REPORT OF THE COMPTROLLER & AUDITOR GENERAL OF
INDIA : UNION GOVT. (COMMERCIAL) PART IX 1982

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REPORT OF THE

COMPTROLLER AND AUDITOR GENERAL OF INDIA

UNION GOVERNMENT (COMMERCIAL)

PART IX

1982

JESSOP & COMPANY LIMITED

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Page	Reference	*For*	*Read*
(1)	(2)	(3)	(4)
11	18th to 20th lines from top	, from time and May 1976 for construction, erection and commissioning of Company	, from time to time unsecured loans aggregating Rs. 100.77 crores to the Company
11	Total—Column(4)	2374.96	2374.95
15	12th line from top	Gvoernment	Government
15	22nd line from top	loan	loans
20	15th line from top	chanes	cranes
22	7th line from top	featues	features
24	Table 1975-76 Col. 2	63	663
36	Heading	Expansion Project	Expansion Projects.
39	19th line from top	accmulation	accumulation
49	2nd line from top	4 or	4 for
57	12th line from bottom	tender	tenders
61	Table 1980-81 Col. 2	19.15	19.62
68	Table Actual cost Col. 4	99.44	99.74
68	Table Estimated Cost Col. 2.	49.30	79.30
73	Table (item 4)	440	740
73	Total	Rs. 4545	Rs. 4575
	,,	Rs. 6114	Rs. 6117
81	Table—Total (a) + (b)—1978-79	692	962
81	,, item (f)	daiily	daily.
83	12th line from top	tune	time.
87	1st line from top	payments	hours
90	Table—Total 1977-78	8764.13	8864.13
93	2nd line from bottom (1979-80)	(—)10.17	(+)10.17
105	12th line from top	fire	the
118	2nd line from top	& Supports etc.	& Supports & Conveyor Handling Mechanism
118	2nd line from bottom	with	worth
121	2nd line from top—Col. 6	(Rs. 199)	(Rs. 119)
122	13th line from top—last col.	(Rs. 332)	(Rs. 342)
124	Add below the annexure Note : In respect of sale for 1979-80, there was price adjustment of (—) Rs. 61 lakhs, break up of which was not available.		
125	15th line from top—col. 6	(7.99)	(8.99)
	8D—4333		
125	21st line from top—col. 6	(12.83)	(12.23)
128	12th line from top—col. 6 item 7 (1975-76)	244	344
128	12th line from bottom—col. 8 item 9 (1981-82)	1341	1541.

REPORT OF THE

COMPTROLLER AND AUDITOR GENERAL OF INDIA

UNION GOVERNMENT (COMMERCIAL)

PART IX

1982

JESSOP & COMPANY LIMITED

TABLE OF CONTENTS

PREFATORY REMARKS

A reference is invited to paragraph 5 of the Prefatory Remarks in Part I of the Report of the Comptroller & Auditor General of India—Union Government (Commercial), 1982 whenein it was mentioned that the appraisal report of Jessop & Company Limited selected by Audit Board for comprehensive appraisal was under finalisation.

2. This Part contains results of the appraisal undertaken by the Audit Board of the working of the Jessop & Company Limited. In this case the Audit Board consisted of the following members :

(1) Shri P. P. Gangadharan, Chairman, Audit Board & Ex-officio Additional Deputy Comptroller and Auditor General (Commercial) from 1st March 1980.

(2) Shri P. P. Dhir, Chairman, Audit Board & Ex-officio Additional Deputy Comptroller & Auditor General (Commercial) from 1st February 1982 to 9th June 1982.

(3) Shri R. C. Suri, Chairman, Audit Board & Ex-officio Additional Deputy Comptroller & Auditor General (Commercial) with effect from 10th June 1982.

(4) Shri A. Ghosh, Accountant General—I, Bihar, Ranchi.

(5) Shri A. P. Sinha, Member, Audit Board & Ex-officio Director of Commercial Audit, Calcutta.

(6) Shri A. K. Khosla, Managing Director, The English Electric Company of India Limited, Pallavaram, Madras, Part-time Member.

(7) Shri J. Matthan, Part-time Member.

3. After consideration of the Report by the Audit Board at its meeting held on 23rd and 24th October 1981, the Report was issued to the Ministry of Industry (Department of Heavy Industry) on 21st August 1982 for acceptance of the facts and comments, if any. Replies of the Ministry were received in December 1982.

4. The meeting of the Audit Board with the representatives of the Ministry and the Company was held on 15th March 1983.

This Report was finalised by Audit Board after taking into account :

(a) the replies of the Ministry furnished in December 1982.

(b) the results of discussions held on 15th March 1983 with the representatives of the Ministry and the Company, and

(c) the additional information furnished by the Ministry in April 1983.

6. The Comptroller & Auditor General of India wishes to place on record his appreciation of the work done by the Audit Board and acknowledges with thanks the contribution, in particular, of the members who are not officers of the Indian Audit and Accounts Department.

1. Introduction

1.01 *Historical background*

Following investigations into the affairs of Jessop & Company Limited under Section 15 of the Industries (Development and Regulation) Act, 1951, Government took over the management of the Company under Section 18A of the said Act, initially for a period of three years with effect from 15th May 1958, subsequently extended from time to time upto 14th August 1969. In the meantime, with a view to acquiring a controlling interest in the Company, the Government of India purchased in August 1965, 11,23,300 ordinary shares of Rs. 10 each, which constituted 50.10 per cent of the total paid-up share capital of the Company. From 15th August 1969 the management of the Company was restored to the Board of Directors. However, by virtue of holding majority shares in the Company, the Government of India continued to control its affairs. In March 1973, the Government of India purchased 2000—5 per cent Cumulative Preference Shares of Rs. 100 each, thus raising its share holding to 51.04 per cent of the total paid-up share capital. Accordingly, the Company became a Government company with effect from 1st April 1973.

1.02 *Acquisition of controlling interest by Government*

With a view to acquiring a controlling interest in the Company, the Government approved on 6th June 1963, a proposal for purchase of the entire block of 11,23,300 equity shares of Rs. 10 each held by various firms and associates controlled by an industrialist. In pursuance of this decision, negotiations for the purchase of the shares were started with the industrialist and his associates.

An agreement was signed on 18th August 1965, in terms of which the sellers agreed to sell 11,23,300 fully paid ordinary shares of Rs. 10 each in the Company to the President of India. A supplemental agreement was also signed on 19th August 1965 in terms of which the parties concerned mutually agreed to refer the question relating to the price payable for the shares to the arbitration of Shri S. K. Das, retired Judge of the Supreme Court of India. The agreement stipulated that the price of the shares would be determined by the Arbitrator taking into consideration, *inter alia*, the value of tangible and intangible assets including investments, know-how, goodwill and profit potentiality of the Company and also all debts and claims of and liabilities due by the Company as on the date of the sale agreement and the fact that the said shares represent the controlling interest in the Company and all such other factors as appear to be relevant to the Arbitrator.

The supplemental agreement further provided, *inter alia*, that :

— the Arbitrator shall make and sign the Award within 9 months from the date of entering upon the reference. The Arbitrator may, from time to time, extend the time beyond the period of 9 months with the consent of both the parties;

— on making 'on account' payment within 10 days at the rate of Rs. 25 per share or the ruling market price on the date of the sale agreement, whichever was less, the ownership of the shares will pass on to the Buyer. The 'on account' payment by the Buyer to the Sellers shall be adjusted after the price of the said shares was determined by the Arbitrator.

As the closing market price of the shares of the Company on Calcutta Stock Exchange on the date of the sale agreement

(18th August 1965) was Rs. 25.62 per share, the total 'on account' payment of Rs. 2.81 crores for 11,23,300 ordinary shares at Rs. 25 per share was made to the respective shareholders in August 1965 and, consequently, the shares were transferred in the name of the President of India on 18th September 1965 and 21st September 1965. The net worth per share of the Company on 31st October 1965 was Rs. 30.84.

The Arbitrator entered upon his reference on 27th August 1965 and gave his Award on 21st April 1969. Under the Award, the price of 11,23,300 fully paid ordinary shares of the face value of Rs. 10 each was determined at Rs. 50 per share as on the date of the sale agreement.

The Award was accepted by the Government as according to the assessment made by Government's own Consultants it was considered not unreasonable. Accordingly, a sum of Rs. 2.81 crores, being the difference between the awarded price and 'on account' payment and a further sum of Rs. 70.06 lakhs being interest thereon for the period from August 1965 to May 1969 (at the rate of 1 per cent above the Reserve Bank rates from time to time) was paid to the sellers on 25th May 1969.

The arbitration award was actually given after 3 years and 8 months. The Government's share towards the remuneration and expenses of the Arbitrator, Counsels, Consulting Chartered Accountants, Consulting Engineers, etc. amounted to Rs. 21.32 lakhs upto 15th July 1969.

1.03 The working results of the Company from 1958 when its management was taken over by the Central Government till

31st March 1973 after which date it became a Government company are indicated below :—

Year ending October	*Capital employed	Production	Sales	Net Profit (+) Loss(—) after tax	Loan from Government of India	Income tax	Dividend (Percentage)
	(Rupees in lakhs)						
1958	276.98	596	651	(+)35	..	23	7
1959	369.68	648	659	(+)31	..	23	10
1960	488.44	908	908	(+)43	..	29	19
1961	530.13	1201	1201	(+)70	..	49	19
1962	628.39	1325	1282	(+)50	..	106	19
1963	709.47	1456	1472	(+)77	..	85	22
1964	790.53	1661	1671	(+)81	..	108	27
1965	935.63	1777	1785	(+)97	..	133	27
1966	1115.36	1625	1605	(+)95	..	117	27
1967	1233.06	1317	1291	(+)55	..	38	27
1968	1222.60	1158	1188	(—)85	..	..	1
1969	1304.71	1427	1402	(—)49	..	..	..
1970	1368.79	1074	1063	(—)225	..	..	..
1971	1287.19	814	809	(—)557	500	..	..
1-11-71 to 31-3-73	2099.86	2154	2138	(—)543	648	..	..

*Capital employed includes block-in-progress.

It will be seen from the above table, that the Company was earning profit upto the year 1967; the profit began to decline from 1965 and the Company began to sustain losses from 1968 onwards. The losses accumulated to Rs. 9.87 crores as on 1st April 1973 when it became a Government company.

The market value of the ordinary share of Rs. 10 each declined from Rs. 25.62 on 18th August 1965, the date of the sale agreement for acquiring shares to Rs. 3.47 on 3rd April 1973, *i.e.*, just after it became a Government Company.

1.04 Certain aspects of the working of the Company *viz.*, working results, overheads, employment and productivity and financial and management control were examined by the Committee on Public Undertakings in August 1981. The recommendations of the Committee are contained in its Twenty-ninth Report (Seventh Lok Sabha) 1981-82.

2. *Objectives*

The main objects of the Company as per its Memorandum of Association are :

— to carry on business of constructional engineers, mechanical engineers, iron founders, manufacturers of and dealers in bridges and steel frame buildings and steel and iron structures of all kinds, general engineers, tool makers, brass founders, metal workers, boiler makers, etc.

— to buy, sell, manufacture, repair, convert, alter, and deal in machinery, apparatus, implements, ores, metals, iron-stone, rolling stock and hardware, etc.

— to carry on any business relating to the winning and working of coal, metal and all other minerals, the production and working of metals, the production, manufacture and preparation of any other materials which may be usefully or conveniently combined with such business.

Consequent on the acceptance of the recommendations made by the Administrative Reforms Commission, the Ministry of Finance, Bureau of Public Enterprises in their office memorandum of 3rd November 1970 requested all the Ministries to initiate action to lay down the objectives and obligations, both financial and economic, of each public enterprise under their administrative control.

The objectives and obligations of the company in terms of the above office memodandum have not been laid down. The Ministry of Industry (Department of Heavy Industry) stated (December 1982) that the Company was taking steps to lay down the objectives as per office memorandum of the Bureau of Public Enterprises at the earliest.

In May 1978 the Ministry of Industry, while observing that the objects of the Company covered a wide field of areas often unrelated to each other, desired that the objectives should be reviewed in detail so as to determine a set of coherent objectives, which were in keeping with the nature of the manufacturing activities envisaged for the Company. Even though the Board of Directors of the Company also desired (July 1978) that a proposal in this regard be submitted to the Board for consideration, no action in this regard has been taken so far (February 1983).

3. Organisational Set-up and Delegation of Powers

3.01 *Organisational Set-up*

The overall control of the Company vests in the Board of Directors consisting of Chairman, Managing Director and other Directors (whose total number should not be less than three and exceed fifteen).

As on 31st March 1982, the Board of Directors consisted of a whole-time Chairman-*cum*-Managing Director, two whole-time Directors (Finance/Commercial) and five part-time Directors. The Director (Commercial) was appointed only with effect from 28th April 1978.

In October 1980, the Company engaged the Administrative Staff College of India, Hyderabad on a fee of Rs 0.99 lakh to develop a revised organisational structure of the company with the object of :

— stressing the concepts of accountability and profit consciousness;

— developing integrated responsibility centres at the middle management level; and

— facilitating the development of functional skills and specialisations in keeping with its contemporary needs.

The Administrative Staff College in its report of May 1981 made, *inter alia*, the following recommendations :

— Introduction and promotion of a process of participative decentralised management.

— Development of a second line of managers and their participation in the corporate decision making.

— Change over from the existing functionalised structure to a divisionalised organisation.

— Operation of the product groups as independent profit centres.

— Partial decentralisation of the functions of engineering.

— Entrustment of responsibility of high standards of product quality and professional excellency in engineering including research and development and value engineering to the chief engineer.

— Encouragement of concept of discipline oriented specialisation.

— Creation of Research and Development, Quality Assurance & Control and Value Engineering Departments.

— Decentralisation of the function of manufacturing.

The Board of Directors of the Company, before whom the matter was placed in September 1981 suggested that the reorganisation based on the recommendations, be attempted cautiously and with circumspection. The Board was, however, of the view that it was not appropriate at that time to change the existing structure especially at the corporate level. In respect of recommendation for formation of business groups below the Board level, the Board felt that the Chairman and Managing Director may proceed to adopt the same, if he was satisfied that this would lead to better organisational performance, provided there was no increase in manpower requirements or additional financial burden. No decision has been taken on the recommendations of the Consultants so far (February 1983).

On the organisational set-up of the Company, the Ministry of Industry (Department of Heavy Industry) stated (April 1983), *inter alia*, as follows :—

"The present organisational set-up of the Company is now under review to meet the future growth requirements of the Company. Steps are accordingly being taken to bring about necessary changes in the structure to make it more effective and result oriented. While making these changes, due care is taken to ensure that the authorities and responsibilities of the respective departments are clearly defined and there is no over lapping.

The entire structure of the Company is being reviewed in the light of the various comments and also the difficulties being faced and it is expected that the revised organisational structure will be finalised in the course of next few months."

3.02 *Delegation of Powers*

Article 104 of the Articles of Association of the Company lays down that the Board may, from time to time, entrust to and confer upon the Managing Director such of its powers as it may think fit. It was only in October 1981 that the Board of Directors approved the delegation of powers to the Chairman-cum-Managing Director.

In the delegation of powers approved by the Board of Directors to the Chairman-cum-Managing Director in October 1981 it was mentioned that the matters having substantial financial implications or concerning the financial policy of the Company, the Chairman-*cum*-Managing Director will exercise powers after consulting the Director (Finance), and that the Chairman-cum-Managing Director may at his discretion appoint ad hoc/standing committee with such powers as may be delegated for specific or general purchases, contracts, selection of personnel, etc.

The Bureau of Public Enterprises in their office memorandum of September 1970 had emphasised that the system of delegation of powers throughout the managerial hierarchy upto the lowest level of each enterprise should be reviewed on comprehensive basis in order to ensure that, at all levels, the centres of responsibilities corresponded exactly with the centres of power. No such exercise has been made by the Company. The Ministry stated (December 1982) that the delegation/sub-delegation of powers to subordinate authorities were being contemplated and would be formulated in the near future.

The Company has a whole-time Director (Finance) on its Board of Directors. Although there is no Financial Adviser designated as such, the functions of the Financial Adviser are performed by the Director (Finance). After accepting the recommendations of the Committee on Public Undertakings contained in its Fifteenth Report (4th Lok Sabha—April 1968), the Bureau of Public Enterprises had issued (May 1969) broad guidelines defining the main functions, responsibilities and powers of the financial heads of the public sector undertakings. The guidelines, inter alia, provided that the Board of Directors should lay down detailed powers and functions of the Financial Adviser, particularly in regard to matters which should be reserved :

(i) for concurrence of Financial Adviser ;

(ii) for consultation with the Financial Adviser ;

(iii) those on which the Financial Adviser need not be consulted.

The guidelines issued by the Bureau of Public Enterprises have not been acted upon so far (February 1983). The Management stated (March 1981) that the powers and functions of the Director (Finance) of the Company were regulated by service contract, Articles of Association and existing practices.

It may be mentioned that the Articles of Association of the Company and service contract do not lay down the powers and functions of the Director (Finance).

4. Capital Structure

4.01 *Capital Structure*

The authorised capital of the Company as on 31st March, 1982 was Rs. 35 crores divided into 1 lakh 5 per cent cumulative preference shares of Rs. 100 each and 340 lakh equity shares of Rs. 10 each. The paid-up capital as on that date was Rs. 25.99 crores comprising of 0.20 lakh cumulative preference shares (Rs. 0.20 crore) and 257.89 lakh equity shares (Rs. 25.79 crores).

The participation of the various parties in the share capital of the Company as on 31st March, 1982 was as under :—

(Rupees in lakhs)

Shareholders	Preference Shares	Equity Shares	Percentage to total paid-up capital
President of India	2.00	24,87.28*	95.8
Life Insurance Corporation of India .	11.96	43.17	2.1
Unit Trust of India.	0.68	1.43	0.1
Nationalised Banks.	0.30	2.09	0.1
Govrnment of West Bengal	..	0.10	..
Other Shareholders	5.06	44.87	1.9
	20.00	25,78.94	100.0

*Comprises purchase in August 1965 and subsequent issue of equity shares.

The Government of India have also advanced, from time and May 1976 for construction, erection and commissioning of Company for meeting cash losses, working capital requirement and capital expenditure out of which an amount of Rs. 59.16 crores was outstanding as on 31st March, 1982 as per details given below :—

(Rupees in lakhs)

Year	Loan received	Total loan at the end of the year	Loan converted into equity	Loan repaid	Balance outstanding
Upto 1973 .	1148.00				
1973-74 . .	797.00	1945.00	..	50.00	1895.00
1974-75 . .	1126.53	3021.53	..	..	3021.53
1975-76 . .	688.90	3710.43	1670.00	..	2040.43
1976-77 . .	250.00	2290.43	250.00	..	2040.43
1977-78 . .	647.37	2687.80	311.95	270.30	2105.55
1978-79 . .	826.46	2932.01	..	426.75	2505.26
1979-80 . .	1478.70	3983.96	143.00	426.79	3414.17
1980-81 . .	1770.79	5184.96	..	611.78	4573.18
1981-82 . .	1342.98	5916.16	..	..	5916.16
TOTAL . . .	10076.73		2374.96	1785.62	5916.16

Further break-up of the loans granted for various purposes is given below :—

(Rupees in lakhs)

Purpose of loan	Loan Advanced upto 31st March 1982	Loans converted into equity by Government	Loans repaid	Loan outstanding on 31st March 1982
Cash losses	2906.00	1670.00	50.00	1186.00
Working capital	5036.65	176.05	855.44	4005.16
Capital expenditure . . .	2134.08	528.90	880.18	725.00
Total	10076.73	2374.95	1785.62	5916.16

The Company defaulted in payment of interest on Government loan during 1977-78 and 1978-79 and as a result had to pay penal interest of Rs. 10.74 lakhs thereon.

The Company also obtained secured term loan from the Industrial Development Bank of India to the extent of Rs. 2.93 crores in June 1969 out of which an amount of Rs. 1.31 crores was outstanding as on 31st March 1982. The Company defaulted in timely repayment of principal and as a result is liable to pay penal interest of Rs. 1.32 lakhs.

In addition to unsecured loans given by the Government of India for meeting its working capital requirements, the Company also made cash credit arrangements upto a limit of Rs. 22.65 crores with the Nationalised Banks. An amount of Rs. 22.27 crores (secured Rs. 18.29 crores and unsecured Rs. 3.98 crores) was outstanding on this account as on 31st March 1982.

The debt equity ratio increased from 6.43 : 1 on 1st April 1973 to 14.52 : 1 on 31st March 1975 but decreased to 2.33 : 1 as on 31st March 1982, *inter alia*, owing to conversion of Government loans into equity.

4.02 *Restructuring of Capital*

By October 1971 accumulated losses of the Company aggregated to Rs. 4.53 crores, which wiped off the entire share capital of Rs. 2.24 crores and Reserves and Surplus of Rs. 0.58 crore. The Company approached the Government of India in 1972 for a suitable capital reorganisation. The Government of India, however, expressed the view that the appropriate time for capital reorganisation would be when the Company would attain break-even position and cease incurring losses. Having attained a temporary break-even position in 1974-75, the Company approached the Government in April 1975 with a proposal for its capital re-organisation on the basis of a Report prepared by a firm of Chartered Accountants. The proposal envisaged conversion of the entire amount of Government loans into equity and reduction in share capital, including preference share capital, to the extent of accumulated losses. The idea behind the proposal was to establish an appropriate debt-equity ratio, to ensure that the paid-up capital was fully represented by tangible assets and to improve the profitability of the Company.

In March 1976, Government approved the following measures to restructure the capital of the Company :—

— Conversion of Government loans of Rs. 16.70 crores (as against Rs. 17.06 crores which represented the total accumulated cash losses upto 31st March 1975) into equity with effect from 1st April 1975;

— Moratorium on payment of interest and repayment of principal upto 31st March 1977 on the balance amount of loan of Rs. 13.51 crores ;

— Rescheduling of the payment of the balance amount of loan of Rs. 13.51 crores and interest thereon over a period of five years after the period of moratorium was over.

These measures, however, failed to achieve the desired objective as, in the absence of internal generation of resources, the Company continued to encounter difficulties in meeting with the increased requirements of working capital as well as in making payment of interest charges and repayment of Government loans on the expiry of the aforesaid moratorium on 31st March 1977. The accumulated losses of the Company amounted to Rs. 17.51 crores upto 31st March 1978 and increased to Rs. 55.03 crores as on 31st March 1982.

In view of its continuing financial difficulties, the Company again approached Government in September 1978, with a new capital reorganisation scheme, the broad features of which were :

(i) Conversion of Government loans of Rs. 21.06 crores into equity to ensure a debt equity ratio of 1:1.

(ii) Retention of liability of interest on Government loans aggregating Rs. 4.35 crores in the form of loans on a permanent basis carrying usual interest charges as margin money towards working capital.

(iii) Reduction of paid-up capital to the extent of accumulated losses of Rs. 18.87 crores.

(iv) Purchase of shares held by other shareholders at some reasonable price by Government to make it a wholly owned Government company.

The Government intimated (September 1981) that the above proposals were not accepted on the grounds that the last capital re-organisation having been effected only three years earlier, the Company's working needed to be watched for some time more and the report of the consultants (Messrs Batliboi & Company) who had been appointed in June 1981 by the Company for drawing a capital re-organisation scheme for the Company was awaited.

A viability plan submitted by the Company to the Government in June 1981 contained the proposals for the reimbursement of the difference between cash-losses suffered by the Company and non-plan support given by the Government, reimbursement of cash-loss of Rs. 399 lakhs expected to be incurred in 1981-82, financial assistance for further modernisation and rehabilitation of the plant and equipment involving a capital outlay of Rs. 4.97 crores and capital restructuring to achieve a proper debt equity ratio.

As per this viability plan the Company was expected to break-even in 1982-83 before charging depreciation and interest on Gvoernment loans, at a production level of Rs. 62.84 crores.

The consultants (M/s. Batliboi and Company) in their report on the capital reorganisation scheme submitted in October 1981 made, inter alia, the following recommendations :

(i) Moratorium on repayment of loans from Government upto 31st March 1981 for a period of 5 years starting from the date of implementation of the scheme.

(ii) Interest holiday on all the existing loans from Government as on 31st March 1981 as well as on all future loan to be received by the Company for a period of 5 years, starting from the date of implementation of the scheme.

(iii) All future funds received from Government after implementation of the scheme to be in the form of equity and loan in the ratio of 1 : 1.

The consultants also pointed out that the Company could earn cash profits from 1983-84 provided the capital reorganisation scheme was implemented and the projected production achieved in a phased manner indicated in their report.

The Board of Directors considered the recommendations of the consultants in October 1981 and recommended that the Government may be requested for the approval to the moratorium on repayment of loans for 5 years from April 1981 and interest holiday on all existing loans from Government as on 31st March 1981 and on all future loans to the company for a period of 5 years. The proposal was sent to the Government in December 1981.

In July 1982, on the basis of recommendations of the Expert Committee on the Public Enterprises, the Government decided to grant the following financial reliefs to the Company in order to achieve break-even in 1982-83 and making profits thereafter.

(i) Waiver of recovery of interest on Government loans amounting to Rs. 45.73 crores outstanding as on 31st March 1981 with effect from 1st April 1981 to 31st March 1985.

(ii) Financing of cash losses incurred by the Company during 1981-82 through a non-plan Government loan and waiver of interest thereon till 31st March 1985.

(iii) Moratorium on repayment of instalments of above mentioned loans till 31st March 1985.

The above financial reliefs were granted subject to the condition that the revised projections of production and profitability furnished by the Company, as indicated below, were achieved :

(Rupees in crores)

	1982-83	1983-84	1984-85
Output	55.34	65.24	72.00
Operating results (Profit) . . .	0.10	0.62	3.48

5. Rehabilitation and Replacement Programme

As the existing facilities at Company's works at Dum Dum built up gradually since inception had not been properly planned and replaced, a large number of plant and equipment had become un-productive and obsolete. In order to maintain the planned growth of the Company, it was considered necessary not only to replace all these machines with modern and more production equipment but also to provide the Company with some additional heavy duty equipment in view of the changing pattern of its products in recent years. Accordingly, on the basis of a study carried out in respect of the existing plant and equipment, the Management prepared (July 1975) a project report on Capital Expenditure for Rehabilitation Programme 1974—79. The Report envisaged replacement of 228 inefficient, un-economic and obsolete machines by 220 new machines in addition to procurement of 24 new machines as balancing facilities, involving a total capital expenditure of Rs. 517.63 lakhs (foreign exchange component—Rs. 158.80 lakhs). The report also envisaged that the expenditure was liekly to increase to Rs. 694.46 lakhs (foreign exchange-component—Rs. 221.48 lakhs) owing to inflationary trend. This was approved by the Board of Directors and sent to Government in July 1975. Government's approval to the proposal at an estimated cost of Rs. 485 lakhs (foreign exchange component—Rs. 154.80 lakhs) was received in April 1977; pending formal sanction, the Government had approved an expenditure of Rs. 126.53 lakhs on the scheme during 1974-75 and 1976-77.

On account of additions of new products to the Company's product range and technological advancement that had taken place in the field of machine tools, modifications were made in the plant and equipment procured/to be procured from that originally planned. Accordingly, a revised list of equipment was approved by the Board of Directors in July 1981 at a revised estimated cost of Rs. 571.49 lakhs (foreign exchange component—Rs. 158.80 lakhs). The revised estimate was approved by Government in November 1981.

The year-wise details of capital expenditure under the Rehabilitation Programme during 1974-75 to 1981-82 are indicated below :—

(Rupees in lakhs)

Year	Amount of capital expenditure as sanctioned by the Government (April 1977)	Amount of loan received by the Company from Government	Amount of expenditure incurred
1974-75	76.53	76.53	76.53
1975-76	Nil	Nil	43.34
1976-77	50.00	50.00	131.11
1977-78	100.00	100.00	
1978-79	258.47	100.00	94.67
1979-80	Nil	100.00	33.12
1980-81	Nil	18.00	34.63
1981-82	Nil	40.47	46.60
TOTAL	485.00	485.00	460.00

The table below indicates the planned vis-a-vis actual year-wise procurement/installation of the equipment :—

Year	Planned (Number)	Actual (Number installed)
1974-75	29	21
1975-76	101	7
1976-77	60	83
1977-78	44	47
1978-79	10	16
1979-80	Nil	32
1980-81	..	21
1981-82	..	4
TOTAL	244	231

The Rehabilitation Programme which was scheduled to be completed in 1978-79 is now expected to be completed by 1982-83 after a delay of about 4 years.

The scheme on completion was expected to result in a net increase in value of production and gross surplus (prior to depreciation and interest) of Rs. 183.70 lakhs and Rs. 149.68 lakhs respectively. The extent of benefits actually derived from the implementation of the scheme have not been assessed by the Company. The value of production in different years from 1974-75 onwards is, however, indicated below :

Year	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Value of Production (Rs. in crores)	39.88	43.40	41.10	43.77	28.42	37.86	38.32	44.51

The Ministry stated (December 1982), *inter alia*, as follows :

(i) Full benefits of the Rehabilitation Scheme could not be reaped by the Company owing to various constraints shortage of power affecting supplies from ancillaries, availability of matching materials in time, low productivity of labour, financial constraints in regard to working capital, etc.

(ii) Since production was dependent on various extraneous factors, it was not possible to identify and quantify the benefits arising out of this scheme.

(iii) The Company has submitted (September 1981) another scheme for further modernisation and rehabilitation of the plant, equipments and service facilities involving a capital outlay of Rs. 4.57 crores which was under implementation with the approval of Government.

(iv) The Company has set a target of production of Rs. 55 crores in 1982-83.

6. Diversification

6.01 *Introduction*

The traditional activities of the Company comprise manufacture of cranes, sluice gate, road rollers, metre gauge coaches, railway wagons, structural and other engineering items, etc.

With a view to absorbing surplus man-power (estimated at about 2000 workers) and freeing itself from its total dependence on conventional product lines, the Company embarked upon a programme of diversifying its range of products and for this purpose it entered into 17 collaboration agreements with foreign firms during the period from 1972 to 1979. The salient features of these collaboration agreements are detailed in Annexure I.

The Company progressively diversified its activities to the manufacture of paper making machinery, steel works duty chanes, crawler tractors, hydraulic circular saw machines, aerial ropeways, ship's deck cranes, vibratory road rollers, shuttle dumpers, etc. The products covered under these collaboration agreements can be broadly divided into the following groups :—

(a) Manufacturing activities in totally new fields of technology requiring complete know-how and substantial additional manufacturing facilities. The only product under this group is paper making machinery.

(b) Manufacturing activities involving new technology but requiring minor capital investment in the form of balancing equipment. The products under this group are crawler tractors, dump trucks, mobile cranes, powered roof supports and aerial ropeways.

(c) Induction of improved design and technology in keeping with the modern developments into the Company's existing product range *viz.*, hydraulic circular saw machines, saw blade sharpening machines, vibratory road rollers and ship deck cranes.

(d) Products which form ancillaries or attachment to one of the major products of the Company *viz.*, gear couplings, grabs, special material handling equipments, doctor equipment for paper making machinery.

The diversification programme was completed by 1978-79 with an additional investment of Rs. 9.55 crores.

The Company had not prepared any feasibility reports backed by advance market surveys in respect of any of the diversification schemes except for the paper making machinery project.

The Management stated (March 1981) that (i) all proposals for diversification and collaboration had been approved by the Board; (ii) no separate project/feasibility reports were prepared as per practice prevailing at that time for schemes which did not involve major capital investment; and (iii) information available with the Company, estimates based on plans of Government Departments, etc. were utilised for projecting demand. The Management further stated (December 1981) as follows :—

— Demand analysis was required for products coming under groups (a) and (b) only, and for groups (c) and (d), the Company was hopeful of tapping the existing market.

— With regard to technical infrastructure, the Company had to depend on the transfer of technical know-how from foreign collaborators and imparting training to its own Officers. As regards the existing products in which the technical knowledge was already available within the Company it was only a question of adoption with regard to areas where it called for improved techniques.

— Paper machinery, being absolutely a new product line, the Company had to depend on finance available from the Government. For other schemes also, finance was obtained from Government for balancing equipment under the Rehabilitation Scheme.

A review of some of the diversification schemes indicated the following featues :—

6.02 *Paper Machinery Project*

(a) In February 1972, Government of India granted licence to the Company to manufacture pulp and paper making machinery in collaboration with a firm of U.S.A. Under the agreement entered into on 22nd November 1972 with the firm, valid for a period of 10 years, the Company was required to pay the firm U.S. $ 6,00,000 in three instalments in a period of 2 years of the agreement for supply of technical know-how for the project. In addition, technical assistance fee at 2½ per cent of the net sale price and royalty at 2½ per cent of net ex-factory selling price less landed cost of imported components, were also payable to the collaborators.

The Feasibility Report of the Project, prepared in April 1974 by the National Industrial Development Corporation Limited, at the instance of the Company, envisaged the following :—

(a) The Project with an annual capacity to manufacture 2 machines each of upto 200 tonnes per day capacity would be an economically viable and technically feasible unit.

(b) Full rated production to be achieved in the third year of production.

(c) Sales earning of Rs. 300.00 lakhs and Rs. 725.00 lakhs in the first and second years respectively and of Rs. 1500 lakhs per annum at the rated capacity level from the third year onwards.

(d) The break-even point at 60 per cent of the rated capacity (*i.e.* Rs. 900 lakhs).

(e) The project to be completed within a period of 2½ years from the date of firm decision for implementation of the project at a cost of Rs. 827.96 lakhs (excluding margin money of Rs. 160 lakhs).

As against the estimated capital cost of Rs. 827.96 lakhs (foreign exchange component—Rs. 216.50 lakhs), Government approved a total capital outlay of Rs. 574.39 lakhs (foreign exchange component—Rs. 214.24 lakhs) in July 1976 and released loans to this extent from time to time upto 1977-78. The actual expenditure incurred during the period from 1974-75 to 1978-79 amounted to Rs. 607.38 lakhs (foreign exchange content—Rs. 160.98 lakhs); the excess expenditure of Rs. 32.99 lakhs over the sanctioned outlay was regularised by the Government in January 1980 by way of loans.

The firm decision to implement the project was taken immediately after receipt of government's approval to the agreement in January 1973. Accordingly, in terms of the feasibility report, the project should have been completed within a period of 2½ years *i.e.* by July 1975 whereas it was actually completed in 1978-79.

While production of certain parts of paper machinery was started from the third quarter of 1974 by using existing facilities in the shops, the paper machinery works became operative from April 1976. The full installed capacity could be established only in 1978-79. Technical know-how fee amounting to Rs. 50.78 lakhs was paid by 1975-76.

Delay in implementation of the project was attributed by the Management (March 1981) to :—

(i) non-availability of Government loans at the time earlier envisaged ; and

(ii) modification in the installed/production capacity due to cut-back in the capital investment envisaged.

(b) The installed capacity, actual production, sales earnings and working results since 1976-77 *i.e.* the 3rd year of production, are indicated in the table below :

Year	Installed capacity (Rs. in lakhs)	Production (Rs. in lakhs)	Sales (Rs. in lakhs)	Percentage of actual production to installed capacity	Profit(+) Loss (—) (Rs. in lakhs)
1976-77 . .	(Partly installed)	254.00	254.00	..	(+)54.73
1977-78 . .	-do-	395.00	395.00	..	(—)43.00
1978-79 . .	1800.00	590.00	502.00	27.9	(+)6.32
1979-80 . .	1800.00	856.00	927.00	51.5	(—)30.74
1980-81 . .	1800.00	705.00	641.00	35.6	(—)58.66
1981-82 . .	1800.00	523.00	602.00	33.4	(—)20.41

NOTES : (*i*) According to the Management the rated production capacity is Rs. 1500 lakhs.

(*ii*) The installed capacity has been worked out at 1975-76 price level. According to the Management the installed capacity at 1979-80 price level would work out to Rs. 2428.00 lakhs.

(*iii*) The year-wise quantitative data was not maintained by the Company.

(c) The following table indicates the orders received, orders executed and orders pending execution during 1974-75 to 1981-82.

(Rs. in lakhs)

Year	Opening balance	Orders received during the year	Total orders	Orders executed	Orders pending execution
1974-75 . .	862	44	906	243	663
1975-76 . .	663	604	1267	381	886
1976-77 . .	886	57	943	254	689
1977-78 . .	689	2592	3281	363	2918
1978-79 . .	2918	22	2940	562	2378
1979-80 . .	2378	166	2544	849	1695
1980-81 . .	1695	480	2175	705	1470
1981-82 . .	1470	71	1541	498	1043

NOTE : The yearwise quantitative data was not maintained by the Company.

In this connection the following points deserve mention :

(i) As against the projected gross operating surplus of Rs. 297.70 lakhs per annum from the 3rd year of production, the project earned a profit of Rs. 54.73 lakhs in 1976-77 and Rs. 6.23 lakhs in 1978-79 and incurred losses of Rs. 43.00 lakhs in 1977-78, Rs. 30.74 lakhs in 1979-80, Rs. 58.66 lakhs in 1980-81 and Rs. 20.41 lakhs in 1981-82.

(ii) Production and sales were far below the rated/ installed capacity.

(iii) Not only the order position was not satisfactory, there were also delays in execution of the orders received.

The Management attributed (March 1981) the non-receipt of major orders to the policy of permitting import of second hand paper making machines as well as news-print machines.

Non-execution as well as delay in execution of orders was attributed (December 1981) by the Management to the following reasons :

— Lack of experience in performing the specialised nature of work.

— Longer lead time in eatablishment of reliable sub-suppliers for components, etc. of highly specialised nature.

— Delay in the opening of Letters of credit for overseas supplies owing to tight situation in regard to availability of working capital.

(iv) The total outgo of foreign exchange in the shape of lump sum fee, royalty and cost of imported materials amounted to Rs. 11.81 crores during 1971—73 to 1981-82.

The Ministry stated (December 1982) as follows :

> "One of the major reasons for non-achievement of rated capacity is the fact that the growth of paper industry in India has not come up as envisaged in the project. In the project report it was envisaged that two units of 200 TPD capacity machines will be manufactured by Jessop & Company Ltd. every year. After the order received from Hindustan Paper Corporation for supply of plant and equipment for their Nagaland, Nowgong, and Cachar projects, no major manufacturing unit has come up in the country. Further in some cases, Government has allowed import of equipment which has affected the order position of the Company."

6.03 *Aerial Ropeway*

The Company secured four orders between March 1972 and May 1976 for construction, erection and commissioning of aerial ropeways under the collaboration agreements entered into with the four foreign parties referred to in Annexure I. The details of these orders indicating, *inter alia*, the contract value, estimated *vis-a-vis* actual cost incurred are contained in Annexure II.

The following points in this regard are of interest :—

(i) The Company has incurred a net loss of Rs. 143.79 lakhs upto 31st March, 1982 on the execution of these 4 orders.

(ii) In two orders (aerial ropeways for Rajban Cement Factory and Bokaro Steel Plant, the information in respect of which was available) the Company incurred a loss of Rs. 265.38 lakhs as against an anticipated profit of Rs. 47.21 lakhs.

In both the cases referred to above, the actual expenditure on material, labour and overhead was far in excess of the estimates. In the case of Bokaro Steel Plant, the Company could not recover even the material cost.

(iii) There were delays in installation of ropeways ranging from over 1 year to over 4 years.

(iv) The reasons which contributed to the heavy loss in the case of Bokaro Steel Plant were, *inter alia*, manufacture of extra protection bridges and long cradle guards, erection of suspension bridge over river Damodar not envisaged at the time of framing estimates and rivetted connections in place of bolted connections.

6.04 *Performance of other Diversification Schemes*

The performance of other diversification schemes upto 31st March 1982 is detailed in Annexure III. In this connection the following points deserve mention :—

(i) In the case of most of the products, not only were the orders received far below the production envisaged in various collaboration agreements, the orders received were also not fully executed.

(ii) As against the projected production of Rs. 102.48 crores envisaged in the collaboration agreements, orders of the value of Rs. 42.25 crores only were received during the years 1973-74 to 1981-82. Orders of the value of Rs. 21.49 crores only were executed during this period. As against the total value of orders executed to the extent of Rs. 21.49 crores, the total outgo of foreign exchange amounted to Rs. 8.92 crores of which imported materials (excluding steel the value of which could not be furnished by the Management) accounted for Rs. 7.27 crores.

(iii) Components valuing Rs. 64.50 lakhs were imported during 1973-74 to 1975-76 for Hanomag Jessop Crawler Loaders and Hanomag Diesel Engines. Out of these, components valuing Rs. 25.42 lakhs only were utilised (Rs. 22.67 lakhs in 1979-80 and Rs. 2.75 lakhs in 1981-82), leaving components valuing Rs. 39.08 lakhs unutilised till 31st March 1982, resulting in blocking of capital for various periods ranging from 3 to 6 years with consequential loss of interest.

The Management attributed (December 1981) non-utilisation of imported components to lower sales especially of crawler tractors, than expected. The Management further stated that from the present trend it appeared that sale was picking up and that the stock of imported components would be utilised in full.

In regard to the collaboration agreements entered into by the Company with the various foreign parties, the Ministry stated (April 1983), *inter alia,* as follows :

— The collaboration agreements helped the Company for better utilisation of the capacities of the different shops.

— These agreements have helped the Company to indigenise the sophisticated high technology products thereby reducing dependence on imports and also to utilise the existing capacities of the Company in a better way.

6.05 *Research and Development*

Although wide range of diversification activities had been undertaken by the Company with the technical know-how obtained from foreign collaborators since 1972, a Research and Development Wing for development of hydraulics and absorption of technology and phased indigenisation of components received from foreign collaborators was formed in November 1980 only.

A feasibility report for setting up a Research and Development section with a view to speeding up technology absorption and indigenisation of know-how being transferred through various collaboration agreements was submitted to Government in October 1981. The project envisaged a capital expenditure of Rs. 20 lakhs, which was sanctioned by Government in November 1981. The implementation of the project commenced from January 1982 and was expected to be completed by March 1984.

The Ministry stated (December 1982) that the Company has design wings dealing with each product who are engaged in absorbing the technology provided by collaborators and that there was continuous absorption of technology of collaborators.

7. PERFORMANCE APPRAISAL

7.01 *Production Capacity*

The rated and attainable production capacity of various products of the Company has not been fixed on the basis of any analysis; while the production capacity of traditional items was fixed on the basis of maximum production achieved in the past, that of new items was based on the licenced capacity. The capacities fixed, therefore, did not represent either the production capacity of each individual production centre/shop or of the Company as a whole.

The Management stated (March 1981/March 1982) as under :

— The production capacity was known to the technical managers as and when the various plant and equipment were installed and commissioned in the works for production over a period of time............ In setting targets of production the experience with regard to the limiting factors affecting the production capacity of the machines is usually taken cognisance of. The process of formally fixing the capacity was first drawn in the year 1974-75 to satisfy statutory requirement for publication in the balance sheet.

— The capacities were attainable depending upon product mix of orders being executed.

In the absence of a scientific assessment of the production capacity, a realistic assessment of the capacity utilisation of the individual shops or production centres with reference to product-mix is not possible.

The Ministry stated (April 1983) as follows :—

"..................As the Company is still in the process of changing its product-mix, it will take some more time to assess the capacity of the various works on a scientific basis. Preliminary work in this regard has already been taken up."

7.02 *Production Planning*

In March 1969 the Bureau of Public Enterprises issued guidelines to the public undertakings to examining their existing production Control Organisation in the light of guidelines with a view to improving the same. It was also desired that planning and action phase, particularly process planning, material and tool control organisation should normally have an Industrial Engineering section attached to it dealing with improvement of methods.

The Company had not identified the department which would be responsible for preparation of the overall annual production programme, planning and control. This work was under the direct supervision of the Chairman-*cum*-Managing Director upto 1977-78 and thereafter a Central Planning Department under the Manager, Central Services was created for this purpose. The production programme of the Company for the years 1980-81 and 1981-82 was drawn up by the Manager, Management Services and for 1982-83 by the General Manager, Engineering. The details of the production planning carried out during 1978-79 and 1979-80 were not made available to Audit in the absence of which the effectiveness, adequacy or otherwise of the same could not be determined.

From 1980-81 onwards a draft production programme is prepared in consultation with the Commercial Department. The draft plan is then discussed with the Central Planning, Works Managers and Planning Officers of the respective Planning Cells and the programme for the year is then finalised by the Manager, Management services/General Manager, Engineering. Reasons for revisions in the draft programme are not recorded. On the basis of annual programme, monthly programmes (order-wise/ sub-order-wise) are drawn up and circulated to all departments. Based on this programme, works planning department draws up plans for individual shops/sections. Monthly Progress Review Meetings are held and programmes are changed and re-scheduled, if necessary. In this connection, the following observations are made.

(i) There is no proper written system of feed back of the information regarding actual loads in relation to planned loads to the Central Planning in respect of all shops/production-centres to ensure re-allocation of future loads well in advance for effective utilisation of idle capacity of shops.

(ii) Separate loading charts are maintained for critical high value machines only.

(iii) In the absence of time and motion study, while projecting sequence of operations, the time to be taken for each sequence is not estimated in terms of man-hours, but is done on an *ad hoc* basis.

(iv) Material procurement lacked proper linking with production planning.

7.03 *Operational Efficiency*

The following points are of interest :—

(i) Neither norms were laid down in respect of rejections at various processes/stages of manufacture/fabrication of different products nor were any records maintained showing the actual rejections by the Company in respect of the works undertaken at the Dum Dum Factory. Records for rejections in the Cast Iron Foundry were, however, maintained.

The Management stated (December 1981) as follows :—

"The norm of consumption of materials for tailor made jobs according to the consumers' requirements is set by the Drawing Office, which varies from job to job depending on the intricacies of work involved. These norms are counter checked only after the job is completed. As most of the tailor-made jobs are of long cycle nature, taking into account of rejections at every stage of operation is not feasible, specially in view of the fact that the existing system does not cater for component batch costing. This type of costing which will need complete overhaul and reorganisation with the introduction of EDP and gearing up of productive departments involved in material flow line is currently under review."

(ii) Norms of labour efficiency based on any scientific study were also not determined.

(iii) No records were maintained showing the cause-wise details of idle labour hours for each job.

(iv) Similarly, neither log-books indicating utilisation of individual machines nor any records showing the extent of idle machine hours together with the reasons therefor were maintained.

Though the above aspects were brought to the notice of the Board of Directors in December 1977, it was only in March 1981 that instructions for maintenance of records of idle time of labour and machines were issued to the works managers. According to the Management (March 1982) these instructions could not be implemented due to resistance from the workers.

7.04 *Overall Performance*

The targets of production for individual products were fixed by the Company every year. The targets of production were valued at the sale price of individual products at the time the targets were fixed; the actual production was valued at the sale price at the end of the year.

A comparison of actual production of the major products with the installed capacity and budgeted production given in Annexure IV would indicate that the actual production during the period 1973-74 to 1981-82 was generally far below the installed capacity of the individual products except in case of road rollers (in 1973-74) and cranes (in 1976-77 and 1977-78 when it was more than the capacity). In a number of cases even the targets of production, which were fixed at a level lower than the installed capacity, could not be achieved.

According to the Management, the following reasons were attributable to the shortfall in production.

1973-74

— Acute power shortage.

1974-75

— Restriction in the manufacture of EMU and Metre Gauge coaches on the request of Railway Board due to difficulty in their financial resources.

— Cut-back in expenditure for road building affecting utilisation of capacity in the road roller works.

— Delay in receipt of free supply items of wheel sets and axle boxes from the Railways.

— Working capital shortage.

1975-76

— Lack of demand for road rollers.

— Working capital shortage.

1977-78

— Unscheduled, frequent and prolonged power cuts throughout the year.

— Lack of adequate orders to match the overall total production capacity.

1978-79

— Power crisis.

— Shortage of steel.

— Lack of matching materials.

— Imbalance in order book position.

— General shortage of working capital.

1979-80

— Shortage of power supply.

— Shortage of steel.

— Lack of matching materials.

— Imbalance in order book position resulting in lack of work in certain workshops.

— General low productivity.

— Insufficient working capital.

1980-81

— Difficulty in obtaining steel materials.

— Acute power shortage which affected supplies from ancillaries/small-scale industries.

— Lack of matching materials.

— General low productivity.

— Imbalance in order book position for some of the products.

— General shortage of working capital.

1981-82

— Lack of matching materials particularly certain sections of steel.

— General low productivity.

— Acute power shortage affecting supplies from ancillaries/small scale industries.

— General shortage of working capital.

7.05 *Loss of Production*

The Company had not analysed the loss of production (in quantity and value) due to various reasons mentioned in the preceding paragraph. However, on an enquiry from Audit, the following information regarding loss due to shortfall in production for the years 1978-79 to 1981-82, was furnished by the Management in December 1981/March 1983 :—

(Rupees in lakhs)

Reasons	Loss			
	1978-79	1979-80	1980-81	1981-82
(a) Power shortage . .	300	550	291	117
(b) Raw Materials shortage	150	250	522	356
(c) Others including shortage of working capital .	Not available	Not available	219	305
TOTAL	450	800	1032	778

It will be seen from above that the Company suffered a loss of production to the extent of over Rs. 30.60 crores during the years 1978-79 to 1981-82 alone on account of various reasons.

7.06 *Expansion Project*

(i) *Steel works duty crane project*

Considering the market potential, past experience of the Company in crane manufacturing line, availability of know-how from foreign collaborator and in order to utilise the existing capacity of machine shop and manpower, the Company engaged (November 1971) the National Industrial Development Corporation Limited, New Delhi, as Consultants for preparing a techno-economic feasibility report for the manufacture of Steel Works Duty Cranes (SWDC) which were hitherto being imported. The salient features of the report submitted by the Consultants in January 1972 were :—

— The manufacture of different types of cranes with a capital investment of Rs. 320 lakhs (foreign exchange component—Rs. 107.14 lakhs) to be financed by raising long term loans.

— The production facility to be established within 18 months from the date of firm decision to go ahead with the project.

— As against the estimated cost of production of Rs. 394 lakhs in the third year of production, the sale value of the full rated production was estimated at Rs. 447 lakhs.

— The total gross return (after providing for depreciation, amortisation of project cost, interest) from the project was estimated as Rs. 746.69 lakhs for the first 10 years of expansion.

— The break-even point to be reached at 66 per cent of the rated capacity.

The project was approved by Government in January 1973 at a capital cost of Rs. 320 lakhs (foreign exchange—Rs. 107.14 lakhs). The capital cost was revised to Rs. 381 lakhs (foreign exchange—Rs. 139.85 lakhs) in July 1974 due to increase in cost of plant and equipment, building material and labour charges, etc. The revised cost was approved by the Government in October 1975. The project was financed by long term Government loans sanctioned between 1972-73 to 1975-76. The project was completed at a cost of Rs. 395.21 lakhs (including foreign exchange amounting to Rs. 68.69 lakhs) in March 1976 as against the scheduled completion in July 1975. The delay in completion of the project was attributed by the Management (December 1981) to longer delivery period for some of the imported machine tools.

The actual production of S.W.D. cranes during the years 1975-76 to 1981-82 is given below :—

	Production envisaged as per Project Report			Actual production		
	Numbers	Tonnes	Value (Sales) Rs. in lakhs	Numbers	Tonnes	Value (Sales) Rs. in lakhs
1975-76 (1st year) .	3	590	140.50	4	Not available	209.74
1976-77 (2nd year) .	4	1120	274.40	6	-do-	395.53
1977-78 (3rd year) .	6	1800	447.00	1	-do-	115.40
1978-79 (4th year) .				10	-do-	924.00
1979-80 (5th year) .				5	-do-	129.00
1980-81 (6th year) .				17	-do-	339.27
1981-82 (7th year) .				14	-do-	310.75
				57		2423.69

The Company produced 11 S.W.D. cranes during 1975-76 to 1977-78 as against 13 cranes contemplated in the project report. No projections were made in the project Report beyond 1977-78. Again, yearly targets for production of these cranes were also not fixed.

(ii) Road Rollers

In view of the anticipated increase during the year 1972-73 in the demand of road rollers indicated by the various Government agencies, the Company decided in 1972 to step up the production capacity from 600 to 1200 road rollers per annum and applied (August 1972) to Government for grant of industrial licence. A letter of intent was granted by Government to the Company in December 1972. Government granted the industrial licence with the condition that the expansion should be completed and commercial production established within a period of two years from the date of issue of the licence. Pending formal approval of Government, the project was taken up for execution during 1973. The expansion programme envisaged a total expenditure of Rs. 146 lakhs (foreign exchange : Rs. 35.8 lakhs).

The project was formally sanctioned by Government in June 1975. The entire project cost was sanctioned by Government in the form of loans of Rs. 103 lakhs in 1974-75 and Rs. 43 lakhs in July 1975. The project was completed in the 3rd quarter of 1975 at a total cost of Rs. 149.40 lakhs (foreign exchange : Rs. 37.96 lakhs).

The actual utilisation of installed capacity for road rollers for the years 1973-74 to 1981-82 as indicated in Annexure IV would indicate that there was a drop in production in 1975-76 and onwards in comparison to 1973-74 and 1974-75 to such a low level that even the initial installed capacity was not achieved. Thus, the expenditure of over Rs. 1.49 crores incurred on the expansion project did not prove remunerative.

There was also huge unsold stock to the extent of 356 road rollers (value : Rs. 4.98 crores) as on 31st October, 1975. In order to overcome the ways and means difficulties arising from such accumulation, the Company obtained a temporary bridging loan from the State Bank of India in January 1976 to the extent of Rs. 2 crores on which interest amounting to Rs. 21.64 lakhs was paid upto March 1977. The unsold stock of road rollers as on 31st March, 1982 was 43 valued at Rs. 80.22 lakhs.

In this connection the Ministry stated (December 1982) as follows :—

> "With a view to meeting increased demand for road rollers the company undertook expansion of its road roller works with Government approval. Due to certain cutback in expenditure for road building, the demand for road rollers had dropped considerably which could not be foreseen earlier. The absence of orders resulting from drop in demand has been responsible for accmulation of unsold finished stock of road rollers blocking a substantial amount of capital. Further with the increase in the number of competitors our share in the market has gone down."

7.07 Structurals

The Company is equipped to engineer bridges, industrial buildings, sluice and crest gates, caisson gates and other similar hydraulic structures, pressed steel water tanks, etc. Actual and estimated cost of major structural jobs undertaken between 1974-75 and 1979-80 (with cost booked upto 30th September, 1981) is shown in Annexure V. It will be seen therefrom that in almost all the cases, the actual expenditure was far more than the estimated expenditure as well as sales value. Over the last nine years ending on 31st March, 1982 the Company incurred a total loss of Rs. 1,376.02 lakhs in the manufacture of gates and other structural items.

The Management attributed (February/September 1982) the following reasons for loss in structural items.

— Delay in execution of the works.

— Inflationary effect on the elements of cost during the period of contracts.

— Delay in supply of matching materials, designs and drawings by customers.

— Delay/non-availability of wagons for non-dimension consignments.

— Change in design/drawings during fabrication.

— Higher quantity of alloy steel fabrication.

— Booking of idle labour against jobs.

An anlysis of some of the contracts in audit indicated that the following factors also contributed to the losses.

(i) Absence of escalation clause in the contracts (Contract Nos. 9D-4357 and 5D-4321).

(ii) Underquoting of the price owing to prevailing price being less than the Company's conversion cost (Contract No. 9D-4357).

(iii) The negotiated price being much less than the estimated cost (Contract No. 5D-4321).

7.08 Rolling stock

The Company is one of the leading manufacturers of rolling stock in the country. The range of manufacture covers wagons of various types, metre gauge coaches and electric multiple unit (EMU) coaches.

It will be seen from the details given in Annexure IV that the installed capacity for rolling stock production remained grossly under-utilised depsite reduction of the installed capacity in 1976-77 in respect of coaches; capacity of railway wagons was reduced to zero in 1976-77 on account of discontinuance of its manufacture. The production of wagons was, however, resumed in 1979-80.

The table below shows the comparative position of orders received for manufacture of wagons and orders executed :—

Year	Number on order				
	Opening balance	Orders received during the year	Orders cancelled	Orders executed	Closing balance
1974-75 . .	2433	..	634	860	939
1975-76 . .	939	..	500	439	..
1976-77 . .	..	..	..	..	..
1977-78 . .	..	..	..	..	..
1978-79 . .	..	335	125	..	210
1979-80 . .	210	Spares	..	187	23
1980-81 . .	23	2362	..	30	2355
1981-82 . .	2355	452	250	305	2252

NOTE : Figures for the year 1973-74 could not be furnished by the Management.

In regard to the stoppage of production of wagons during 1976-77, the Management stated in June 1979 as follows :—

"The Wagon industry faced a sudden crisis towards the end of 1966 when Railway Board instructed the wagon builders to curtail production by 35 per cent. With the drastic cut in the production and release of lesser quantity of orders during the subsequent years at arbitrary and un-remunerative prices by

Railway Board, the wagon industry as a whole faced a severe set-back. However, to utilise a portion of wagon building capacity, the Company continued to manufacture wagons inspite of incurring losses and under-took diversification programme to replace the capacity of wagon manufacture and gradually tapered off the installed capacity."

It was further stated by the Management that with the discontinuance of manufacture of wagons in Wagon and Coach Works, most of the floor areas of wagon works was converted to instal facilities for machining, grinding special stainless steel fabrication works required for various products. It may be mentioned that in the absence of any records showing particulars of work (with value/out-put) done in Wagon Works for products other than manufacture of wagons and coaches, the extent of utilisation of surplus capacity of the wagon works could not be ascertained.

The decision to stop manufacture of wagons was reversed in 1977 when it was decided to quote for export of wagons mainly to mop up surplus fabrication capacities. Orders for 125 wagons and 300 I.C.F. bogies were received for supply to Vietnam Railways. Orders from Indian Railways were accepted from 1979-80 onwards. The Company stated in December 1981 that since the wagon capacity could not be absorbed by the Company, orders had been accepted again from Indian Railways.

7.09 Important cases of losses in export of Railway Wagons

(i) Loss on export of wagons to Poland

The Company suffered a loss of Rs. 4.76 crores on the supply of 500 railway wagons to a Polish firm between December 1971 and December 1973. The case was mentioned in Section I.I of the Audit Report of Union Government (Commercial), 1977 Part-II (Miscellaneous topics of interest).

(ii) Loss on export of Railway wagons to Yugoslavia

Under a contract with the State Trading Corporation of India Limited (STC) signed on 30th June 1971, the Company undertook to supply 433 GAS type wagons to the Community of Yugoslav Railways through M/s. Rudnap, the Yugoslav importing agency, for a total firm price of Rs. 4.94 crores at the rate of Rs. 1.14 lakhs per wagon on the basis of estimates prepared in October 1970 (Annexure VI) which envisaged a profit of Rs. 0.11 lakh per wagon. The entire supply was to be completed by 27th August 1973. On the formation of the Projects and Equipment Corporation of India Limited (PEC), in April 1971 as a subsidiary of the STC, the rights and obligations of the latter under the contract were transferred to the former. The agreements for purchase of components (not available indigenously) from Yugoslavia and Rumania were signed between September 1971 and December 1972 and the agreement for assembly contract with M/s. Rudnap was signed in December 1972. Under the addendum to the main contract and the Protocol thereunder signed on 15th January 1975 (a) the number of wagons was reduced from 433 to 175; (b) the price was increased from Rs. 1.14 lakhs to Rs. 1.56 lakhs per wagon; (c) shipment of the wagons was to be completed by April 1975; (d) delivery of the wagons was to be completed by September 1975 and (e) the assembly charges were increased from Rs. 0.09 lakh to Rs. 0.17 lakh per wagon. The revised estimate of cost prepared in April 1975 indicated a loss of Rs. 1.15 lakhs per wagon on the basis of the revised sale price of Rs. 1.56 lakhs per wagon (Annexure VI). 90 per cent payment of the sale value of the wagons was to be made over a period of 12 years. In order to finance the manufacture of wagons for the export order, the Company obtained secured loan of Rs. 295 lakhs from the State Bank of India from January 1973 to July 1975 on which interest charges amounting to Rs. 72.94 lakhs for the period from January 1973 to June 1977 were paid. Owing to reduction in the number of wagons from 433 to 175, imported steel (Rs. 40.04 lakhs), imported components (Rs. 17.39 lakhs) and indigenous components

(Rs. 33.17 lakhs) became surplus and could not be utilised till October 1975. As on 31st March 1981, the stock of surplus imported steel stood at Rs. 2.22 lakhs; the surplus imported and indigenous components worth Rs. 36.93 lakhs were, however, shown in the books of the Company at a value of Rs. 0.29 lakh only, the difference of Rs. 36.64 lakhs having been treated as loss on account of obsolescence of those components. According to the Management (March 1983) there was no stock of surplus steel and components as on 31st March 1982.

The shipment of wagons and delivery thereof was completed on 23rd June 1975 and 14th August 1976 respectively at a total cost of Rs. 5.75 crores (Rs. 3.29 lakhs per wagon) comprising cost of direct materials (Rs. 2.19 crores), direct labour charges (Rs. 0.35 crore), direct expenses (Rs. 1.38 crores) and overhead expenses (Rs. 1.83 crores) resulting in a total loss of Rs. 2.98 crores (after adjusting cash assistance of Rs. 0.38 crore and departmental cost of Rs. 0.35 crore). The loss worked out to Rs. 1.70 lakhs per wagon against the profit of Rs. 0.11 lakh per wagon originally envisaged in October 1970 and a loss of Rs. 1.15 lakhs envisaged in April 1975. Thus, the price quoted on the basis of unrealistic cost estimates resulted in a huge loss to the Company in as much as even the enhanced revised sale price of Rs. 1.56 lakhs per wagon did not cover even the actual cost of direct materials (Rs. 0.98 lakh) and direct expenses (Rs. 0.79 lakh) per wagon thereby making no contribution towards the conversion cost of the wagons.

The increase in cost and delay in delivery were attributed by the management (August 1975/July 1976) mainly to the following reasons :—

Reasons for increase in cost	Reasons for delay in delivery
1. Offering of firm price before receipt of detailed technical specifications and drawings due to insistence of the customer and non-inclusion of escalation clause in the main contract due to the customer not agreeing to it.	1. Delay in the commencement of assembly work by the assembly contractor pending clarification of a technical issue by the Community of Yugoslav Railways.

Reasons for increase in cost	Reasons for delay in delivery
2. Increased cost of materials and components due to general rise in prices, use of heavier imported sections arising from Rudnap's refusal to supply components at originally agreed prices.	2. Suspension of assembly work on several occasions on account of non-settlement of norms for additional work.
3. Increase in man-hours from 4,540 per wagon to 11,165 per wagon due to abnormal low productivity, idle hours arising from unscheduled power cuts and manufacture of components in excess of 175 wagons.	3. Delay in assembly due to utilisation of wheel sets procured by the Company for its wagons in other wagon contracts by M/s. Rudnap.
4. Excessive rise in freight charges, financing charges, etc. not envisaged earlier.	4. Shortage of space in the assembly factory.
	5. Delay in assembling wagons due to unilateral postponement of completion date by M/s. Rudnap.

Incidentally, the contract dated 30th June 1971 was a back-to-back contract concluded in connection with the major contract entered into earlier on 23rd October 1970 between the STC and the Yugoslav Authorities. The Yugoslav side having invoked the performance Bank Guarantees under the terms of the contract, the STC/PEC paid Rs. 39.09 lakhs. Out of this amount, the Company's share amounting to Rs. 10.95 lakhs was paid in August 1979.

7.10 Durgapur Works

(i) Historical background

In 1963-64, the Company decided to set up a new factory at Durgapur with the following objects in view :

(a) Shifting and extension of Cast Iron Foundry at Dum Dum.

(b) Shifting of machine tool works at Dum Dum.

(c) Setting up of work for manufacture of both laminated and coiled spring required for railway rolling stock.

(d) Setting up of a steel foundry.

(e) Setting up of a few other works.

The new factory was to serve as a captive unit of the Dum Dum Works.

In November 1964, the Board approved a proposal to acquire land at Durgapur for the above purposes. Accordingly, the Company acquired the following land from Durgapur Development Authority at a total cost of Rs. 21.05 lakhs (Rs. 14.30 lakhs lease value of land and Rs. 6.75 lakhs for site preparation).

Industrial land in July, 1965 and February, 1970 @ Rs. 9,500 per acre	120.285 acres
Residential land in October, 1965 @ Rs. 75,000 per acre	4.13 acres

Eventually, only two works were set up at Durgapur—the Cast Iron Foundry (in 1966) at a total capital cost of Rs. 28.44 lakhs and the spring plant (commissioned in 1966-67) at a total capital cost of Rs. 28.88 lakhs. As a result, only 2.14 per cent of the total industrial land acquired at Durgapur could be put to use for industrial purposes. Further, only one building with 6 flats was built on the residential land. Thus, bulk of the investment of Rs. 21 lakhs made on acquisition of land at Durgapur remained unproductive. The Management stated (April 1975) that "in view of recession in Engineering Industry and also for other problems like labour etc., the Company was not in a position to proceed with its new projects in Durgapur." The Management further stated (December 1976) that there was no immediate plan to dispose of any surplus land.

(ii) *Non-utilisation of new 72" Cupola Furnace at Durgapur Cast Iron Foundry*

In order to meet the production requirement of cast iron castings for paper machinery, the Paper Machinery Project Report (April 1974) had envisaged creation of certain additional facilities for modernisation of the Iron Foundry including installation of two electrical melting furnaces (7.5 T/Hour). The Company, however, installed one receiving and super-heating furnace (15/20 T Channel Type Holding Furnace) on 31st March 1978 and one 72" cupola furnace (15 T/Hr.) on 22nd December 1978 at the cost of Rs. 32.02 lakhs and Rs. 12.50 lakhs respectively.

After installation of 72" cupola it was found that the immediate requirements could be met otherwise even without the use of the new cupola. As the cost of operation of the new cupola was much higher, it was decided to use it later when the Company would receive orders for paper making machinery requiring larger drying cylinder. Accordingly, the new copula remained idle (March 1983).

The Management stated (March 1980) that regular operation of the cupola without a suitable charging device proved to be rather difficult as about 40 workmen were required to handle 15 tonnes of raw material per hour for charging the cupola and it was, therefore, considered that a mechanical charging device should be provided which was under construction; till such time the charging device was commissioned, the cupola would only be used intermitently and in case of failure of the receiving furnace. A sum of Rs. 1.76 lakhs (against the estimated cost of Rs. 3 lakhs) was spent on the mechanical charging device upto 31st March 1982.

(iii) *Cast Iron Foundry*

(a) *Production Performance*

The installed capacity of the Foundry has not been assessed. No norms have been laid down by the company for bad castings and melting loss. The production performance of the Foundry from 1973-74 to 1981-82 is given below :—

(Figures in tonnes)

Year	Good castings	Bad castings	Runner/ riser, dull metal	Melt loss	Total melt	Percentage to total melt of			Melt loss
						Good castings	Bad castings	Runner/ riser, dull metal	
1	2	3	4	5	6	7	8	9	10
1973-74 . . .	2223	225	530	162	3140	70.8	7.2	16.9	5.2
1974-75 . . .	1586	162	389	113	2250	70.5	7.2	17.3	5.0
1975-76 . . .	1701	146	497	121	2447	69.5	6.0	19.6	4.9
1976-77 . . .	1665	176	519	121	2481	67.1	7.1	20.9	4.9
1977-78 . . .	1644	196	491	174	2505	65.6	7.8	19.6	7.0
1978-79 . . .	1444	252	513	118	2327	62.1	10.8	22.1	5.1
1979-80 . . .	1509	204	580	124	2417	62.4	8.5	24.0	5.1
1980-81 . . .	1326	312	480	110	2228	59.5	14.0	21.6	4.9
1981-82 . . .	1811	255	563	135	2764	65.5	9.2	20.4	4.9

The bad castings, runners/riser and dull metal are re-used for re-melting.

The Management intimated (December 1981) to Audit that the percentages of 5 to 7 for melt loss, 18 for runner/riser; 4 or dull metal and 10 to 12 for bad casting can be taken as norms for losses. In regard to the actual performance, the Management further stated (December 1981/March 1982) as follows :—

—The percentage of bad castings has increased from an average of 8 per cent to about 14 per cent during 1979-80 and 1980-81, which can be attributed to the larger quantity of complicated paper machinery castings which the foundry was handling.

—It was planned to modernise the production facilities of foundry by providing sand drying system and also mechanising the material handling system for the various cupolae. It was also proposed to provide facilities for producing ingot moulds which would enable the foundry to utilise the liquid material that would be available from 72" Cupola.

—The production of iron foundry during the last three years ended 1980-81 apparently showed a downward trend due to the fact that during this period more stress had been given towards producing more of complicated castings requiring a high degree of skill rather than simpler heavy castings.

Operation of the Foundry at the level of production achieved during 1973-74 to 1981-82 was uneconomical as indicated below :—

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Cost of good castings per tonne (Rs.) .	4,042.81	6,010.83	5,921.10	6,824.65	7,913.46	9,053.37	9,501.60	12,525.64	11720
Average market price of iron castings per tonne (Rs.) .	1,450.00	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00	4,000.00	6,000.00	6828
Amount of difference per tonne (Rs.) .	2,592.81	2,510.83	2,421.10	3,324.65	4,413.46	5,553.37	5,501.60	6,525.64	4892
Excess of cost of production over the market price (Rs. in lakhs) . .	57.64	39.83	41.20	55.37	72.56	80.21	83:05	86:53	88.59

N.B.—Separate cost records are not maintained for each item of castings at Durgapur Foundry.

(b) *Machining of castings*

The raw iron castings (categorised as good) are transported from Durgapur to Dum Dum works for machining. Neither norms for rejections were laid down nor detailed records of rejections were maintained at Dum Dum Works. However, 29.338 tonnes, 26.421 tonnes, 34.417 tonnes, 105.787 tonnes, 67.726 tonnes, 92.643 tonnes, 173.011 tonnes, 334.895 tonnes and 71.796 tonnes of iron castings rejected at Dum Dum Works during machining in 1973-74, 1974-75, 1975-76, 1976-77, 1977-78, 1978-79, 1979-80, 1980-81 and 1981-82 respectively were sent back to Durgapur.

(iv) *Spring Plant (Durgapur—Closure of)*

The spring plant designed to produce 70,000 springs (20,000 leaf/laminated and 50,000 coil) per annum was installed in 1968 at a cost of Rs. 28.88 lakhs. There was gross under-utilisation of the capacity of the plant right from its installation as would be seen from the data given below :—

	(Actual production in numbers)								
	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
1	2	3	4	5	6	7	8	9	10
Leaf/Laminated spring . .	9048	12760	6601	7224	12451		9371	2489	1161
Coil spring . .							3626	2640	695

NOTE : The data for the years 1967-68 to 1970-71 pertains to the accounting year November to October. Data for the years 1971-72 and 1972-73 pertains to the period November 1971 to March 1973.

Following dicontinuance of manufacture of wagons, production in the spring plant ceased with effect from August 1975. Consequently, the Board of Directors of the Company decided (September 1975) to sell the plant and machinery and to utilise the sale proceeds for expansion of the Foundry at Durgapur Works. The depreciated value of the plant and machinery as on 31st March 1976 was Rs. 23.70 lakhs. In December 1976, Burn Standard Company Limited agreed to purchase a number of machines for a sum of Rs. 24 lakhs (approx.) or at an agreed sale price provided the machines were in working condition. The Company's sale proposal was accepted in March 1977 by the Industrial Development Bank of India which had financed the setting up of the plant, subject to certain conditions for rescheduling of the payment of loan instalments so as to coincide with the payment schedule as proposed by Burn Standard Company Limited. No formal agreement was signed with Burn Standard Company Limited in regard to sale of machinery. Burn Standard Company Limited lifted some machines of written down value of Rs. 8.17 lakhs only during 1977-78, against ad hoc payment of Rs. 8 lakhs. Two machines of the written down value of Rs. 1.22 lakhs were also sold to 2 private parties in November 1978 at Rs. 3.21 lakhs and another machine of the written down value of Rs. 2,000 was sold for Rs. 6,500 in 1981-82. Non-disposal of the balance idle machinery (written down value of Rs. 14.29 lakhs) financed from the interest bearing loan from Industrial Development Bank of India involved loss of interest for the period from April 1976 to March 1982 on the locked up funds.

The Management stated (April 1978) that despite repeated persuasion. Burn Standard Company Limited neither conveyed their confirmation to lift balance machinery nor fulfilled their commitment in regard to balance payment.

8.00 **Material Management and Inventory Control**

The following deficiencies were noticed in the material management and inventory control :—

(i) No comprehensive manual for material management and purchase procedure outlining the procedure to be followed regarding indenting, purchase, receipt, inspection, storing, custody, issue and disposal of materials has been drawn up by the Company.

(ii) No material budgeting, cataloguing, standardisation & codification of materials had been introduced.

(iii) Neither ABC analysis of various stores items had been carried out, nor levels of inventory holdings of stock items had been fixed.

(iv) There was no system of periodical review of stock holdings to ascertain the extent of surplus, obsolete and unserviceable items of stores and spares, etc.

(v) There was no centralised department for procurement of materials as a whole and issues were not controlled centrally (except in case of a few items *viz.* petrol, oil, lubricants, stationery etc.)

(vi) In the case of non-stock items or productive materials the items were procured and booked directly against specific job-orders for which neither itemwise quantitative stores accounts were maintained nor was any physical verification carried out periodically.

(vii) Although there was a central stores department at Dum Dum for custody and issue of stock items, the major works also held work stock sub-stores and initiated indenting action independently. There was no co-ordinated central control over the procurement of work stock items as a whole.

Some of these aspects are discussed in the succeeding paragraphs.

8.01 *Physical Verification*

Physical verification of only 'works stock' items (except shop floor items) was conducted on continuous basis by the stock verifiers of the Internal Audit Department. The table below indicates the extent of coverage in physical verification and the discrepancies noticed during the years 1973-74 to 1981-82 :—

Year	Total Number of items in stock (approx)	Number of items verified	Percentage of coverage	Excesses		Shortages	
				No. of items	Value (Rs. in lakhs)	No. of Items	Value (Rs. in lakhs)
1	2	3	4	5	6	7	8
1973-74 .	5015	2201	44	74	0.11	76	0.14
1974-75 .	5057	2977	59	118	0.22	126	0.26
1975-76 .	5219	3908	75	102	0.21	83	0.23
1976-77 .	5080	3815	75	169	0.21	132	0.27
1977-78 .	4877	3911	80	146	0.26	114	0.19
1978-79 .	5121	3727	73	38	0.06	40	0.04
1979-80 .	5653	4995	88	53	0.11	101	0.15
1980-81 .	5053	4652	92	42	0.13	78	0.89
1981-82 .	4399	3490	79	138	0.55	175	0.46

In April 1974 the Company engaged a firm of technical consultants on a fee of Rs. 5 lakhs for a comprehensive physical verification of all stocks. The firm verified 5871 items of productive materials and 9262 items of work stock including non-productive materials at Dum Dum Works between 4th June 1974 and 26th March 1976. The reports of the consultants received on 1st April 1976 indicated discrepancies in terms of quantities only. A quick appraisal made by the Internal Audit Department in respect of the excesses and shortages relating to steel materials revealed a net surplus of Rs. 1 crore. However, pending a thorough scrutiny of the reports, no adjustments had been carried out in the accounts of the Company (June 1981).

The Ministry stated (December 1982) that the steel materials found surplus on the completion of various jobs have been taken into account after checking.

8.02 *Inventory Holdings*

The table below indicates the comparative position of inventory and its distribution at the end of each of the last 9 years ended 31st March 1982.

(Rupees in lakhs)

	31-3-74	31-3-75	31-3-76	31-3-77	31-3-78	31-3-79	31-3-80	31-3-81	31-3-82
1. Raw materials & works stock .	847.95	967.93	737.12	700.67	639.36	649.01	695.52	588.13	610.90
2. Stores & spares .	0.76	2.07	2.84	27.34	36.77	32.14	32.25	34.89	31.35
3. Stock of stores & spares at Bonded Warehouse at CIF value . . .	..	387.47	399.99	458.91	188.76	278.41	1538.64*	1651.54*	1640.29*
4. Work-in-progress	1132.47	1651.87	1613.45	1339.56	1519.74	768.51	1320.68	1294.31	1300.31
5. Finished stock .	156.09	253.53	589.63	57.82	350.89	329.79	221.25	271.57	314.48
6. Loose tools, patterns and drawings	5.85	8.88	7.59	7.81	11.29	8.94	6.89	6.35	4.09
7. Materials in transit									
(*a*) Imported .	61.74	144.57	30.76	80.86	59.01	56.20	50.47	119.96	59.47
(*b*) Indigenous .	13.04	5.90	12.00	1.30	5.68	10.99	11.66	20.32	4.38
TOTAL .	2217.90	3422.22	3393.38	2674.27	2811.50	2133.99	3877.36	3987.07	3965.27

*Includes proportionate Custom Duty.

The stock of raw materials and work stock (including in transit) and stores and spares represented 6.99 months' consumption for production in 1973-74, 7.89 months' in 1974-75, 5.87 months' in 1975-76, 7.34 months' in 1976-77, 3.93 months' in 1977-78, 8.55 months' in 1978-79, 11.84 months' in 1979-80, 10.30 months' in 1980-81 and 11.84 months' in 1981-82.

The work-in-progress represented 5.10 months' value of production at cost (including depreciation) in 1973-74, 5.39 months' in 1974-75, 5.84 months' in 1975-76, 5.06 months' in 1976-77, 3.77 months' in 1977-78, 2.46 months' in 1978-79, 3.37 months' in 1979-80, 3.08 months' in 1980-81 and 3.04 months' in 1981-82.

On inventory control in the Company, the Ministry stated (April 1983), *inter alia,* as follows :—

— All out efforts are being made by the Company to control inventory to the maximum extent by restricting purchases, disposing of surplus and non-moving items, etc. without effecting production and productivity.

— The Company has started to introduce gradually various modern inventory control systems like computerisation, issue accounting system, perpetual inventory system, stream lined purchase procedure, ABC analysis, fixation of stock levels, etc. only recently.

— The Committee on Inventory Control led by Director General, BPE has made a number of suggestions for improvement and some of them have already been implemented.

— The benefit of introduction of these measures will start accruing only after some time.

8.03 *Slow-moving and non-moving items of raw materials, stores and spares etc.*

The stock of raw materials, components and stores and spares included a number of non-moving and slow moving items from year to year. Out of the total stock of raw materials, components and stores and spares of Rs. 17.99 crores (excluding custom duty of Rs. 5.47 crores on materials in Bonded Warehouses) as on 31st March 1982, stores and spares and components of the value of Rs. 1.91 crores had not moved for the last two years or more.

Large quantities of materials and equipment were imported by the Company under its various diversification schemes and kept in the Bonded Warehouse, which had been lying there for long periods. The cif value of such materials and equipment at the end of 31st March 1982 stood at Rs. 11.03 crores (including Rs. 1.91 crores referred to above), the agewise analysis of which is given below :—

	Number of items	Value (Rs. in crores)
(*i*) For over 5 years . . .	30	0.36
(*ii*) Between 3 and 5 years . .	87	1.00
(*iii*) Less than 3 years . . .	596	9.67
		11.03

Apart from the risk of deterioration, the accumulation of huge stock has resulted not only in the blocking of the working capital involving foreign exchange but also loss of interest thereon.

The Management attributed (February 1982) the increase in the value of the stock in the bonded warehouses to inability of the company in paying the customs duty due to shortage of working capital and the low rate of consumption.

The Management further stated (September 1982) that the Ministry released Rs. 7.82 crores in March 1982 for materials lying in stock which was deposited with the Customs Authorities and the customs duty for bonded materials was being adjusted against the said deposit and that as a result, the value of materials in the bonded warehouse has considerably gone down.

The Ministry stated (April 1983) that :

— A separate cell has since been set up at Head Office for identification of slow-moving and non-moving items and quick disposal thereof.

— The Stores Department at Dum Dum has been strengthened by appointment of an experienced Stores Manager to co-ordinate the functions of various stores depots.

8.04 *Disposal of scrap*

In the course of manufacture of the Company's products considerable quantity of iron and steel scrap is generated. The sale value of scrap for the period from 1973-74 to 1981-82 amounted to Rs. 510.92 lakhs. In this connection the following features deserve mention :

(1) Upto 19th August 1975, out of 200—250 registered firms who were considered reliable and financially sound by the Company, tender for sale of scrap were issued generally to 20 to 25 firms by rotation. In cases where workshops wanted disposal of scrap immediately for clearance of a particular area to make room for raw materials, finished products, construction or repair works, only limited or verbal tenders were issued to the firms who were considered capable of depositing the value forthwith in cash or otherwise and arrange clearance immediately on receipt of delivery order. From 20th August 1975, open tender system for sale of scrap was resorted to. Vital information such as description and

quantity of disposable scrap, location of the material, date and time for opening of tenders, etc. were not mentioned in the tender notices.

On the basis of the quotations received from the tenderers, the sale orders were finalised and issued by the Structural Division. No tender committees, with representative from Finance and Accounts Department, were constituted for considering the quotations received from the tenderers. No reserve price for any category of scrap was fixed.

(2) The Company does not have any Central Scrap Yard. No quantitative records were maintained for scraps which were generated and accumulated at different works from where sales were effected by the Structural Division.

(3) In the absence of internal roads connecting all the works with the two weigh bridges of the Company, the empty lorries of the contractors after registering their weights travelled on public roads before coming for loading the materials from works and have thereafter to travel in public roads before coming to the weighing point again.

(4) The Company had not explored the possibility of selling ferrous scraps directly to the producers of special/alloy steels or through the Metal Scrap Trade Corporation Limited, Calcutta (MSTC—another Public Sector Undertaking).

In reply to an audit query, the Management had stated (May 1975) as follows :—

"As suggested, the Company will look into the possibility of disposing of steel scrap through MSTC Limited, Calcutta. However, it may be mentioned that there may be certain constraints, as enumerated below :—

(a) Due to acute shortage of space for storing of scrap and also due to the fact that we do not have a Central Scrap-yard, it is most essential that scrap arising have to be lifted daily from various works to avoid congestion in the Shop Floor which could lead to hampering of production.

(b) MSTC, being a Government body would, as a policy, fix prices of the various categories of scrap on a long term basis, *viz.*, half-yearly or annually. We feel that fixation of prices for the various categories of scrap under a long term basis may lead to substantial loss to the Company, as from our experience scrap prices fluctuate almost daily and generally on the upward trend."

(5) Some of the firms enlisted with the Company and to whom enquiries and orders were issued, were operating on 'Benami' basis. The Management, while admitting this, stated (May 1975) that as competitively and financially they were not affected by these arrangements, they had not given due importance to this aspect.

The Management further stated (September 1982) as follows :

(i) At present scraps are being disposed of either by auction or by open tenders. The detailed procedure for disposal of scrap has also been laid down, and a scrap yard set up in various workshops so that the same could be kept according to categories.

(ii) The MSTC have not shown much interest in the purchase of scrap because of its insufficient generation.

8.05 *Disposal of Steel Materials*

In accordance with the accounting procedure followed by the Company, materials procured for a particular job were booked directly against the specific job orders. The balance remaining unused after the completion of the particular jobs was not taken on stock charge and consequently was not reflected in the Balance Sheet of the Company.

In October 1978, the quantity of such steel materials purchased over a number of years and not usable due to natural corrosion and rusting was assessed at 1333.5 tonnes. The particulars of the order to which these materials related as also their purchase prices were not ascertainable.

The sale of these surplus steel materials as scrap was authorised verbally by the Chairman & Managing Director. No Survey Committee was, however, constituted for this purpose. The Management stated (May 1980) that during verbal discussion between the Managers and Chairman & Managing Director, it was decided that the materials which became scrap for the Company, should be cleared from the yard at the earliest.

During the period from 1978-79 to December 1981, 1469.093 tonnes of steel materials, such as, plates, M.S. plates, M.S. flats, M.S. angles, etc. were sold mainly to private parties at a total price of Rs. 44.28 lakhs (including 281.500 tonnes of surplus imported spring steel for Rs. 7.33 lakhs). Out of the aforesaid quantity, 1364.500 tonnes was sold for Rs. 40.35 lakhs against open tenders and the balance of 104.593 tonnes for Rs. 3.93 lakhs on the basis of negotiation without obtaining financial concurrence.

The Ministry stated (December 1982) as follows :

> "Company has laid down procedure for disposal of scrap and surplus materials. Disposal of surplus materials are made by open tender/auction after the materials are declared surplus by a committee. Slow and non-moving items are now being regularly reviewed and disposal action taken. As a result, considerable materials have already been disposed of."

8.06 *Purchase Procedure*

The Purchases made by the Company fall into two categories :—

(a) Raw materials *viz.* steel, components, etc. acquired for specific jobs and known as 'Productive Materials' and directly booked to the Cost Cards.

(b) Materials of common use for production, maintenance and repairs, etc. known as 'Works stock'.

The purchases made constitute bulk of the total revenue expenditure (excluding interest and depreciation) of the Company as will be seen from the data given below for the years 1973-74 to 1981-82 :—

(Rupees in crores)

Year	Purchases	Total revenue expenditure (excluding interest and depreciation)	Percentage of Col. (2) to (3)
1	2	3	4
1973-74 . . .	17.50	27.62	63.36
1974-75 . . .	27.07	36.82	73.52
1975-76 . . .	21.75	38.25	56.86
1976-77 . .	19.06	35.11	54.29
1977-78 . . .	22.55	42.72	52.79
1978-79 . . .	15.33	30.73	49.89
1979-80 . . .	33.99	38.95	87.27
1980-81 . . .	19.15	42.37	45.20
1981-82 . . .	22.07	46.85	47.11

The break-up of the purchases made during the years 1978-79 to 1981-82 is given below :—

(Rupees in crores)

Purchases	1978-79	1979-80	1980-81	1981-82
1	2	3	4	5
1. Imported steel . . .	0.92	2.52	1.44	1.96
2. Imported components and spare parts . . .	3.06	9.49	2.34	3.61
3. Indigenous bought-out components . . .	10.37	20.96	15.11	16.00
4. Other items . . .	0.98	1.02	0.73	0.50
TOTAL PURCHASES . .	15.33	33.99	19.62	22.07

In this connection the following points deserve mention :

(a) There was poor linkage between production planning and procurement. Materials and components were procured against drawing office lists prepared by the engineering department based on the delivery schedules committed to the customers rather than on the actual production plan taken up by the works. This procedure resulted in accumulation of high inventory.

(b) There was no practice of inviting open tenders before awarding supply/work orders. Normally, limited tenders were invited from parties with whom the Company had business dealings in the past. In many cases quotations were invited verbally and repeat orders placed on suppliers without obtaining fresh quotations. Reasons for non-acceptance of the lowest tender were rarely recorded before issue of the supply orders. There was no laid down procedure for enlisting of suppliers and contractors. No clause for recovery of liquidated damages in the case of delay in supply had been inserted in the purchase orders and in many cases the delivery period had not been indicated.

(c) The Company did not have any Central Purchase Organisation. The stores, materials, components, etc. required for manufacture of a product were procured by the concerned Product Division. Other materials like steel, general consumable stores, foreign purchases, capital goods, liveries and stationery articles, etc. were procured by Steel Planning and Procurement Division, Works Purchase Office, Foreign Purchase Division, Chairman's Secretariat and Administration Department, etc.

(d) The Company does not have a comprehensive manual containing procedures for purchasing, inspection, storing, issues and disposal, etc., of materials for guidance of all concerned.

The Ministry stated (April 1983), *inter alia,* as follows :—

— To ensure proper linkage between production planning and procurement, all indents are now examined with reference to the actual production programme taken up by the works and the likely delivery schedules to meet their requirements.

— A Senior Officer in the rank of Deputy General Manager has been entrusted with the task of purchases and at present all purchases of steel items, consumables, oil, timbers, etc. are being purchased centrally under his control.

— A centralised Purchase Department will start functioning from 4th April 1983.

— A purchase procedure on modern lines is under preparation and with the introduction of this procedure, the procurement of stores will be stream lined.

8.07 *Procurement of steel castings*

For the manufacture of 433 wagons under an export contract, the Company placed an order on a firm on 5th June 1972 for supply of 99 sets of steel castings of different specifications valued at Rs. 10.45 lakhs at varying rates. These sets were to be supplied in a phased manner between September 1972 and May 1973, against an irrevocable and revolving letter of credit opened in favour of the supplier on 29th January 1973. The firm failed to maintain the delivery schedule and commenced supplies from July 1973 only. The letter of credit was twice revalidated by the Company—once in March 1973 upto 31st January 1974 and again in September 1973 upto 30th June 1974.

Owing to failure of the firm to maintain the delivery schedule, the Company advised the suppliers on 12th June 1974 by which date 2056 castings had already been supplied, to stop further production of castings, and to treat the order as completed. The firm, however, made a further supply of 493 castings upto 27th June 1974 and realised a total sum of 9.92 lakhs through the above mentioned irrevocable letter of credit extended from time to time. Out of the castings supplied by the firm, castings valuing Rs. 3.53 lakhs were rejected by the Company on 8th September 1974, but intimation regarding rejection was communicated to the firm only on 21st June 1975. The firm, refused to accept any responsibility on the ground of delay in intimation. The rejected castings were sold (March 1982) for Rs. 1.12 lakhs resulting in an avoidable loss of Rs. 2.41 lakhs.

9. *Sales Management*

9.01 *Sales Organisation*

The products of the Company are marketed through its various commercial divisions (*viz.*, cranes, structurals, mining and haulage, road plant, rolling stock, paper machinery and marine and industrial engineering each under the charge of a Manager. The Managers of these divisions functioned under the Managing Director upto 28th April 1978 when a Director

(Commercial) was appointed to head the Marketing Organisation of the Company. The activities of the commercial divisions comprised preparation of job estimates, submission of quotations, finalisation of sales contracts, purchase of production materials and dealing with customers in all the matters relating to the sale of particular products.

While the products like road rollers, dumpers and cold saw machines, etc. are sold through agents, the remaining products are sold directly either by bidding against open tenders or through negotiations.

9.02 *Pricing Policy*

The Company has not so far formulated a clear-cut pricing policy in respect of its various products and jobs done by it. The quotations prepared by the commercial divisions were based on engineering estimates of materials, labour and overhead costs at pre-determined fixed percentages on labour cost etc. The system of associating the finance or cost office with the framing of estimates, quotations and finalisation of sales orders/contracts had not been introduced.

The Board of Directors in its meeting held in July 1978, while noting with great concern the losses being incurred by the Company on all orders and at the same time losing valuable orders on account of quotations being much above the lowest quotations, desired the Director (Finance) to study the matter and put up proposals on the pricing policy of the Company for consideration and approval of the Board.

In pursuance of the above decision of the Board of Directors, a note on the pricing policy prepared by the Director (Finance) was put up to the Board of Directors in November 1978 for consideration. The note, *inter alia*, contained suggestions for overcoming various deficiencies in the pricing policy and the factors which should govern the pricing policy of the Company.

Some of the factors having a bearing on the pricing of products as pointed out in the note, are given below :—

— Inconsistency in the rates of profit or loss in the product groups or in the individual jobs in a product group.

— Existence of idle labour on the one hand and non-execution of orders in time on the other hand.

— Non-fixation of installed capacity on a scientific basis with reference to the product mix.

— Lack of proper production planning, sales planning and availability of dependable clear cut data in regard to market conditions, man-power planning, etc.

— Need for appropriate change/modification in the design of the products to achieve economy, reduction in wastage in production, economising in the price of materials, accountal of materials rendered surplus, etc.

— Necessity for fixation of norms of productivity.

— Need for periodical reporting to the Board of Directors in regard to quotations submitted and the data thereof with a view to enabling the Board to form a view of the state of affairs and issuing necessary guidelines in the matter.

It was decided (November 1978) that the note should be studied by the other Directors also and an agreed plan of action on pricing policy would be put up later. No action has been taken in the matter.

The Ministry stated (December 1982) as follows :—

> "Most of the products of the Company are subject to severe competition in the open market. Hence no rigid pricing policy can be followed for these products though all possible care is taken to estimate the cost properly, covering all expenses as well as an element of profit at the time of tendering. However, prices have to be adjusted on case to case basis, taking into account our competitors' price as revealed by past tenders, our estimated cost of production, likely competition etc. In the case of Road Rollers our prices are controlled by DGS&D Rate contract. In the case of wagons the sale price is fixed for all the manufacturers by the Railway Board."

The Ministry further stated (April 1983) as follows :—

> "For better estimation for submission of quotations and finalisation of sale orders/contracts all estimates are now prepared by the Commercial Divisions in consultation with Manager (Cost) before the same is put up to the Director (Finance) and Chairman and Managing Director for approval."

9.03 *Loss on the supply and erection of 9 E.O.T. Cranes*

Under an order placed in October 1977 by Kudremukh Iron Ore Company Limited—another Government Company, the Company under-took to manufacture, supply and erect 9 E.O.T. cranes of various capacities between 1st January 1978 and 1st April 1978 for a total firm price of Rs. 109.14 lakhs. The original quotation (April 1977) of the Company was for Rs. 157.44 lakhs (including erection charges of Rs. 3.15 lakhs) which was reduced to Rs. 109.14 lakhs after negotiations.

The Company delivered the cranes between January 1978 and August 1978 at a total cost of Rs. 239.37 lakhs as against the estimated cost of Rs. 148.64 lakhs as per details given below :—

(Rupees in lakhs)

	Cost of Supply				Cost of erection	Total Cost
	Material	Labour	Overhead	Total Rs.		
1	2	3	4	5	6	7
Actual cost . .	116.34	15.05	99.44	231.13	8.24	239.37
Estimated cost . .	49.30	8.33	57.86	145.49	3.15	148.64
Excess of actual cost over estimated cost	34.04	6.72	41.88	85.64	5.09	90.73

The following points of interest emerge from the above transaction :—

(i) The overall sale price of Rs. 109.14 lakhs did not cover even the actual cost of materials.

(ii) Substantial portion of the total loss of Rs. 130.23 lakhs is attributable to unrealistic estimates of cost.

The Management stated (October 1981/January 1982) that the order was secured at a minimum price when the order position for cranes was not encouraging and there was severe competition. The escalation clause had to be withdrawn during negotiation. Further, delay in delivery of the cranes due to lack of matching steel, changes in the design parameters, delay in receipt of components, etc. contributed to increase over the estimated cost.

9.04 *Overall sales performance*

(a) No sales budget as distinct from production budget (which is based on the orders received) was prepared by the Company. Table below compares the actual sales with the actual production during 1973-74 to 1981-82 :—

(Rupees in crores)

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Actual Production .	24.49	35.15	40.65	44.74	45.06	35.38	32.87	37.70	47.45
Actual Sales . .	24.67	35.25	37.49	47.87	42.12	36.05	32.59	37.20	42.49

(b) Product-wise details of actual production and sales are contained in Annexure IV.

(c) *Order Position*

The position regarding the orders received, executed, cancelled and pending execution for the years 1974-75 to 1981-82 is indicated in Annexure-VII.

In this connection the following points deserve mention :—

(i) Not only was the receipt of orders for different products fluctuating from year to year, execution of the orders by the Company was also erratic.

Though the order position in respect of marginally remunerative/unremunerative products such as structurals and cranes, was more or less satisfactory, the overall order position reflected glaring imbalances; while there were no orders for wagons from 1974-75 to 1977-78, for M. G. Coaches from 1976-77 to 1977-78 and 1981-82 and EMU Coaches from 1975-76 to 1977-78 and 1979-80 to 1981-82, orders for remunerative products like road rollers and Paper machinery, etc. were inadequate all along.

(ii) There were delays in the execution of the orders.

The Management stated (October 1981) that the production was seriously affected due to lack or irregular supply of power, labour indiscipline, low productivity of labour, lack or non-availability of proper materials and lack of working capital.

9.05 Agencies for Sales

The table below indicates the sales made through different agencies and commission paid there-against during 1973-74 to 1981-82 :—

(Rupees in lakhs)

Agencies	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Sales :									
1. Direct sales by the Company . .	1,581.08	2,413.34	3,181.92	4,302.01	3,372.77	2,738.28	2,042.48	2,435.13	3,315.70
2. Non-exclusive agents . .	723.64	972.12	462.18	428.06	651.33	843.87	855.00	886.78	870.56
(Commission paid)	(40.60)	(49.41)	(24.81)	(29.27)	(25.27)	(31.57)	31.00	(16.77)	(28.28)
3. Sole selling agents	..	..	21.97	42.95	36.01	20.42	30.00	55.56	15.00
(Commission paid)	..	..	(1.07)	(1.82)	(0.76)	(2.15)	(1.13)	(0.89)	(1.94)
4. Exports . .	162.05	140.01	82.68	13.51	152.75	2.58	407.00	342.47	17.60
TOTAL SALES .	2,466.77	3,525.47	3,748.75	4,786.53	4,212.86	3,605.15	3,334.48	3,719.94	4,218.86
Percentage of direct sales to total sales	64.1	68.5	84.9	89.9	80.1	76.0	61.2	65.4	78.6

NOTES : (1) The products covered by direct sales were cranes, structurals, wagons/coaches and paper machinery. Road rollers were sold direct as well as through non-exclusive agents.

(2) Sole selling agents were employed for products like hydraulic circular saw machines and saw blade sharpening machines.

(3) Non-exclusive agents were employed for products like road rollers, crawler tractors and dump trucks.

(4) Items of export include wagons, cranes, bogies, road rollers, tanks etc.

9.06 Sale of products through non-exclusive agents (Distributors)

(a) Road Rollers :

(i) Appointment of Distributors :

In accordance with the terms of the collaboration agreement of February 1957 with a foreign firm (M/s. Aveling Barford Ltd. U.K.) effective upto 18th June 1971, M/s. Greaves Cotton & Co. Ltd. were appointed distributors of road rollers manufactured by the Company, for areas (excepting the Eastern Region) where it had previously represented the foreign firm. Even after the expiry of the collaboration agreement, the services of the distributors were being utilised without entering into any formal agreement on the ground of the firm's profound knowledge of the market and their proficiency in effecting sales and servicing of road rollers. The Management stated (December 1981) that necessary action to revalidate the contract with the firm would be taken as there was no other alternative agent in India who could render the same quality of service.

(ii) Service Commission :

Barring supply of 150 road rollers for which the Company accepted Rs. 20,000 per road roller as advance from the Distributors and paid an additional sum of Rs. 1,425 per road roller towards financing charges, the Company agreed to pay to the distributors service commission amounting to Rs. 4,575 from April 1973 to March 1975 and Rs. 6,000 from April 1975 onwards per road roller as per details indicated below :

	From April 1973 to March 1975	From April 1975 onwards
	1	2
	Rs.	Rs.
(1) Arranging DGS&D's inspection at Company's Works, despatch, assembly of roller at site, commissioning and handing over to customer in running order and providing after sale service as required in the DGS&D's running contract	3,000	3,000

	1	2
(2) 1/4 per cent insurance charges . .	246	406
(3) West Bengal sale tax (WBST) . .	500	1,639
	(1/2 percent)	(1.1 percent)
(4) Financing charges for the period between effecting payment to the Company against Inspection Note and the Distributors' recovering the amount from DGS&D against despatch (98 per cent)	440	950
(5) Financing charges for last 2 per cent payment after handing over of the road roller	89	122
	Rs. 4,545	Rs. 6,114
		say Rs. 6,000

In this connection, the following points deserve mention: (i) The sales of road rollers through the distributors were made in areas other than those covered by the Eastern Region involving movement of goods from one state to another which attracted payment of Central Sales Tax, the incidence of which was to be borne by the ultimate buyers in other states. The transactions with the distributors were, however, treated as local sales which attracted payment of West Bengal Sales Tax. Since the West Bengal Sales Tax on these sales charged to the distributors could not be recovered by the distributors from the clients in other states, the same was first recovered from the distributors and was later reimbursed to them by inclusion of the West Bengal Sales Tax element in their service commission.

Thus, in effect the incidence of West Bengal Sales Tax on these sales was actually borne by the Company as the West Bengal Sales Tax recovered from the distributors was re-imbursed to them but an equivalent amount had to be deposited by the Company with the State Sales Tax Authorities.

At the time of refixation of commission of the distributors in April 1976, it was considered that the sales through the distributors in areas outside the State of West Bengal were not sales in the State of West Bengal attracting the West Bengal Sales Tax but could be treated as inter-state sales attracting the Central Sales Tax payable by the ultimate buyers in other states. From April 1976 onwards, therefore, only Central Sales Tax, as applicable, was charged in the bills which were preferred on the distributors at addresses outside the State of West Bengal and accordingly re-imbursement of the element of West Bengal Sales Tax was discontinued with effect from 28th April 1976.

During the period from April 1973 to 27th April 1976, the total incidence of West Bengal Sales Tax borne by the Company by treating sales through the distributors outside the State of West Bengal as local sales amounted to Rs. 8.17 lakhs which could have been avoided had the sales through the distributors in areas outside West Bengal been treated as inter-state sales from the beginning.

(ii) In February-March 1976, 15 road rollers were sold to Calcutta Metropolitan Development Authority, Calcutta through the Distributors who were paid service commission of Rs. 0.69 lakh. As the Eastern Region was outside the jurisdiction of the distributors and qualified for direct sale by the Company, payment of service commission amounting to Rs. 0.69 lakh to the Distributors, lacks justification.

The Management stated (March 1981) that even in the Eastern Region sales were made through various distributors on a case to case basis on market considerations.

(iii) As per agreed arrangements between the Company and the Distributors, bills were to be paid by the latter within 21 days from the date of inspection of the road rollers at the Company's works, in consideration of which financing charges (for the period between the date on which payments were made by the

Distributors to the Company and date on which they recovered the dues from the consignees) were included as a distinct item in the service commission.

However, payments of the bills were not made by the Distributors within the stipulated period and there were delays in making payments running upto 275 days. The financing charges paid to the Distributors for the periods of delays during 1973-74 to 1981-82 work out to Rs. 32.03 lakhs. Allowance of financing charges for the periods of delays in clearance of company's bills amount to grant of undue concession to the Distributors.

(b) *Crawler tractors*

In September 1974 a firm (M/s. Greaves Cotton & Co.) which had earlier been appointed as the Distributors for road rollers manufactured by the Company, was appointed as the Company's sales and service agent for crawler tractors in areas other than Eastern Region.

16 crawler tractors/dozers were however, sold mostly to Government parties through the Agent in the Eastern region during the period from 1974-75 to 1976-77, on which service commission amounting to Rs. 3.42 lakhs was paid. The sale through the Agent in the Eastern Region which was within the Company's jurisdiction of direct sale, lacks justification.

The Management stated (April 1979) as follows :—

> "For market considerations, we have been utilising the services of various agents to secure orders on case to case basis as the situation demands. In the cases cited, the services of Greaves Cotton were utilised and it will be seen that they were successful in securing the orders."

10. Costing System and analysis of costs

10.01 *General*

The Company does not have a Cost Accounting Manual. Instructions issued in the past in the form of notices govern the procedures to be followed in respect of cost accounting. The Company follows the system of job/batch costing for ascertaining the cost of its products. The system of 'Standard costing' even for standard products like road rollers and crawler tractors, etc., was not introduced on the ground that due to constant change in the product design it would need frequent revision and will defeat its purpose.

No standard norms for use of materials in different processes of manufacture have been laid down by the Company in the case of cranes, railway wagons and other important fabricated items. The Management stated (December 1981) as follows :—

> "The norm of consumption of materials for tailor made jobs according to the customers' requirements is set by the Drawing Office, which varies from job to job depending on intricacies of work involved. These norms are counter-checked only after the job is completed. As most of the tailor made jobs are of a long cycle nature, taking into account of rejections at every stage of operation is not feasible, especially in view of the fact that the existing system does not cater for component batch costing. This type of costing which will need complete overhaul and reorganisation with the introduction of EDP and gearing up of Productive Departments involved in material flow line is currently under review. However, under the present system of costing where the total job is reckoned as one order for ocst collection purposes, the job-wise material accounting is the only alternative and the control can be carried out only at the end of the job."

10.02. *Deficiencies in costing procedure*

Material Cost

Cost of raw materials, components, etc. purchased specifically for a job on the basis of engineering estimates were booked directly to the job concerned. Besides, the materials are also issued from stock or by transfer from other jobs. The actual consumption of such materials was not accounted for by issue accounting, with the result that the work-in-progress figure remained inflated to the extent of the value of materials not actually utilised/converted in production. There was no system of determining the extent of unconsumed material lying in the shop floor at the year end. The Issue Accounting system for steel materials was introduced from August 1976. The Management stated (October 1981) that issue accounting for other items would be introduced gradually with computerisation for which action had been initiated.

Labour Cost

The labour rates per hour of different categories of workmen are worked out on the basis of their pay and dearness allowance alone. Other elements like production bonus, annual bonus etc. are not taken into account for the purpose. While the annual bonus is taken into consideration as an element of overhead expenditure, production bonus is not taken into account for calculation of labour rate.

The Management stated (October 1981) that as the incidence of production bonus varied from job to job depending on the norm fixed and the performance of the labour during a period it was thought better to charge production bonus as a separate element of cost to the job involved in finding total cost. The question of taking into account the annual bonus and production bonus in working out the labour hour rate was, however, being examined.

Overhead Cost

All other expenses excepting works general expenses and Head Office expenses (including financing charges) are booked under the respective works accounts and treated as overhead expenditure. The works general expenses and Head Office expenses (including financing charges) are allocated to the respective works accounts to arrive at the total overhead expenses for each work.

The total overhead expenses pertaining to each work are recovered by charging the respective job order/batch order at pre-determined rates fixed for each wok over a period of time as a percentage on direct labour as booked in the cost card monthly for each such job.

Consequent on heavy under-absorption of overhead costs to the extent of Rs. 225.01 lakhs in 1973-74, the ovehead recovery rates were revised in 1974-75, effective from 1st April 1973. Although significant shift in the poduct-mix of the Company took place in the intervening period, affecting the actual utilisation of the capacity of different works, no further revision of the recovery rates was made thereafter. The non-revision of the overhead rates in conformity with the trends of actual expenditure over a long period rendered them unrealistic and vitiated the costs. There was under-absorption (–)/over-absorption (+) of overhead expenses to the extent of (–) Rs. 48.47 lakhs in 1974-75, (+) Rs. 17.35 lakhs in 1975-76, (–) Rs. 4.71 lakhs in 1976-77, (—) Rs. 55.24 lakhs in 1977-78, (–) Rs. 84.82 lakhs in 1978-79, (—) Rs. 86.12 lakhs in 1979-80, (–) Rs. 73.63 lakhs in 1980-81 and (—) Rs. 71.19 lakhs in 1981-82.

The Management stated (September 1982) that overhead recovery rates of the various works have since been revised in 1981-82.

The Ministry stated (December 1982) as follows :

(i) Since the items of standard products are very few compared to the total production of the company, no separate standard costing has been introduced.

(ii) Since most of the products are non-standard and tailor-made no standard norms for usage of materials can be laid down for them. However, as soon as an order is received from the client detailed bill of material is prepared based on the engineering norms/

estimates for each of its components. These estimates serve the purpose of control which is provided by standard norms of usage of materials in a company producing standard components.

(iii) The incidence of overhead expenses for the period from 1973-74 to 1980-81 appears to be high since the production of the Company during these years was on the lower side.

10.03 *Cost analysis and variances*

Owing to allotment of a single work order number for a batch comprising large number of units of a product requiring a long period for completion, the actual cost of a unit remained unknown till the completion of the entire batch.

As the estimates for the jobs were not made available, by and large to the Costing Section by the respective commercial divisions, it was not able to draw up the variances between the estimated and the actual cost and usages under material, labour and overhead in respect of each completed job. In a few cases where cost reports in the prescribed form indicating particulars of costs under materials, labour, overhead, etc. prepared by the costing section were forwarded to the commercial division concerned for detailed analysis and investigation of the variances, these reports were not sent back to the cost section alongwith the observations of the commercial division so that suitable action could be taken to analyse the variances.

In the absence of detailed analysis and investigation of the variances between the estimated and actual cost/usages the causes of under or over estimation could not be ascertained for control purposes.

The extent of variations between the estimated and actual cost in respect of some of the orders for which estimates were available is indicated in Annexure-VIII. The figures reveal that there has been wide variation between estimates drawn up for material, labour and overheads and actuals there against.

The Ministry stated (December 1982) as follows :

"For the purpose of cost control a job-wise statement is forwarded to respective commercial division for comparison with the estimates and subsequent corrective action. A broad analysis of the material cost for certain sophisticated and big jobs is made and variance with the estimates is brought out for detailed scrutiny by the concerned departments. A detailed cost report for each individual job is also prepared after the completion of the job for necessary scrutiny and corrective action for future similar jobs."

In this connection the following observations are made :

(i) Periodical statements of actual expenditure in respect of major jobs only are prepared by the cost office and sent to the respective commercial divisions of the Company.

(ii) Estimates in respect of jobs are not always available with the cost office.

(iii) Variance analysis by the respective commercial divisions are not sent to the cost office. During the last 2 years only one variation statement was sent to the cost office by the commercial division.

11. Man-power analysis and labour utilisation

11.01 *Man-power analysis*

The Company had not conducted an integrated study to determine its work-force requirement with reference to the actual or optimum level of production. Thus, there was no realistic assessment of manpower requirement. The actual shop-wise labour efficiency as compared with the estimated labour efficiency with reference to the optimum capacity of each shop had also not been ascertained.

11.02 *Personnel Strength*

The actual strength of the Company during 1973-74 to 1981-82 was as follows :—

Sl. No.	Category	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
(*a*)	Management staff	732	741	758	766	750	753	729	726	708
(*b*)	Supervisory staff	130	139	145	156	177	209	259	276	275
	TOTAL (*a*) + (*b*)	862	880	903	922	927	692	988	1002	983
(*c*)	Monthly paid—clerical staff	702	697	682	662	641	621	605	590	639
(*d*)	Monthly paid—security staff, drivers, bearers, etc.	516	491	459	443	428	425	430	436	452
(*e*)	Workmen (daily rated/hourly rated)	8872	8820	8506	8384	8342	7997	8069	8182	8074
(*f*)	Out station workmen daily rated/monthly paid)	106	110	120	130	171	262	174		
	TOTAL (*c*) to (*f*)	10196	10118	9767	9619	9582	9305	9278	9208	9165
	GRAND TOTAL (*a*) to (*f*)	11058	10998	10670	10541	10509	10267	10266	10210	10148

While the strength of the workers had declined over the years, that of the management and supervisory staff had gone up from year to year (except in 1981-82).

This unfavourable trend is also discernable in the ratio of expenditure between productive and non-productive salaries and wages, as indicated below :—

((Rupees in lakhs)

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Productive wages including production bonus, etc. .	354.27	410.07	367.33	416.24	396.88	342.38	416.28	483.18	524.26
Non-productive salaries and wages .	556.30	666.61	655.31	701.10	782.37	792.16	869.43	978.88	1035.10
Total salaries, wages & bonus, etc. .	910.57	1076.68	1022.64	1117.34	1179.25	1134.54	1285.71	1462.06	1559.36
Percentage of non-productive salaries & wages to total salaries & wages .	66.54	61.53	64.08	62.75	66.34	72.52	72.19	66.95	66.38
Percentage of productive salaries & wages to total salaries & wages . . .	33.46	38.47	35.92	37.25	33.66	27.48	27.81	33.05	33.62
Ratio of productive to non-productive wages and salaries .	1 : 1.99	1 : 1.60	1 : 1.78	1 : 1.68	1 : 1.97	1 : 2.64	1 : 2.60	1 : 2.03	1 : 1.97

From the information furnished by the Management/Ministry to the Committee on Public Undertakings in August 1981, the following position emerges:

— On account of the Company's policy to stop manufacture of wagons and due to change in technology from rivetted construction to welded construction, there was a surplus labour strength of about 2,000 men approximately.

— Since 1980 about 40 per cent of 4353 workmen in the Structural and coach works had been idle despite repeated requests from them to give material.

— The system of ascertaining idle tune for labour and machinery specifying reasons therefor was not being followed and the workers could not be employed productively owing to apprehension of disruption of industrial relations.

The Committee on Public Undertakings in paragraphs 4 to 6 of its Twenty-Ninth Report 1981-82 (Seventh Lok Sabha) had recommended/observed as under:

(i) An independent study of the actual requirement of employees of various categories should be made.

(ii) The existing labour force could be productively employed to a large extent provided regular flow of matched inputs and closer supervision could be ensured. The present problem is clearly one of managerial inefficiency which ought to be curbed. The possibility of Company developing its own ancillary units should be explored for assured supply of materials.

The Ministry stated (December 1982) that the strength of the various categories of employees of the Company could not be fixed on any scientific basis due to the fact that the mixture of employees that existed before the takeover of the Company for their product line at that time could not be abruptly changed after takeover and that this imbalance will continue for sometime more until natural wastage and future replenishment take a corrective action.

In this connection, the Committee on Public Undertakings in its Fifty Third Action Taken Report (Seventh Lok Sabha)—1982-83 while observing that fixation of employees strength on a scientific basis is a must if only to arrive at the exact surplus man power and to take action to adjust the man power to the actual need progressively, had desired that this exercise should be taken up forthwith.

11.03 *Overtime*

While on the one hand the Company was over-staffed, on the other hand considerable amount of over-time allowance ranging from Rs. 29.33 lakhs to Rs. 124.65 lakhs per year was paid to workers during the years 1973-74 to 1981-82 as per details given below :—

(Rupees in lakhs)

	1973-74		1974-75		1975-76		1976-77		1977-78		1978-79		1979-80		1980-81		1981-82	
	Hours	Amount	Hours	Amount	Hours	Amount	Hours	Amount	Hours	Amount	Hours	Amount	Hours	Amount	Hours	Amount	Hours	Amount
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
1. Normal time . . .	193	291.91	199	379.54	187	387.94	186	389.28	183	409.14	166	403.95	172	472.22	172	513.49	165	526.50
2. Overtime . . .	19	55.67	19	67.90	20	84.58	28	94.53	33	124.65	12	29.33	11	30.95	14	42.26	12	39.06
3. Total Hours/amount paid .	212	347.58	218	447.44	208	472.52	214	483.81	216	533.79	178	433.28	183	503.17	187	555.75	177	565.56
4. Percentage of overtime to normal time (i.e. 2 to 1) .	9.75	19.07	9.71	17.89	10.94	21.80	14.52	24.23	17.91	30.47	7.07	7.26	6.64	6.55	8.33	8.23	7.46	7.41

S/5 C&AG/83—7

It will be seen from the data given above that the percentage of overtime payments to normal time increased from 9.75 in 1973-74 to 17.91 in 1977-78. The Committee on Public Undertakings was informed by the Company in August 1981 that the huge payment of overtime was due to guaranteed payment of overtime allowance for 1½ to 2 hours daily to certain categories of staff like sweepers, drivers and crane operators, etc. under the agreement entered into with one of the Unions. The Committee on Public Undertakings in Para 5 of its Report referred to above had adversely commented upon this practice and desired that this should not be allowed.

The Ministry stated (April 1983) as follows :—

"........every effort is being made to reduce the overtime by adopting various measures like strict control and change in the incentive scheme which has already been introduced in some of the shops and is likely to be introduced in other shops also shortly."

11.04 *Productivity*

The table below indicates the production and the value added per workman and employee as well as average earnings per employee during the last 9 years :—

(Rs. in lakhs)

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
(*a*) *Value of production*									
(*i*) Per Workman	0.298	0.452	0.510	0.490	0.525	0.355	0.469	0.468	0.551
(*ii*) Per employee	0.239	0.363	0.407	0.390	0.417	0.277	0.369	0.375	0.439
(*b*) *Value added*									
(*i*) Per Workman	0.116	0.181	0.212	0.236	0.185	0.145	0.177	0.192	0.240
(*ii*) Per employee	0.093	0.145	0.169	0.188	0.147	0.113	0.139	0.154	0.191
(*c*) Investment in fixed assets per employee	0.11	0.13	0.17	0.20	0.24	0.26	0.26	0.28	0.29
(*d*) Average earnings per employee	0.082	0.098	0.096	0.106	0.112	0.111	0.125	0.143	0.154

It is interesting that, while the investment in fixed assets per employee increased from Rs. 0.17 lakh in 1975-76 to 0.29 lakh in 1981-82, the value of production and value added per employee were generally less except in 1976-77, 1977-78 and 1981-82 from the levels achieved in 1975-76. This indicates that the assets created were not put to full profitable use.

According to the information given by the company in August 1981 to the Committee on Public Undertakings the productivity in the Company was about 0.3 tonne per man per month as against around 3 tonnes per man per month in other public and private sector undertakings. The Company had also informed the Committee that the workers do not put in more than 2½ to 3 hours of work per day. The Committee was informed that the incentive scheme introduced in the past had lost its impact on account of wage increases that have taken place.

The Committee in para 5 of its Report referred to above was critical of the incredibly low productivity in the Company, and desired that fresh incentive scheme should be evolved to link wages including D.A. and bonus to productivity and introduced in all public sector undertakings.

The Ministry stated (April 1983) is follows :—

"With a view to achieve higher production targets and higher productivity, a new incentive scheme has been introduced in the Road Roller Works. The matter is under discussion with the Unions for introduction of the scheme in the other works also. Once the scheme is introduced, it will not only help to boost up production but also reduce overtime payment made to the Workers."

12. **Financial position, profitability analysis, credit control, etc.**

12.01 *Financial Position*

The table below summarises the financial position of the Company during the years 1976-77 to 1981-82.

(Rupees in lakhs)

	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
LIABILITIES						
1. (*a*) Paid-up Capital . . .	2,143.99	2,455.94	2,455.94	2,598.94	2,598.94	2,598.94
(*b*) Reserve & Surplus . .	22.82	22.82	22.82	22.82	22.82	25.52
2. Borrowings from :—						
(*a*) Government of India . .	2,040.43	2,105.55	2,505.26	3,414.17	4,573.18	5,916.16
(*b*) Industrial Development Bank of India	180.00	165.00	131.00	131.00	131.00	131.00
(*c*) Others	..	..	..	..	32.57	15.87
(*d*) Cash credit (including export packing credit)	1,972.35	2,164.56	1,847.68	2,235.81	2,210.76	2,178.52
3. Trade dues & Current Liabilities (including provisions) . . .	1,587.16	1,950.26	2,707.84	3,403.91	3,797.44	3,384.76
TOTAL	7,946.75	8,864.13	9,670.54	11,806.65	13,366.71	14,250.77

	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
ASSETS						
4. Gross Block	2,142.04	2,539.69	2,635.14	2,698.61	2,880.79	2,906.09
Less : Depreciation	567.12	653.82	743.16	837.10	937.63	1,032.30
5. Net Fixed Assets	1,574.92	1,885.87	1,891.98	1,861.51	1,943.16	1,873.79
6. (*a*) Capital Work-in-Progress . .	249.49	132.93	106.46	113.34	69.25	154.96
(*b*) Technical Know-how Charges	47.41	45.41	42.10	38.02	27.35	13.56
7. Investments	76.87	76.87	7.16	7.16	7.31	7.31
8. Current Assets, Loans & Advances .	4,750.32	4,972.10	4,958.96	6,192.03	6,560.24	6,697.69
9. Misc. Expenses & Losses . . .	1,247.74	1,750.95	2,663.88	3,594.59	4,759.40	5,503.46
TOTAL	7,946.75	8,764.13	9,670.54	11,806.65	13,366.71	14,250.77
Debt Equity Ratio	1.04 : 1	0.92 : 1	1.07 : 1	1.36 : 1	1.81 : 1	2.33 : 1
Capital Employed	4,738.08	4,907.71	4,143.10	4,649.63	4,705.96	5,186.72
Net worth	919.07	727.81	(—)185.12	(—)972.83	(—)2,137.64	(—)2,879.00

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

2. Net worth represents paid-up Capital plus Reserves and Surplus less intangible assets.

12.02 *Working results*

The working results of the Company for the six years ending with 1981-82 are analysed below :—

(Rupees in lakhs)

	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
1	2	3	4	5	6	7
1. Sales	4,786.53	4,212.85	3,605.15	3,259.42	3,789.43	4,249.08
2. Other Income	0.92	3.50	3.85	75.85	202.89	144.37
3. Cost of work done on Capital Account	46.33	34.75	5.63	6.66	15.01	8.31
4. Increase (+)/Decrease (—) in Stock of Finished goods & Work-in-Progress	(—)723.54	(+)126.29	(—)772.34	(+)443.64	(+)23.95	(+)48.91
5. Total Value of Production . . .	4,110.24	4,377.39	2,842.29	3,785.57	4,031.28	4,450.67
6. *Less :* Value of materials, stores, spares, fuel consumed and Royalty, Drawing & Design charges, Technical know-how charges paid/payable	2,128.18	2,834.50	1,686.09	2,357.72	2,212.38	2,514.82
7. Net Value added	1,982.06	1,542.89	1,156.20	1,427.85	1,818.90	1,935.85

1	2	3	4	5	6	7
8. Expenditure contributing to net value added :—						
(a) Salaries	1,117.34	1,179.25	1,134.54	1,285.71	1,500.21	1,559.36
(b) Depreciation	74.72	91.29	93.79	95.93	102.74	105.59
(c) Interest on Loans . . .	454.90	480.92	498.96	644.98	852.56	422.89
(d) Other Expenses & Adjustments .	265.38	258.05	251.64	331.94	528.20	592.07
	1,912.34	2,009.51	1,978.93	2,358.56	2,983.71	2,679.91
Profit (+)/Loss (—)	(+)69.72	(—)466.62	(—)822.73	(—)930.71	(—)1,164.81	(—)744.06
	1,982.06	1,542.89	1,156.20	1,427.85	1,818.90	1,935.85
Profit (+)/Loss (—) anticipated in the Budget Estimates	(+)144.00	(+)9.00	(—)138.00	(—)620.00	(—)993.00	(—)840.00
Percentage of expenditure to net value added	96.48	130.24	171.16	165.18	164.04	138.44

12.03 *Profitability Analysis*

The Company has been continuously incurring losses since 1977-78. The following table indicates the contribution made by the major lines of production to the profit/loss of the Company for the six years ending 31st March 1982.

(Rupees in lakhs)

Name of major group of products	1976-77 Profit (+)/ Loss (—)	1977-78 Profit (+)/ Loss (—)	1978-79 Profit (+)/ Loss (—)	1979-80 Profit (+)/ Loss (—)	1980-81 Profit (+)/ Loss (—)	1981-82 Profit (+)/ Loss (—)
1	2	3	4	5	6	7
Cranes	(+)6.57	(—)112.72	(—)138.29	(—)395.36	(—)429.49	(—)362.80
Gates	(+)60.60	(—)24.28	(—)238.41	(—)90.65	(—)138.69	(+)3.00
Paper making machinery	(+)54.73	(—)43.00	(+)6.32	(—)30.74	(—)58.66	(—)20.41
Ropeways	(+)12.98	(—)106.71	(—)142.90	(—)53.01	(—)34.42	(+)3.46
Structurals	(—)20.29	(—)187.35	(—)207.45	(—)130.93	(—)116.52	(—)58.98
Wagons and coaches	(—)122.49	(—)53.97	(—)55.88	(—)132.98	(—)231.50	(—)310.98
Road rollers etc.	(+)70,35	(+)61.41	(—)61.66	(+)107.21	(—)33.56	(—)5.86
Miscellaneous Products	(+)7.27	..	(+)15.54	(—)10.17	(—)121.97	(+)8.51
TOTAL	(+)69.72	(—)466.62	(—)822.73	(—)930.71	(—)1164.81	(—)744.06

It will be seen from the above table that the Company has been incurring loss in the production of almost all the major products during the last 5 years ending 31st March 1982 except in the case of Road Rollers in 1977-78, Paper making machinery in 1978-79 and gates, ropeways in 1981-82. It will also be seen therefrom that the actual losses incurred by the Company (except in 1981-82) were much higher than the budgetted losses indicated in Para 12.02. The Committee on Public Undertakings in Para 1 of Part II of its twenty-ninth Report 1981-82 (Seventh Lok Sabha), while considering this aspect had desired that the tendency on the part of the Public Undertakings to under-estimate the losses should be curbed.

The cumulative loss as on 31st March 1982 amounted to Rs. 55.03 crores thereby wiping off the paid-up capital of Rs. 25.99 crores and a part of outstanding loans of Rs. 59.16 crores obtained from the Government of India. The cumulative loss per worker works out to Rs. 0.68 lakh as on 31st March 1982.

According to the Management the following main reasons contributed to the losses of the Company.

1977-78

— Low production.

— Provision for annual bonus for the year as well as for previous years.

1978-79

— Low production.

— Increase in wages cost on account of implementation of Tripartite Wage settlement, increase in prices of steel and other materials.

— Uneconomic prices of products due to competition and other factors.

— Huge financial charges, etc.

1979-80

— Low production.

— Increase in salaries and wages.

— Increase in cost of imported steel being higher as compared to local prices.

— General increase in the cost of raw-materials, components etc.

— The prices of products being uneconomic due to severe competition, acceptance of orders even at low price for keeping the production facilities utilised.

— High financing charges.

1980-81 and 1981-82

— Effect of inflation which affected the input prices of raw materials, components.

— Increase in salaries/wages of the employees.

— Steep increase in the interest charges.

On the future prospects of the Company, the Ministry stated (April 1983), *inter alia,* as follows :—

— The production of the Company is showing an upward trend during the last few years with consequent decline in losses.

— Orders for road rollers, paper making machinery, railway wagons etc. are not forthcoming but despite contraint, and difficulties it is hoped that as a result of various corrective efforts taken, the Company will be able to achieve break even at a budgeted production of Rs. 62.24 crores during 1983-84.

12.04 *Credit control*

One of the factors which has resulted in adverse liquidity position of the Company is the huge amount outstanding against debtors. The following table indicates the volume of book debts, and sales for the last six years ending 31st March 1982.

(Rs. in lakhs)

Year	Debts considered		Total	Sales	Percentage of debtors to sales
	Good	Doubtful			
1	2	3	4	5	6
1976-77 . .	1,693.34	96.02 (33.67)	1,789.36	4,786.54	37.38
1977-78 . .	1,791.17	96.02 (33.67)	1,887.19	4,212.86	44.80
1978-79 . .	2,025.59	174.11 (42.08)	2,199.70	3,605.15	61.02
1979-80 . .	1,828.92	202.71 (117.36)	2,031.63	3,334.48	60.93
1980-81 . .	2,094.76	230.66 (144.75)	2,325.42	3,861.86	60.22
1981-82 . .	1,673.77	165.48 (93.54)	1,839.25	4,343.69	42.34

NOTE : Figures in the brackets indicate provisions made against doubtful debts.

The figures under Sundry Debtors represented about 4.49 months' sales in 1976-77, 5.38 months' in 1977-78, 7.32 months' in 1978-79, 7.31 months' in 1979-80, 7.23 months' in 1980-81 and 5.08 months' in 1981-82.

The analysis of debts outstanding for more than one year as on 31st March 1982 is given below:

(Rupees in lakhs)

	Government parties	Private parties
1	2	3
(i) Debts outstanding for more than one year but less than two years . . .	193.66	19.36
(ii) Debts outstanding for two years and more but less than three years . .	148.71	10.18
(iii) Debts outstanding for three years and more	293.41	99.19

The Ministry stated (December 1982) that as a result of various actions taken by the Management for prompt realisation of outstanding debts, the balance as on 31st March 1982 has come down.

12.05 *Working Capital*

The working capital of the Company stood at Rs. 31.63 crores in 1976-77, Rs. 30.22 crores in 1977-78, Rs. 22.51 crores in 1978-79, Rs. 28.05 crores in 1979-80, Rs. 27.98 crores in 1980-81 and Rs. 33.13 crores in 1981-82 and represented 7.38, 7.43, 7.19, 7.14, 6.72 and 7.65 months value of production at cost excluding depreciation during these years. The working capital as on 31st March 1982 was financed through cash credit from banks (Rs. 22.27 crores) and internal and other resources (Rs. 10.86 crores).

Lack of adequate working capital had been ascribed by the Management as one of the constraints for the efficient working of the Company. This was mainly because of the fact that huge funds were locked up in the inventories and sundry debtors. (Paragraphs 8.02 and 12.04 of the report refer).

The working capital requirements of the Company were met partly from Government loans and partly from cash credit arrangements from the banks. The following table indicates the extent of loans obtained for this purpose and interest paid/payable thereon during the years 1976-77 to 1981-82 :—

(Rupees in crores)

Year	Government of India loans	Cash credit (Cumulative balance)	Interest on	
			Government loans	Cash credit
1	2	3	4	5
1976-77 . . .	..	19.72	0.92	2.93
1977-78 . . .	4.62	21.64	0.97	2.60
1978-79 . . .	7.06	18.48	1.46	2.40
1979-80 . . .	11.59	22.53	2.26	3.18
1980-81 . . .	16.68	22.45	3.85	3.77
1981-82 . . .	12.33	22.27	0.08	4.02

It was stated by the Government (August 1981) that an outside agency (M/s. Batliboi & Company) had been appointed for an independent appraisal of requirement of working capital whose report has been submitted to the Government and was under examination.

13. Financial Management and Internal Control

13.01 *Accounting System*

In May 1975, the Company engaged a firm of Chartered Accountants for preparation of a comprehensive accounts manual at a fee of Rs. 0.40 lakh. The accounts manual was prepared by the firm in March 1977.

The main features of the manual were :—

— Introduction of issue accounting for steel items as a first phase programme; other productive materials to be covered in phases.

— Revision of customer accounting procedure.

— Integration of work-in-progress accounts maintained by cost office with financial accounts.

— Introduction of bonded warehouse stock accounting procedure ;

— Mechanisation of financial accounting.

— Revision of general ledger accounting manual.

In this connection, the Management stated (December, 1981) as under :

(i) Steel materials and consumables had already been brought under the purview of issue accounting system and the remaining items would be covered in course of next 2 years.

(ii) Mechanised issue accounting system could be implemented only after detailed study of the present system and laying down programme for the mechanisation of the accounting system for which Hindustan Computers Limited were appointed last year. The firm had completed their study and would be submitting their final report shortly so that the same could be implemented with effect from April 1982.

The Statutory Auditors in their Report (February 1982) under section 619(3) of the Companies Act on the accounts of the Company for the year ended 31st March 1981 had observed that the said manual neither laid down the detailed accounting procedures nor specified the financial powers, duties and responsibilities of various officers.

13.02 *Internal Audit*

Though the Company was in existence for quite a long period, it was only in October 1981 that an Internal Audit Manual defining the scope and programme of work for internal audit was prepared and approved by the Board of Directors. The Statutory Auditors of the Company in their Report under Section 619(3) of the Companies Act, 1956 on the accounts of the company for the year ended 31st March 1981 made the following observations :—

> "Reports by the Internal Audit Department regarding the non-implementation of internal control procedure (regular writing up of books, regular reconciliation of accounts, regular drawing up of trial balances, regular follow up of advances, book debts etc.) do not appear to have been sufficiently emphasised so that corrective action could have been taken in time."

The Committee on Public Undertakings in their Fifteenth Report (Fourth Lok Sabha—April 1968) on "Financial Management in Public Undertakings" had recommended that the functions of internal audit should include a critical review of the systems, procedures and operations as a whole rather than merely of the accounting work. The Ministry of Finance (Bureau of Public Enterprises), while accepting the above recommendation had directed the public enterprises in September 1968 to introduce such a system. The Internal Audit Department had, however, not conducted any such appraisal on the performance of the Company so far (March 1982).

The statutory auditors in their report referred to above had also observed that Internal Audit Department had confined its activities to routine audit work only.

In this connection the Management stated (March 1982) that the Internal Audit Department was being strengthened so as to cover all the activities of the Company.

13.03 *Budgetary Control*

The Bureau of Public Enterprises, had suggested in March 1968 that each public sector undertaking should compile a budget manual which should, *inter alia,* prescribe the responsibility-cum-cost centres for compilation of the budgets. Neither such a Manual had been compiled nor responsibility-cum-cost control centres prescribed (March 1983).

The Ministry stated (December 1982) as follows :—

— Company has recently installed a mini computer and the accounts are being computerised.

— All connected forms, proformas etc. have been re-designed and accounts codified to suit the present requirement for computerisation.

— Once computerisation of accounts is complete, the responsibility-cum-cost centre budgets will be introduced.

13.04 *Management Information System*

A management information system for production, sales, manpower planning was introduced from 1981-82 only

OVERALL SUMMARY

1. *Historical Background*

Following investigation into the affairs of Jessop & Company Limited under Section 15 of the Industries (Development and Regulation) Act, 1951, Government took over the Management of the Company under Section 18A of the said Act, initially for a period of three years from 15th May 1958, subsequently extended from time to time upto 14th August 1969. In the meantime, with a view to acquiring controlling interest in the Company, Government purchased in August 1965, 11,23,300 ordinary shares of Rs. 10 each constituting 50.10 per cent of the total paid-up share capital held by various firms and associates controlled by an Industrialist. The price payable for the shares was determined (April 1969) by an Arbitrator at Rs. 50 per share. In March 1973, the Government of India purchased 2000—5 per cent cumulative preference shares of Rs. 100 each, thus raising Government shareholding to 51.04 per cent of the paid-up capital of the Company.

2. *Objectives*

The Company has not so far (December 1982) formulated the objectives and obligations, both financial and economic in terms of the instructions issued by the Bureau of Public Enterprises in November 1970. The Company has also not taken any action to lay down a set of coherent objectives as suggested by the Ministry of Industry in May 1978.

3. *Delegation of Powers*

No action had been taken (December 1982) to review the system of delegation of powers throughout the managerial hierarchy upto the lowest level in order to ensure that at all levels, the centres of responsibilities corresponded exactly with the centres of powers in terms of Bureau of Public Enterprises instructions of September 1970. Similarly, detailed powers and functions of the Financial Adviser had not been laid down in terms of the Bureau of Public Enterprises instructions of May 1969.

4. *Financial Position and Working Results*

As on 1st April 1973 when the Company became a Government Company, there was an accumulated loss of Rs. 9.87 crores. The Company had continuously been incurring losses since 1977-78. The cumulative loss as on 31st March 1982 stood at Rs. 55.03 crores thereby completely wiping off the paid-up capital of Rs. 25.99 crores and part of outstanding loans of Rs. 59.16 crores obtained from the Government of India out of the total loans of Rs. 100.77 crores.

On the basis of the recommendations of the Expert Committee on Public Enterprises, the Government granted (July 1982) certain financial reliefs to the Company subject to the condition that the revised projections of production, profitability furnished by the Company were achieved. According to these projections, the Company was expected to earn an operating profit of Rs. 0.10 crore at a production level of Rs. 55.34 crores in 1982-83.

5. *Rehabilitation Programme*

In order to maintain the planned growth, the Company embarked up on a rehabilitation programme in 1975 at a cost of Rs. 5.18 crores (subsequently revised to Rs. 5.71 crores). The scheme which was expected to be completed in 1978-79 is now expected to be completed by 1982-83. Further, the scheme on implementation was expected to result in a net increase in the value of production and gross surplus (prior to depreciation and interest) of Rs. 1.84 crores and Rs. 1.50 crores respectively. The extent of benefits actually derived from the implementation of the scheme have not been assessed by the Company.

6. *Performance of diversification schemes*

The traditional activities of the Company comprise manufacture of cranes, sluice gates, road rollers, metre gauge coaches, railway wagons, structurals and other engineering items, etc. With a view to diversifying its lines of manufacture, the

Company has taken up manufacture of new items like aerial ropeways, trawler tractors, paper making machinery, etc. in technical collaboration with a number of foreign firms.

The diversification programme completed by the Company in 1978-79 at a cost of Rs. 9.55 crores in technical collaboration with 17 foreign firms did not yield expected results owing mainly to :

— non-receipt of adequate orders and delay in the execution of the orders received;

— absence of feasibility studies about economic viability of the schemes except in the case of paper machinery project;

— under-utilisation of additional production capacity created at a cost of Rs. 1.49 crores for road rollers;

— overall loss of Rs. 1.44 crores on the execution of four orders secured—Aerial Ropeways; and

— no significant effort had been made to absorb and update the technologies obtained through foreign collaborations.

7. *Overall Performance*

The rated and attainable production capacities of various products of the Company have not been fixed on the basis of a scientific analysis. While the production capacities of the traditional items had been fixed on the basis of maximum production achieved in the past those of the new items were based on the licenced capacity. As a result, a realistic assessment of capacity utilisation of the individual shops or production centres with reference to product-mix was not possible. However, the following notable factors of the production performance of the Company deserve mention :

— The actual production of major products was generally far below the installed capacity of the individual products.

— In a number of cases, even the targets of production which were fixed at a lower level than the installed capacity had not been achieved.

— The Company suffered a loss of production to the extent of over Rs. 30.60 crores during the years 1978-79 to 1981-82 alone on account of various reasons (power shortage, raw materials shortage and others).

— The production of steel works duty (SWD) cranes was not satisfactory even after an investment of Rs. 3.95 crores on expansion of the project.

— Though the installed capacity of the road rollers was raised from 600 to 1200 per annum at a cost of Rs. 1.49 crores (1974-75), there was a drop in the production from 1975-76 onwards even as compared to 1973-74 and 1974-75 to such a low level that even the initial installed capacity of 600 road rollers was not achieved. There was also an accumulation of unsold stock of road rollers which necessitated obtaining of a bridging loan involving considerable payment of interest.

— In the case of structurals, the actual expenditure was far more than the estimated expenditure as well as sales value. Over the last 9 years ending 31st March 1982 the Company incurred a total loss of Rs. 13.76 crores in the manufacture of gates and valves.

— The installed capacity of rolling stock remained grossly under-utilised. The production was stopped in 1976-77 but resumed later. The Company also suffered huge losses on the export of railway wagons. In the case of export of wagons to Yugoslavia alone, a loss of Rs. 2.98 crores was incurred owing to unrealistic estimates, offering of firm prices before receipt of detailed specifications, etc.

— Operation of Cast Iron Foundry was uneconomical as the market price of castings was cheaper as compared to the cost of production of such castings by the Company.

— No norms had been laid down in respect of rejections at various processes/stages of manufacture/fabrication of different products nor had any records showing actual rejections been maintained for the Dum Dum Factory (except Cast Iron Foundry).

— Neither norms of labour efficiency based on any scientific study were determined nor records showing the cause-wise details of idle labour hours for each job as well as idle machine hours were maintained.

8. *Material management and inventory control*

The following deficiencies were noticed in the material Management and inventory control :—

— No comprehensive manual for material management and purchase procedure outlining the procedure to be followed regarding indenting, purchase, receipt, inspection, storing, etc. of materials had been drawn up.

— No material budgeting, cataloguing, standardisation and codification of materials had been introduced.

— Neither ABC analysis of various stores items had been carried out, nor levels of inventory holdings of stock items had been fixed.

— There was no system of periodical review of stock holdings to ascertain the extent of surplus, obsolete and unserviceable items of stores and spares, etc. Out of the total stock of raw materials, components and stores and spares of the value of Rs. 17.99 crores (excluding customs duty of Rs. 5.47 crores on materials in Bonded Warehouses) as on 31st March 1982, stores and spares and components of the value of Rs. 1.91 crores had not moved for 2 years or more.

— Materials and equipment to the extent of Rs. 1.36 crores imported under various diversification schemes had been lying in the bonded warehouse for 3 to 5 years and above.

— There was no centralised department for procurement of materials as a whole and issues were not controlled centrally except in the case of a few items.

— In the case of non-stock items or productive materials, the items were procured and booked directly against specific job orders for which neither item-wise quantitative stores accounts were maintained nor was any physical verification caried out periodically.

— Although there was a central stores department at Dum Dum for custody and issue of stock items, the major works also held work stock sub-stores and initiated indenting action independently. There was no co-ordinated central control over the procurement of work stock items as a whole.

— There was poor linkage between procurement and production planning which resulted in accumulation of inventory.

— A quick appraisal by the Internal Audit Department of the report (April 1976) of the firm of technical consultants appointed for comprehensive physical verification revealed a net surplus of steel materials to the extent of Rs. 1 crore.

9. *Sales management and pricing policy*

The following points are of interest :

— The Company has not so far formulated a clear cut pricing policy in respect of its various products/jobs.

In a number of cases, the Company was not able to recover the costs.

— There was no system of associating finance or cost accounting section with the framing of estimates, quotations and finalisation of sale orders/contracts.

— No sales budget as distinct from production budget was prepared by the Company.

— Not only was the receipt of orders for different products fluctuating from year to year, execution of the orders by the Company was also erratic and there were delays in execution of the orders. Though the order position in respect of marginally remunerative/ unremunerative products was more or less satisfactory the overall order position reflected imbalances.

10. *Costing system and analysis of cost*

The Company followed the system of job/batch costing for ascertaining the cost of its products. In this connection the following features deserve mention :

— The system of standard costing even for standard products like road rollers and crawler tractors, etc. was not introduced.

— No standard norms for use of materials in different processes of manufacture have been laid down by the Company in the case of cranes, railway wagons and other important fabricated items.

— There were wide variations between estimates drawn up for material, labour and overheads and actuals thereagainst. There was no system of detailed analysis and investigation of the variances between the estimated and actual cost/usage.

11. *Manpower analysis and labour utilisation*

The following notable points are of interest :

— The Company had not conducted an integrated study to determine its work force requirement with reference to the actual or optimum level of production.

— The actual shop-wise labour efficiency as compared with the estimated labour efficiency with reference to the optimum capacity of each shop had not been ascertained.

— On account of Company's policy to stop manufacture of wagons and due to change in technology from rivetted construction to welded construction, there was a surplus labour strength of about 2000 men approximately.

— Since 1980, about 40 per cent of 4353 workmen in the structural and coach works had been idle.

— The productivity per employee was very low as compared to other public and private sector undertakings.

— While on the one hand the Company was over staffed, on the other hand huge overtime allowance ranging from Rs. 29.33 lakhs to Rs. 124.65 lakhs per year was paid to workmen during the years 1973-74 to 1981-82.

12. *Credit Control*

Huge amounts were outstanding against sundry debtors affecting adversely the liquidity position of the Company. The percentage of debtors to sales rose from 37.38 in 1976-77 to 61.02 in 1978-79 and decreased to 42.34 in 1981-82. Debts outstanding for 3 years and more amounted to Rs. 2.93 crores from Government parties and Rs. 0.99 crore from private parties.

13. *Budgetary control*

A budget manual prescribing responsibility-*cum*-cost centres had not been compiled.

14. *Management information system*

A management information system for production, sales, manpower planning was introduced from 1981-82 only.

R C Suri

(R. C. SURI)
Chairman, Audit Board and Ex-officio Additional Deputy Comptroller and Auditor General (Commercial)

NEW DELHI
The 22-11-1983

Countersigned

Prakash

(GIAN PRAKASH)
Comptroller and Auditor General of India

NEW DELHI
The 22-11-1983.

ANNEXURE I

(Referred to in paragraph 6.01)

Salient features of Diversification schemes

Name of Foreign Collaborators/Date of agreement	Name of Product/Job	Effective Date	Date of Government approval	Period of agreement	Amount of lumpsum fees payable	Percentage of royalty payable
1	2	3	4	5	6	7
1. Beloit Walmsley International, U.S.A. (22-11-1972)	Paper Machinery	19-1-73	23-2-72	10 years from the date of validation	6,00,000 US $ payable in 3 instalments	Technical assistance fee @ 2½ per cent of the net price and royalty @2½ per cent of the net ex-factory selling price less landed cost of imported materials.
2. Massey Ferguson Hanomag Inc. & Co., West Germany (28-3-1972)	Crawler Tractors with Dozer and Loader Attachments	16-8-72	16-8-72	5 years from the date of Commercial production	D.M. 1,60,200 payable in 4 instalments	3 per cent of the net sales less landed cost of imported components.
3. Nikex, Budapest (19-10-1972)	Aerial Ropeway for Bokajan Cement Factory	28-12-72	20-12-72	For one order only	Rs. 19,14,250 payable in two instalments	—
4. Creusot Loire, France (12-11-72)	Hydraulic Circular Saw Machine/Saw blade/Sharpening Machine	16-5-73	16-5-73	10 years from the date of signing of the agreement	F. Francs 2,57,000 payable in 3 instalments	5 per cent of the net invoice value less landed cost of imported components and 7 per cent for exports.
5. Frank Wiggleworth & Co. Ltd., U.K. (21-6-1973)	Geared Couplings and Special Flexible Couplings	31-1-75	31-1-75	5 years from the effective date	£ 5,000 payable in 2 instalments	5 per cent of the net selling price less landed cost of imported components.

6. Nikex, Budapest (30-4-1975)	Aerial Ropeway for Rajban Cement Plant	5-7-75	5-7-75	For one order only	Rs. 8,40,000 payable in 4 instalments	—
7. Mitchel Ropeway, U.K. (31-5-1975)	Aerial Ropeway for Bokaro Steel Plant	22-7-75	22-7-75	3 years from the effective date	£ 80,000 payable in 3 instalments	—
8. Clerke Chapman Limited, U K. (12-9-1975)	Grabs	23-7-76	23-7-76	5 years from the date of commissioning	£ 5,000 payable in 3 instalments	5 per cent of the sale price less landed cost of imported components & Hydraulic/bearings locally bought.
9. Nikex, Budapest. (7-7-1976)	Aerial Ropeway for Penden Cement Authority	16-9-76	16-9-76	For one order only	Rs. 8,50,000 payable in 3 instalments	—
10. A. B Haggland Sener, Sweden (30-12-1976)	Electro-hydraulic Ship Deck Cranes	27-1-77	27-1-77	5 years from the date of the Ex-Works shipment of the first product sold	SW.Kr. 4,00,000 for the first 3 Cranes & Sw.Kr. 15,000 for each additional crane numbering six (total SW.Kr. 4,90,000).	5 per cent of the net invoice value exlcuding packing, internal sale — commission & value of landed cost of imported components.
11. Aveling Barford Limited, U.K. (11-1-1977)	Dump Trucks	8-3-77	8-3-77	5 years from the date of commissioning	£ 6,250 payable in 3 instalments	3 per cent of the net invoice value for home sale and 5 per cent on export.
12. —do— (11-10-1977)	Vibratory Road Rollers	11-10-77	31-8-77	—do—	£ 50,000 in one instalment	—
13. Walter Somers (Materials Handling) Limited, U.K. (19-7-1977)	Special Materials Handling Equipment	2-9-77	2-9-77	—do—	£ 40,000 payable in 3 instalments	4 per cent of the net invoice value less landed cost of imported components plus Hydraulic/bearing locally purchased.

1	2	3	4	5	6	7
14. Gullick Dobson Limited, U.K. (31-1-1978)	Powered Roof Supports, Heavy Duty Stakers, and supports conveyor Advancing Mechanism	24-4-78	24-4-78	—do—	£ 25,000 payable in 3 instalments	4 per cent of the net invoice value of the product & 6 per cent on exports of the net invoice value excluding packing and landed cost of imported components.
15. Creusot Loire, France (18-9-1978)	Self-propelled Cranes. (Mobile Cranes)	12-1-79	12-1-79	10 years from the date of Government approval	F. Francs TLF Model—1,20,000 GG845TL—1,50,000 GG860TL—2,50,000 GTL17075—2,00,000 GGI5100—2,50,000, 250—1,50,000 (optional)	3 per cent on ex-factory price less landed cost of imported components limited to 5 years.
16. Vickerys Limited, U K. (30-12-1977)	Doctors Equipment for Paper Machinery	8-5-78	Approval not considered necessary	10 years	Free of charges	—
17. Mining Development Ltd., U.K. (8-9-1977)	Mindev Type Site Dump Loader	8-9-77 (Date of signing of agreement)	Approval not considered necessary	5 years from the effective date	Free of charges	—

ANNEXURE II

(Referred to in Paragraph 6.03)

(Rs. in lakhs)

Sl. No.	Name of the work & date of agreement	Contract value	Escalation	Total	Date of completion as per contract	Actual date of completion	Estimated					Actual expenditure upto 31-3-1982				Profit/Loss (+) (—)
							Material	Labour	Overhead	Profit	Total	Material	Labour	Overhead	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Aerial Ropeway for Bokajan Cement Factory (7-3-72)	279.06	89.50	368.56	October, 1974	January, 1976	NA	NA	NA	NA	NA	224.72	9.16	36.57	270.45	(+) 98.11
2.	Aerial Ropeway for Rajban Cement Factory (12-4-74)	184.49	45.42	229.91	December, 1976	June, 1980	113.20	7.80	32.00	17.00	170.00+ Escalation	160.92	16.08	68.02	245.02	(—) 15.11
3.	Aerial Ropeway for Pagli Cement Factory, Penden, (30-9-75)	147.96	12.55	160.51	October, 1977	April, 1981	NA	NA	NA	NA	NA	96.26	6.25	34.52	137.03	(+) 23.48
4.	Aerial Ropeway for Bokaro Steel Plant (7-5-1976)	514.36	66.17	580.53	March, 1977	April, 1981	404.00	15.50	50.00	30.21	499.71+ Escalation	583.00	37.93	209.87	830.80	(—) 250.27
		1125.87	213.64	1339.51								1064.90	69.42	348.98	1483.30	(—) 143.79

ANNEXURE III

(*Referred to in paragraph* 6.04)

OTHER PRODUCTS UNDER DIVERSIFICATION SCHEMES

(Rupees in lakhs)

Name of Products	Year	Production as projected in collaboration agreement		Orders received		Orders executed	
		Quantity	Value (Rs.)	Quantity	Value (Rs.)	Quantity	Value (Rs.)
1	2	3	4	5	6	7	8
Crawler Tractor with Dozer & Loader Attachments	1973-74	—	—	3	9.48	—	—
	1974-75	267	373.00	28	97.79	21	72.50
	1975-76	400	560.00	24	82.96	31	101.24
	1976-77	400	560.00	92	296.64	86	259.10
	1977-78	400	560.00	44	150.08	14	56.36
	1978-79	400	560.00	37	154.56	20	77.47
	1979-80	400	560.00	48	229.03	20	82.21
	1980-81	400	560.00	53	211.65	17	74.59
	1981-82	400	560.00	20	157.00	16	65.00
Couplings	1977-78	255	14.25	123	5.64	67	4.01
	1978-79	340	19.00	194	12.35	114	7.05
	1979-80	340	19.00	146	10.98	90	5.61
	1980-81	340	19.00	205	14.99	168	9.41
	1981-82	340	19.00	201	7.83	330	16.31

1	2	3	4	5	6	7	8
GRAB							
(a) Hydraulic Grab	1976-77	N.A.	N.A.	1	3.25	1	3.25
	1977-78	N.A.	N.A.	2	11.60	2	11.60
	1978-79	N.A.	N.A.	—	—	—	—
	1979-80	N.A.	N.A.	—	—	—	—
	1980-81	N.A.	N.A.	—	—	—	—
	1981-82	N.A.	N.A.	—	—	—	—
(b) Rope-operated Grab	1976-77	N.A.	N.A.	7	13.00	7	13.00
	1977-78	N.A.	N.A.	4	9.00	4	9.00
	1978-79	N.A.	N.A.	—	—	—	—
	1979-80	N.A.	N.A.	1	3.00	1	3.00
	1980-81	N.A.	N.A.	—	—	—	—
	1981-82	N.A.	N.A.	—	—	—	—
Deck Crane	1976-77	15	270.00	8	243.66	—	—
	1977-78	20	360.00	—	—	8	212.20
	1978-79	30	540.00	4	91.93	—	31.46
	1979-80	30	540.00	—	—	—	—
	1980-81	30	540.00	—	—	1	26.49
	1981-82	30	540.00	—	—	3+Part	133.44
Dump Trucks	1977-78	—	—	4	26.20	—	—
	1978-79	20	80.00	11	72.05	8	50.21
	1979-80	30	120.00	5	32.75	12	75.00
	1980-81	40	160.00	2	14.22	2	14.22
	1981-82	40	160.00	2	16.00	2	16.00

Vibratory Road Roller	1977-78	—	—	—	—	—	—
	1978-79	—	—	—	—	—	—
	1979-80	—	—	12	68.60	—	—
	1980-81	7	20.00	7	56.00	6	37.86
	1981-82	7	20.00	10	115.00	7	48.00
Special Material Handling Equipment	1977-78	—	—	—	—	—	—
	1978-79	11	56.25	35	56.17	3	1.01
	1979-80	20	100.00	20	82.04	13	3.73
	1980-81	25	125.00	20	81.96	25	33.70
	1981-82	25	125.00	2	2.81	18	56.00
SAW MACHINES							
(a) Hydraulic Circular Saw Machine	1974-75	—	—	—	—	—	—
	1975-76	20	35.08	6	21.49	6	21.49
	1976-77	48	84.20	11	42.53	11	42.53
	1977-78	48	84.20	7	35.98	7	35.98
	1978-79	48	84.20	11	51.72	4	19.30
	1979-80	48	84.20	5	23.73	6	25.38
	1980-81	48	84.20	12	41.28	11	47.75
	1981-82	48	84.20	6	25.35	3	12.39
(b) Saw Blade Sharpening Machine	1975-76	7	4.44	—	—	—	—
	1976-77	16	10.66	—	—	—	—
	1977-78	16	10.66	1	1.65	1	1.65
	1978-79	16	10.66	—	—	—	—
	1979-80	16	10.66	2	4.13	2	3.73
	1980-81	16	10.66	2	4.19	4	7.79
	1981-82	16	10.66	5	11.05	1	1.95

1	2	3	4	5	6	7	8
Powered Roof Supports, Heavy Duty Stakers & Supports etc.	1977-78	—	—	50 Sets	£ 38,550	—	—
	1978-79	—	—	—	—	—	—
	1979-80	—	—	—	—	—	—
	1980-81	—	—	218 Sets	505.00*	—	—
	1981-82	—	—	90	949.00	218	113.00
Doctor's Equipment for Paper Machinery	1977-78 to 1981-82	—	—	—	—	—	—
Mindev Type Site Dump Loader	1977-78 to 1981-82	—	—	—	—	—	—
Mobile Crane	1977-78	—	—	—	—	—	—
	1978-79	—	—	—	—	—	—
	1979-80	20	350.00	1	32.00	1	32.00
	1980-81	8	575.00	1	26.78	1	26.78
	1981-82	8	575.00	—	2.00@	4	150.00
Grand Total			10,248.18		4,225.04		2,149.40

*Includes free supply items with Rs. 392 lakhs.

@Represents price adjustments.

ANNEXURE IV

(*Referred to in Paragraph*—7.04)

Statement showing actual production, Sales vis-a-vis the installed capacity and targets of production fixed

(Rupees in Lakhs)

Sl. No.	Product	Year	Installed capacity	Original targets	Revised targets	Actual production	Sales
1	2	3	4	5	6	7	8
1.	Structural fabrication including gates and aerial Rope-ways.	1973-74	6000 Tonnes	N.A. (Rs. 123)	N.A. (Rs. 121)	3538 Tonnes (Rs. 234)	2773 Tonnes (Rs. 215)
		1974-75	6000 Tonnes	N.A. (Rs. 113)	N.A. (Rs. 243)	1694 Tonnes (Rs. 295)	1664 Tonnes (Rs. 315)
		1975-76	6000 Tonnes	N.A. (Rs. 136)	N.A. (Rs. 242)	3857 Tonnes (Rs. 348)	3941 Tonnes (Rs. 349)
		1976-77	13000 Tonnes	N.A. (Rs. 1007)	N.A. (Rs. 930)	10676 Tonnes (Rs. 827)	10676 Tonnes (Rs. 807)
		1977-78	13000 Tonnes	8363 Tonnes (Rs. 957)	11606 Tonnes (Rs. 1328)	8606 Tonnes (Rs. 969)	8606 Tonnes (Rs. 969)
		1978-79	13000 Tonnes	11386 Tonnes (Rs. 694)	13416 Tonnes (Rs. 756)	10476 Tonnes (Rs. 756)	10022 Tonnes (Rs. 744)
		1979-80	13000 Tonnes	4019 Tonnes (Rs. 410)	5410 Tonnes (Rs. 502)	6243 Tonnes (Rs. 396)	6315 Tonnes (Rs. 414)
		1980-81	6000 Tonnes	8188 Tonnes (Rs. 631)	5517 Tonnes (Rs. 455)	4183 Tonnes (Rs. 422)	4565 Tonnes (Rs. 423)
		1981-82	6000 Tonnes	3881 Tonnes (Rs. 285)	5247 (Rs. 543)	4291 Tonnes (Rs. 641)	4248 Tonnes (Rs. 655)

1	2	3	4	5	6	7	8
2.	Cranes	1973-74	6000 Tonnes	N.A. (Rs. 310)	N.A. (Rs. 302)	3670 Tonnes (Rs. 311)	3635 Tonnes (Rs. 315)
		1974-75	6000 Tonnes	N.A. (Rs. 367)	N.A. (Rs. 358)	2876 Tonnes (Rs. 372)	2986 Tonnes (Rs. 366)
		1975-76	6000 Tonnes	N.A. (Rs. 605)	N.A. (Rs. 870)	5578 Tonnes (Rs. 1183)	5578 Tonnes (Rs. 1186)
		1976-77	7000 Tonnes	N.A. (Rs. 1524)	N.A. (Rs. 1737)	8041 Tonnes (Rs. 2172)	7962 Tonnes (Rs. 2158)
		1977-78	7000 Tonnes	5696 Tonnes (Rs. 1796)	6813 Tonnes (Rs. 2148)	7470 Tonnes (Rs. 2075)	6807 Tonnes (Rs. 1872)
		1978-79	7000 Tonnes	4526 Tonnes (Rs. 1612)	3525 Tonnes (Rs. 1111)	3106 Tonnes (Rs. 997)	3623 Tonnes (Rs. 1201)
		1979-80	7000 Tonnes	1116 Tonnes (Rs. 400)	3283 Tonnes (Rs. 919)	1446 Tonnes (Rs. 352)	1641 Tonnes (Rs. 385)
		1980-81	7000 Tonnes	3106 Tonnes (Rs. 1163)	2674 Tonnes (Rs. 1007)	2796 Tonnes (Rs. 828)	2790 Tonnes (Rs. 805)
		1981-82	7000 Tonnes	3108 Tonnes (Rs. 902)	2940 Tonnes (Rs. 1123)	2578 Tonnes (Rs. 898)	2319 Tonnes (Rs. 846)
3.	Railway wagons	1973-74	2100 Nos.	1127 Nos. (Rs. 665)	1032 Nos. (Rs. 455)	1027 Nos. (Rs. 353)	1027 Nos. (Rs. 362)
		1974-75	2100 Nos.	1098 Nos. (Rs. 571)	728 Nos. (Rs. 312)	720 Nos. (Rs. 343)	720 Nos. (Rs. 343)
		1975-76	2100 Nos.	600 Nos. (Rs. 171)	768 Nos. (Rs. 301)	439 Nos. (Rs. 181)	439 Nos. (Rs. 181)
		1976-77	Nil	Nil	Nil	Nil	Nil
		1977-78	Nil	Nil	Nil	Nil	Nil (Rs. 1 lakh)

	1978-79	Nil	Nil	Nil (Rs. 199)	Nil	Nil (Rs. 3 lakhs)
	1979-80	Nil	N.A. (Rs. 624)	N.A. (Rs. 721)	227* Nos. (Rs. 489)	190 (Rs. 434)
	1980-81	1200 Nos.	283 Nos. (Rs. 269)	413 Nos. (Rs. 400)	290** Nos. (Rs. 382)	327 Nos. (Rs. 347)
	1981-82	1200 Nos.	595 Nos. (Rs. 226)	275 Nos. (Rs. 124)	305 (Rs. 234)†	305 Nos. (Rs. 160)
4. Metre Guage coaches	1973-74	300 Nos.	51 Nos. (Rs. 97)	132 Nos. (Rs. 256)	117 Nos. (Rs. 288)	117 Nos. (Rs. 288)
	1974-75	300 Nos.	115 Nos. (Rs. 253)	157 Nos. (Rs. 388)	138 Nos. (Rs. 432)	138 Nos. (Rs. 432)
	1975-76	300 Nos.	184 Nos. (Rs. 467)	N.A. (Rs. 368)	130 Nos. (Rs. 511)	130 Nos. (Rs. 511)
	1976-77	180 Nos.	86 Nos. (Rs. 167)	86 Nos. (Rs. 170)	86 Nos. (Rs. 197)	86 Nos. (Rs. 197)
	1977-78	180 Nos.	Nil	Nil	Nil	Nil
	1978-79	180 Nos.	Nil	Nil	30 UF 20 Shells (Rs. 31)	40 Nos. (Rs. 23)
	1979-80	180 Nos.	Nil	Nil	Nil	
	1980-81	180 Nos.	Nil	20 Nos. (Rs. 20)	Nil	
	1981-82	180 Nos.	93 Nos. (Rs. 307)	67 Nos. (Rs. 238)	12‡Nos. (Rs. 200)	12 Nos. (Rs. 160)
5. E.M.U. Coaches	1973-74	36 3 Car unit	6 3 Car unit (Rs. 78)	10 3 Car unit (Rs. 130)	8 3 car unit (Rs. 144)	8 Nos. (Rs. 144)
	1974-75	36 3 Car unit	21 3 car unit (Rs. 273)	23 3 car unit (Rs. 299)	23 3 car unit (Rs. 366)	23 3car unit (Rs. 366)

*including 62 MG coaches
**including 23 MG coaches
† includes free supply items
‡ includes free supply items

1	2	3	4	5	6	7	8
		1975-76	36 3 car unit	24 3 car unit (Rs. 312)	22 3 car unit (Rs. 352)	16 3 car unit (Rs. 327)	16 3 car unit (Rs. 327)
		1976-77	24 3 car unit	21 3 car unit (Rs. 343)	21 3 car unit (Rs. 320)	20 car unit (Rs. 305)	20 3 car unit (Rs. 305)
		1977-78	24 3 car unit	5 3 car unit (Rs. 57)	5 3 car unit (Rs. 62)	3&4 spare cars (Rs. 71)	3&4 spare cars (Rs. 71)
		1978-79	24 3 car unit	Nil	Nil	Nil	(Rs. 8)
		1979-80	24 U/F	6 UF (Rs. 141)	5 UF (Rs. 105)	20 UF (Rs. 14)	16 (Rs. 11)
		1980-81	24 U/F	72 UF (Rs. 520)	25 UF (Rs. 243)	3 UF (Rs. 100)	3 (Rs. 110)
		1981-82	24 U/F	61 UF (Rs. 482)	45 (Rs. 363)	31 (Rs. 472)*	4 (Rs. 332)
6.	Road rollers	1973-74	900 Nos.	780 Nos. (Rs. 624)	942 Nos. (Rs. 962)	972 Nos. (Rs. 1031)	999 Nos. (Rs. 1055)
		1974-75	1200 Nos.	1570 Nos. (Rs. 1570)	1138 Nos. (Rs. 1320)	1073 Nos. (Rs. 1319)	1079 Nos. (Rs. 1315)
		1975-76	1200 Nos.	720 Nos. (Rs. 1015)	660 Nos. (Rs. 924)	414 Nos. (Rs. 723)	196 Nos. (Rs. 409)
		1976-77	1200 Nos.	300 Nos. (Rs. 450)	160 Nos. (Rs. 261)	70 Nos. (Rs. 134)	322 Nos. (Rs. 478)
		1977-78	1200 Nos.	656 Nos. (Rs. 906)	270 Nos. (Rs. 373)	506 Nos. (Rs. 734)	468 Nos. (Rs. 683)
		1978-79	1200 Nos.	531 Nos. (Rs. 801)	463 Nos. (Rs. 695)	513 Nos. (Rs. 781)	535 Nos. (799 Rs.)
		1979-80	1200 Nos.	520 Nos. (Rs. 870)	507 Nos. (Rs. 809)	532 Nos. (Rs. 828)	508 Nos. (Rs. 790)

	1980-81	1200 Nos.	420 Nos. (Rs. 784)	558 Nos. (Rs. 932)	567 Nos. (Rs. 964)	570 Nos. (Rs. 968)
	1981-82	1200 Nos.	512 Nos. (Rs. 1027)	690 Nos. (Rs. 1173)	424 Nos. (Rs. 799)	438 Nos. (Rs. 911)
7. Crawler tractors	1973-74	Project Stage	50 Nos. (Rs. 110)	Nil		
	1974-75	120 Nos.	56 Nos. (Rs. 140)	22 Nos. (Rs. 75)	21 Nos. (Rs. 73)	21 Nos. (Rs. 73)
	1975-76	120 Nos.	60 Nos. (Rs. 210)	60 Nos. (Rs. 230)	33 Nos. (Rs. 107)	31 Nos. (Rs. 101)
	1976-77	120 Nos.	120 Nos. (Rs. 462)	96 Nos. (Rs. 336)	92 Nos. (Rs. 276)	86 Nos. (Rs. 259)
	1977-78	120 Nos.	85 Nos. (Rs. 280)	46 Nos. (Rs. 151)	12 Nos. (Rs. 54)	14 Nos. (Rs. 56)
	1978-79	120 Nos.	91 Nos. (Rs. 338)	50 Nos. (Rs. 163)	28 Nos. (Rs. 103)	20 Nos. (Rs. 77)
	1979-80	120 Nos.	58 Nos. (Rs. 177)	33 Nos. (Rs. 98)	14 Nos. (Rs. 66)	20 Nos. (Rs. 82)
	1980-81	120 Nos.	60 Nos. (Rs. 180)	45 Nos. (Rs. 150)	21 Nos. (Rs. 89)	17 Nos. (Rs. 75)
	1981-82	120 Nos.	20 Nos. (Rs. 60)	20 Nos. (Rs. 74)	16 Nos. (Rs. 71)	22 Nos. (Rs. 103)
8. Paper Making machinery	1973-74	Project State				
	1974-75	—do—	Nil	Rs. 200	Rs. 196	Rs. 196
	1975-76	—do—	Rs. 662	Rs. 709	Rs. 533	Rs. 553
	1976-77	—do—	Rs. 290	Rs. 294	Rs. 254	Rs. 254

*Includes value of free supply items

1	2	3	4	5	6	7	8
		1977-78	—do—	Rs. 528	Rs. 543	Rs. 395	Rs. 395
		1978-79	2 Nos. (Rs. 1800)	Rs. 1426	Rs. 1009	Rs. 590	Rs. 502
		1979-80	—do—	Rs. 1700	Rs. 1239	Rs. 856	Rs. 927
		1980-81	—do—	Rs. 1197	Rs. 1000	Rs. 705	Rs. 641
		1981-82	—do—	Rs. 770	Rs. 634	Rs. 523	Rs. 602
9.	Dumpers	1977-78	50 Nos.	Nil	Nil	Nil	Nil
		1978-79	50 Nos.	20 Nos. (Rs. 130)	20 Nos. (Rs. 125)	17 Nos. (Rs. 102)	8 Nos. (Rs. 50)
		1979-80	50 Nos.	30 Nos. (Rs. 188)	9 Nos. (Rs. 57)	4 Nos. (Rs. 30)	12 Nos. (Rs. 75)
		1980-81	50 Nos.	15 Nos. (Rs. 93)	12 Nos. (Rs. 72)	4 Nos. (Rs. 25)	2 Nos. (Rs. 14)
		1981-82	50 Nos.	11 Nos. (Rs. 66)	11 Nos. (Rs. 66)	2 Nos. (Rs. 18)	2 Nos. (Rs. 17)
10.	Miscellaneous	1973-74		Rs. 95	Rs. 128	Rs. 88	Rs. 88
		1974-75		Rs. 130	Rs. 295	Rs. 119	Rs. 119
		1975-76		Rs. 455	Rs. 37	Rs. 152	Rs. 152
		1976-77		Rs. 142	Rs. 330	Rs. 309	Rs. 309
		1977-78		Rs. 136	Rs. 205	Rs. 208	Rs. 195
		1978-79		Rs. 170	Rs. 213	Rs. 178	Rs. 198
		1979-80		Rs. 100	Rs. 169	Rs. 256	Rs. 202
		1980-81		Rs. 185	Rs. 233	Rs. 255	Rs. 248
		1981-82		Rs. 95	Rs. 124	Rs. 839	Rs. 453

ANNEXURE V

(Referred to in Paragraph 7.07)

(Rupees in lakhs)

Order No.	Quantity M.T.	Date of Commencement	Date of Completion	Cost upto September 1981 Materials	Labour	Overhead	Total	Sales value
4D-4319 (Bokaro Expn.)	4445	May 1974	August 1980	17.03	27.05	111.42	155.50	119.85
				(13.34)	(16.89)	(53.78)	(84.01)	
5D-4321 (Bhilai Expn.)	5314	Sept. 1975	Sept. 1979	23.39	45.38	193.02	261.79	115.58
				(15.94)	(14.14)	(45.33)	(75.41)	
8D-4331 (Bhilai Expn.)	1693	Nov. 1977	January 1982	3.18	23.38	100.22	126.78	46.36
				(2.91)	(5.76)	(18.42)	(27.09)	
8D-4332 (Bhilai Expn.)	504	Sept. 1977	October 1979	1.19	4.98	22.27	28.44	12.04
				(0.76)	(1.63)	(5.24)	(7.63)	
8D-4333 (Bhilai Expn.)	2808	Feb. 1978	May 1980	4.93	31.67	129.26	165.86	80.55
				(4.49)	(7.99)	(28.64)	(42.12)	
9D-4359 (Box Girder)	383	Jan. 1979	August 1980	0.76	4.58	18.32	23.66	9.60
				(1.15)	(1.34)	(4.29)	(6.78)	
8D-4334	2780	Feb. 1978	February 1981	46.02	13.06	54.59	113.67	100.94
8C-4334 (ASP DGP–Fab. Erec.)				12.66	0.87	2.61	16.14	
				58.68	13.93	57.20	129.81	
				(3.25)	(12.83)	(48.93)	(64.41)	
9D-4335—4337 BHEL, Trichi 9G-4341	672	Dec. 1978 Sept. 1978	October 1979 March 1981	7.45	13.37	64.22	85.04	30.25
OD-4376 (Tata pumping Station	809	Oct. 1979	December 1981	1.96	2.89	11.70	16.55	24.25
				(4.85)	(10.72)	(32.16)	(47.73)	
9D-4357 (Oil Rig)	275	March 1979	April 1981	3.30	8.26	44.29	55.85	23.07
				(2.75)	(5.50)	(22.00)	(30.25)	

Note : Figures within brackets represent 'estimated cost'.

ANNEXURE VI

[Referred to in paragraph 7.09(ii)]

YUGOSLAV WAGON CONTRACT

Description of Heads	Original estimate of October 1970	Revised estimate of April 1975
1	2	3
	(Rs.)	(Rs.)
1. Materials and Components :		
(*a*) Steel (excluding excise duty) . .	18,542	22,070
(*b*) Components	51,535	79,120
2. Conversion cost :		
(*a*) Labour	5,220	18,860
(*b*) Overhead	15,660	81,140
(*c*) Production bonus	1,044	6,850
3. Freight and insurance	16,300	39,331
4. Handling and assembly	10,553	21,152
5. Other direct expenses	2,967	16,373
6. Rudnap's and STC's commission. . .	1,692	1,984
7. Total cost per wagon	1,23,513	2,86,880
8. Cash assistance	20,701	15,598
9. Sale price	1,14,200	1,56,500
10. Profit/Loss	(+)11,388	(—)1,14,782

ANNEXURE VII

[*Referred to in Paragraph* 9.04(C)]

(Rs. in lakhs)

Product/Job	Year	Opening Balance		Orders received during the year		Total Orders		Orders executed		Orders cancelled		Orders Pending	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. STRUCTURAL	1973-74			N.A.								N.A.	505
	1974-75	N.A.	505	N.A.	819	N.A.	1,324	N.A.	160	NIL	NIL	N.A.	1,164
	1975-76	N.A.	1164	N.A.	228	N.A.	1,392	N.A.	310	NIL	NIL	N.A.	1,082
	1976-77	N.A.	1082	N.A.	1144	N.A.	2,226	N.A.	716	NIL	NIL	N.A.	1,510
	1977-78	N.A.	1510	N.A.	264	N.A.	1,774	N.A.	784	NIL	NIL	N.A.	990
	1978-79	11,715T	990	6,254T	702	1,7969T	1,692	10,231T	621	NIL	NIL	7,738T	1,071
	1979-80	7,738T	1071	9,519T	614	1,7257T	1,685	5,303T	338	4T	8	11,950T	1,339
	1980-81	11,950T	1339	2,413T	357	1,4363T	1,696	4,020T	337	—	..	10,343T	1,359
	1981-82	10,343T	1359	528T	103	1,0871T	1,462	4,159T	391	..	..	6,712T	1,071
2. CRANE	1973-74			N.A.								..	1,732
	1974-75	N.A.	1732	N.A.	1467	N.A.	3,199	N.A.	352	NIL	NIL	N.A.	2,847
	1975-76	N.A.	2847	N.A.	819	N.A.	3,666	N.A.	986	NIL	NIL	N.A.	2,680
	1976-77	N.A.	2680	N.A.	1339	N.A.	4,019	N.A.	1644	NIL	NIL	N.A.	2,375
	1977-78	N.A.	2375	N.A.	623	N.A.	2,998	N.A.	1812	NIL	NIL	N.A.	1,186
	1978-79	2,699T	1186	3,885T	1063	6,584T	2,249	3,106T	954	NIL	NIL	3,478T	1,295
	1979-80	3,478T	1295	6,324T	1829	9,802T	3,124	1,295T	278	600T	143	7,907T	2,703
	1980-81	7,907T	2703	945T	506	8,852T	3,209	2,752T	809	..	..	6,100T	2,400
	1981-82	6,100T	2400	2,458T	844	8,558T	3,244	2,282T	821	..	..	6,276T	2,423
3. ROAD ROLLER	1973-74		..	..									
	1874-75	986(N)	1162	92(N)	130	1,078(N)	1,292	1075(N)	1,287	NIL	NIL	3(N)	5
	1975-76	3(N)	5	195(N)	297	198(N)	302	193(N)	295	NIL	NIL	5(N)	7
	1976-77	5(N)	7	94(N)	165	99(N)	172	79(N)	142	NIL	NIL	20(N)	30
	1977-78	20(N)	30	531(N)	772	551(N)	802	506(N)	735	NIL	NIL	45(N)	67
	1978-79	45(N)	67	667(N)	1003	712(N)	1,070	513(B)	776	2(N)	3	197(N)	291
	1979-80	197(N)	291	667(N)	1102	864(N)	1,393	532(N)	828	3(N)	4	329(N)	561
	1980-81	329(N)	561	418(N)	759	747(N)	1,320	567(N)	962	88(N)	143	92(N)	215
	1981-82	92(N)	215	471(N)	975	563(N)	1,190	431(N)	826	37(N)	69	95(N)	295
4. TRACTOR	1973-74												
	1974-75	Nil	Nil	30(N)	102	30(N)	102	20(N)	69	NIL	NIL	10(N)	33
	1975-76	10(N)	33	33(N)	75	43(N)	108	31(N)	101	NIL	NIL	12(N)	7
	1976-77	12(N)	7	34(N)	95	46(N)	102	35(N)	99	NIL	NIL	11(N)	3
	1977-78	11(N)	3	33(N)	152	44(N)	155	11(N)	58	NIL	NIL	33(N)	97
	1978-79	33(N)	97	37(N)	169	70(N)	260	25(N)	88	17(N)	53	28(N)	119
	1979-80	28(N)	119	45(N)	185	73(N)	304	14(N)	43	7(N)	28	52(N)	233
	1980-81	52(N)	233	50(N)	193	102(N)	426	21(N)	87	16(N)	70	65(N)	269
	1981-82	65(N)	269	20(N)	157	85(N)	426	16(N)	65	..	..	69(N)	361
5. DUMPER	1977-78	..	..	4(N)	26	4(N)	26	NIL	NIL	NIL	NIL	4(N)	26
	1978-79	4(N)	26	11(N)	69	15(N)	95	15(N)	95	NIL	NIL	NIL	NIL
	1979-80	..	..	4(N)	25	4(N)	25	4(N)	25	..	..	..	..
	1980-81	..	..	2(N)	14	2(N)	14	2(N)	14	..	..	..	..
	1981-82	..	..	2(N)	16	2(N)	16	2(N)	16	..	..	..	..

S/5 C&AG/83—11

1	2	3	4	5	6	7	8	9	10	11	12	13	14
6. WAGONS	1973-74	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1974-75	2,433	800	NIL	NIL	2,433	800	860	335	634	162	939	303
	1975-76	939	303	NIL	NIL	939	303	439	167	500	136	NIL	NIL
	1976-77	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	1977-78	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	1978-79	NIL	NIL	335	678	335	678	NIL	29	125	269	210	380
	1979-80	210	380	Spares	20	210	400	187	378	..	..	23	22
	1980-81	23	22	2,362	1,119	2,385	1,141	30	14	..	..	2,355	1,127
	1981-82	2,355	1,127	452	210	2,807	1,337	305	130	250	91	2,252	1,116
7. M. G. COACHES	1973-74	N.A.	N.A.	N.A.	N.A.	N.A	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1974-75	156	332	100	319	256	651	126	370	NIL	NIL	130	281
	1975-76	130	281	86	244	216	625	130	458	NIL	NIL	86	167
	1976-77	86	167	NIL	NIL	86	167	86	167	NIL	NIL	..	..
	1977-78	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	1978-79	NIL	NIL	300	334	300	334	NIL	NIL	NIL	NIL	300	334
	1979-80	300	334	292	1,259	592	1,593	40	40	22	238	530	1315
	1980-81	530	1,315	Spares	3	530	1,318	260	261	..	..	270	1057
	1981-82	270	1,057	NIL	NIL	270	1,057	12	159	..	..	258	898
8. EMU COACHES	1973-74	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1974-75	62	809	27	375	89	1184	23	313	..	..	66	871
	1975-76	66	871	NIL	NIL	66	871	14	257	25	336	27	278
	1976-77	27	278	NIL	NIL	27	278	20	255	NIL	NIL	7	23
	1977-78	7	23	NIL	NIL	7	23	7	23	NIL	NIL	NIL	NIL
	1978-79	NIL	NIL	79U	1,875	79U	1875	NIL	NIL	NIL	NIL	79U	1,875
	1979-80	79U	1,875	NIL	NIL	79U	1875	Part	14	..	..	79U +2 Spare	1,861
	1980-81	79U +2 spare	1,861	NIL	NIL	79U+ 2 Spare	1,861	100 (3 cars)	1,761	..	..	78U +2 Spare	1,761
	1981-82	236N	1,761	NIL	NIL	236N	1761	31	308	..	..	205N	1,453
9. PAPER MACHINERY	1973-74	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1974-75	N.A.	862	N.A.	44	N.A.	906	N.A.	243	NIL	NIL	N.A.	663
	1975-76	N.A.	663	N.A.	604	N.A.	1,267	N.A.	381	NIL	NIL	N.A.	886
	1976-77	N.A.	886	N.A.	57	N.A.	943	N.A.	254	NIL	NIL	N.A.	689
	1977-78	N.A.	689	N.A.	2,592	N.A.	3,281	N.A.	363	NIL	NIL	N.A.	2,918
	1978-79	N.A.	2,918	N.A.	22	N.A.	2,940	N.A.	562	NIL	NIL	N.A.	2,378
	1979-80	N.A.	2,378	N.A.	166	N.A.	2.544	N.A.	849	NIL	NIL	N.A.	1,695
	1980-81	N.A.	1,695	N.A.	480	N.A.	2,175	N.A.	705	..	..	N.A.	1,470
	1981-82	N.A.	1,470	N.A.	71	N.A.	1,341	N.A.	498	..	..	N.A.	1,043
10. MISCELLANEOUS	1973-74	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1974-75	NIL	NIL	N.A.	90	N.A.	90	NIL	NIL	N.A.	NIL	N.A.	90
	1975-76	N.A.	90	N.A.	347	N.A.	437	N.A.	135	N.A.	NIL	N.A.	302
	1976-77	N.A.	302	N.A.	78	N.A.	380	N.A.	255	N.A.	NIL	NIL	125
	1977-78	N.A.	125	N.A.	102	N.A.	227	N.A.	151	N.A.	NIL	N.A.	76
	1978-79	N.A.	76	N.A.	308	N.A.	384	N.A.	150	N.A.	NIL	N.A.	234
	1979-80	N.A.	234	N.A.	231	N.A.	465	N.A.	90	N.A.	NIL	N.A.	375
	1980-81	N.A.	375	N.A.	256	N.A.	631	N.A.	206	N.A.	NIL	N.A.	425
	1981-82	N.A.	425	N.A.	123	N.A.	548	N.A.	135	N.A.	NIL	N.A.	413

N.A. = Not available. N.B. = The figures for the year 1973-74 could not be furnished by the Management.

N = Number. T = Tonne. U = A unit of 3 Nos.

ANNEXURE—VIII

(*Referred to in Paragraph* 10.03)

Statement showing variations between the estimated and actual cost

Sl. No.	Job No./batch No.	Description of products		Estimated cost (Rs. in lakhs)	Actual cost (Rs. in lakhs)	Percentage of Variation between estimates and actual
1	2	3	4	5	6	7
1.	2—H—6060—79	1 OT L. L. Crane	Material	5.60	12.60	125.00
			Labour	0.74	2.98	302.68
			Overhead	3.44	18.52	438.45
			Total	9.78	34.10	248.67
2.	2H—6080	2 OT laddle crane	Material	49.95	87.72	75.62
			Labour	6.37	9.07	42.39
			Overhead	38.67	59.53	53.94
			Total	94.99	156.32	64.56
3.	2H—6082	15 T/H.B. Crane	Material	4.12	5.97	44.90
			Labour	1.28	2.54	98.44
			Overhead	5.76	19.05	230.73
			Total	11.16	27.56	146.95

1	2	3	4	5	6	7
4.	2H—6136	5 T/E.O.T. crane	Material	2.96	3.69	24.66
			Labour	0.79	2.15	172.15
			Overhead	2.81	14.10	40.18
			Total	6.56	19.94	203.96
5.	2H—6150—58 . . .	5 T/D.L. crane	Material	32.38	37.48	15.75
			Labour	2.04	5.26	157.84
			Overhead	10.88	40.11	268.66
			Total	45.30	82.85	82.89
6.	2H—6180	Coke pusher	Material	18.60	24.25	30.38
			Labour	1.36	3.84	182.35
			Overhead	7.77	17.15	120.72
			Total	27.73	45.24	63.14
7.	4H—6330	E.O.T. Crane	Material	0.30	2.69	463.33
			Labour	0.15	0.35	133.33
			Overhead	0.60	3.75	525.00
			TOTAL	1.05	5.39 (5.79—0.40)	413.33
8	5H—6334	E.O.T. Crane	Material	1.25	1.70	36.00
			Labour	0.30	0.44	66.66
			Overhead	1.50	2.42	61.33
			Total	3.05	4.56	49.51

9. 5H—6336, 37 & 57	E.O.T. Crane	Material	14.54	27.56	89.55
		Labour	2.41	3.85	59.75
		Overhead	11.68	26.57	127.48
		Total	28.63	57.98	102.51
10. 2G—5385—89	Motor-Cum Parcel Van	Material	87.74	71.43	(—)18.59
		Labour	11.42	20.48	79.33
		Overhead	39.98	92.69	131.84
		Total	139.14	184.60	32.67
11. 3G—5510—14	M.G. coaches	Material	218.21	203.04	(—)6.95
		Labour	18.20	24.37	33.90
		Overhead	63.70	110.91	74.11
		Total	300.11	338.32	12.73
12. 2D—5082	TORX wagons	Material	128.92	291.09	125.79
		Labour	16.78	40.53	141.54
		Overhead	58.75	165.91	182.40
		Total	204.45	497.53	143.35
13. 2H—6131—33	45T floating crane	Material	23.32	33.96	45.63
		Labour	3.62	6.69	84.81
		Overhead	19.52	33.82	73.26
		Total	46.46	74.47	60.29
14. 8H—6000/5	9 Nos. E.O.T. Crane	Material	79.30	115.49	45.64
		Labour	8.33	15.06	80.79
		Overhead	57.86	99.66	72.24
		Total	145.49	230.21	58.23