ix*) although considerable quantities of stores were consumed at different mines, the value of consumption chargeable to revenue during a year was being arrived at by deducting the value of the verified closing stock fom the aggregate value of opening stock and purchases and receipts from transfer from other mines during the year; shortages found during physical verification were thus included in consumption of stores.

(2) *Surplus stores and equipment*—A list of stores and equipment, surplus to the requirements of the Company, valuing Rs. 4·65 lakhs, was prepared by the Company in September 1974. These had not been disposed of (April 1978).

(3) *Stores at Daitari*—In regard to stores at Daitari, the following points were noticed:—

(*a*) Out of 700 items of spares supplied (1968) by the supplier of the ore handling plant at Daitari, 513 items (value not available) remained unidentified and unaccounted for (April 1978).

(*b*) According to the physical verification report (August 1977) of the Executive Engineer (Mechanical), the following idle stores/equipment were lying in stores :

Description	Quantity (Number)	Value (In lakhs of rupees)
(1)	(2)	(3)
Instrument panel for Kennedy crusher drum controller, starter, resistors	2	Not mentioned
Single phase house service meters	80	Not mentioned
Panel boards, motor accessories for stock pile and spares for crane	Not mentioned	
Power cables (aluminium)	2,100 meters	1·11
Power cables (Copper)	5 Tonnes	Not mentioned
Dozer	1	Not mentioned
Spares for dozer	..	0·12
Spares for traxcavator	..	0·66
Spares for Rumamin road roller	Not mentioned	Not mentioned
Russian rig spares	493 items	0·29 (366 items)

Report regarding utilisation is awaited (April 1978).

(*c*) Sixteen items of civil stores at Daitari, found (August 1977) surplus / unserviceable, were not disposed of (March 1978). The value of 10 items was Rs. 2·91 lakhs; the value of the remaining six items was not available (April 1978).

(4) Physical verification of the stock of ores at the various mine heads and at stock yards at the loading points, conducted at the end of each year by the Company for the years 1970-71 to 1975-76, showed shortages and excesses as indicated below :—

	Shortage		Excess	
	Quantity (Tonnes)	Value (Rupees in lakhs)	Quantity (Tonnes)	Value (Rupees in lakhs)
Iron ore ..	54,723	6·01	4,684	0·65
Chrome ore ..	18,092	18·63	240	0·14

The Management attributed (March 1976) the shortages to fines arising during handling and stacking, transportation and unloading of ore, driage of moisture content of ore and variation on account of conversion factor from cubic metres to tonnes. No norms for handling and stacking losses *etc.* had, however, been fixed by the Company (April 1978).

4.13. Manuals

(i) *Costing manual*—A system of costing to ascertain the cost per tonne of the various ores raised and to prepare an annual operational budget based on production targets was evolved for the first time in 1972-73. The analysis of actual expenditure against each element of cost like salaries and wages, drilling and blasting, repair and maintenance, royalty, transportation and handling charges, as compared to the budgeted expenditure indicated in the monthly cost statements submitted by the various camps was, however, of limited use, in view of the time lag of 2 to 9 months between actual production and compilation of the data. In February 1977 the Board of Directors approved a Cost Accounts Manual, which contained the procedure for maintaining the cost records in the field offices and the head office and the system of furnishing the cost information to the head office for arriving at the cost. This procedure has not been implemented (April 1978). Reconciliation of the cost accounts with the financial accounts was not being done (April 1978).

(ii) *Accounts Manual*—A private firm was entrusted (January 1974) with the preparation of service rules and manuals, *viz.* 'Manual of office procedure', 'Manual of Budgeting and Accounting Rules and Procedures', 'Employees Conduct Rules', 'Leave Rules', *etc.* at an all inclusive fee of Rs. 0·13 lakh *plus* free boarding and lodging charges. The firm was

selected after negotiation with it. The firm submitted the draft service rules and manuals in March 1974 and the Company paid the fee along with Rs. 0·01 lakh towards reimbursement of lodging and boarding charges. The draft service rules and manuals compiled by the firm were, however, found by the Company to be unsuitable.

The manuals were got recompiled by a retired Gazetted Officer of the State Government between November 1975 and November 1976 to whom Rs. 0·10 lakh were paid by the Company. These were approved by the Board of Directors during January 1977 with some modifications.

4.14. Internal audit

The Company appointed a firm of Chartered Accountants as its internal auditor in June 1967 at a fee of Rs. 4,000 per annum (enhanced to Rs. 7,500 per annum in 1968). The terms of appointment stipulated that its duties would include internal audit, suggestion for improvements in methods and systems, reconciliation of accounts statements, annual stock statements and help towards preparation of annual accounts. There was no periodical review of its performance ; no internal audit reports were prepared and submitted to the Management. Its services were dispensed with in September 1976 as it was felt that its contribution as internal auditors was negligible. Expenditure of Rs. 0·68 lakh was incurred during June 1967 to September 1976 on this account. In additon, an employee of the firm was paid travelling allowance and fixed daily allowance at Rs. 15 per day aggregating Rs. 0·21 lakh for his visits to different units during the period from 1967-68 to 1975-76 which was not covered by the terms of the appointment of this firm.

In July 1977, an Assistant Accounts Officer was appointed to work as Internal Audit Officer under the control of the Finance Wing of the Company. The scope and extent of work to be done by him has not been laid down (April 1978). Information in regard to the nature and extent of work done by him is awaited (April 1978).

4.15. *Other points of interest*

4.15.1. *Procurement of drilling rigs*—The Company had procured (1963-64) six drilling rigs of Russian origin from the Director of Mines (four, value : Rs. 6·97 lakhs) and Balimela Dam Project authorities (two, value : Rs. 5·23 lakhs) for work in Handidhua colliery area. The rigs were not put to use as no mining operations were carried out in the colliery. Of the two rigs obtained from Balimela Dam Project authorities, one was transferred to the Director of Mines in March 1965 at Rs. 2·61 lakhs. The Company did not succeed in its endeavours to transfer the remaining five rigs along with the colliery in July 1970 to the State Government as the Directorate of Mines did not accept the rigs on the ground that these were not in working condition for lack of proper maintenance and upkeep. These were there upon transported from Handidhua to Jajpur-Keonjhar Road at a cost of Rs. 0·05 lakh approximately. Two rigs were finally sold to Hindustan Steel Limited in September 1975 at Rs. 2·21 lakhs *plus* storage and supervision charges (Rs. 0·39 lakh). The other three rigs were lying idle (April 1978).

4.15.2. *Hiring of 'Mack' dumpers to Balimela Dam Project*—Seven 'Mack' dumpers procured (1965) by the Company for Rs. 27·51 lakhs were rented in 1968 (four in May 1968 and three in December 1968) to the Balimela Dam Project for use up to 1969. The Company intimated (May 1968) the Balimela Dam authorities the following terms and conditions of hire:—

(*i*) Hire charges were to be paid at the rate of Rs. 72 per hour for each dumper;

(*ii*) cost of eatablishment of operating and supervisory staff was to be borne by the Balimela Dam Project; and

(*iii*) the dumpers were to be returned in perfect working condition.

The Project authorities, while generally accepting the conditions, indicated that hire charges would be paid as decided by the Irrigation and Power Department of the State Government. Pending fixation of rates by Government, the Project authorities paid Rs. 6·61 lakhs towards hire charges at Rs. 72 per dumper hour on an *ad hoc* basis for 9180 dumper hours (excluding 368 transit hours the cost of which was to be borne by the Project) during the period from November 1968 to April 1970. In June 1970, Government fixed the hourly rate of hire charges per dumper at Rs. 64·42.

Four of the dumpers were returned by the Project authorities in July 1970. These were got repaired by the Company at a cost of Rs. 2·04 lakhs. The other three dumpers were returned in April, October and November 1974 respectively. The Company estimated the repair charges for these dumpers at Rs. 4·97 lakhs. The dumpers had not been repaired (April 1978).

As the Balimela Dam authorities had delayed the return of the dumpers after their work was over in 1970 and as these had not been utilised for the optimum period, the Company claimed (July 1974 and July 1976) (*i*) hire charges of Rs. 24·80 lakhs for the seven dumpers up to June 1970 at 4 *per cent* per annum on the capital cost of the machinery, (*ii*) depreciation charges and interest on capital of Rs. 14·52 lakhs for the period the dumpers were retained beyond June 1970 and (*iii*) repair charges of Rs. 7·01 lakhs for putting the dumpers back in use.

46.33

Two meetings were held (September 1974 and September 1975) between the representatives of the Government, the Balimela Dam Project and the Company, which led to the folowing decisions:—

(*i*) An amount of Rs. 0·69 lakh (in additon to the hire charges calculated at the rate of Rs. 64·42 per hour) was payable to the Company.

(*ii*) The Balimela Project authorities did not agree to payment of depreciation charges, *etc.*, as hire charges were fixed taking into account the same.

(*iii*) Repair charges were to be paid to the Company after joint inspection of the vehicles, repairs undertaken, *etc.*, by both the organisations.

The matter was awaiting settlement as the Company had not indicated its acceptance or otherwise of the terms to Government (April 1978).

As against interest on borrowed capital and depreciation of Rs. 21·79 lakhs incurred by the Company, it could realise Rs. 6·61 lakhs only by way of hire charges.

4.15.3. *Payment of penalty for low power factor*—The Company has been drawing power for the Daitari iron ore project from the Orissa State Electricity Board with effect from 26th July 1965. No formal agreement was entered into (February 1978) between the parties, and power was being supplied on the strength of an undertaking given by the Company on 22nd July 1965 stating that it would abide by the tariff and other conditions of the Orissa State Electricity Board. The power drawn from 15th September 1970 was at 2,000 KVA.

The ore handling plant of the project was commissioned in January 1974 and the consumption was governed by the Large Industries' tariff of the Board. According to the tariff applicable, the Company was to maintain the power factor at 80 *per cent* and above up to December 1974 and 90 *per cent* and above thereafter. The Company was liable to pay power factor penalty at 0·5 *per cent* of energy charge for each *per cent* by which the average power factor fell short of the minimum. During the period form December 1973 to February 1975, the power factor in the project ranged between 38 and 63 *per cent*. The panalty paid to the Board during that period amounted to Rs. 0·99 lakh.

In March 1975, the General Manager of the project proposed to the headquarters of the Company installation of 'power capacitor banks' to improve the power factor. The Company invited tenders in February 1976 and placed orders in August 1977 on a firm 'V' for supply of 49 capacitors for Rs. 3·33 lakhs. The capacitors due to be installed by the supplier within four months form the date of placing of orders had not been received (March 1978). In the meantime, the project had paid power factor penalty of Rs. 2·70 lakhs from March 1975 to November 1977.

4.16. The above matters were reported to the Company/Government in January 1978; their replies are awaited (April 1978).

SECTION V

ORISSA CONSTRUCTION CORPORATION LIMITED

5.1. Construction of bridge over Sunder river

Mention was made in paragraph 25 of the Report of the Comptroller and Auditor General of India for the year 1972-73 (Commercial) about award of the work of construction of a brigde over Sunder river by Government to the Company on lump sum contract for Rs. 18 lakhs and the delay in the completion of the work. The work, originally scheduled to be completed by November 1971, was actually completed in August 1976 at a total expenditure of Rs. 26·92 lakhs (provisional). The delay in completion has not been regularised by the Roads and Buildings Department by grant of extension and an amount of Rs. 0·30 lakh was recovered from the Company as penalty.

The following points were noticed:—

(*a*) According to the design approved (April 1973) by the Chief Engineer (Roads and Buildings), eight pier caps were to be laid with cement concrete having a proportion of 1: 1: 2. The Company, however, laid two of the pier caps with cement concrete in the proportion of 1: $1\frac{1}{2}$: 3. This was not accepted (September 1974) by the Department and the Company had to demolish the caps and reconstruct these at its own cost (Rs. 0·30 lakh). Claim made on the Department (September 1974) for an amount of Rs. 0·30 lakh has not been settled (April 1978).

(*b*) The estimated length of the bridge was 752·5 feet. The contract stipulated that for increase/decrease in the length of the bridge the rate per running foot was to be increased/decreased proportionately. The Company, by adding an additional shore-span to the bridge, increased its length to 777·5 feet and claimed (December 1973) an extra amount of Rs. 0·60 lakh over the lump sum amount. This was rejected (February 1974) by the Department on the ground that the additional span had been agreed to on the suggestion of the Company for its convenience at no extra cost to the Department.

(*c*) The bridge has two abutments—one on the Khariar side and another on Bhawanipatna side. On Khariar side, excavation of shore span abutment was done for six feet more than the designed depth to reach the soil bearing capacity required as per the design. Claim for extra expenditure of Rs. 0·24 lakh made (October 1974) on this account has not been finally settled (April 1978).

The matter was reported to the Company and Government in March 1977; replies are awaited (April 1978).

SECTION VI

ORISSA STATE COMMERCIAL TRANSPORT CORPORATION LIMITED

6.1. Renovation of trucks

The Company took up during 1975-76, renovation of seven old trucks, through its own/hired mechanics in its workshop at Baliparbat, at an estimated labour cost of Rs. 2,500 per truck. Finding that the progress of work was poor, the Managing Director enquired (June 1975) from a local firm 'A' about its willingness to take up the work. Tenders were not invited. Firm 'A' quoted (13th June 1975) labour charges of Rs. 4,500 per turck and stated that construction of bodies of five trucks would be taken up at a time and completed within 15 to 20 days depending upon supply of the materials. A work order was issued (8th July 1975) on firm 'A'. The Managing Director had stated (July 1975) that "the extra cost of Rs. 2,000 per vehicle could be sacrificed in the interest of quicker delivery schedule". Seventeen old trucks were handed over during the period from October 1975 to January 1976 to the firm.

According to the work order, the firm was to deliver 17 completed trucks within three months. The firm, however, took 4 to 15 months in delivering 13 completed trucks. Computed with reference to the cost of construction by engaging its own or hired mechanics in the Company's workshop, the extra expenditure incurred on renovation of the 17 trucks worked out to Rs. 0·34 lakh.

An advance of Rs. 0·51 lakh was paid to the firm in six instalments during November 1975 to July 1976 though the same was not provided for in the work order issued to and accepted by the firm.

The matter was reported to the Management/Government in October 1977 ; replies are awaited (April 1978).

SECTION VII

PILOT PROJECT COMPANIES

7. Loss in sale of shares

Jagannath Chemicals and Pharmaceutical Works Limited was incorporated in 1959-60 as a pilot project company with an authorised equity capital of Rs. 2·00 lakhs, increased to Rs. 3·00 lakhs in 1966-67. The State Government initially contributed Rs. 0·84 lakh in the total paid-up capital of Rs. 1·04 lakhs. Government further contributed Rs. 1·00 lakh in 1968 and Rs. 2,500 in 1972. Thus, the contribution of the State Government was Rs. 1,86,500 out of the total paid-up capital of Rs. 2,16,500 as in March 1974. The balance (Rs. 30,000) was contributed by a private entrepreneur. The Company stopped its operations from 1969 as it was incurring loss. The accounts of the Company were in arrears since 1965-66. Government had stated (June 1976) that the private entrepreneur, who was the Managing Director, avoided finalisation of the accounts on some plea or the other.

According to the balance sheet as on 31st March 1974 compiled by the Company, the accumulated losses of the Company amounted to Rs. 0·91 lakh. The stocks of raw materials and semi-finished and finished goods valued at Rs. 0·87 lakh had deteriorated in quality due to long storage. The book debts amounted to Rs. 11,700; Government considered in June 1976 that a major portion of the debts was irrecoverable. Government stated in December 1976 that in spite of directives of the Board of Directors, issued between August 1973 and August 1974, to dispose of the stocks, the Managing Director did not do so, as a result of which she was removed (October 1975) from the post.

In March 1976, Government sold out the equity shares of Rs. 1,86,500, held by it in the Company, to a private firm for Rs. 97,000; the loss incurred was Rs. 89,500. Government stated (June 1976) that the shares were sold out at Rs. 97,000 as the losses of the Company were likely to be Rs. 2·00 lakhs against paid-up capital of Rs. 2,16,500.

CHAPTER II

STATUTORY CORPORATIONS

SECTION VIII

8.1. General

There were four Statutory Corporations in the State on 31st March 1977, namely:

(i) Orissa State Electricity Board,

(ii) Orissa State Financial Corporation,

(iii) Orissa State Warehousing Corporation, and

(iv) Orissa State Road Transport Corporation.

8.2. Orissa State Electricity Board

8.2.1. Loan capital—The Orissa State Electricity Board was formed in March 1961 by transfer of the assets and liabilities of the then Electricity Department. The value of the assets transferred to the Board by Government up to 31st March 1977, according to the declarations issued by Government under section 60 (2) of the Electricity (Supply) Act, 1948, was Rs. 6,599·47 lakhs; in the Board's accounts it was shown as Rs. 6,485·74 lakhs; the difference is under reconciliation (April 1978).

The value of assets transferred to the Board (Rs. 6,599·47 lakhs) has been treated as a loan from Government under section 60(2) of the Electricity (Supply) Act, 1948.

The State Government also gave loans in cash to the Board. Further, the Board has raised loans from time to time in the market by issuing bonds and borrowing from the Life Insurance Corporation of India, the Rural Electrification Corporation Limited and the Industrial Development Bank of India. The long-term loans outstanding on 31st March 1977 were Rs. 2,09,93·58 lakhs, the break-up of which by the source of finance is given below:—

	As on 31st March 1976	As on 31st March 1977	Increase (+)/ decrease (—) over the previous year
	(In lakhs of rupees)		
(a) Loans from Government*			
Loans by way of assets transferred	63,75·78	63,75·78	Nil
Cash loans ..	19,74·28	45,15·92	(+)25,41·64
Investment in loan bonds..	41,54·84	48,97·34	(+)7,42·50
Total (a) ..	1,25,04·90	1,57,89·04	(+)32,84·14
(b) Other loans—			
Life Insurance Corporation of India	21,95·00	23,81·75	(+)1,86·75
Rural Electrification Corporation Limited	18,74·46	25,60·47	(+)6,86·01
Industrial Development Bank of India	2,32·39	2,49·82	(+)17·43
Agricultural Refinance Development Corporation	..	12·50	(+)12·50
Total (b) ..	43,01·85	52,04·54	(+)9,02·69
Total(a)+(b) ..	1,68,06·75	2,09,93·58	(+)41,86·83

*Differs from details of loans shown in the Finance Accounts. The difference is under reconciliation.

8.2.2. Guarantee—Under the Electricity (Supply) Act, 1948, the State Government have to guarantee the repayment of principal and payment of interest in respect of loans raised by the Board. Government had guaranteed the repayment of loans aggregating Rs. 77,43·24 lakhs raised by the Board up to 31st March 1977. The guarantee commission payable to Government but not paid was Rs. 67·14 lakhs as on 31st March 1977.

8.2.3. Working results—The working results of the Board for 1976-77, with comparative figures for the preceding two years, are shown below:—

	1974-75	1975-76	1976-77
	(In lakhs of rupees)		
(i) Revenue receipts ..	19,93·42	31,53·86	34,05·94
(ii) Expenses on revenue account	20,44·06	30,07·68	34,31·87
(iii) Net surplus (+)/deficit(—) as per consolidated revenue account	(—)50·64	(+)1,46·18	(—)25·93
(iv) (a) Subsidy receivable from Government for power intensive industries	17·85	0·17	..
(b) Subsidy claimed for loss on rural electrification	3,20·00	5,00·00	6,70·00
(v) Amount available for appropriation under Section 67 of the Electricity (Supply) Act, 1948	2,87·21	6,46·35	7,48·07

	1974-75	1975-76	1976-77
		(In lakhs of rupees)	
(vi) Appropriation towards interest on loans, general reserve and other reserves	2,87·21	6,21·23	7,48·07
(vii) Balance available for appropriation towards interest on loans from Government	Nil	25·12	Nil
(viii) Deficit for the year	6,08·66	3,82·61	4,84·07
(ix) Progressive deficit at the end of each year			
(*a*) Arrears of interest due to Government	12,44·66	15,72·55	20,56·62
(*b*) Arrears of depreciation	1,21·00	..	..
(*c*) Arrears of provision for general reserve	78·06	..	..

8.3. Other Statutory Corporations

The accounts of the following Corporations were in arrears:—

	Year from which accounts were due
Orissa State Warehousing Corporation ..	1976-77
Orissa State Road Transport Corporation ..	1975-76

8.3.1. Orissa State Road Transport Corporation

The total paid-up capital of the Corporation as at the end of 1974-75 was Rs. 8,35·61 lakhs contributed as follows:—

	(In lakhs of rupees)
Government of Orissa ..	8,07·59*
Government of India ..	28·02
Total ..	8,35·61

The Corporation obtained (June 1974) ways and means loans amounting to Rs. 15·00 lakhs from the State Government which were repaid in March 1975. The Corporation had sustained a loss of Rs. 57·90 lakhs up to 31st March 1975.

* Differs from Finance Accounts. The difference is under reconciliation.

8.3.2. Orissa State Financial Corporation

(1) *Share capital*—The authorised capital of the Corporation is Rs. 2·00 crores consisting of two lakh shares of Rs. 100 each. The paid-up capital of the Corporation indicating the contributions of the Union Government, the State Government and others was as mentioned below:—

	As on 31st March 1976	Percentage of the paid up capital	As on 31st March 1977	Percentage of the paid up capital
	(In lakhs of rupees)		In lakhs of rupees)	
State Government	66·17	63·6	66·17**	63·6
Union Government	22·00	21·2	22·00	21·2
Others ..	15·83	15·2	15·83	15·2
Total ..	1,04·00	1,00·0	1,04·00	1,00·0

(2) *Loans*—Long-term loans including bonds, debentures and deposits obtained by the Corporation were as follows:—

Source	On 31st March 1976	On 31st March 1977
	(In lakhs of rupees)	
Open market loans by issue of bonds and debentures	4,60·00	5,75·00
Reserve Bank of India ..	40·00	..
Industrial Development Bank of India ..	2,31·61	4,65·99
Total ..	7,31·61	10,40·99

Government has guaranteed the repayment of open market loans obtained and payment of interest thereon under section 7 (1) of the State Financial Corporations Act, 1951. As on 31st March 1977, Government had guaranteed the repayment of loans aggregating Rs. 6,79·00 lakhs. The guarantee commission due but not paid to Government as on 31st March 1977 was Rs. 4·70 lakhs.

** According to Finance Accounts the figure is Rs. 69·15 lakhs. The difference is due to (*a*) value of shares of Rs. 2,000 transferred to private parties during 1973-74 and (b) share contribution of 3,00,000 made during 1976-77, being not taken into [illegible] Corporation.

(3) *Return on capital employed*—The rate of return in 1975-76 and 1976-77 on the capital employed is indicated below:—

	1975-76	1976-77
	(In lakhs of rupees)	
Capital employed ..	7,64·75	10,51·26
Return on capital employed ..	59·73	83·71
Percentage of return ..	7·8	8·00

The State Government had guaranteed the repayment of capital and payment of minimum dividend at 3·5 *per cent* on the initial share capital of Rs. 50 lakhs raised during 1972-73 and at 4 *per cent* on the additional share capital of Rs. 50 lakhs and special share capital of Rs. 4 lakhs raised in 1976-77.

8.4. A synoptic statement showing the summarised financial results of the four Statutory Corporations, on the basis of the latest available accounts, is given at Appendix IV.

SECTION IX

ORISSA STATE ELECTRICITY BOARD

9.1. Procurement af conductors

(1) Open tenders were invited by the Superintending Engineer (Stores and Purchase) in July 1973 for supply of three types of conductors. Thirtyeight offers were received in time, out of which 16 were considered as acceptable. The following prices, *f. o. r.* destination, offered by firm 'A', were the lowest:—

Type of conductor	Price per kilometre (In rupees)
Raccoon ..	2,142
Ant ..	1,123
Gnat ..	585

The tenders were valid for 90 days from the date of opening, that is up to 5th November 1973. Decision on purchase was not taken within the validity period, the reasons for which were not on record. The validity period of some of the tenders was extended by the tenderers on request by the Board. The Board authorised the Chairman in December 1973 to place orders on the lowest tenderer or any other tenderer who agreed to supply at the lowest tendered rate, taking into consideration the price preference of 15 *per cent* to be given to small industrial units within the State according to the policy of the State Government. After negotiations, a letter of intent was issued (February 1974) by the Board on one of the tenderers, firm 'B' (a Government of Orissa undertaking), for supply of 1,000 Km. of each type at the following prices:—

Type	Price per kilometre (In rupees)
Raccoon ..	2,291·94
Ant ..	1,201·61
Gnat ..	625·95

Although firm 'B' was not a small scale unit, price preference of 7 *per cent* over the lowest offer of firm 'A' was given to it. This resulted in an extra expenditure of Rs. 2·70 lakhs.

The matter was reported to the Board and Government in May 1976. The Board stated (October 1976) that the tender file had been seized by the Vigilance Department and as such it was not possible to offer any comments. Reply of Government is awaited (April 1978).

(2) In response to invitation of tenders (June 1976) by the Superintending Engineer (Stores and Purchase) for supply of all-aluminium and ACSR conductors, 56 offers were received, of which 27 offers were found valid. Rates offered by the following firms were the lowest.

Firm		Type of conductor	Rate per Kg. *f.o.r.* destination (Rupees)
'A'	..	Ant	15·39
'S'	..	Gnat	15·50
'U'	..	Weasel	12·44

The lowest offers were not accepted by the Board for reasons not on record.

With a view to encouraging growth of the small scale industries in the State, the general orders issued by Government in November 1970 envisaged grant of price preference up to 15 *per cent* to local small scale industries in purchase of articles required for State service. Although no directive in terms of section 78A of the Electricity (Supply) Act, 1948 was issued to the Board to comply with the general order, the Board, on its own, decided to implement it. Among the local small scale industries, firm 'G' had offered the lowest rates of Rs. 15·75, Rs. 16·00 and Rs. 12·50 per kg. of 'Ant', 'Gnat' and 'Weasel' conductors respectively, which were within the price preference range of 10 *per cent*. Letters of intent were, however, issued (December 1976) to four other small scale units, which had quoted higher rates, for supply of 6,00,500 kg. of different types of conductors at the rates quoted by 'G'. The Management informed (November 1976) the Board of Directors that the past performance of firm 'G' was unsatisfactory and the capability of a single small scale unit was inadequate to supply the entire requirement. Later, on the basis of complaints made by the suppliers that the rates accepted by the Board were unworkable, in February 1977, at the instance of Government, the rates were increased. Revised purchase orders were placed in February 1977 at the increased rates. The quantity ordered, the lowest rates received and the rates ultimately accepted were as under:—

Type of conductor		Quantity ordered (kg.)	Lowest rate received	Rates finally accepted
			(*f. o. r.* destination Rupees per kg)	
Ant	..	57,600	15·39	16·38
Gnat	..	94,900	15·50	16·80
Weasel	..	4,48,000	12·44	13·70

Compared to the lowest rates received, there was an extra liability/expenditure of Rs. 7·45 lakhs.

The Management stated (June 1977) that the purchase orders were placed according to the decisions of the Board.

The matter was reported to Government in December 1977 ; reply is awaited (April 1978).

9.2. Purchase of galvanised iron pins

The requirement of galvanised iron pins for insulators for the year 1976-77 was assessed by the Board in November 1976 at 18,000 for 11 KV insulators and 5,000 for 33 KV insulators. The Superintending Engineer (Stores and Purchase) invited open tenders on 12th October 1976 for supply of pins, the last date for receipt of tenders being 17th November 1976. Twelve firms quoted. Offers of five firms were rejected (January 1977) by the Board's Contract Committee for the reason that the firms did not furnish earnest money deposit with the tender and they were not entitled to exemption from payment of earnest money. The other seven tenders were considered by the Committee and it was decided (25th January 1977) to place the order on firm 'A' of Rourkela, the lowest valid tenderer, for 20,000 pins for 11 KV insulators at Rs. 5·40 each *f. o. r.* destination.

For pins for 33 KV insulators, the lowest valid offer was that of firm 'B' of Calcutta at Rs. 18 each, *f. o. r.* destination. This was followed by the offer of firm 'C' of Cuttack which quoted Rs. 20·55 each. This firm, being a local small scale industrial unit, was entitled to price preference up to 15 *per cent* over the rate of the lowest valid tenderer and was also exempt from payment of earnest money deposit. The Contract Committee decided (January 1977) to place an order for 5,000 pins on firm 'C'.

Orders for pins of both the varieties were placed in February 1977.

In January 1977, the requirement of pins for 11 KV insulators was reassessed at 45,000. In February 1977, short notice tenders were invited again for supply of 25,000 pins (excluding the quantity of 20,000 pins, the proposal for which was under consideration at that time) from the firms which had quoted on the earlier occasion. Out of 11 offers received ten were rejected on the ground that the tenderers did not furnish earnest money deposit. Order was placed (March 1977) for supply of 25,000 pins for 11 KV insulators on firm 'C' at Rs. 5·78 each *f. o. r.* destination. This firm had originally quoted Rs. 7·15 each but subsequently reduced the rate on its own.

In the case of both the tenders, firm 'D' had submitted offers lower than the rates accepted, *viz*, Rs. 4·60 each for 11 KV insulators and Rs. 13·80 each for 33 KV insulators on the first occasion, and Rs. 4·90 each for 11 KV insulators on the second occasion. The offers were rejected (January/March 1977) on the ground that the firm did not furnish earnest money deposit and that its registration with the Board having expired on 30th June 1976 it was not entitled to exemption from payment of earnest money deposit. On verification (August 1977) of the Register of Registration by Audit it was seen that the registration of the firm with the Board had been extended on 10th November 1976 up to June 1978. Rejection of the offer on incorrect grounds resulted in an extra expenditure of Rs. 0·50 lakh.

Further, correct and timely assessment of the total requirements of pins and placement of orders for the entire quantity at one time against the tender of October 1976 could have enabled the Board to avoid further extra expenditure of Rs. 0·30 lakh on 25,000 pins of 11 KV ordered in March 1977.

The matter was reported (November 1977) to the Board/Government; their replies are awaited (April 1978).

9.3. Payment of demurrage/wharfage charges

(1) The central Stores purchase organisation of the Board places orders on various firms for supply of materials, which are consigned by the suppliers to the three stores divisions situated at Cuttack, Burla and Berhampur. According to a report furnished by the Board to Government in March 1976, demurrage/wharfage charges totalling Rs. 17·37 lakhs were paid to the Railways during 1969-70 to 1975-76 (up to December 1975), as detailed below:—

		(In lakhs of rupees)
1969-70 to 1971-72	..	2·13
1972-73	..	2·45
1973-74	..	4·43
1974-75	..	3·21
1975-76 (Up to December)	..	5·16

Out of Rs. 17·37 lakhs, Rs. 11·59 lakhs were reported by the Management in March 1976 to be chargeable to the suppliers' accounts under the terms of the purchase orders as the suppliers had not adhered to the

provisions of the purchase orders; for example, some suppliers did not furnish advance information about despatch of materials or they booked consignments to 'self' instead of to 'consignee'. Report regarding progress of recovery of such demurrage/wharfage from the suppliers, called for by Audit in June 1976, is awaited (March 1978).

The balance amount of Rs. 5·78 lakhs was chargeable to the Board's accounts for which the Board stated (March 1976) the following reasons:—

(*a*) Receipt of a number of wagons at the same time, making it difficult to unload them at a time;

(*b*) want of adequate facilities for transportation;

(*c*) refusal by the Railways to release the consignments in cases where railway receipts were not received;

(*d*) non-availability of funds for payment of freight for timely release of consignments; and

(*e*) time lag from the date of receipt of intimation till release of documents

(2) Against an order placed (June 1975) for supply of PVC cables on a firm of Satna, two consignments of materials (14,053 Km.) reached the destination railway station in October 1975. These were taken delivery of by the consignee in March 1976, the delay being mainly because some allegations of supply of defective materials made between October 1975 and March 1976 by a third party against the suppliers were under investigation by the officers of the Board for 111 to 130 days. The Board paid (March 1976) Rs. 0·80 lakh towards demurrage charges to the Railways.

(3) Eleven potential transformers and 52 current transformers (both of 220 KV), shipped in May 1976 in three consignments by a firm of Belgium against an order placed (April 1975) by the Superintending Engineer (Transmission), reached Calcutta port in July 1976. The Board cleared two consignments in September 1976 and another in April 1977. As per the Board, the delay in clearing the consignments from the port was due to:

(*i*) delay in payment of customs duty (20 days in respect of two consignments and 61 days in respect of one consignment);

(*ii*) delay in explaining the contents of the consignments to Customs appraisers and/or arranging for railway wagons (16 days for two consignments and 17 days for one consignment); and

(*iii*) the value involved in the case of one consignment, being more than the value of import licence by Rs. 0·47 lakh, for which clearance by the Customs authorities was furher delayed by 110 days.

The Board had to pay Rs. 0·66 lakh towards wharfage charges. The matter was reported to the Board in February 1977 and to Government in January 1978; their replies are awaited (April 1978).

9.4. Supply of power to South Eastern Railway

(*i*) In accordance with an agreement of 13th August 1971, effective from October 1969, power was being supplied to the South Eastern Railway at Khurda Road under "General Purpose Tariff". The contract demand was 700 KVA. The tariff provided that the average power factor of the supply should be arranged by the consumer to be not less than 80 *per cent* up to 31st December 1974 and 90 *per cent* thereafter. The monthly charges were to be increased by 0·5 *per cent* for each *per cent* or part thereof by which the average power factor during a month fell below 80 *per cent* up to 31st December 1974 and 90 *per cent* thereafter. A test check in the Board's Divisional Office at Khurda Road showed that penalty for low power factor (ranging between 0·58 and 0·88) had not been levied on the consumer. On their being pointed out by Audit (October 1976), the Divisional office levied (December 1976) penalty aggregating Rs. 0·19 lakh for the period from January 1975 to May 1976 (realised in January 1977) and continued to levy the penalty thereafter.

(*ii*) The maximum demand indicator fixed to record the demand was stated (December 1976) by the concerned Executive Engineer of the Board to be not working till November 1975 and in the absence of any record of the demand actually availed of, the consumer was billed during this period for the demand contracted. The indicator was replaced by the Board in December 1975. A test check of the recordings during the period December 1975 to September 1977 showed that in 16 out of 22 months the maximum demand exceeded the contract demand by 1,737 KVA in aggregate. In the absence of any penal provision in the tariff prescribed by the Board for consumers governed by "General Purpose Tariff", the Divisional office did not levy any penalty for the excess drawal of power over the contract demand (April 1978).

The matter was reported to the Board/Government in December 1977. The Board accepted (February 1978) the factual position; reply of Government is awaited (April 1978).

9.5. Non-levy of Surcharge for supply of elctricity

The Board entered into (February 1966) an agreement with the Cold Storage Unit, Kaurmunda for supply of high tension power under the large industries tariff. The Board, however, supplied power at low tension

(LT) as the distribution system did not permit supply of energy at high tension. According to the tariff prescribed from time to time, when the Board supplied power to a large industrial consumer at LT the tariff rates were to be increased by 10 *per cent* on demand and energy charges. However, in the case of this consumer, the rates were not so increased during the period from February 1968 to February 1974, as a result of which there was under-assessment of energy charges by Rs. 0·23 lakh.

The matter was reported to the Board/Government in October 1976; replies are awaited (April 1978).

9.6. Billing and collection

Under the rules of the Board, power consumption bills are to be issued to the consumer each month. The consumer is required to pay the amount of the bill within 15 days of its issue. In the event of default, the service line is subject to disconnection and legal action is to be taken for recovery of the outstanding dues. Deviation from this procedure was noticed in some cases in the Balsore Electrical Division, as indicated below, resulting in accumulation of dues recoverable from the consumers concerned.

(*a*) For power supplied to an industrial consumer from 24th August 1973, the position of issue of energy consumption bills and collection of dues up to July 1975 was as follows :—

Period of demand	Date of sending the bills	Amount Rs.	Date of collection of dues	Amount collected Rs.
September 1973 to January 1974	19th July 1974	23,217		
February 1974 to June 1974	28th June 1975	23,461	August 1975 ..	17,500
July 1974 to December 1974	28th April 1975	27,706	September 1975	52,308
January 1975 to July 1975	5th July, 7th July, and 25th August 1975	42,148		
		1,16,532		69,808

Thereafter, though the divisions sent bills regularly to the consumer, the latter did not make any payment and the dues up to February 1976 accumulated to Rs. 88,044. In March 1976, at the request of the consumer, he was allowed by the Superintending Engineer to pay the dues in six instalments, the first being payable immediately and subsequent instalments with each of the monthly bills for the months of March 1976 to July 1976. The consumer paid the first instalment of Rs. 19,978 on 27th March 1976 but did not make any further payment of arrears along with the monthly bills for March to July 1976. The power supply was there upon disconnected on 8th July 1976. The unrecovered dues up to December 1976 amounted to Rs. 1,42,160. The consumer unit was reported (August 1976) to have been closed down. The outstanding amount has not been recovered nor has any legal action been taken (April 1978).

The matter was reported to the Board / Government in August 1977; replies are awaited (April 1978).

(*b*) It was noticed (January 1977) that, as on 30th November 1976, bills had not been issued in respect of 3,115 consumers, reasons for which were not on record. Up to July 1976, the Division did not also maintain the register of test reports, which had been prescribed to guard against delay and omissions in billing. Thereafter, the register was opened but was not maintained properly. Consequently, year-wise break-up of the arrears in billing have not been worked out. A test check of the records of one sub-division, where bills in respect of 1097 consumers had not been issued up to 30th November 1976, showed that in respect of 790 consumers, who were given service connections during 1971-72 to 1975-76, even the first bills had not been issued. Computed on the basis of the minimum charges payable as per the Board's tariff, the energy charges recoverable for the period from 1971-72 to 1975-76 from the 790 consumers aggregated Rs. 2·59 lakhs.

The matter was reported to the Board / Government in August 1977; their replies are awaited (April 1978).

THERMAL POWER STATION, TALCHER

9.7.1. Introductory

The thermal power station at Talcher, set up by the State Government between March 1961 and April 1969 at a total cost of Rs. 30,80·00 lakhs, was transferred to the State Electricity Board in June 1970 for operation and maintenance. The power station has four generation units of 62·5 MW each and it operates in conjuction with the Hirakud-Talcher grid. The power generated at the station was 25 to 37 *per cent* of the total power generated in the State during the period from 1972-73 to 1976-77.

9.7.2. Power generation

Against the installed capacity of 250 MW, the firm capacity of the station is 180 MW. Mention was made in paragraphs 11 (4) and 21·4 of the Reports of the Comptroller and Auditor General of India for the years 1972-73 and 1973-74 (Commercial) respectively about low utilisation of the firm capacity of the power station. The power generated by the power station during the five years up to 1976-77 was as under:

Year		Average generation (in MW)	Peak generation (in MW)	Percentage of average generation to	
				Installed capacity	Firm capacity
1972-73	..	73·0	165	29·2	40·5
1973-74	..	62·4	169	25·0	34·6
1974-75	..	98·2	178	39·3	54·6
1975-76	..	81·8	182	32·7	45·4
1976-77	..	109·7	200	43·9	61·0

The Board stated (March 1978) that owing to the abrasive character of coal the effective installed capacity of the station was 204 MW and firm capacity was 140 MW.

9.7.3. The following table gives the unit-wise details of the performance of the four units of the power station since their commissioning and up to 31st March 1977:—

	Unit—I	Unit—II	Unit—III	Unit—IV
Date of commissioning	17th December 1967	28th March 1968	11th July 1968	11th April 1969
Installed capacity (MW)	62·5	62·5	62·5	62·5
Installed capacity (in Mkwh)	5084	4933	4775	4364
Number of hours available for operation	81348	78921	76404	69829
Number of hours actually worked.	41109	38454	27046	34768
Number of outage hours	40110	39041	48006	34022

	Unit-I	Unit-II	Unit-III	Unit-IV
Number of standby hours	129	1426	1352	1039
Plant availability (*per cent*)	50·5	48·7	35·4	49·8
Percentage of outage hours to available hours	49·3	49·4	62·8	48·7
Actual generation including auxiliary consumption (Mkwh)	1596	1536	1121	1366
Expected generation at 70 *per cent* load factor, with reference to actual hours utilised (Mkwh)	1850	1730	1217	1565
Shortfall in generation (Mkwh)	254	194	96	199
Auxiliary consumption (Mkwh)	162	177	131	152
Percentage of auxiliary consumption to power generated	10·2	11·5	11·7	11·1
Plant factor (gross generation to installed capacity) percentage	31·4	31·1	23·5	31·3

(Source: Monthly generation statistics of the power station)

In this connection the following points deserve mention :—

(*i*) According to the guide lines issued by the Government of India in December 1972 for the Inspection Team deputed to examine the supply position of power and to advise on steps for bringing about improvement, the plant factor of a thermal power station should be 65 *per cent* or more. However, the plant factor of the units ranged between 23·5 and 31·4 *per cent*, indicating that the gross generation was much less than the norm.

(*ii*) The plant availability assumed in the project report of the station was 90 *per cent*. The actual plant availability ranged from 35·4 to 50·5 *per cent*. The outages were 48·7 to 62·8 *per cent* of the available working hours, the highest being in Unit III.

(*iii*) Even with reference to the actual hours of working, the generation was 96 to 254 Mkwh below the expected generation, which was attributed (March 1977) by the Central Electricity Authority to operational constraints.

(*iv*) No norms for auxiliary consumption have been fixed by the Board (January 1978). Generally, auxiliary consumption is provided in the project estimates at six *per cent* of the units generated. The auxiliary consumption in the station worked out to 10·2 to 11·7 *per cent*.

9.7.4. Outage hours

(1) Outage hours are categorised as planned outage for scheduled overhaul and inspection, forced outage for break-downs, *etc.* and maintenance outage. The following table shows the extent of different outages during the five years up to 1976-77.

(Total available hours : 35,040 per annum)

	1972-73	1973-74	1974-75	1975-76	1976-77
1	2	3	4	5	6
Hours lost due to outages	18,785	20,821	14,653	17,858	12,640
Hours lost due to planned outages	1,349 (7·2)	2,411 (11·6)	2,634 (18·0)	4,226 (23·7)	1,766 (14·0)
Hours lost due to forced outages	6,054 (32·3)	13,153 (63·2)	10,692 (73·0)	4,303 (24·1)	1,339 (10·6)
Hours lost due to maintenance outages	11,382 (60·5)	5,257 (25·3)	1,327 (9·0)	9,329 (52·2)	9,535 (75·4)

(Figures in brackets indicate percentage to total outage.)

The excessive outages during 1972-73, 1973-74 and 1975-76 were mainly due to vibration of turbine bearings from August 1972 to April 1974 and three boiler explosions between November 1973 and April 1975 as noted below:—

Unit	Date of occurrence	Period of outage	Outage hours
II	1st November 1973	1st November 1973 to 25th May 1974	4,930
I	23rd January 1975	23rd January 1975 to 11th May 1975	2,444
IV	8th April 1975	8th April 1975 to 5th July 1975	2,107

The Chief Engineer, Electricity-*cum*-Chief Engineer, Electrical Projects of the State Government, who investigated the causes of the explosion in Unit II, attributed (December 1973) it to erroneous injection of oil into the furnance contributing to the formation of explosive mixture in the form of atomised oil, continuous supply of air providing necessary oxygen for ignition and lack of vigilance in detecting the fire-out and signalling the control room for stopping the coal mills.

A consultant of the Ministry of Energy, Government of India, appointed by the Board, in 1975 to study the problem of boiler explosions, attributed (May 1975) the explosion in Unit I to inherent manufacturing defects leading to rupture of tubes and that in Unit IV to heavy fluctuations of draft due to high variation in frequency. Though no positive cause for the explosion in Unit II was located, the consultant observed that the boilers were very much susceptible to fire, generally due to system disturbances.

Information regarding the expenditure incurred on repairing the boilers is awaited from the Board (April 1978).

(2) *Maintenance outages*—Each generation set is provided with a boiler and a turbo-generator. According to the report of a committee on "Modernisation of maintenance procedure in large thermal stations" (April 1975), the loss per day of shut-down of a 100 MW unit is Rs. 2 lakhs and annual maintenance of a boiler should take 30 days, while a turbo-generator should take 45 days in three to five years for capital maintenance. On the basis of these norms, the mantenance outages of the four units would work out to 780 days or 18,720 hours in a span of five years, against which the actual maintenance outages were 36,830 hours during the five years up to 1976-77,

registering an excess of 18,110 hours or 755 days. Computed with reference to the loss of Rs. 2 lakhs per day of shut-down of a 100 MW unit, the loss of revenue due to excessive maintenance outages during these years, taking into account the firm capacity of 180 MW, amounted to Rs. 27,18·00 lakhs.

Reasons for the excessive maintenance outages had not been investigated by the Board. An assessment made by the power station Management in November 1975, on the basis of actual experience, indicating that 115 days per unit per annum would be required for annual repair and maintenence, had not also been accepted by the Board (April 1978).

(3) *Operational constraints*—

(*i*) *Trippings*—There were 105 trippings for 1241 hours during the period from June 1973 to March 1977, resulting in loss of generation of nearly 49,640 Mkwh. The year-wise and cause-wise analysis of the trippings is indicated below :—

	1973-74	1974-75	1975-76	1976-77
Number of trippings ..	16	26	33	30
Generation hours lost in trippings—				
(*a*) System disturbance ..	15	58	34	@
(*b*) Turbo-generator trouble	2	6	Nil	@
(*c*) Auxiliary failures ..	10	7	Nil	@
(*d*) Induced draft fan trouble	23	11	107	@
(*e*) Other causes ..	271	76	196	@
Total ..	321	158	337	425

(*ii*) *Variation in peak demand*—There were wide variations between the maximum and the minimum loads, as indicated in the following table :—

Year	Maximum (MW)	Minimum (MW)	Difference in peak demand (MW)
1972-73 ..	165	61	104
1973-74 ..	168	62	106
1974-75 ..	178	105	73
1975-76 ..	182	93	89
1976-77 ..	200	100	100

(Note: @ Cause-wise details were not available)

Various committees and experts had gone into the working of the power station at different times during October 1972 to March 1977 and, *inter alia*, made the following observations :—

(*a*) The poor performance of the power station was attributable to high percentage of planned shut-downs, forced outages and auxiliary or equipment constraints.

(*b*) While drawing up the specifications for the boiler and the ash handling system the high abrasive quality of coal was not taken into account. Consequently, the coal preparatory system, ash disposal system and induced draft fan (I. D. fan) were failing frequently, resulting in reduced plant availability.

(*c*) Each unit of the station had been provided with three pulveriser mills of 40 *per cent* capacity each and one I. D. fan of 110 *per cent* capacity, with little margin for wear and tear and standby provision during operation.

(*d*) Electrostatic precipitators were very much undersized for the duty conditions and the type of fly ashes resulting from the coal burnt in the power station.

(*e*) The coal fired in the boilers of the power station had ash plus moisture content of about 46 to 47 *per cent* (sometimes up to 56 *per cent*) as against the designed expectation of 41 *per cent*. The poor quality of coal caused rapid wear of rings and balls, mill parts, erosion in I. D. fan and reduction in grindability index from 66 to 51, involving reduction in plant output by about 30 *per cent*.

(*f*) Owing to rapid wear of mill parts, the spare parts originally received in the station had been exhausted. Efforts to obtain replacement from indigeneous suppliers had not been very successful. Even cannibalisation of parts from shut-down unit to stand-by unit, to bring it to operation, took 8 to 10 days on each occasion.

The Committees' recommendations on major problems have not been implemented (April 1978).

9.7.5. Expansion scheme

(1) *Procurement of turbo-generators and boilers*—In November 1972, the Planning Commission approved a scheme for expansion of the power station at a total cost of Rs. 38,40·00 lakhs, which was later revised to Rs. 72,26·00 lakhs. The scheme envisaged addition of two generating units of 110 MW capacity each during the Fifth Plan period. The work was to be executed by the Board with loans to be obtained from the State Government from out of Plan resources.

(*i*) The Government of India advised (September 1972) the Board to approach Bharat Heavy Electricals Limited (BHEL)/Heavy Electricals India Limited (HEIL) for supply of the plant and suggested an *ad hoc* advance payment of Rs. 40 lakhs per turbo-generator and Rs. 50 lakhs per boiler by the Board to these companies. The advance to BHEL, which produced sets of 110 MW capacity, was not paid till February 1973 for want of funds. In March 1973, the Board placed letters of intent on BHEL for supply of two units of turbo-generators and two units of boilers. In response, BHEL submitted (August 1973) bills for advance payment of Rs. 2,20·00 lakhs, representing 10 *per cent* of the value of the equipment, to enable it to take up their manufacture. Attempts made by the State Government to persuade the Government of India to provide additional funds and obtain loans from nationalised banks did not materialise, with the result that the advance to BHEL could not be paid immediately. Finally a loan of Rs. 2,20 lakhs was received from the State Government in March 1974 (Rs. 1,20 lakhs) and July 1974 (Rs. 1,00 lakhs) and the amount was paid to BHEL in March and August 1974.

The Board entered into an agreement with BHEL in December 1975 for supply and erection of the equipment for Rs. 34,83·00 lakhs. In this connection it may be mentioned that the price agreed upon by BHEL for identical equipment for the Andhra Pradesh State Electricity Board, for which a letter of intent was placed in January 1973, was Rs. 33,70·00 lakhs. Thus, the price payable by the Board was higher by Rs. 1,13·00 lakhs than the price in January 1973. The increase in the price was attributed (December 1975) by the suppliers to increase in cost of imported material for the boilers owing to belated receipt of the advance (Rs. 83·00 lakhs) with consequential delay in execution of agreement and increase in the cost of erection (Rs 30 lakhs).

(*ii*) Loans sanctioned to the Board by Government up to March 1977 amounted to Rs. 32,52 lakhs against which the actual expenditure up to March 1977 was Rs. 28,62.77 lakhs. This included Rs. 22,20·77 lakhs advanced to BHEL towards supply of turbo-generators and boilers.

(*iii*) The first unit of the expansion scheme was scheduled to be commissioned in October 1977 and the second six months thereafter. The work on the scheme was started in July 1976. The Board stated (March 1978) that the first unit was expected to be commissioned in December 1979 and the second unit in June 1980.

(2) *Civil works*—The Chief Engineer (Generation) invited open tenders in August 1975 for construction of civil and structural works. The last date

for receipt of tenders was 28th October 1975, which was later extended up to 14th November 1975 at the request of some of the intending tenderers. Fourteen firms submitted tenders which were opened on 14th November 1975.

The tenderers, besides submitting item-wise rates for the work, also stipulated special conditions like payment of advances, escalations on account of labour and materials, payment of water and electricity charges separately, *etc*. To make the tenders comparable, the extra liabilities on account of the special conditions were evaluated by the Executive Engineer in charge of the work and added to the quoted rates. The offer of firm 'C', which quoted Rs. 5,77·24 lakhs, was evaluated at Rs. 6,71·91 lakhs and was the lowest. The tender of Orissa Construction Corporation Limited (a State Government undertaking), which quoted Rs. 8,23·49 lakhs, was evaluated at Rs. 9,27·62 lakhs, and it ranked tenth lowest among the offers received. The Contract Scrutiny Committee considered the tenders in February/March 1976 and recommended negotiation with Orissa Construction Corporation Limited with a view to getting its rates reduced and in case the results were not satisfactory, negotiation with the others commencing with the lowest bidder.

On 26th March 1976, the Board considered the tenders along with the recommendation of the Contract Scrutiny Committee and decided to negotiate with firm 'C' and another firm 'D', which quoted Rs. 5,92·56 lakhs (evaluated cost : Rs. 7,12·73 lakhs) and the offer of which ranked third lowest among the offers received, for withdrawal of special conditions attached to their offers for possible splitting of the work. Negotiations were accordingly carried out on 6th/7th of April 1976 by the Chief Engineer (Generation). Firm 'C' did not agree for splitting the work. Both the firms, however, agreed for withdrawal of some of the special conditions but firm 'D' enhanced its rates against some items. After negotiation, the offers of both the firms compared as under:—

Firm	Original offer		Revised offer	
	Quoted	Evaluated	Quoted	Evaluated
	(In lakhs of rupees)			
'C' ..	5,77·24	6,71·91	5,77·24	6,16·83
'D' ..	5,92·56	7,12·73	6,74·33	6,96·79

On 22nd April 1976, Orissa Construction Corporation Limited submitted a revised offer of Rs. 675·73 lakhs to the Board with certain special conditions; on 5th May 1976, it again revised some of these special conditions and stated

that no further reduction was possible and that the entire work should be awarded to it. Its final offer was evaluated at Rs. 7,32·12 lakhs and the work was entrusted to it in May 1976. Orissa Construction Corporation Limited accepted the work on 1st June 1976 and formal work order was issued to it on 1st July 1976. The work was in progress (April 1978).

Award of work to Orissa Construction Corporation Limited in preference to the lowest offer of firm 'C' resulted in an extra expenditure/liability of 1,15·29 lakhs, with reference to the cost of the offer evaluated by the Board. The Management stated (December 1976) that the Board awarded the work to the Government owned Company in the larger interest of the State.

9.7.6. Cost of generation

Particulars of cost of generation during the three years up to 1975-76 are given below :—

		1973-74	1974-75	1975-76
Units generated (Mkwh)	Gross units	546·598	860·643	716·301
	Net units	486·837	773·363	643·642
		(In lakhs of rupees)		
Cost of generation—				
Fuel ..		1,49·17	2,42·32	2,38·30
Lubricants and other consumable stores.		9·36	30·66	23·08
Station supplies and miscellaneous expenses.		44·85	69·52	69·18
Wages and gratuity to labour.		31·77	44·06	41·60
General establishment and administrative expenses		51·35	69·70	81·59
Depreciation ..		1,05·67	1,05·70	1,05·73
Interest ..		1,52·05	1,59·41	1,60·28
Total ..		5,44·23	7,21·37	7,19·76

	1973-74	1974-75	1975-76
		(In paise)	
Unit cost—			
Variable cost—			
Fuel ..	3·10	3·13	3·70
Lubricants and other consumable stores	0·20	0·40	0·36
Station supplies and miscellaneous expenses	0·90	0·90	1·07
Wages and gratuity to labour	0·60	0·57	0·65
Fixed cost—			
General establishment and administrative charges	1·10	0·90	1·27
Depreciation ..	2·20	1·37	1·64
Interest ..	3·10	2·06	2·49
Total ..	11·20	9·33	11·18

(Source—Cost data compiled by the Board)

The cost of generation per unit was estimated in the project report (1961) at 3·35 paise. There was no further study on the subject after 1961.

In the project report, the elements of depreciation and interest were assumed at 2·3 and 4·5 *per cent* respectively of the capital invested. However, the actual percentages on the capital investment of Rs. 30·80 lakhs were as follows:—

	1973-74	1974-75	1975-76
Depreciation ..	3·43	3·43	3·43
Interest ..	4·93	5·18	5·21

9.7.7. Pulveriser rings and balls

Mention was made in paragraph 17 of the Report of the Comptroller and Auditor General of India for the year 1972-73 (Commercial) about the short life of pulveriser rings and balls, procured during the period from 1964 to 1966. According to the suppliers of the original equipment, a set of rings and balls should last for 11,500 hours and at this rate the station would have required around 3, 4, 4 and 5 of rings in the years 1973-74 to 1976-77 respectively. As against this, the actual consumption was 20, 20, 18 and 21 rings, indicating that the average life of a ring at the station during these years was 1,708, 2,446, 2,303 and 2,616 hours, respectively. The value of excess consumption of rings was of the order of Rs. 1,06·89 lakhs computed with reference to their procurement cost. The excessive wear of pulveriser rings was attributed by the Board in October 1977 to the high abrasive quality of coal due to the presence of silica, quartz and other extraneous matter.

9.7.8. Excess consumption of pulveriser springs

The coal mills of the four units of the station are fitted with six pulveriser springs each. The Central Electricity Authority (CEA) had estimated (July 1976) that each spring would last for more than 6,000 hours. The average life of a spring at the station was, however, 2,921 hours during 1975-76 and 1976-77. Computed with reference to the life of 6,000 hours, the number of springs required for 40,161 hours of working of the coal mills in two years 1975-76 and 1976-77 was 81 against which the actual consumption was 165. The value of excess consumption of 84 springs worked out to Rs. 2·07 lakhs.

It was stated by the Board in September 1977 that CEA had merely given an estimated life, which was not relevant in practice.

9.7.9. Ash handling system

The steam generators of the power station are equipped with a combination of mechanical dust collector (80 *per cent* of the duty) for precipitation of dense particles and electrostatic precipitator (20 *per cent* of the duty) for precipitation of fine particles. While the electrostatic precipitators were inoperative since inception due to heavy dust collection and high ash content of coal, the parts of mechanical dust collectors wore out fast, due to high resistivity of the dust, as a result of which the ash handling system did not achieve the designed output. Commenting on the failure of the electrostatic precipitator, BHEL, which was requested by the Board to investigate the feasibility of improving the performance, observed (March 1975) that the parameters and the constructional features of the electrostatic precipitator were very much undersized for the duty conditions and the type of fly ashes resulting from the quality of coal burnt in the station, and concluded that in view of these inherent defects the performance of the existing dust collecting plant could not be appreciably upgraded by any modification or adjustment of its components. Spare parts procured from a foreign supplier in December 1973 at a cost of about Rs. 2·00 lakhs (US dollars 20,836) have been lying idle (January 1978) in addition to 54 items of spare parts held in stock since 1970 (value not available).

On account of the failure of the electrostatic precipitator, ash removal was got done by employing contract labour. The estimated cost of ash clearance through mechanical handling was Rs. 5,000 per annum. The actual expenditure on manual clearance during the three years up to 1976-77 was as given below:—

Year		Amount (In lakhs of rupees)
1974-75	..	2·22
1975-76	..	2·33
1976-77	..	0·91

9.7.10. **Contribution to the revenues of the Board**

The following table gives the details of the financial performance of the power station during the three years up to 1975-76 :—

	1973-74	1974-75	1975-76
Units sent out for sale (in Mkwh)	463·755	735·050	496·254
Cost of generation of units sent out (Rupees in lakhs)	5,19·41	6,85·80	5,54·81
Revenue computed at overall average sale price of the Board (Rupees in lakhs)	3,96·96	6,96·09	5,96·99
Total revenue of the Board from sale of power (Rupees in lakhs)	15,77·97	18,52·25	30,35·74
Percentage of contribution by the power station to overall revenues of the Board	25·16	37·58	19·66

The reduction of contribution by the power station during 1975-76 was partly due to overall increase in the quantum of power sold consequent on generation of power at Balimela.

9.7.11. **Procurement of Coal**

Coal is allocated to different power stations by the Linkage Committee of the Government of India, on the basis of which the Coal India Limited (previously National Coal Development Corporation Limited) supplies coal to the power station. There is no written agreement laying down the terms and conditions of supply of coal. The daily requirements of coal are assessed jointly by the suppliers and the power station Management. Analysis of coal is also made jointly to determine its grade. Coal with a moisture *plus* ash content of more than 43 *per cent* was liable for rejection up to 31st July 1975. Thereafter, coal having calorific value less than 2500 K. cal / Kg. is liable for rejection. The quantities for rejection are decided on the basis of joint analysis of samples drawn, while coal is fed into the boilers. Payment to the suppliers is made on weekly bills.

Up to 1970-71, coal was being received from South Balanda Collieries (distance : 8 km. from the power station) through a belt conveyor system constructed by the Board. Since 1971-72, coal is also being received from Jagannath Collieries (distance : 11 km) first by truck up to the mouth of the conveyor belt and then by the conveyor belt.

The boilers of the power station were designed to handle coal having moisture content of 6 *per cent*, ash content ranging from 41.5 to 43 *per cent* and calorific value ranging from 3900 to 4420 K. cal/kg. A test check of the details of coal handled over the period of five years ended 1976-77 showed that the characteristics of the coal actually received from the collieries varied widely as compared to the specifications, as indicated below :—

	Ranged between
Moisture content (in *per cent*)	1·83 (1972-73) and 12·46 (1973-74)
Ash content (in *per cent*)	6·60 (1973-74) and 62·00 (1972-73)
Calorific value (in K. cal/Kg.)	2000 (1972-73) and 6760 (1976-77)

The coal was also reported by the power station Management to have high abrasive content owing to presence of stones and shales, thereby affecting the efficiency of the coal mills.

9.7.12. According to the project report, the power station was to utilise inferior grade (grade III) coal. In actual practice, the power station has been utilising coal of higher grade (selected grades A and B and grades I and II) involving higher costs. Computed with reference to the price of grade III coal, utilisation of superior grades of coal had resulted in extra cost of Rs. 43·34 lakhs during the three years ended March 1977.

The consumption per kwh of energy generated was estimated in the project report to range from 0·48 to 0·55 kg. The actual consumption ranged between 0·68 kg (1976-77) and 0·71 kg. (1974-75) per kwh. of power generated during the three years 1974-75 to 1976-77. The cost of coal consumed in excess of the estimated requirement (reckoned with reference to 0·55 Kg/kwh) amounted to Rs. 1,75·29 lakhs during the three years ended March 1977.

The extra expenditure on account of excess consumption and consumption of higher grade of coal led to an incrase in the cost of generation per kwh. of power to the extent of 0·6 paise, 0·7 paise and 0·8 paise during 1974-75, 1975-76 and 1976-77 respectively.

In connection with the supply of coal, the following points were noticed :—

(*i*) Owing to more ash content and less calorific value, as compared to the permissible limits, the power station rejected a total quantity of 1,04·710 tonnes of coal during 1972-73, 1975-76 and 1976-77. As the coal rejected was not segregated, reasons for which were not available, it was also fed into the boilers. In the absence of settlement of the rate at which payment was to be made for the lower grade coal, no payment has been made for it (April 1978).

(*ii*) The Board constructed in June 1968 a cross country conveyor belt system of 8·8 km. at a cost of Rs. 2,68·42 lakhs for feeding coal from the South Balanda mines into the power station on an assurance given (1965) by the suppliers that coal would be supplied from the mines for a period of 20 years. Since 1971-72, the supplier started supplying coal from its Jagannath Colliery also, the coal being transported by trucks from the mines to the mouth of the conveyer belt. The supplier claimed a total amount of Rs. 33·50 lakhs on account of the transportation by trucks for the period from April 1973 to September 1977; the rate of transportation per tonne varying from Rs. 2·95 to Rs. 4·26. Though the Board disputed the claim initially, in view of the assurance which was given by the suppliers in 1965 it agreed in June 1977 to pay the claim after deducting Rs. 1·20 per tonne. Final settlement is awaited (April 1978).

In November 1976, it was agreed between the suppliers and the Board that the existing conveyor belt system would be extended (estimated cost: Rs. 52·50 lakhs) up to the Jagannath Colliery at the cost of the suppliers and that the Board would bear the cost of its operation and maintenance. The work on the extension was taken up in September 1977.

(*iii*) The conveyor belt system has a rated capacity to handle 800 tonnes of coal per hour, against which the average load handled, since inception to March 1977, ranged between 218 tonnes (1973-74) and 350 tonnes (1969-70).

The following table illustrates the position:—

Year	Quantity of coal carried (Tonnes)	Hours of operation required reckoned at 800tonnes per hour.	Actual hours of operation	Average achievement per hour (Tonnes)
1972-73	3,93,407	492	1,436	274
1973-74	4,03,006	504	1,848	218
1974-75	4,95,056	619	2,191	226
1975-76	5,14,224	643	2,302	223
1976-77	6,84,131	855	2,582	265

The Management of the power station stated (July 1976) that the system was designed to meet future increase in capacity, of the power station.

As against the cost of Rs. 1·51 per tonne estimated by the State Government in 1965 for transportation of coal over the system, the actual cost during 1975-76 and 1976-77 worked out to Rs. 2·03 and Rs. 2·18 (excluding depreciation, interest, cost of power and general administrative expenses).

9.7.13. Transformation and transmission

The table below indicates the power generated, power sent out and the energy lost in transmission for the five years up to 1976-77 :—

	1972-73	1973-74	1974-75	1975-76	1976-77
Energy generated (Mkwh)	639·174	546·598	860·643	716·301	961·375
Auxiliary consumption (Mkwh)	68·273	59·761	87·280	72·659	99·020
Energy transmitted (Mkwh)	550·644	463·755	735·050	496·254	778·264
Transformation and transmission losses (Mkwh)	20·257	23·082	38·313	147·388	84·091
Percentage of power loss to power generated (excluding auxiliary consumption)	3·7	4·7	4·9	29·7	10·8

The Board has not fixed any norm for such losses. Reasons for the abnormal loss during 1975-76 enquired from the Board in June and November 1977 are awaited (April 1978).

9.7.14. Purchases and inventory control

(1) The value of the annual purchases of stores and spare parts of the power station, over the five years up to 1976-77, averaged Rs. 1,66·78 lakhs, of which 42·4 *per cent* constituted imported items. The General Superintendent of the power station has been delegated powers to make purchases up to Rs. 10·00 lakhs on each occasion subject to provision in the budget and observance of other formalities. Purchases over this limit are to be finalised by the contract committee of the Board. Up to 1975-76, purchases were made piece-meal as and when indents were received from different departments of the power station. The procedure for consolidating indents periodically and making bulk purchases was introduced in September 1976.

(2) In response to a limited tender enquiry made on 13th September 1973, Bharat Earth Movers Limited (BEML— a Government of India Undertaking) quoted (Novermber 1973) Rs. 6·80 lakhs, valid up to 23rd December 1973, for supply of one crawler tractor (D 120 A-18) with special coal dozer attachment. The supplier had stipulated payment of 30 *per cent* of the value as advance with the order. Action was not taken to finalise the purchase within the validity period. Approval of the Board making 30 *per cent* advance payment, sought for in January 1974, was received in March 1975. Reasons for the delay were not available. In the meantime, BEML revised (December 1974) the rate to Rs. 10·05 lakhs. An order was placed in March 1975 and the tractor was supplied in November 1975. Delay in taking the purchase decision, thus, resulted in an extra expenditure of Rs. 3·25 lakhs.

(3) In response to a limited tender enquiry made in February 1976, a US firm quoted (June 1976) U. S. dollars 31,251·76 (Rs. 2·86 lakhs) FAS for supply of 15 items of spare parts of supervisory instruments for turbo-generators. The firm extended the validity of the offer from 3rd September 1976 to 30th September 1976, as requested by the power station Management. Action to obtain release of the necessary foreign exchange was, however, initiated only in September 1976 and the release was obtained in December 1976. In the meantime, in October 1976, the firm enhanced its prices by 10 *per cent* (valid up to 30th November 1976). Order was placed in April 1977 through the India Supply Mission at U. S. dollars 34,417·70 (Rs. 3·09 lakhs), resulting in an extra

expenditure of Rs. 0·23 lakh. The Management attributed (August 1977) the delay mainly to the following:—

(*a*) After receipt of the offer, field engineers had to be consulted to find out the feasibility of curtailing the quantum of spare parts in view of the heavy expenditure involved.

(*b*) As the concerned Assistant Engineer dealing with the case was on leave, there was delay in processing the case.

(4) *Warehousing and demurrage charges*—(*i*) Two consignments of Panberthy glass assembly and Dissicant Sorbit 'O', sent by air by two firms of USA against emergency orders placed in March 1975 and January 1976, reached the Calcutta airport on 18th December 1975 and 8th July 1976 respectively. The consignments could not be cleared till March 1977 on account of delay in getting report of chemical analysis (required for determining the customs duty), which was called for by the Board from the manufacturers after arrival of the consignments at the airport. Warehousing charges amounting to Rs. 0·13 lakh were paid before their clearance.

(*ii*) A consignment of rings and balls, imported from USA against ISM contract of December 1976, reached Calcutta port on 27th March 1977 but was cleared after delay of one week because intimation regarding arrival of the ship was received late from the clearing agents of the Board. Consequently, demurrage charge amounting to Rs. 0·15 lakh was paid to the Port Trust, as reported (April 1977) by the Liaison Officer of the Board in Calcutta. No action had been taken against the clearing agents for the delay in sending intimation (April 1978).

(5) The operation division of the power station handles the receipt, custody and issue of stores. The following are the particulars of stock of stores held at the end of each of the three years up to 1976-77:—

Year		Value of stock at the end of the year	Stock in terms of months' consumption
		(In lakhs of Rupees)	
1974-75	..	1,88·05	17
1975-76	..	2,79·75	25
1976-77	..	3,82·84	33

Mention was made in paragraph 82 (*ii*) of the Report of the Comptroller and Auditor General of India for the year 1970-71 about non-maintenance of priced stores ledger, non-fixation of limits of reserve stock and non-preparation of inventory of closing stock. The deficiencies persist (April 1978).

(6) The following points were also noticed:—

(*i*) The minimum, maximum and re-ordering levels for stores and spare parts were not fixed.

(*ii*) The power station Management did not standardise and codify stores materials to facilitate control of inventory.

(*iii*) On receipt, stores were inspected by the Officer-in-charge of the stores. In case of specialised materials/machines, the indentor was associated with the inspection. As on 31st March 1977, materials valued at Rs. 6·98 lakhs, received during 1973-74 to 1976-77, were awaiting inspection and acceptance by the indentors.

(*iv*) Used spare parts were not handed over to the store at the time of their replacement.

(*v*) In three cases, because of delay in testing, replacement for defective materials (value : Rs. 0·35 lakh) could not be obtained and these were lying unutilised.

(*vi*) Scrap materials lying in the Central store were not segregated and disposed of .

(*vii*) The stores items were not segregated into capital stores and consumable stores.

(*viii*) Physical verification of stores for the year 1975-76 was partly done and that for the year 1976-77 was not conducted.

(*ix*) As on 31st March 1977, 987 items of spare parts, building stores, electrical and other materials were declared slow moving/non-moving. The age-wise particulars of these stores are given below:—

Stores not issued		Number of items
for more than 9 years	..	275
for more than 5 years but up to 9 years		218
for more than 3 years but up to 5 years		494

As priced stores ledgers were not maintained, their value could not be ascertained.

(*x*) As on 31st March 1977, 97 items of scrap and unserviceable items like tyres, batteries, empties, used-up spare parts, transformer oil and electrical material were held in store without disposal since 1974-75. The value of 11 items worked out to Rs. 3·00 lakhs. Value of the remaining items could not be ascertained.

(*xi*) In 18 cases (value : Rs. 5·23 lakhs), where advance payments were made to the suppliers concerned, the stores, on receipt (May 1971 to November 1976), were found to be defective and/or unsuitable, but replacement was not obtained (April 1978).

(7) *Shortage of high speed diesel oil*—(*i*) High speed diesel oil required for starting of boilers and for maintaining the stability of flame in the furnace is procured from the Indian Oil Corporation Limited. The oil is delivered in tankers of 10 kl. capacity and is stored in underground tanks. If the dip and seal of the tankers are found intact on receipt, the supplier does not entertain claims towards short deliveries.

A test check (July 1977) of the records of 1975-76 disclosed discrepancies between the quantities of oil shown in the delivery challans of the supplier and the quantities recorded after gauge measurement of the underground tanks. The total shortages for the year 1975-76 worked out to 22,600 litres (value : Rs. 0·25 lakh). There was no record to indicate whether at the time of taking delivery the dip and seal of the tankers were verified to be intact.

(*ii*) Shortages with reference to the book balances, noticed during physical verification of oil by gauge reading taken at the end of each month during the four years upto 1976-77, are shown below:—

Year		Issues (in litres)	Shortages (net)	Percentage of shortages to issues	Value of* shortages (Rupees)
1973-74	..	11,85,600	44,900	3·80	47,145
1974-75	..	12,26,200	22,000	1·80	24,200
1975-76	..	12,80,900	41,650	3·25	45,815
1976-77	..	16,87,200	54,500	3·23	71,940
			Total	..	1,89,100

The percentage of losses ranged between 1·8 and 3·8 *per cent* as against 0·5 *per cent* recommended (May 1976) by the supplier towards handling losses. The money value of the shortages in excess of the recommended percentage of handling losses worked out to Rs. 1·57 lakhs. The shortages were not investigated (April 1978).

*Value has been computed at yearly average price.

9.7.15. Other points of interest

(1) *Employees provident fund scheme and family pension fund schemes*—The Board introduced the Employees Provident Fund and Family Pension Fund Schemes, with effect from 1st June 1970, in all its constituent units, excepting the Talcher Power Station where it was introduced from 1st March 1971. The employees' share of the contribution in respect of the staff working in Talcher Power Station was, however, deducted from their pay for March 1972 paid in April 1972. The Regional Provident Fund Commissioner, Bhubaneswar demanded (June 1972), however, payment of both employees' and employer's contributions together with administration charges from 1st June 1970 (the date when the Board adopted the scheme) in respect of all the employees working in the power station. An amount of Rs. 2·80 lakhs being the employer's share and the administration charges for the period from 1st June 1970 to 29th February 1972 was paid in August 1975.

The Regional Provident Fund Commissioner also demanded (August 1975) from the Board the payment of the employees'share amounting to Rs.3·24 lakhs. This was not recovered from the employees since, as per the provisions of the Act, an employer cannot make deductions in respect of arrear contribution from the wages of the employees if he had failed to collect these in time.

Representation of the Management for exemption from payment of the employees' share was stated to be pending with the Central Provident Fund Commissioner, New Delhi (April 1978).

(2) *Cyclone damage to the Switchyard*—The switchyard of the power station was hit by a cyclone on 22nd May 1976; six out of the 21 bays in the switchyard collapsed completely and transmission of power was disrupted.

The Board thereupon restricted the supply of energy to its major consumers and stopped sale of power to the Bihar State Electricity Board. The resultant loss of revenue per month was estimated (June 1976) at Rs. 96·75 lakhs. Information regarding the value of damage was not available. Repairs had been completed in two bays at a total expenditure of Rs. 11·00 lakhs (August 1977). The Board stated (September 1977) that the restoration was expected to be completed by March 1978. Further reports are awaited (April 1978).

The Management lodged a claim (May 1976) for Rs. 1,00·00 lakhs with the insurers. Settlement of the claim is awaited (April 1978).

(3) *Machinery and equipment lying idle*—Five items of machinery and equipment (value : Rs. 10·25 lakhs) were lying idle (January 1978) since the date of their receipt. Details are given below:—

Particulars of machine/equipment	Value (Rupees in lakhs)	Date of receipt	Reasons
(*i*) Boring machine ..	6·46	June 1970	For want of spare parts
(*ii*) Surface grinding machine ..	0·23	June 1970	For want of spare parts
(*iii*) Telephone exchange ..	2·62	February 1975	For want of suitable accommodation
(*iv*) Time punching machine ..	0·17	March 1976	Not available
(*v*) Bradma machine ..	0·77	August 1976	Non-sanction of staff for operation

Note :—Items (*i*) and (*ii*) were transferred from Government

(4) *Manpower*—The project report (1961) did not indicate the estimated manpower requirement. The Board did not also evolve any yardstick for engagement of staff based on detailed work studies. The strength of the regular employees of the power station increased from 352 in 1974-75 to 367 in 1976-77 and the power generated per employee declined from 2·44 Mkwh in 1974-75 to 1·99 Mkwh in 1975-76 but increased to 2·61 Mkwh in 1976-77.

In addition to salaries and wages, the power station paid substantial amounts on account of overtime. As against the expenditure of Rs. 50·73 lakhs, Rs. 56·31 lakhs and Rs. 57·45 lakhs towards salary and wages for the years 1974-75, 1975-76 and 1976-77, the expenditure on account of overtime payments amounted to Rs. 8·59 lakhs, Rs. 7·12 lakhs and Rs. 8·38 lakhs respectively. No system prescribing the criteria for booking labour on overtime basis and for obtaining prior orders of the competent authority was evolved. The system of punching'time in' and 'time out' was not in vogue ; as such the time spent on overtime was not susceptible of verification, excepting with reference to the certificates given by the Officer-in-charge.

(5) *System of accounts*—Under the pay and accounts scheme, introduced by the Board in 1971-72, all payments in respect of the power station were to be made by the Pay and Accounts Officer (PAO), Talcher after pre-audit. A general review of the accounts records showed the following deficiencies :—

(*i*) The balances of advances to suppliers, temporary/miscellaneous advances/miscellaneous public works advances, security deposits, etc. as per subsidiary registers were not reconciled with the balances in the general ledger.

(ii) Temporary advance register was not maintained properly in as much as postings in the register were not made regularly and it was not also closed every month ; there was also delay ranging from 2 to 23 months in rendering accounts by the recipients of temporary advances for adjustment.

(iii) Register of claims preferred with insurers, suppliers and carriers was not maintained.

(iv) Property register, showing the value of individual assets with reference to the original cost of purchase, *etc*, was not maintained.

Internal audit of the station, required to be conducted by the Pay and Accounts Officer, was in arrears since the time of taking over of the station by the Board.

9.7.16. The above matters were reported to Government in October 1977; reply is awaited (April 1978).

SECTION X

ORISSA STATE WAREHOUSING CORPORATION

10.1. Introduction

The Orissa State Warehousing Corporation was established on 21st March 1958 under Section 28 of the Agricultural Produce (Development and Warehousing) Corporation Act, 1956 and started functioning in February 1959. Consequent on the passing of the Warehousing Corporations Act, 1962, the Corporation was deemed to have been established under the latter Act.

10.2. Functions

The main fuctions of the Corporation, as prescribed in the Warehousing Corporations Act, 1962, are :

(*a*) to acquire and build godowns and warehouses within the State ;

(*b*) to run warehouses in the State for agricultural produce, seeds, manures, fertilisers, agricultural implements and notified commodities and to arrange facilities for their transport to and from the warehouses ; and

(*c*) to act as an agent of the Central Warehousing Corporation or of Government for purchase, sale, storage and distribution of agricultural produce, seeds, manures, fertilisers, agricultural implements and notified commodities.

The following additional functions were also undertaken:—

(*a*) Disinfestation service outside warehouses in respect of agricultural produce and notified commodities ; and

(*b*) acting as agent for purchase, sale, storage and distribution of agricultural produce, seeds, manures, fertilisers and notified commodities on behalf of a Company or a body corporate.

10.3. Organisational set-up

The general superintendence and management of the affairs and business of the Corporation is vested in a Board of Directors, which is assisted by an Executive Committee consisting of the Chairman, the Managing Director and three other directors. There are eleven directors on the Board ; six are nominated by the Central Warehousing Corporation and others by the State Government. The Managing Director is appointed by the State Government with the previous approval of the Central Warehousing Corporation. The Secretary of the Corporation is in charge of the Accounts Organisation of the Corporation.

Regulations regarding service conditions, delegation of powers, conduct of meetings, *etc.*, framed by the Corporation in June 1976 under Sections 23 (2) and 42 of the Act, were awaiting finalisation (March 1978). Pending finalisation, the Corporation followed the Regulations of the Central Warehousing Corporation.

10.4. Capital structure

The authorised capital of the Corporation as on 31st March 1977 was Rs. 1 crore, divided into one lakh shares of Rs. 100 each. The issued, subscribed and paid-up capital of the Corporation as on 31st March 1977 was Rs. 39·76 lakhs, contributed equally by the Central Warehousing Corporation and the State Government.

10.5. Construction of godowns

(1) Till March 1974, the Corporation constructed eight godowns, one in each of the following centres, at a total cost of Rs. 7·54 lakhs:—

Name of the centre		Year of opening	Capacity (In tonnes)	Cost (Rupees in lakhs)
Jatni	..	1959	1,000	0·87
Birpratapapur	..	1968	500	0·47
Kantabanji	..	1959	1,000	0·94
Titlagarh	..	1960	1,000	1·14
Rampur	..	1970	500	0·61
Khariar Road	..	1960	1,000	1·15
Gunupur	..	1959	1,000	1·15
Chandabali	..	1968	600	1·21
Total	..		6,600	7·54

Construction of a godown at Nimapara was taken up in 1965-66, on a site adjacent to a co-operative rice mill, at the request of the mill. The godown was to cater to the needs of the mill exclusively. There was, however, no agreement with the mill in this regard. The construction was stopped in May 1970 at the roof level, after incurring expenditure of Rs.0·47 lakh, as the mill had shifted its place (date not available) rendering the warehousing accommodation unnecessary. The Management stated (December 1976) that further investment to complete the building was not worth while since the prospect of utilisation by private depositors was not much. The Government stated (January 1978) that the matter would be placed before the Board of Directors for a decision.

(*ii*) Between April 1974 and March 1977, the Corporation decided to construct godowns at ten places with storage capacity of 14,500 tonnes at an estimated cost of Rs. 39·50 lakhs. Of these, one godown (Udala) with storage capacity of 500 tonnes was completed in November 1977 at a cost of Rs. 1·33 lakhs and construction of another at Balasore is in progress (April 1978). Construction work has not started in other places though in two places about 6 acres of land have been acquired.

Funds provided in the budget year after year for construction of godowns were not utilised as indicated below :—

Year		Budget provision	Actual expenditure
			(In lakhs of rupees)
1974-75	..	20·40	0·05
1975-76	..	28·49	..
1976-77	..	27·08	0·37

The Management stated (November 1977) that the main bottleneck in starting construction was the acquisition of land.

10.6. Acquisition of godowns owned by the State Government

From 1959, the Corporation had been hiring godowns of the Civil Supplies Department of the State Government. Later, in August 1969, godowns of the Civil Supplies Department at 15 places, having capacity of 16,281 tonnes, were offered to the Corporation for sale by Government. The matter regarding valuation of the godowns was not finalised (April 1978) as the Civil Supplies Department considered that the Corporation should take the buildings at the current market rate while the Corporation was prepared to take the buildings at book value less depreciation. Government stated (January 1978) that the Civil Supplies Department had been requested to handover the buildings immediately pending finalisation of the valuation and the terms and conditions of transfer.

10.7. Warehousing capacity

As on 31st March 1977, the Corporation owned eight godowns in five districts and utilised a portion of an incomplete godown with an aggregate storage capacity of 6,634 tonnes. In addition, it had hired 42 godowns in 13 districts with aggregate storage capacity of 83,497 tonnes.

The particulars of the warehousing capacity owned and hired by the Corporation, at the end of each of the three years up to 1976-77, are given below :—

Year		Owned capacity at the end of the year		Hired capacity at the end of the year		Total available capacity at the end of the year	
		Number of godowns	Capacity (In tonnes)	Number of godowns	Capacity (In tonnes)	Number of godowns	Capacity (In tonnes)
1974-75		8	6,600	25	48,383	33	54,983
1975-76	..	8	6,600	29	66,530	37	73,130
1976-77	..	9	6,634	42	83,497	51	90,131

Augmentation of the warehousing capacity owned by the Corporation since 1970-71 (34 tonnes) was small. The hired capacity increased both in terms of number of godowns and storage capacity from 11 and 9,912 tonnes in 1970-71 to 42 and 83,497 tonnes in 1976-77 respectively. Government stated (January 1978) that the construction programme was delayed due to the proposed transfer of Civil Supplies Department godowns in the State to the Corporation.

10.8. Utilisation of storage capacity

The table below indicates the particulars of the storage capacity available (owned and hired), average occupancy and percentage of occupancy during each of the five years up to 1976-77 :—

Year		Total storage capacity available at the close of the year	Average* occupancy during the year	Percentage of occupancy
		(In tonnes)		
1972-73	..	22,455	12,653	56
1973-74	..	27,905	16,241	58
1974-75	..	54,983	44,500	81
1975-76	..	73,130	63,074	86
1976-77	..	90,131	69,633	77

* Separate figures for 'hired' and 'owned' godowns are not available.

The following points were noticed:—

(*i*) The godowns at Birpratappur and Rampur, having storage capacity of 500 tonnes each and constructed at a cost of Rs. 1·08 lakhs, were not utilised by the Corporation for considerable periods, as mentioned below after they were taken possession of :—

Godown		Date of taking possession	Period for which lying unutilised
Birpratappur	..	February 1968	February 1970 to February 1972 January 1974 to March 1975
Rampur	..	April 1970	April 1970 to March 1972 November 1973 to June 1975

The Management stated (July 1976) that these godowns were constructed in the premises of co-operative rice mills and it was hoped that the rice mills would procure paddy and utilise the godowns. The godowns were not utilised by them as the rice mills scheme in the co-operative sector failed. It was further stated that no party came forward to take these godowns on hire.

(*ii*) Godowns were hired even though enough space was available in the Corporation's own godowns at the same places, as indicated in the following table :—

Name of the centre		Owned capacity	Hired capacity	Rent paid per annum	Occupancy 1974-75	Occupancy 1975-76	Occupancy 1976-77
		(In tonnes)		(Rupees)	(In tonnes)		
Kantabanji	..	1,000	1,400	3,998	705	865	1,391
Khariar Road	..	1,000	550	1,572	560	316	768

Government stated (January 1978) that the Corporation retained the godowns in its own interest expecting better business in future years.

10.9. Storage

(*a*) *Custom handled*—The following table indicates the extent of custom handled during each of the five years up to 1976-77:—

Year		Custom handled (In tonnes)
1972-73	..	28,935
1973-74	..	34,675
1974-75	..	42,305
1975-76	..	1,50,617
1976-77	..	1,75,009

(*b*) *Customer-wise utilisation*—The table below indicates the percentage of utilisaton of the storage capacity, customer-wise, during each of the five years upto 1976-77 :—

Year		Food Corporation of India	Government (State and Central)	Fertiliser companies	Producers and co-operatives	Traders
1972-73	..	30	26	40	1	3
1973-74	..	28	45	22	1	4
1974-75	..	20	50	25	1	4
1975-76	..	15	60	22	1	2
1976-77	..	36	47	12	5	Nil

Most of the custom was from the Food Corporation of India and the Governments ; the utilisation of storage by producers, co-operatives and traders was less than 5 *per cent*.

The Management stated (July 1976) that on account of restrictions imposed (December 1975) by the State Government in movement and storage of foodgrains the custom from producers and traders was not encouraging.

10.10. Shortage of stocks

(*a*) The Corporation has no system of physical verification of stocks. The stocks held on behalf of Government are verified periodically by the staff of the Civil Supplies Department and that of Food Corporation of India by the staff of the Food Corporation of India in the presence of the staff of the Corporation. The value of shortages noticed in such physical verifications is recovered from the storage bills of the Corporation.

Physical verification conducted by the Officers of the State Government and the staff of the Food Corporation of India and returns submitted by the various Superintendents of Warehouses, during April 1975 to April 1976, revealed shortages in the stocks of rice, wheat and sugar valued at Rs. 12·90 lakhs in 19 warehouses. No shortage is allowed by the State Government or the Food Corporation of India in their stocks. The percentage of actual shortage ranged from 1 to 6. Storage charges amounting to Rs. 3·15 lakhs were adjusted by the Food Corporation of India (Rs. 0·78 lakh) and the District Collectors (Rs. 2·37 lakhs) towards shortages. In addition, storage bills amounting to Rs. 22·52 lakhs relating to the period 1971-72 to 1976-77 were not paid (January 1978) by the State Government owing to unsettled dispute regarding shortages.

The shortages have not been investigated (April 1978). Government stated (January 1978) that the shortages occurred due to heavy content of moisture at the time of receipt of stock, that the Food Corporation of India had agreed to consider the shortage in each warehouse according to the merits of each case and that the Civil Supplies Department had been requested to waive the shortages pertaining to its stocks.

(*b*) A clerk, placed in charge of the warehouse at Jaleswar from September 1976, was found to be absconding from 18th November 1976. Stocks of sugar, wheat and cash at the warehouse, when verified (23rd November 1976) by the Secretary of the Corporation were found short, the value of shortages being Rs. 79,005 (stock : Rs. 75, 780, cash : Rs. 3,225). The matter was reported to the police on 6th December 1976 and taken up with the insurers on 14th December 1976. The insurance company surveyed the shortage in November 1977 and wanted reports of the police and the internal auditors. Further developments are awaited (April 1978).

10.11. Credit system

(*a*) *Issue of bills*—Bills were issued to the parties concerned for recovery of storage and other charges but records pertaining thereto were not properly maintained as noted below:—

(*i*) Though necessary for better control and uniformity, printed and serially numbered bill books were not used;

(*ii*) Party-wise accounts were not maintained; and

(*iii*) The bill registers were not kept up-to-date and reconciled with the personal ledger accounts as at the close of each year.

(*b*) *Outstanding debtors*—The table below indicates the position of book debts against the total income of the Corporation for the three years up to 1975-76:—

		1973-74	1974-75	1975-76	1976-77 (Provisional)
		(Rupees in lakhs)			
Total debtors	..	14·89	32·27	42·91	71·44
Reserve for bad and doubtful debts		1·55	2·85	3·85	3·85
Warehousing income	..	11·39	26·29	41·93	62·60
Other income	..	4·20	2·37	0·95	1·05
Total income	..	15·59	28·66	42·88	63·65

The party-wise and year-wise break-up of the outstanding debts as on 31st March 1976 was as follows:—

Year		Food corporation of India	Government (State and Central)	Fertiliser companies, producers, and co-operatives	Private parties	Total
		(In lakhs of rupees)				
1971-72	..	0·46	0·03	0·02	..	0·51
1972-73	..	1·46	0·35	0·14	..	1·95
1973-74	..	1·30	0·66	0·27	..	2·24
1974-75	..	1·17	5·81	1·06	..	8·04
1975-76	..	4·43	21·94	3·77	0·04	30·18
Total	..	8·82	28·79	5·26	0·04	42·91

The outstanding amount against the Government departments was stated by the Management to be due to unsettled dispute regarding shortage of rice, wheat and sugar. The amount outstanding against the Food Corporation of India is mainly due to non-settlement of storage charges, brief particulars of which are given below:—

(*i*) There is no agreement with the Food Corporation of India detailing the terms and conditions such as the rates applicable for warehousing, *etc.*

(*ii*) In pursuance of a decision taken at a meeting of the Central and the State Warehousing Corporations in January 1971 to adopt uniform rates of warehousing charges by all the Corporations, the tariff rates for storage of foodgrains per tonne per month were revised to Rs. 2·50, Rs. 3·00 and Rs. 3·30 with effect from January 1971, June 1973 and September 1974 respectively. The rates were not accepted by the Food Corporation of India. Which has been paying at Rs. 2·20 per tonne per month, although bills are being raised as per the prevailing tariff from time to time.

(*iii*) From December 1972, the Corporation took up warehousing of sugar for the Food Corporation of India. The storage tariff rate prevailing from time to time was as follows:—

Effective from		Rate per tonne (In rupees)
1st January 1971	..	2·80
1st June 1973	..	3·30
1st September 1974	..	4·00

The Corporation had been billing up to December 1975 at the rate of Rs. 2·20 per tonne per month. In a meeting between the officials of the Central Warehousing Corporation and the Food Corporation of India in December 1972 / January 1973, it was decided that the Food Corporation of India would pass the bills of the State Warehousing Corporation for storage of sugar at Rs. 2·80 per tonne per month up to June 1974 and at Rs. 3·20 thereafter. This arrangement was accepted (May 1973) by the Corporation. Recoveries at these rates had, however, not taken place (March 1978) and the Food Corporation of India was paying storage charges for sugar at Rs. 2·80 per tonne per month from January 1976. The Management stated (July 1977) that reasons for non-payment at the rate agreed to by the Food Corporation of India were not known to it. Government stated (January 1978) that discussions between the Central Warehousing Corporation and the Food Corporation of India had not been finalised.

10.12. Financial position

The accounts of the Corporation for the year 1976-77 are in arrears (March 1978). The following table indicates the financial position of the Corporation for the three years ending 31st March 1976:—

		1973-74	1974-75	1975-76
Liabilities		(Rupees in lakhs)		
Paid-up capital	..	26·76	31·76	35·76
Reserves and surplus	..	4·39	6·08	10·07
Liabilities and provisions	..	8·15	18·69	34·96
Total	..	39·30	56·53	80·79
Assets				
Gross block	..	9·37	10·79	11·13
Less: Depreciation	..	2·48	3·13	4·00
Net fixed assets	..	6·89	7·66	7·13
Investments	..	4·92	3·74	6·39
Cash and bank balances	..	4·33	6·15	7·43
Other current assets, loans and advances		23·16	38·98	59·84
Total	..	39·30	56·53	80·79
Capital employed	..	26·03	34·60	40·34
Net worth	..	32·10	40·85	49·64

Notes—(*i*) Capital employed represents net fixed assets *plus* working capital.

(*ii*) Net worth represents paid-up capital *plus* reserves *less* intangible assets.

10.13. Working results

The working results of the Corporation for the three years up to 31st March 1976 are tabulated below :—

		1973-74	1974-75	1975-76
		(Rupees in lakhs)		
Income—				
(*a*) Warehousing charges	..	11·39	26·29	41·93
(*b*) Interest	..	0·34	0·31	0·51
(*c*) Other income	..	3·86	2·06	0·44
Total	..	15·59	28·66	42·88
Expenditure—				
(*a*) Pay and allowances	..	3·06	4·17	6·24
(*b*) Rent, rates, taxes and insurance		1·42	4·00	6·74
(*c*) Depreciation	..	0·41	0·66	0·88
(*d*) Other expenses	..	7·78	16·74	24·60
(*e*) Net profit before tax	..	2·91	3·09	4·42
Total	..	15·58	28·66	42·88
Percentage of net profit before tax to :				
Warehousing charges	..	26	12	11
Share capital	..	11	10	12

The surplus available, the provision made for taxation and the dividend declared from 1972-73 to 1975-76 are given in the following table :—

Year		Surplus	Provision	Dividend declared	Percentage of share capital
		(Rupees in lakhs)			
1972-73	..	2·05	..	0·52	2
1973-74	..	2·91	0·80	0·83	3
1974-75	..	3·09	0·75	1·55	5
1975-76	..	4·42	..	1·43	4

10.14. Accounting manual

The Corporation has not prepared any accounting manual prescribing the detailed procedure for maintenance of accounts at each warehouse and at the head office (April 1978).

10.15. Other points of interest

(*a*) *Forged release orders*—On verification of the records of Bolangir warehouse by the staff of the Food Corporation of India in April 1975, it came to notice that 60 quintals of sugar (value : Rs. 25,800) were taken delivery of from the warehouse by four dealers on forged release orders. After investigation, the Management attributed (November 1976) the loss to the negligence of the Superintendent of the warehouse. The value of the sugar was deducted by the Food Corporation of India from the subsequent bills of the Corporation towards storage charges. The matter was reported to the Police in April 1975, it is under investigation (April 1978). Claim made on the insurers (November 1976) is also pending settlement (April 1978).

(*b*) *Cases of theft*—Twenty cases of theft of various items of stock in ten warehouses were reported to the Police during the period from October 1973 to October 1976 as and when these occurred. These cases involved a loss of Rs. 0·79 lakh. Of these, the Police could not find any clue in respect of two cases (loss : Rs. 0·38 lakh). In one case involving Rs. 9,030, the Police reported that the case was not one of theft but of misappropriation ; the matter is subjudice (March 1978). In the remaining cases, reports of the Police had not been received (March 1978). The Management recovered (September 1976) from the insurers Rs. 0·46 lakh in

eight cases including Rs. 0·38 lakh in the two cases where the Police could not find any clue, and Rs. 0·08 lakh in six out of the remaining 17 cases where the Police report was awaited.

(*c*) *Non-realisation of sales tax*—Consequent on the takeover of the wholesale trade in wheat and wheat products by the State Government in April 1973, Government entrusted (April 1973) the storage of wheat and storage and distribution of wheat products to the Corporation. The Corporation was to sell the wheat products according to the directions issued by the Government from time to time. The mill price of wheat products was fixed by the Government of India. The Corporation was allowed to fix the selling price by adding actual freight and 3 *per cent* margin, sales tax and other taxes being extra.

The Corporation was liable to pay sales tax under the Orissa Sales Tax Act, 1947 in respect of the sales from centres where the turnover exceeded Rs. 25,000 per annum, each individual centre being treated as a separate unit for this purpose. Under the Act *ibid*, a wholesaler becomes eligible to collect sales tax effective from the date of applying for registration. The turnover at the Cuttack and Jharsuguda centres exceeded the limit of Rs. 25,000 in May 1973 and June 1973 respectively but these centres did not collect sales tax from the retailers till they were registered by the sales tax authorities in November 1973 and June 1974. However, the sales tax authorities at Cuttack and Jharsuguda assessed (March/July 1974) the tax payable by the Corporation for these centres at Rs. 52,876 and Rs. 6,501 respectively for the quarters ended June and September 1973. Penalties of Rs. 3,000 and Rs. 1,500 respectively were also levied (between March and July 1974) as the tax was not paid within the prescribed period. The tax, including penalty, was paid during March/April 1975. The Corporation filed appeals in November 1974 against the levy of tax and penalty, but the appeals were rejected by the authorities on the following grounds :—

(*i*) The Cuttack centre filled the registration form in a defective manner, and

(*ii*) the Jharsuguda centre did not apply in time.

The Corporation decided (July 1975) not to appeal to the High Court as there was no ground for appeal.

SECTION XI

ORISSA STATE ROAD TRANSPORT CORPORATION

11. Payment of sales tax

The erstwhile State Transport Service (STS) was selling ticket books printed in its press to and constructing in its workshops bus bodies for the Orissa Transport Company Limited. It was also selling scrap materials like tyres and tubes to outside parties. This practice was continued by the Orissa State Road Transport Corporation (OSRTC) which took over the functions of the erstwhile State Transport Service on its formation in May 1974. The STS/OSRTC did not get itself registered as a dealer under the Orissa Sales Tax Act, 1947 although the turnover had exceeded Rs. 25,000 by 1970-71. It did not also collect sales tax on its sales.

In August 1975, the sales tax authorities assessed the STS/OSRTC as an unregistered dealer and levied sales tax amounting to Rs. 3·40 lakhs (STS relating to period 1971-72 to 1973-74 : Rs. 2·48 lakhs and OSRTC relating to 1974-75 : Rs. 0·92 lakh) on the turnover pertaining to the years from 1971-72 to 1974-75. Penalty of Rs. 4·53 lakhs (STS : Rs. 3·16 lakhs and OSRTC : Rs. 1·37 lakhs) under the Orissa Sales Tax Act, 1947 was also imposed (August 1975) for failure to get registered as a dealer. The tax was paid between March 1976 and September 1976. Appeal filed by the Corporation before the Commissioner of Sales Tax in October 1976 regarding payment of penalty is pending (April 1978).

The loss due to payment of sales tax without corresponding collection amounted to Rs. 3·40 lakhs for the period ending 1974-75, besides the liability on account of penalty.

The matter was reported to the Management/Government in October 1977/November 1977; replies are awaited (April 1978).

BHUBANESWAR,
The 27 MAY 1978

(R. K. CHANDRASEKHARAN)
Accountant General, Orissa

Countersigned

(GIAN PRAKASH)
Comptroller and Auditor General of India

NEW DELHI,
The 1 JUN 1978

APPENDICES

APPENDIX I

(Reference : paragraph 1.5, page..2)

Statement showing arrears in accounts (as in January 1978)

Serial Number	Name of the Company	Year from which accounts were in arrears
	(a) Companies fully owned by Government—	
1	Industrial Development Corporation of Orissa Limited ..	1975-76
2	Orissa Small Industries Corporation Limited ..	1975-76
3	Orissa Construction Corporation Limited ..	1974-75
4	Orissa Lift Irrigation Corporation Limited ..	1974-75
5	Orissa Mining Corporation Limited ..	1976-77
6	Orissa Forest Corporation Limited ..	1972-73
7	Orissa State Commercial Transport Corporation Limited	1971-72
8	Orissa Fisheries Development Corporation Limited ..	1969-70
9	Leather Corporation of Orissa Limited ..	1976-77
10	New Mayurbhanj Textiles Limited ..	1976-77
	(b) Companies partly owned by Government (other than Pilot Project Companies)—	
11	Orissa Road Transport Company Limited ..	1976-77
12	Orissa Agro Industries Corporation Limited ..	1973-74
13	Mayurbhanj Textiles Limited ..	1971-72
	(c) Subsidiary Companies—	
14	Hira Steels and Alloys Limited ..	1976-77
15	East Coast Salt and Chemical Industries Limited ..	1974-75
	(d) Pilot Project Companies (Companies working)—	
16	Utkal Foundry and Engineering Company Limited ..	1976-77
17	Orissa Instruments Company Limited ..	1974-75

Serial Number	Name of the Company		Year from which accounts were in arrears
18	Spark Battery Manufacturing Works Limited	..	1971-72
19	Orissa Boat Builders Limited	..	1970-71
20	Orissa Agrico Limited	..	1969-70
21	Cuttack Iron and Steel Products Limited	..	1967-68
	(e) Companies whose assets were sold—		
22	Eastern Acquatic Products (India) Limited	..	1973-74
23	Gajapati Steel Industries Limited	..	1969-70
24	Orissa Electrical Manufacturers Limited	..	1967-68
25	Orissa Board Mills Limited	..	1968-69
26	Manufacturer Electro Limited	..	1962-63
	(f) Companies under revival—		
27	Premier Bolts and Nuts Company Limited	..	1967
28	Modern Electronics Limited	..	1965-66
29	Orissa Foundry Company Limited	..	1968-69
	Orissa Tiles Limited	..	1968-69
	(g) Companies under Liquidation—		
31	Modern Malleable Casting Company Limited (March 1976)		1973-74
32	Manorama Foundry Works Limited (March 1972)	..	1968-69
33	Orissa Timber Products Limited (September 1972)	..	1968-69
34	Kalinga Steel and Wire Products Limited (August 1971)	..	1968-69
35	Chilika Cashew Manufacturing Works Limited (August 1971)		1967-68
36	Orissa Wood Products Limited (March 1972)	..	1967-68
37	Utkal Fruit Products Limited (July 1966)	..	1966-67
38	Balanga Iron Works Limited (July 1971)	..	1965-66

Serial Number	Name of the Company		Year from which accounts were in arrears
39	Orissa Sports Manufacturing and Fabricators Limited (January 1972)		1963-64
40	Cocacola (India) Limited (May 1964)	..	1963-64
41	Hansanath Ceramic Industries Limited (May 1972)	..	1963-64
42	Kalinga Fruit Products (January 1964)	..	1963-64
43	Madhusudan Chemical Industries Limited (January 1971)		1963-64
44	Orissa Trunk and Enamel Works Limited (January 1971)		1963-64
45	Konark Processing Works Limited (January 1971)	..	1963-64
	(h) Companies in which Government shares were sold—		Year for which accounts are in arrears
46	Jagannath Chemical and Pharmaceutical Works Limited	..	1965-66 to 1975-76
47	Kalinga Foundry Limited	..	1970-71 and 1971-72
48	Utkal Metal Products Limited	..	1970-71

Note—The dates within brackets indicate when the Companies went into liquidation.

APPENDIX II

(Reference : paragraph 1.7, page 2)

Summarised Financial results of working of Government Companies on the basis of latest available accounts

Sl. No.	Name of the Company	Name of the Department	Date of incorporation	Year of account	Total capital invested	Profit (+)/ Loss (—)	Total interest charged to profit and loss account	Interest on long-term loans	Total return on capital invested (7+9)	Percentage of total return on capital invested	Capital employed	Total return on capital employed (7+8)	Percentage of return on capital employed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
						(In lakhs of rupees)							
	(A) Companies wholly owned by the State Government—												
1.	Industrial Development Corporation of Orissa Limited	Industries	29th March 1962	1974-75	31,40·50	(+)1,14·32	1,56·63	1,18·01	2,32·33	7·40	28,50·75	2,70·95	9·50
2.	Orissa Mining Corporation Limited	Mining and Geology	16th May 1956	1974-75	16,20·22	(—)2,02·16	61·35	61·35	(—)1,40·81	..	9,90·29	(—)1,40·81	..
				1975-76	15,92·39	(+)60·18	61·28	61·28	1,21·46	7·61	10,12·97	1,21·46	11·99
3.	Orissa State Commercial Transport Corporation Limited	Commerce and Transport	7th January 1964	1970-71	4,40·05	(—)26·73	23·21	20·35	(—)6·38	..	3,57·74	(—)3·52	..
4.	Orissa Fisheries Development Corporation Limited	Forest, Fisheries und Animal Husbandry	8th August 1962	1968-69	62·31	(—)4·38	0·95	0·95	(—)3·43	..	35·21	(—)3·43	..
5.	Orissa Lift Irrigation Corporation Limited	Irrigation and Power	21st September 1973	1973-74	78·53	(—)28·23	2·93	..	(—)28·23	..	24·03	(—)25·30	..
6.	Industrial Promotion and Investment Corporation	Industries	12th April 1973	1976-77	1,54·80	(+)2·82	..	..	2·82	1·82	1,32·43	2·82	2·13
7.	Orissa Small Industries Corporation Limited	Industries	1st April 1972	1974-75	1,61·66	(+)9·37	7·63	4·16	13·53	8·31	1,25·52	17·00	13·54
	(B) Companies partly owned by the State Government—												
8.	Orissa Road Transport Company Limited	Commerce and Transport	1st October 1950	1975-76	1,27·51	(—)37·02	..	..	(—)37·02	..	1,57·08	(—)37·02	..
9.	Orissa Agro Industries Corporation Limited	Agriculture	20th October 1961	1971-72	1,59·17	(—)0·20	5·67	2·43	2·23	1·40	1,69·62	5·47	3·22
				1972-73	1,84·17	(—)1·09	4·67	2·97	1·88	1·02	1,71·12	3·58	2·09
10.	Mayurbhanj Textiles Limited	Industries	1943	1970-71	4·32	(—)0·82	0·11	..	(—)0·82	..	0·62	0·71	..
	(C) Companies floated under Pilot Project Scheme—												
11.	Utkal Foundry and Engineering Company Limited	Industries	3rd April 1959	1975-76	3·24	0·45	0·22	..	0·45	13·89	5·19	0·67	12·91
12.	Rourkela Fabrications Limited	Industries	28th March 1959	1975-76	8·24	1·00	0·37	0·37	1·37	16·63	10·22	1·37	13·40
				1976-77	7·69	1·60	0·37	0·37	1·97	25·62	9·74	1·97	20·23

Sl. No.	Name of the Company	Name of the Department	Date of incorporation	Year of account	Total capital invested	Profit (+)/ Loss (—)	Total interest charged to profit and loss account	Interest on long-term loans	Total return on capital invested (7+9)	Percentage of total return on capital invested	Capital employed	Total return on capital employed (7+8)	Percentage of return on capital employed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
13.	Orissa Foundry Company Limited, Berhampur	Industries	18th March 1958	1967-68	3·34	(—) 0·21	0·05	..	(—) 0·21	..	2·56	(—) 0·16	..
14.	Orissa Instruments Company Limited	Industries	14th March 1961	1973-74	1·26	(+) 0·12	..	..	(+) 0·12	9·52	1·23	0·12	9·76
15.	Spark Battery Manufacturing Works Limited	Industries	17th March 1958	1970-71	3·10	(—) 0·59	0·33	..	(—) 0·59	..	5·71	(—) 0·26	..
16.	Orissa Agrico Limited ..	Industries	16th March 1961	1968-69	1·42	(—) 0·34	0·08	..	(—) 0·34	..	2·43	(—) 0·26	..
17.	Orissa Tiles Limited ..	Industries	1st September 1959	1967-68	8·86	(—) 2·45	0·64	0·34	(—) 2·11	..	7·05	(—) 1·81	..
18.	Orissa Boat Builders Limited	Industries	18th March 1958	1969-70	3·40	(+) 0·02	..	..	(+) 0·02	0·59	1·59	(+) 0·02	1·26
19.	Orissa Board Mills Limited	Industries	4th April 1960	1967-68	10·72	(—) 1·04	0·51	0·51	(—) 0·53	..	4·69	(—) 0·53	..
	(D) Subsidiary Company—												
20.	Hira Steels and Alloys Limited*	Industries	23rd August 1974	1975-76	36·67	..	1·57	1·50	1·50	4·09	27·39	1·57	5·73

NOTE: 1. *The company has not gone into production

2. Capital invested represents paid-up capital *plus* long-term loans *plus* free reserves.

3. Capital employed represents *net* fixed assets (excluding capital works-in-progress) *plus* or *minus* working capital.

APPENDIX III

(Reference : Paragraph 4.10.2, page 79)

Table showing surplus cash and its investment from time to time by the Orissa Mining Corporation Limited.

Amount of surplus cash (Rupees in lakhs)	Date of availability	Manner and period of investment and rate of interest (per annum)
20·00	31st July 1975	Term deposits of six months renewed from time to time. 31st July 1975 to 2nd August 1977 (6 *per cent*).
18·00	27th October 1975	Term deposits of six months renewed from time to time. 27th October 1975 to 13th March 1977 (3½—7 *per cent*). In Government Account at 3½ *per cent* thereafter.
20·00	21st November 1975	Term deposits of six months renewed from time to time. 21st November 1975 to 23rd March 1977 (3½ to 7 *per cent*). In Government Account at 3½ *per cent* thereafter.
50·00	22nd November 1975	Term deposits of six months renewed from time to time. 22nd November 1975 to 23rd March 1977 (3½—7 *per cent*). In Government Account at 3½ *per cent* thereafter.
50·00	28th July 1976	Term deposit of six months renewed from time to time. 28th July 1976 to 28th July 1977 (6 *per cent*).
30·00	28th July 1976	Term deposit of six months renewed from time to time. 28th July 1976 to 28th July 1977 (6 *per cent*).

Amount of surplus cash (Rupees in lakhs)	Date of availability	Manner and period of investment and rate of interest (per annum)
30·00	28th July 1976	Term deposit of six months renewed from time to time. 28th July 1976 to 28th July 1977 (6 *per cent*).
1,00·00	16th April 1977	Deposited in Government Account at 3½ *per cent* up to January 1978.
60·00	17th May 1977	Deposited in Government Account at 3½ *per cent* up to February 1978.
12·00	31st March 1977	Deposited in Government Account at 3½ *per cent* up to June 1977 and renewed from time to time. 31st March 1977 to 28th February 1978.

APPENDIX IV

(Reference : Paragraph 8.4, page 126)

Summarised financial results of working of Statutory Corporations/Board on the basis of latest available accounts

(Rupees in lakhs)

Sl. No.	Name of the Corporation	Name of the Department	Date of incorporation	Year of accounts	Total capital invested	Profit(+) /Loss(—)	Total interest charged to profit and loss account	Interest on long term loans	Total return on capital invested (7+9)	Percentage of total return on capital invested	Capital employed	Total return on capital employed (7+8)	Percentage of return on capital employed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Orissa State Electricity Board.	Irrigation & power.	March 1961	1976-77	21,623·68	..	625·99	625·99	625·99	2·89	16,609·56	625·99	3·77
2	Orissa State Financial corporation.	Industries	March 1956	1976-77	..	(+)29·77	53·94	53·94	(+)83·71	..	1,051·26	83·71	8·00
3	Orissa State ware housing corporation.	Agriculture & co-operation	March 1958	1975-76	40·17	(+)4·42	..	..	(+)4·42	11·00	40·34	4·42	10·96
4	Orissa State Road Transport corporation.	Commerce and Transport	May 1974	1974-75	835·61	(—)57·90	45·73	45·73	(—)12·17	..	845·49	(—)12·17	..

NOTE—1. Capital invested represents paid up capital *plus* long-term loans *plus* free reserves.

2. In case of Orissa State Financial corporation, capital employed represents mean of aggregate of opening and closing balances of (i) paid-up capital, (ii) bonds and debentures, (iii) reserves, (iv) borrowings including refinance and (v) deposits.

3. In case of other statutory corporations, capital employed represents net fixed assets (excluding capital works-in-progress) *plus* working capital.