

C. P. U. No. 179

**COMMITTEE ON PUBLIC
UNDERTAKINGS
(1971-72)**

(FIFTH LOK SABHA)

SECOND REPORT

BHARAT EARTH MOVERS LIMITED

MINISTRY OF DEFENCE
(DEPARTMENT OF DEFENCE PRODUCTION)



**LOK SABHA SECRETARIAT
NEW DELHI**

September, 1971/Bhadra, 1893 (S)

Price : Re. 1.75

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CORRIGENDA

SECOND REPORT OF THE COMMITTEE ON
PUBLIC UNDERTAKINGS ON BHARAT EARTH
MOVERS LIMITED. (5th LOK SABHA)

<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
(iii)	-	2 (Under the Heading 'Secretariat')	Same	Same
(vii)	2	16	affect	after
4	1.16	2-3	Rail-coach	Rail-coaches
4	1.16	7-8	agreement	agreements
5	2.1	7	225	125
5	2.2.	6th -- of the statement	develop- lopment	development
5	2.2	statement last line	2,33	2,83
6	2.4	1	Secretary	Secretary
6	2.5	3	Delete BIML	the word
7	2.6	20	Ordinance	Ordinance
7	2.7	11	Insert 'exercises in respect of the Heavy Earth Moving' after the word 'initial'.	
8	2.9	5	Delete ';	
8	2.9	20	other cases	another case
9	2.12	5-6	manufacture	manufacture
10	2.14	1	e	be
10	2.14	8	fotting	footing
11	3.1	3	Le-Toureau	Le-Tourneau
11	3.1	6	Gomatsu	Komatsu
12	3.4	1	consideration	considera- tions
12	3.5	5	Insert 'when' after the word 'later'	
13	3.5	4	onsultant	consultant

<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
13	3.8	1	term	terms
14	-	6	charged	charges
14	-	17	cinsultation	consultation
14	Statement-against III, Col.2		31-19-1969	31.10.1969
15	3.9	Statement- against I Col.4	3,83,975	4,83,975
16	-	2-3	baggageges	baggages
16	3.11	3	ut	out
20	-	1	number	number
25	3.30	17	representativee	rep- resentative
26	3.33	2 from bottom	Insert 'above after the word '(a)'	
27	-	3 from bottom	3.36	3.35
29	4.1	6	Insert 'if' after the word 'while'	
30	4.4	3	Rs.1.60	Rs.1.66
33	4.10	5	fixe	five
34		2	viture	virtue
35	5.2	Statement- against item No.2 under the year 1968-69	529.07	329.07
	5.5	bottom	Insert '37' as page number	
37	5.5	1	Delete '††'	
37			Insert '40' in last but one column, under the heading 'Qty' against item (iii) of the table.	
37	5.5.	Table- against item (vii) under 1969-70	10 †	10 ††
39	5.6	6	47	37
39	5.7	Statement- Item 4	Tractrs	Tractors
40	5.9	5	Shrotfalls	Shortfalls
40	5.10	2 from bottom	importer	imported

<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
42	5.13		At the end of para 5.13, add '(c) Non-receipt of tyres from Tyre manufacturers'	
43	-	1	Delete line 1	
44	5.16		Table - Against item 4 under Col.2	Leaders Leaders
44	5.16		Table - Against item 9 under Col.4	Nadoje Nadoje
45	5.24	5	Delete '.' after the word '35-ton'	
46	5.25	6	Complete/knocked down	complete knocked down
48.	5.30	2	not	not
53	5.39	under 1967-68	Rs.323.10	Rs.320.10
55.	5.43	2	Undertakings	Undertaking
56	5.48	4	evidence	evidence
63	7.3	3	Rs.386.59	Rs.296.59
63	7.3	Statement- under Col. "1968-69" against item (iv)	Rs.44,81,959	Rs.44,81,959
65	7.9	11 from bottom	Divisions	Division
69	8.9	7	a field	a field
70	8.11	3	continue	continues
71		19	9.18	8.18
73	9.5	1	Delete 'the' after the word 'Under'	
75	9.9	6	officials/Directors	Official Directors
75	9.9	7-8	performances/or problems	performance of the undertaking.
75	9.9	9	Insert 'been' after the word 'however'	

<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
76	9.12	4	in charge	in-charge
77	9.12	17	re work	re-work
77	9.12	25	individual	individual
78	9.16	2	westing house	Westinghouse
81	9.24	1	Kearne	Kearney
81	9.25	1	Kearne	Kearney
83	9.28 (vi)	7	Pompetition	Competition
83	9.28 (vi)	8	12-2/3%	16-2/3%
86	9.39	6	for	<u>Performance output x 100</u> Actual Man Hours taken

Read
Performance = Standard Man Hours output x 100
Actual Man Hours taken

86	9.39	14	performance	performances
90	(vi)	3	Audit-	Adult.
91	(vii)	4	Insert '_' after the word 'Club'	
92	10.1(ii)	5	3-3-1970	31-3-1970
94	(i) (a)	21	Delete ',' after the word 'avoidable'	
94	(i) (a)	22	foreign	foreseen
94	(i) (a)	26	agreements	agreement
111			Insert 'A' before the word 'Knowledge' in the last line.	
115	-	8	G.	I
121	-	7	LY-35	LW-35
125	-	7 (from bottom)	Delete the word 'and' appearing first	
127	-	20	axle	axles
130	-	last	setting	settling
133	-	8 (from bottom)	and	that
136		3	therefore	thereafter
136		16	process	processes
137		14-15	requirements	requirement

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**COMMITTEE ON PUBLIC UNDERTAKINGS
(1971-72)**

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Shri M. B. Rana

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3. Shri Dinen Bhattacharya
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2. Shri Samer C. Mookerjee—*Deputy Secretary.*
3. Shri M. N. Kaul—*Under Secretary.*

*Elected w.e.f. 11th August, 1971 in the vacancy caused on the resignation of Dr. V. K. R. Varadaraja Rao, M.P. on 29th July, 1971.

**STUDY GROUP II ON ENGINEERING UNDERTAKINGS OF THE
COMMITTEE ON PUBLIC UNDERTAKINGS
(1971-72)**

1. Shri S. N. Misra—*Convener*
2. Shri Narayana Kalliyana Krishnan—*Alternate Convener.*
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4. Shri Dinen Bhattacharya—*Member.*
- *5. Dr. V. K. R. Varadaraja Rao—*Member.*
6. Shri Syed Ahmad—*Member.*
7. Shri Dahyabhai V. Patel—*Member.*

*Resigned from the Committee on Public Undertakings with effect from 29th July, 1971.

INTRODUCTION

I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to present the Report on their behalf, present the Second Report on Bharat Earth Movers Limited.

2. This report is based on examination of the working of Bharat Earth Movers Ltd., upto the year ending the 31st March, 1970. The subject was examined by the Committee on Public Undertakings 1970-71. That Committee also took evidence of the representatives of Bharat Earth Movers Ltd., and of the Ministry of Defence (Department of Defence Production) on the 19th and 21st August, 1970 respectively. The Committee, however, could not finalise their report due to the sudden dissolution of the Fourth Lok Sabha on the 27th December, 1970. The Committee on Public Undertakings (1971-72) considered and finalised the report at their sitting held on the 21st July, 1971 based on the evidence taken by the previous Committee and the further information furnished by the Ministry/ Bharat Earth Movers Ltd. The Committee considered the comments of the Ministry of Defence and Bharat Earth Movers Limited on factual verification of the Report at their sitting held on the 16th September, 1971 and adopted the Report affect certain amendments.

3. The Committee place on record their appreciation of the commendable work done by the Members of the Committee on Public Undertakings (1970-71) in taking evidence and obtaining information for this report which could not be finalised by them because of the sudden dissolution of the Fourth Lok Sabha.

4. The Committee wish to express their thanks to the Ministry of Defence (Department of Defence Production) for placing before them the material and information they wanted in connection with the examination of Bharat Earth Movers Ltd. They wish to thank in particular, the representatives of the Ministry and the Undertaking who gave evidence and placed their considered views before the Committee.

(viii)

5. The Committee also place on record their appreciation of the assistance rendered to them in connection with the examination of Audit Paras relating to Bharat Earth Movers Ltd., by the Comptroller and Auditor General of India.

M. B. RANA,
Chairman,
Committee on Public Undertakings

NEW DELHI;
September 16, 1971.

Bhadra 25, 1893 (S).

I

INTRODUCTORY

A. Historical Background

After the Second World War when the load of the Aircraft Overhaul and manufacture was substantially reduced, Hindustan Aircraft Ltd. designed all metal Class III Broad Gauge Coaches on Standard IRS Underframes, supplied by the Railways. A department for Assembly of Railcoaches was separately established in a building of the Air Supply Depot where a railway track was already available. The manufacture shops of Aircraft Division of HAL were feeding the parts for assembly to the Railway coach Department.

1.2. In 1956, the Railway Board desired that HAL should take up manufacture of integral coaches. After examining various proposals in consultation with the Railway Board and the Ministry of Defence, HAL entered into a Collaboration Agreement with M/s. MAN of West Germany for manufacture of Integral Coaches in 1956 and the Railcoach Division in its present form was established in between 1956—61.

1.3. During the emergency (foreign aggression), the Railcoach Division undertook manufacture of certain items of equipments for defence services as well as deputed men for assisting repair and overhaul work at HAL outstations.

1.4. In 1962 the Ministry of Defence, Government of India, entered into a Collaboration Agreement with M/s. Le-Tourneau Westinghouse Co., (now WABCO) of USA for manufacture of Earth Moving Equipment. The agreement was assigned by Government to HAL for initial exercises of the project. The main consideration leading to this decision was the fact that the Railcoach Division had the knowledge of many techniques involved and also certain facilities to undertake initial exercises which would help in speedy execution of the Project. The implementation of this Agreement was therefore, initially entrusted to the Railcoach Factory of HAL (Bangalore Division).

1.5. At the instance of the Government, H.A.L. submitted a Project Report to the Government in October 1963. At the Expenditure Finance Committee meeting held on the 13th February, 1964, it was proposed that Project Estimates as prepared by the H.A.L. should

be scrutinised further with assistance of the Department of Technical Development. It was suggested that a Technical Committee should go into the various aspects of the Project.

1.6. The Technical Committee generally agreed with the approach of H.A.L. in planning their Project Report of October, 1963. The product-mix were, however, revised suggesting the following targets for production:

- (i) 'C' Scrapers 150 per annum.
- (ii) Articulated Rear Dumps 125 per annum.
- (iii) Haulpak Rear Dumps 150 per annum.

1.7. Planning, development, design manufacture of jigs and fixtures and initial exercises of manufacture of sub-assemblies and assembly of Earth Moving Equipment was commenced in the Railcoach Division when it was a part of M/s. Hindustan Aircraft Limited. A separate Division called "BEML" Division was organised within the HAL to handle the work connected with this Project.

1.8. At the instance of the Government, HAL submitted a Project Report to the Government in October, 1963 and Government's approval of the Project was communicated on 21st April, 1964. Bharat Earth Movers Ltd. was set up as a Public Sector Government Company on 11th May, 1964. It started functioning with effect from 1st January, 1965, when the Heavy Earth Moving Equipment Project along with Railcoach Division was transferred to it.

1.9. The execution of the Project involved considerable foreign exchange outlay, for which it was proposed to approach the Export-Import Bank for a loan. Government considered it necessary that the economic feasibility of the Project should be gone into in detail. For this purpose Government appointed M/s. A. T. Kearney & Co., INC., a firm of consultants from USA at a fee of \$80,787 (Rs. 4,01,370) in October, 1964 to submit a detailed project report. Subsequently, the scope of the study was extended to cover the manufacture of Crawler Tractors in collaboration with M/s. Komatsu Manufacturing Co. of Japan. The consultants submitted their report in May, 1965. M/s. A. T. Kearney & Co. recommended an integrated Project covering the manufacture of Crawler Tractors also. It was also considered necessary by the Government to relieve the Director General, Ordnance Factories of the work connected with the collaboration agreement with M/s. Komatsu Ltd. in order to concentrate on other priority items of work. On 16th July, 1965 Government approved the integrated project at a capital cost of Rs. 19.56

crores including a foreign exchange component of Rs. 7.65 crores. The foreign exchange requirement of the Heavy Earth Movers Division was proposed to be met mainly by the EXIM Bank loan and that of Crawler Tractor manufacture mainly from Yen credit. The Crawler Tractor Manufacturing programme which was being carried out by the D.G.O.F., under an agreement signed on 9th September, 1958 between the President of India and M/s. Komatsu Mfg. Co. Ltd., Japan was therefore entrusted to BEML in December, 1965.

1.10. The foreign exchange required for the execution of Heavy Earth Moving Project could not, however, be procured from the EXIM Bank owing to the embargo imposed by the USA in September, 1965 on further economic aid commitments to India in the wake of Indo-Pak conflict.

1.11. In June, 1967 Government directed the Company to reduce the foreign exchange requirement for the Heavy Earth Moving Project "by adopting the indigenous machinery to the maximum extent possible." Accordingly, the Company submitted its revised estimates for the integrated project to Government in December, 1967.

1.12. On 23rd July, 1968 Government sanctioned an amount of Rs. 17.439 crores including a foreign exchange component of Rs. 5.504 crores for capital expenditure on plant and machinery of integrated project. On 23rd August, 1968 a further sum of Rs. 5.339 crores was sanctioned by Government for buildings and civil works.

1.13. The Company is engaged in the production of broadgauge Railcoaches for the Indian Railways in the Railcoach Factory at Bangalore and Crawler Tractors and Heavy Earth Moving Equipment, i.e. Scrapers, Dumpers and Motorgraders, etc. in their Earth Mover Factory at Kolar Gold Fields.

The items of wheeled heavy earthmoving equipment such as Scrapers, Dumpers, Motor Graders, etc. are being produced under the Technical Collaboration with Messrs. Westinghouse Air Brake Company, USA and Messrs. Building Construction Machinery and Metal Structure Industry—Radoje Dakic—of Yugoslavia. The Crawler Tractors are being manufactured under a Technical Collaboration with M/s. Komatsu Manufacturing Company of Japan. The Company has concluded a fresh 3 years Collaboration Agreement with them.

1.14. The authorised Share Capital of BEML is Rs. 15 crores. The paid up capital of BEML as on 31st March, 1969 was Rs. 8.99 crores.

In 1969-70, it was raised to Rs. 11.89 crores. In addition, Government loans totalling Rs. 4.75 crores were also outstanding as on 31st March, 1969.

1.15. BEML's Factory for the manufacture of Crawler Tractors and Heavy Earth Moving Equipment at Kolar Gold Field is under construction and the factory works relating to Crawler Tractor manufacture and common facilities have been substantially completed. Machinery is being received and progressively installed. The manufacturing programme of the company as approved in 1968, had envisaged the production of 500 Nos. of Crawler Tractors of two sizes and 300 units of Heavy Earth Moving Equipment per annum, in the first phase by 1973-74. The Company has also since decided to take up the manufacture of a third size of Crawler Tractors required mainly for agricultural purposes, in Collaboration with M/s. Komatsu of Japan, and also wheeled Tractors, under Technical Collaboration with Yugoslav firm.

B. Objects and Functions

1.16. The objects and functions of BEML are:—

- (a) To manufacture Broad Gauge Third Class integral Rail-coach according to the present commitment with the Railways.
- (b) To manufacture and market in India and for export in due course, Heavy Earth Moving Equipment and Crawler Tractors of various types under the collaboration agreement assigned to or entered into by the Company with progressive increase in indigenous content; and also to take steps to develop suitable products of BEML's design.
- (c) To render after sale service to the equipment sold with adequate spares backing and help in the maintenance of the existing fleet of Earthmoving Equipment in the country.

II

PROJECT REPORT

In August, 1963 the Ministry of Defence asked the Hindustan Aeronautics Limited to prepare a Project Report and to take steps for the formation of a Public Limited Company (separate from H.A.L.) for the implementation of the Project for manufacture of the heavy earth moving equipment. The Project Report was prepared by H.A.L. and submitted in October, 1963. The Project Report proposed the manufacture of the following:—

1. Model 'C' Scraper 14/18 cu. yd. powered 225 Nos. per annum
by 290 HP Engine
2. Model 'C' Rear Dumper 14/18 cu. yd. powered 100 Nos. per annum
by 290 HP engine
3. Model 'CT' Towed Scraper . . . 14/18 cu. yd. 50 Nos. per annum
4. Motorised Crane 200 HP 25 Nos. per annum
5. Haul-pack Model "LW 35" (Off Powered by 380 HP 50 Nos. per annum
highway truck of 35 ton capacity) engine

2.2. The project was divided into 3 stages. The first stage consisted of a six-years phased manufacturing programme ending with 1968-69, for reaching the target capacity indicated above. Further expansion was envisaged in the subsequent two stages. Foreign Exchange content of the capital outlay for the first stage was estimated as Rs. 3.35 crores. The Additional Foreign Exchange requirement for the second stage was estimated as Rs. 1.5 crores.

The three stages planned were briefly as under:—

Stage	Total outlay exc. housing and develop- ment expenditure	Production Value	Import content of products	Completion date
	(Rs. in crores)			
	Rs.	Rs.	Rs.	
1st stage	6.9	9.05	2.39	1,68-69
2nd stage	9.4	11.94	2.4	1970-71
3rd stage	11.4	16.02	2.83	1972-73

2.3. It was intended to commence assembly of the above equipment by importing them in different stages of 'Knocked Down' condition and completing them by making use of the facilities available at the 'Rail Coach Division' of H.A.L.

2.4. In February, 1964, the Secretary (Coordination) Ministry of Finance as Chairman of the Expenditure Finance Committee decided that a technical committee should go into the various aspects of the Project.

He further observed as follows:—

"Summing up... a stringent technical examination of the project was called for as also its merits re-assessed on the basis of economic viability and other factors... particularly as it had emerged that the foreign collaborators had not under-written the Project Report... It was also to be borne in mind that the collaboration had been entered into by Government and that the Project must go through. Efforts should be made to improve the economics of the Project by suitable re-adjustment of the product-mix or other suitable measures... if on economic considerations there was an overwhelming case for shifting the factory elsewhere, that should be brought out."

2.5. The Expenditure Finance Committee, therefore, appointed a Sub-Committee consisting of the Joint Secretary, Department of Heavy Engineering, Officer on Special Duty, BEML, Project, HAL and Senior Industrial Adviser, DGTD for examining the technical details. This Sub-Committee submitted its report in March, 1964 generally agreeing with the approach adopted by HAL for framing the Project Estimates. The revised product-mix suggested by the Sub-Committee for improving the economic viability was:—

(i) Motorised Scrapers	150 per annum.
(ii) Articulated Reardumps	125 per annum.
(iii) Haul-pack	150 per annum.

The Capital outlay was assessed at Rs. 10.50 crores (excluding Township). These recommendations were approved by the Expenditure Finance Committee on the 28th March, 1964. The formal approval of the Project was also conveyed by Government in April, 1964.

2.6. The Committee desired to know the reason for combining the manufacture of heavy earth moving equipment, rail-coaches and Crawler tractors under one undertaking. In a written note to the Committee the Government have stated that:—

“The manufacture of rail coaches had been taken up by the Bangalore Division of HAL by way of diversification of production and in order to achieve optimum utilisation of capacity. The earthmoving equipment project was later on entrusted to HAL in view of the availability of facilities for undertaking the initial exercises for this project in the Railcoach Division. In view of Tata Committee's recommendations, Government later decided to separate the Railcoach Factory from the main Aircraft Factory of HAL Bangalore Division. Accordingly, the Earth Moving Equipment Project along with Railcoach Division were transferred to BEML with effect from 1st January, 1965. Subsequently, based on report of the US Consultants M/s. A. T. Kearney Inc.), it was decided by Government to entrust Crawler Tractor manufacture also to BEML, mainly with a view to enable the Ordnance Factories, where Crawler Tractor production was till then being carried on, to concentrate on other priority items.”

2.7. The Committee desired to know the reason for handing over the manufacture of railway coaches to the administrative control of the Defence Ministry instead of Ministry of Railways|Railway Board. In a written note, the Government stated that:—

“Manufacture of rail coaches is not entirely done by production units under the Administrative Control of the Railways and some units even in the Private Sector are producing coaching stock. Besides, the production of rail coaches had been taken up by HAL Bangalore Division by way of diversification. As the Rail Coach Factory of HAL had facilities for carrying out the initial Equipment Project, this was on separation from HAL, transferred to BEML along with Earth Moving Equipment Project.”

2.8. Bharat Earth Movers Ltd., was set up as a Public Sector Government Company on the 11th May, 1964. It started functioning with effect from 1st January, 1965 when the Heavy Earth moving equipment project along with the Railcoach Division was transferred to it.

Forge and Foundry

2.9. The other aspect of the project report which was examined by the Technical Committee was in regard to the requirements of castings which necessitated the setting up of a foundry forge complex. The Expenditure Finance Committee had felt that the project seemed; incomplete without a forge and foundry.

In this connection, the Technical Committee observed as follows:—

“The forgings in an Articulated Rear-dump or a Motorised Scraper do not weigh more than a ton in each case. The castings (grey iron, non-ferrous and steel) required for each of these models are even less. It is roughly assessed that for the targetted capacity of all products the annual requirements of forgings and castings would not exceed 350 tons and 200 tons respectively and hence there is no justification for establishing facilities for the production of these in the proposed factory. The items are not complicated or particularly heavy and can be obtained from indigenous sources, although there is a chronic shortage of capacity for quality products in these categories. In other cases, we have suggested for consideration, setting up of a foundry forge complex to cater to the needs of the Heavy Vehicles Project at Avadi, the Vehicles Project at Jabalpur and the proposed Project for earth moving machinery.”

2.10. Having regard to the weight of castings and forgings involved in the proposed production, the Technical Committee saw no justification for adding a captive forge and foundry. It therefore, felt that the idea of a Central Forge Foundry to cater to the needs of this Project as well as the proposed Heavy Vehicles Project at Avadi and the Vehicles Project at Jabalpur was worth examining.

In reply to a question whether the Government had taken any action|decision on the recommendations of the Technical Committee for setting up of a Central Forge Foundry to cater to the needs of BEML Project as well as the Heavy Vehicles Project at Avadi and Vehicles Project at Jabalpur, the Department of Defence Production stated in a written note that:—

“In so far as BEML is concerned, the requirements for forgings and castings were examined in May, 1965 by M|s. A. T. Kearney International Corporation, USA who then

found adequate provision had been made for the manufacture of forgings and castings from Grey Iron Foundry being set up at Jabalpur and the Medium Forge being set up at Wardha. In view of this availability of castings and forgings capacity in India, the manufacturing facilities for the BEML Factory have not included castings or forgings producing Departments.....”.

In a subsequent note the Department of Defence Production stated that:—

“A Grey Iron Foundry Project at Jabalpur has been sanctioned and is at present under execution. This project is intended to cater to the needs of grey iron castings and malleable iron castings in respect of production needs of the Jabalpur Vehicles Factory, Bharat Earth Movers Ltd., as well as the Heavy Vehicles Factory, Avadi. The Unit is expected to go into production in the mid-1970s.

As regards forgings, the Heavy Vehicles Factory at Avadi has forge shop facilities which could to some extent meet the needs of BEML also in respect of forgings. In view of the capacity available in the country, the requirements of BEML and Vehicles Factory, at Jabalpur for forgings, to the extent these cannot be catered for by the Heavy Vehicles Factory, Avadi, could be met from other indigenous sources. In so far as BEML is concerned this is in fact being done.”

2.11. The Committee inquired whether there was any similarity between BEML and Avadi Tank Factory. The Managing Director of BEML admitted that though the Avadi Tank Factory manufactured Tanks and BEML manufactured Tractors, the technology involved was the same. Avadi Tank Factory concentrated on Tanks and the BEML concentrated on Heavy Earth Moving Equipment.

2.12. He further stated that the Tata Committee had also recommended that earth movers should really not be the legitimate part of the activities of HAL. The Tata Committee's recommendation is as follows:—

“In fact, the type of Plant and machinery used in the manufacture of heavy earth moving equipment has much greater similarity with the plant and machinery to be installed at the Avadi Tank Factory which will have the foundry and

heavy forge facilities required to produce parts for the Le-Tourneau machines. We therefore recommend that the possibility of transferring this project to Avadi be investigated."

2.13. Asked whether help was also sought from the Mining and Allied Machinery Corporation Ltd., the Managing Director of BEML stated:—

"We have an understanding with them. We will take from them certain items. Myself and the General Manager went there last time to see what use we can make of their capacity. The main things we can use are castings and forgings, and we have placed a sizeable order for them. We are also making use of such facilities available with HAL, HVF and Praga Tools particularly regarding forgings and castings."

2.14. Asked whether it would not be advantageous if the Avadi Tank Factory and BEML were amalgamated as both these projects were under the Ministry of Defence, the Managing Director stated:—

"Though we are under the same Ministry, but these are two separate establishments. I think we should diversify at each place instead of being amalgamated. Each one has got its own functions and, I think, each one should exist on its own footing."

2.15. The Committee note that BEML is making use of castings and forgings facilities available in the other Public Sector Undertakings. They are not sure whether the existing arrangement is working satisfactorily for an important Defence enterprise like the BEML. The Committee would like Government to review the position from time to time (at least once a year) to make sure that the requirements for castings and forgings of BEML are being met fully and in time.

III

CONSULTANCY AND COLLABORATIONS

Collaboration Agreements

The Company has entered into the following Collaboration Agreements:—

- (i) With M/s. Le—Toureau Westinghouse Co., (now M/s. Westinghouse Air Brake Company) of U.S.A. for the manufacture of Wheeled Equipment.
 - (ii) With M/s. Gomatsu Manufacturing Co. Ltd., of Japan for manufacture of three models of Crawler Tractors.
 - (iii) With M/s. Radoje Dakic a firm of Yugoslavia, for the manufacture of Tigar, 120-SK Wheeled tractors and attachments.
- (i) *Collaboration agreement with M/s. Le—Tourneau Westinghouse Co., (now M/s. WABCO U.S.A.)*

3.2. The need for heavy earth moving machinery was felt in the country early in 1962. The Government asked HAL to prepare a preliminary project report. The Report was prepared by them in 1962. On the basis of this report an agreement with M/s. WABCO was entered into by the Government of India on 27th October, 1962 for the manufacture of Wheeled Equipment and is current upto 8th November, 1972. The Licence Agreement with M/s. WABCO was assigned by the Government to M/s. HAL in December, 1962 for execution. In February, 1963 a team of HAL Officers visited the works of M/s. Le—Tourneau Westinghouse for discussion regarding the various aspects of manufacture of Wheeled Equipment. In October, 1963 a Project Report was submitted by HAL visualising an investment of Rs. 6.90 crores and product-mix of 50 Towed Scrapers, 125 Motorised Scrapers, 100 Articulated Rear-dumps, 50 Haulpak Dumpers and 25 Cranes. This report was considered by the Expenditure Finance Committee of the Government, which appointed a Sub-Committee consisting of the Joint Secretary, Department of Heavy Engineering, Officer on Special Duty, BEML Project, HAL and Senior Industrial Advisor, DGTD for examining the technical details. This Sub-Committee submitted its

report generally agreeing with the approach adopted by HAL for framing the Project Estimates. The revised Product-mix suggested by the Sub-Committee for improving the economic viability was 150 Motorised Scrapers, 125 Articulated Reardumps and 150 Rear Dumps. The capital outlay was assessed at Rs. 10.50 crores (excluding Township). These recommendations were approved by the Expenditure Finance Committee on the 28th March, 1964. The formal approval of the Project was also conveyed by the Government in April 1964 indicating, however, that their specific sanction was required for foreign exchange commitments.

3.3 The main features of the agreement were technical assistance/furnishing of know how in the form of documentation, technicians and training of BEML personnel, supply of components and spare parts at concessional rates, supply of information regarding innovations and developments. In return, BEML was to pay Technical Assistance Fee, Royalty and Research and Development Fee during the currency of the agreement.

3.4 Asked what were the consideration for selecting M/s WABCO, the Secretary, Ministry of Defence (Department of Defence Production) stated that the need was felt for heavy earth-moving machinery in 1962 in the country. It was a decision of the Government that a preliminary project report might be prepared by the Hindustan Aeronautics Ltd. (Rail Coach Division) on the setting up of the capacity for manufacture of heavy earth movers. HAL prepared the report in 1962. It was the view of the Government according to Defence Production Secretary that the site should be at Bangalore, where HAL was located, that the source of foreign exchange was to be USAID Non-project loan and that Rail Coach Division of HAL would run the organisation. It was stated that as USAID loan was the source for setting up the project, it was required that an American company should take up the project. Among the American Companies, the experts considered M/s Le-Tourneau Westinghouse the best and on this consideration, negotiations were held and the collaboration agreement was signed with them in October, 1962. After the agreement was entered into some of the officers of the Hindustan Aeronautics Limited went to the works of the collaborators. A Detailed Project Report was prepared by the HAL, some time in October, 1963.

3.5 It was also stated by the Secretary during evidence: "...The first preliminary report was prepared by HAL on the basis of which foreign collaboration was entered into; the second detailed report was prepared by HAL in October, 1963 on the basis of which further processing in the Ministry started. Then later it was decided that a

detailed appraisal had to be made in order to move an application for loan from EXIM bank and it was our view that a second look would be necessary in order to see the profitability of the Project then it was decided that a foreign consultant may be appointed.....”

3.6 Asked if the Detailed Project Report was prepared before entering into collaboration agreement, it was stated in a written note: “A preliminary Project Report was prepared by Hindustan Aeronautics Ltd. in July, 1962.”

3.7. The Committee are unable to appreciate the wisdom of entering into a Collaboration Agreement with a foreign firm without a Detailed Project Report. It is noted that in this case a team of HAL's Officers to whom the Agreement was assigned for execution, visited the works of the collaborators in February, 1963. The required Detailed Project Report was available in October, 1963 i.e. almost a year after the agreement was entered into in October, 1962. Later, when it was decided that a detailed appraisal had to be made in order to move an application for loan from EXIM bank, a second look on the profitability of the project was taken with the consequence that the agreement ceased to be in effective operation.

The Committee are left with the impression that before entering into the Collaboration Agreement Government assessed neither in depth the requirements of Defence, Border Roads and other organisations nor the profitability of the undertaking. The Government's whole approach appears to have been empirical instead of being based on a well prepared perspective plan for developing indigenous capacity for manufacture of earth moving equipment in the public sector. The Committee would like Government to take effective remedial measures to obviate recurrence of such costly lapses.

3.8. Under the term of the agreement the following payments were to be made to the Collaborators:—

- (i) Payment of U.S. \$7,50,000 in 8 instalments towards technical assistance fee;

[The payment of technical assistance fee was not related to actual production nor was there any co-relationship between the payment and the end products and the payments were made at intervals as specified in the agreement.]

- (ii) a Royalty of two per cent during the currency of this agreement;

- (iii) A Research and Development fee of two per cent during the currency of this agreement;

NOTE:—The Royalty and Research and Development fees are to be calculated on the price of the complete equipment less standard labour rates of Collaborators for assembly charged and the value of the parts imported/purchased under the agreement.

If the total of the Royalty and Research and Development fee payable, on the basis of (ii) and (iii) above during the first five years falls short of \$5,00,000 the difference will be paid by the Licensee on the expiry of the period of five years.

- (iv) remuneration to the foreign technicians posted in India to train the Indian personnel during the first five years.

In respect of the minimum Royalty and Research and Development fee of U.S. \$500,000 payable in October, 1967 under the agreement, Government in consultation with the Collaborators decided that a sum of \$50,000 be paid before 31st March 1968 and the balance be paid in the following manner:—

Instalment No.	Date of payment.	Amount
II] . . . . .	. 31-10-1968	\$ 50,000
III . . . . .	. 31-10-1969	1,00,000
IV . . . . .	. 31-10-1970	1,00,000
V . . . . .	. 31-10-1971	1,00,000
VI . . . . .	. 31-10-1972	1,00,000
		<u>4,50,000</u>

3.9 The total payments made upto 31st March, 1970 to collaborators under the various heads is as follows:—

(i) Technical Assistance fees:

Instalment No.	Date of payment	Value.	
		Dollars	Rupees.
I	9-11-62	1,00,000	3,83,975
II	21-8-63	50,000	2,39,125
III	20-12-63	1,00,000	4,78,750
IV	6-1-65	1,00,000	4,79,750
V	23-12-65	1,00,000	4,78,000
VI	28-11-66	1,00,000	7,57,576
VII	12-12-67	1,00,000	7,53,013
VIII	26-11-68	1,00,000	7,60,456
		<u>7,50,000</u>	<u>44,30,645</u>

(ii) Royalty Research and Development fees:

Date	Total amount due before deduction of income tax on Royalty portion	Income-tax on 50% of the amount representing royalty	Net payment after deduction of income-tax
	Rs.	Rs.	Rs.
28-3-1968	3,78,056	1,42,996	2,35,060
18-10-1968	3,79,485	1,42,996	2,36,489
28-10-1969	7,57,915	2,74,244	4,83,671
	<u>15,15,456</u>	<u>5,60,236</u>	<u>9,55,220</u>

(iii) Royalty, Research and Development Fees Payable after five years period: Liability set up for payment to be made Rs. 3,52,072

No payments have been made so far.

(iv) Payment on account of Technicians:

Rs. 4,43,631 represents payment to WABCO Technicians monthly, baggage travel etc. during the period 1963-64 to 1969-70. Payments made during each year is given below:—

Year	Amount (Rs.)
1963-64	55,000
1964-65	95,475
1965-66	60,000
1966-67	45,000
1967-68	48,935
1968-69	79,221
1969-70	60,000
	4,43,631

3.10. During evidence attention of the Secretary was drawn to the following observation dated 9th May, 1967 of the Ministry of Defence:—

“The collaboration agreement was signed in October, 1962 and is for a period of 10 years. We have not been able to get any real benefit from this agreement while we have paid \$5,50,000 which represents 6 out of the 8 instalments of Technical Assistance Fee.

Further, on 27th October, 1967 on the expiry of the first 5 years of the Agreement, we would be liable to pay a minimum royalty of \$5,00,000 out of which accruable royalty etc., on equipment assembled and sold by BEML would be about \$50,000. This means that the payment of \$4,50,000 of royalty would become infructuous.”

3.11. The Secretary, Department of Defence Production stated during evidence:—

“As the things have turned out to be, it will not be correct to say that it will turn out to be infructuous.”

He further added:

“On the basis of the collaboration agreement, the documentation was obtained and the components were received on concessional rates, and the concession was pretty good. Then, the foreign technicians also came and helped us in

getting the know-how, expertise, setting up of our tools, jigs and fixture and so on and so forth. We started assembly of these equipments, and on the basis thereof, we were able to save foreign exchange. These were the limited things. But the fact does remain that within the first five years period, for which a minimum payment of \$500,000 was stipulated in the collaboration agreement, nothing very much could be done; only to the tune of 50,000 dollars as Royalty there was a corresponding volume of production. But I would like to add that when we negotiated originally this collaboration agreement, the terms that this company had asked for were 1500,000 dollars as technical assistance fee, 5 per cent as royalty, and 85,000 dollars per year for research and development. These were the original terms that were stipulated by this company. And very hard negotiations had to be done with this company, and in their mind there was expectation of certain minimum amount. And the division of that minimum was left to us. Ultimately, and we thought it was a good bargain, the technical assistance fee was reduced to half. Instead of 1500 thousand dollars, it was brought down to 750 thousand dollars. And the royalty element was reduced from 5 per cent to 2 per cent. And this 2 per cent of royalty was also subject to Indian Income-tax. And then, instead of 85 thousand dollars per year of research and development fee, we put it down at 2 per cent of the production, and they naturally started being jittery about it. And then they said: "All right, we stipulated that within the first five years period. A minimum of 500,000 dollars, as royalty and research and development fee will be payable to us." Ultimately, we agreed to this. The Research & Development fee is 2 per cent. This was in lieu of 85,000 dollars per year, that was contemplated earlier, along with 5 per cent royalty."

3.12. In justification of the Agreement it was also stated in a written reply:

"In the field of heavy earthmoving equipment manufacture with a long gestation period while it might appear that no real benefits have accrued because manufacturing facilities were not established by 1967, judged by the totality of events and by the long range points of view, it would not be unreasonable to conclude that benefits have in fact accrued."

3.13. Asked if the Board of Directors has recommended extension of this contract for a further period of five years, the Secretary, Ministry of Defence (Department of Defence Production) stated:

“There is a proposal that the term of this agreement which will expire in October, 1972 should be extended, and the arguments that the company has given are that no further technical assistance fee will be payable; the advantages of further research and development work at the headquarters of the company will be available to us; the minimum guaranteed payment already stands payable, and what will be paid in addition would be only on the basis of whatever we actually produce. And as I said the Company has intentions of starting the manufacture of a few more items out of the total list included in the collaboration agreement.” He also stated that whatever items have been taken up by BEML already during the period of the current agreement, they will have acquired complete mastery of the process of manufacture of those items.

3.14. In a written reply it was stated that because of the Agreement, there were savings (as on 30th June, 1970) in foreign exchange to the extent of Rs. 217.826 lakhs besides the concessional prices of spares which resulted in a saving of Rs. 70.89 lakhs.

3.15. **The Committee would like to point out that the Agreement with the foreign collaborators suffers from several serious drawbacks. The main drawback is that the technical assistance fee of over Rs. 44 lakhs and Royalty, Research and Development Fee of Rs. 15 lakhs have been paid in accordance with a time schedule which bears no relationship to the actual progress made in developing manufacturing capacity for earth moving machinery and equipment by BEML. The Committee would further like to point out that according to Government's own admission there was a liability to pay a minimum royalty of \$ 5,00,000 (Rs. 37,50,000) as on 27th October, 1967 whereas if it was related to equipment assembled and sold by BEML, it would amount to \$ 50,000 (Rs. 3,75,000) only. This clearly points to the fact that royalty to the tune of \$ 4,50,000 (Rs. 33,75,000) has been paid without any commensurate benefit.**

The Committee would like the Government to fix the responsibility for the negligence on the part of persons responsible for inclusion of such a clause in the agreement which has resulted in a huge loss to the Exchequer.

The Committee would like Government to take serious notice of these shortcomings in the Agreement and issue necessary standing instructions in consultation with the Ministry of Finance and Comptroller and Auditor General, to obviate chances of incorporation of such clauses which are detrimental to our interests in Agreements with foreign collaborators.

3.16. While the Committee note that the Company will be able to acquire expertise in the manufacture of several items e.g., Motorised 'C' Scrapers, LW-35 Off-the Highway Rear Dump Trucks and Motor Graders already taken up within the period of the current agreement i.e. by 8th November, 1972, they hope that earnest efforts would be made to acquire the know-how regarding the manufacture of the remaining items within the remaining period of the agreement so that the extension of the period of collaboration agreement with M/s WABCO beyond 1972 may not be necessary.

(ii) *Collaboration agreement with M/s Komatsu*

3.17. The Agreement with M/s. Komatsu Manufacturing Company Ltd., for manufacture of three models of Crawler Tractors was originally entered into by the Government of India on 9th September, 1958 and was current for a period of 10 years. This Agreement was being operated upon by the DGOF. On the recommendation of the US Consultants (M/s A. T. Kearney) and with a view to relieving the DGOF of the load of manufacture of tractors and to enable him to concentrate on other priority items, this Agreement was assigned to BEML on 8th December, 1965. As the full indigenous production of these tractors could not be established within this period, the Agreement was entered into by BEML with M/s Komatsu Mfg. Co., Ltd., in 1969 for a period of three years from 19th February, 1969.

3.18. As per written information furnished by the Ministry of Defence the Collaboration Agreement concluded by BEML with M/s Komatsu in February, 1969 was necessitated because of the earlier Collaboration Agreement with this firm concluded by Government in 1958. At that time, four different foreign firms i.e. (i) M/s. Allis-Chalmers, (ii) M/s Marshalls of UK (Fowler Challengers), (iii) M/s International Harvester, UK and USA, and (iv) M/s Komatsu were considered. Initially, an agreement with M/s International Harvester was concluded in June, 1958. This was, however, later repudiated by the foreign firm. The terms offered by M/s Komatsu were quite favourable both from the point of view of prices, royalty, and other manufacturing terms. It was also known that the Komatsu tractors were based on Caterpillar design and this was considered to be of

advantage since the Army had a large number of Caterpillar tractors which needed reconditioning and for which import of spare parts at lower prices was possible because of the collaboration agreement with M/s Komatsu. This firm had also successfully obtained orders for tractors from other countries in competition with some of the best makes. Having regard to these facts, Government decided to conclude a Technical Collaboration Agreement with M/s. Komatsu.

3.19. The main points of differences between the old and new Agreements with M/s Komatsu were stated to be:—

- “(i) *Parties to the Agreement*: The new Agreement is between BEML and M/s Komatsu whereas the old Agreement was between the Government of India and M/s Komatsu.
- (ii) *Period of the Agreements*: The new agreement is for a period of 3 years from the date of approval of the Agreement by the Government of India and Japan. The new Agreement was entered into mainly with the purpose of achieving maximum indigenisation of the production of Crawler Tractors, which could not be completed during the currency of the previous Agreement, within the shortest possible period. The old agreement was for a period of 10 years.
- (iii) *Licensed Models*: The old Agreement contained a clause providing for regular and prompt supply of information relating to all engineering changes with regard to the material, process techniques and improvements and additions to the equipment covered in the Agreement, whereas the scope of the new Agreement is restricted to the current models. The new Agreement contains a guarantee by the LICENSOR that the Technical Information furnished by them shall be same as supplied to its own factories and would be adequate for the LICENSEE for the manufacture of products equivalent in standard life, performance and quality to those made by the LICENSOR.
- (iv) *Manufacture and selling rights*: Under the old Agreement the LICENSEE had the right of exporting the tractors to any country subject to payment of an agreed royalty. The new Agreement grants the LICENSEE the sole and exclusive license to manufacture the LICENSED MODELS and sell the same in India, Sikkim, Bhutan and Nepal. In addition M/s Komatsu have agreed to grant to BEML a non-exclusive LICENSE for the export of such products

the majority portion of which is indigenously manufactured in India to Burma, Ceylon, Afghanistan, Iran, Iraq, UAR, Jordan, Kuwait, Lebanon, Sudan and Syria on payment of additional royalty and territory commission on such exports.

- (v) *Scope of supply:* (a) *Components:* Under the Old Agreement there was an arrangement to supply various components. Under the new Agreement M/s Komatsu would supply components in sub-Assembly units.
- (b) *Spare Parts:* Under the new Agreement M/s Komatsu have agreed to supply to BEML spare parts of the LICENSED MODELS for a period of 7 years after the termination of the new Agreement.

In respect of spare parts for the equipment manufactured by DGOF and BEML under the old Agreement and for all ranges of Komatsu equipment in India M/s. Komatsu have agreed to supply spare parts for a period of 7 years from the date of the last shipment of the component parts.

- (vi) *Royalty:* Under the old Agreement Royalty was payable at 2 percent on the Ex-Komatsu works prices of the equipment/components manufactured by the LICENSEE (Subject to a minimum of 300 Nos. of each type). Under the new Agreement a fixed rate of Royalty is payable.

Under the old agreement with Komatsu, Royalty was payable at 2 per cent of the value of the parts manufactured by the Licensee for each tractor taking the total cost of the tractor as given by Komatsu Ex-works price. In the current Agreement, the amount of royalty paid for each tractor is fixed irrespective of the indigenous content. The implication of this difference would be that there is a disincentive for rapid indigenisation in the old Agreement as the royalty would increase with the increase of indigenisation. Whereas in the present agreement, the indigenisation does not have any effect on the royalty and is thus an incentive towards rapid indigenisation.

- (vii) *Prices:* According to the provisions of the old Agreement the spare parts were priced at the same rates as components for manufacture. In the new Agreement the pricing of spare parts is based on the Komatsu price list of spare parts ruling at the time of acceptance of the order, subject to a discount."

3.20. During evidence the attention of the Managing Director BEML was drawn to the following statement in the Fifth Annual Report (1968-69) of BEML:—

“...Your Board appointed a Negotiating Committee to discuss the terms of the new Collaboration Agreement with M/s. Komatsu. The negotiations were conducted for a period of 3 months from August, 1968 to November, 1968. A draft Collaboration Agreement was approved by the Board of Directors in November, 1968 as the best that the Negotiating Committee could secure after hard and long negotiations....”

3.21. Asked what was meant by the words ‘the best’ in the above statement the Managing Director stated:—

“The old agreement was entered into in 1958. The old conditions were more favourable. Komatsu was at that time very keen on entering an agreement with us. They did not have the same standing as they have at the present moment. When the first agreement was finished we had again to negotiate with them so as to know on what conditions they would agree to the extension of the arrangement.

Generally speaking, I would say that the earlier agreement was probably a little better. Board of Directors appointed a Negotiating Committee. They tried to return to the old conditions in all cases. They tried their best as much as possible.”

It was also stated in a written reply that:

“The earlier Agreement was generally more favourable in the matter of prices for CKDs components and spares as also in respect of supply of spare parts. The old agreement also made provision for regular and prompt supply by M/s Komatsu of information relating to engineering changes with regard to material, processing techniques, and improvements and additions to the equipment covered in the agreement. The scope of the new agreement is restricted only to the current models of 3 types.”

3.22. Regarding the steps taken to reach a stage where the assistance of Collaborators would no more be required the Secretary, Ministry of Defence (Department of Defence Production) stated:

“We are persisting in our efforts to delete imported items as far as we could. From year to year we have set some

targets for ourselves and in this collaboration our aim is to reach a figure of 85 per cent of indigenous components in the course of next three or four years. As I said earlier, the spare parts will be continued to be supplied to us for seven years even after the agreement is over. The problem is for the remaining 15 per cent. The items are mostly bought out items which are difficult to establish in manufacture but we shall certainly continue our efforts in this direction also."

He added that the Collaborators were giving all the possible assistance in the matter.

3.23. The Committee regret to note that as the full indigenous production of these tractors could not be established within the original period of 10 years the B.E.M.L. had to enter into agreement with M/s. Komatsu for a further period of three years with effect from the 19th February, 1969. The Committee feel that it would have been possible to establish indigenous production within a period of 10 years had the Government assigned the agreement earlier to a body exclusively entrusted with this task instead of loading the D.G.O.F. with the manufacture of tractors.

3.24. During evidence it was admitted that conditions contained in the old agreement "were more favourable." The representative of B.E.M.L. further conceded that the earlier agreement "was probably a little better." It is noted that the earlier agreement was generally more favourable in the matter of prices for complete knocked down components and spares as also in respect of supply of spare parts. Another favourable feature of the old agreement was that it made provision for regular and prompt supply by M/s. Komatsu of information relating to engineering changes with regard to material processing techniques and improvements and conditions to the equipment covered in the agreement. On the other hand the scope of the new agreement was restricted only to the current models of three types. The Committee are concerned to know that the new agreement was less favourable as compared to the old agreement.

3.25. The Committee, however, hope that the B.E.M.L. will take full advantage of the assistance stated to be rendered by the Collaborators in the matter of indigenisation and reach the maximum possible degree of indigenisation within the remaining period of Agreement so as to avoid any further extension to this collaboration agreement.

3.26. During the evidence the attention of Managing Director BEML was drawn to the 119th Report of the Public Accounts Committee (Fourth Lok Sabha) which stated that 20 per cent of the tractors other than Komatsu were awaiting overhaul. But in the case of Komatsu, 30 per cent were waiting overhaul which showed that the sick rate proportion in the case of Komatsu tractors was higher.

3.27. It was enquired whether it was due to lack of spares or due to faulty maintenance or inadequate maintenance or certain inherent defects in the machine that those tractors were awaiting repairs. The Managing Director, BEML denied that there was any inherent defect in the machines. He stated that the machine that had come from Director General Border Roads Organisation were awaiting certain repairs because sufficient spares were not available. The spares were for old models. When they took over the responsibility there had been a shortfall in the supply of spares to old models. The question was about the supplies of spares to the users and it was not the fault of the machine. There was a shortage of spares; the user was confident that he could put all the machines—a majority of the machines—on the road.

3.28. Asked whether the Komatsu tractors were mainly used by the Defence Ministry, it was stated that the old models which were produced by the DGOF were mainly used by the Ministry of Defence and Border Road Organisation. It was added that a proportion of what the BEML were manufacturing was going out to the civilian users also.

3.29. In this connection the Secretary, Department of Defence Production stated during evidence:

“...these tractors were being supplied simultaneously to Defence, to Border Roads and also to Dandakaranya project. I think the systems of maintenance were different in all these 3 organisations and the Border Roads were very happy with all these tractors and so were the Defence people by and large. But there were complaints in Dandakaranya and when our technical people investigated into the matter, it was found that maintenance arrangement in Dandakaranya required to be further improved.” He also stated that in the case of Dandakaranya Project they were probably depending more on maintenance by the suppliers whereas in the case of Defence maintenance was done by themselves.

3.30. When it was pointed out by the Committee that in his evidence before the Public Accounts Committee, the then Secretary (Department of Rehabilitation) had stated in 1963* that on the basis of their performance the Komatsu tractors were somewhat inferior to other makes and types used in Dandakaranya Project, the Government in a written reply stated as under:

“The observations of the Secretary Ministry of Works, Housing & Rehabilitation (Department of Rehabilitation) referred to above, related to certain old models of Komatsu make. Since then, Komatsu have made considerable improvements in their products and BEML’s Agreement with Komatsu is for the current and upto date models. In this connection, attention is invited to the following extract from the 119th Report of the PAC 1969-70 concerning para 18 in the Audit Report Defence Services regarding “delay in the repair of tractors.”

“...It was explained by the representative of the Ministry of Defence that ‘as far as work in the field is concerned I would say the performance of Komatsu and other tractors is comparable. It is about the same. Both are capable of working double shift. It depends on the requirement of task’. In reply to a specific question whether the defect in tractors was on account of material used, the representative of Ministry of Defence stated:

“In the Army we have not come across specific defect due to material.”

The above would also show that the later models of Komatsu compare well with Crawler tractors of other makes.”

3.31. The Committee note that the high sick rate of 30 per cent of the Komatsu tractors was not due to any inherent defect in the machines but because of inadequate supply of spares for all the Komatsu Tractors put on field. The Committee are of the opinion that drawing up a long term procurement programme of spares in advance is not impossible of achievement. Had steps been taken to evolve a long term procurement policy for spares, the critical situation would not have arisen. The Committee hope that such situation would not arise in future since Komatsu have assured to supply spares for a period of 7 years after the termination of the new agreement.

*Public Accounts Committee 1962-63, Eleventh report (Third Lok Sabha) (p. 9)

(iii) *Collaboration Agreement with M/s. RADOJE DAKIC:*

3.32. The Defence Services and the Border Roads Organisation had been looking for some time for an equipment which would be versatile enough to do diverse functions such as dozing, loading, trench digging and recovery work. After intensive trials ranging over a period of 3 months in different terrains and altitude conditions, a high level Committee selected the Yugoslavian Tigar 120-SK Tractor as suitable for the purpose. The Ministry of Defence placed an order for 97 of these tractors in CKD condition and BEML was entrusted with the task of assembling these with certain components to be procured and manufactured by BEML. Since it was understood that there would be a recurring demand from Defence Services and Border Roads for this type of equipment, it was considered appropriate for BEML to go in for a collaboration agreement for manufacture in India, under licence, of this equipment. A Negotiating Committee was appointed to discuss a draft collaboration agreement with M/s Building Construction Machinery and Metal Structure Industry 'RADOJE DAKIC' towards manufacture of this equipment in India. The draft collaboration agreement as approved by the Board of Directors, was approved by the Government and the agreement came into operation from 26th December, 1969 and is current for a period of five years with effect from that date. It has been stated that production of this equipment for the Army has started with approximately 40 per cent indigenous content.

3.33. The main features of the Agreement were technical assistance/furnishing of technical documentation, technician, experts and training of BEML's personnel, supply of complete equipment, component parts and spare parts at the price calculated on the basis of the prescribed formula, supply of all information relating to the licensed model and providing after sales service for the products. In return, BEML was to pay—

- (i) Technical documentation fee amounting to two hundred and twenty five thousand rupees (Rs. 225,000) in 5 instalments to cover the cost of preparation and reproduction of technical documentation and information in the following manner:—
 - (a) 20 per cent four weeks after the agreement becomes effective;
 - (b) 20 per cent three months after the payment at (a) falls due;

- (c) 20 per cent three months after the payment at (b) above falls due;
 - (d) 20 per cent three months after the payment at (c) above falls due;
 - (e) Balance 20 per cent three months after the payment at (d) above.
- (ii) A Royalty of two per cent during the currency of this Agreement.

Note: The Royalty is to be calculated on the FOB price of the complete equipment less FOB value of both component parts and attachment supplied by M/s Radoje Dakic under the Agreement and also those component parts for which technical and manufacturing knowhow is not furnished by the Licensor.

- (iii) Remuneration to the technical personnel for their stay in India for the purpose of rendering technical assistance in connection with the BEML's activities under the Agreement, particularly for establishing production of the Licensed Model and indigenisation of the products.

The agreement grants to the Licensee a non-exclusive licence to sell the Licensed Model and products in Afghanistan, Burma, Ceylon, Ghana, Indonesia, Japan, Jordan, Kuwait, Laos, Lebanon, Malaysia, Saudi Arabia, Thailand and Vietnam.

3.34 The main benefits stated to have been derived from this Collaboration agreement are as follows:—

- (i) During the short period of the Agreement BEML have been able to obtain technical information and guidance to some extent in setting up facilities for the manufacture of TI20-SK wheeled tractors;
- (ii) BEML have also been able to depute their engineers to the Collaborators' Works to study their production methods;
- (iii) Benefit has been derived from the deputation of Collaborator's technical personnel to BEML's factory and their stay with the Company.

3.36. As Tigar-120-SK tractors are stated to be suitable for such diverse functions as dozing, loading, trench digging and recovery work which are of vital use to the Defence Services and Border

Roads, the Committee feel that the Government should have evaluated results after usage in field before entering into collaboration agreement. Since it is essential to meet expeditiously demands for this equipment from Defence Services and Border Roads, the Committee hope that earnest endeavours would be made to achieve indigenous manufacture of this equipment within the period of Agreement.

IV

CONSTRUCTION AND COMMISSIONING

A. Location of the Project

In their Report submitted in March, 1964, the Technical Committee appointed by the Expenditure Finance Committee of the Government, discussed the merits and demerits of locating the Factory at Kolar Gold Fields vis-a-vis Bangalore, and noted that location of the Project at Kolar Gold Fields would necessitate provision of housing facilities while the factory were to be at Bangalore it would be necessary to invest on transport facilities in lieu of housing. That Committee considered that such expenditure, being unproductive, would add to the cost of production and therefore, favoured the location of the Factory at a suitable site nearer the sea coast. The decision to locate the Factory at Kolar Gold Fields was taken by the Government after taking into account the availability of land and other facilities at that place. The then Chairman of Hindustan Aeronautics Ltd. had, in May 1963, after an on-the-spot study by a team of officers of HAL, recommended that it would be more advantageous for Government to establish the Heavy Earth Moving Equipment Factory at Kolar Gold Field than at any other place to be developed *denovo*.

4.2. Asked what were the considerations for locating the Project at Kolar, the Secretary Ministry of Defence (Department of Defence Production) during the evidence stated:

"... It was first thought that the Railcoach Division of the HAL would be a better place. A little later technical studies were conducted, and other considerations also came in. Sites were seen and the Technical Committee of the HAL reported that Kolar would be very appropriate place. Relevant considerations like water, electricity supply etc., were all gone into. The recommendation of this Committee is quite clear. There came another Committee, the Tata Committee, which recommended that earth movers should really not be a legitimate part of the activities of the HAL. On the basis of these various reports it was, in

August, 1963 that a Cabinet Sub-Committee took the decision that the new company should be formed for the earth movers and its location should be Kolar."

4.3 In reply to the same question the Managing Director of BEML stated:

"...I have gone through the Report of this sub-Committee and a reading of the Report does not suggest that they felt that there was an over-whelming case for changing the location elsewhere.....The only reason was for effecting economy by not constructing a township but this particular reason was not accepted by the Ministry who stated that we, as a public sector undertaking, have to provide accommodation for the workers. So it was not an over-riding consideration."

4.4. During the evidence the Committee were also informed that construction of the Township had commenced and the total sanctioned outlay for township was Rs. 1.60 crores which was about 6 to 7 per cent of the total outlay.

4.5. The Committee note that one of the reasons for not locating the Factory at Bangalore was to avoid investment on transport facilities. It was thought that such expenditure would be unproductive and would add to the cost of the product. The Committee note however, that the establishment of the earthmoving factory at Kolar has involved Government investment in the building of a township at an estimated cost of Rs. 1.66 crores. While the Committee are for provision of essential amenities to workers they would like Government to ensure that the expenditure on such infra-structure is kept within the economical and reasonable limits so that it does not unduly burden the cost of production.

(B) Delay in the execution of the Project

4.6 The important stages in the execution of the Project put together in a chronological order are as follows:—

- (i) The agreement with the Collaborators was entered into on 27-10-1962 but the decision to locate the unit at Kolar in Mysore State was taken only in August, 1963.
- (ii) In August, 1963, the Ministry asked the Hindustan Aeronautics Ltd. to prepare a Project Report and to take steps for the formation of a Public Limited Company (separate

from HAL) for the implementation of the Project. The Project Report was prepared by HAL in October, 1963 and the Bharat Earth Movers Ltd. was formed as a Government Company on 11th May, 1964.

- (iii) In February, 1964, the Secretary, (Co-ordination), Ministry of Finance as Chairman of the Expenditure Finance Committee decided that a Technical Committee should go into the various aspects of the Project.
- (iv) The Technical Committee submitted its report in March, 1964 and Government decided on 20-3-1964 finally to locate the unit at Kolar.
- (v) The Chairman of the Company in a letter dated 1st May, 1967 to the Secretary, Ministry of Defence (Department of Defence Production *inter alia* stated as follows in regard to the foreign exchange required for the Unit:—

“The release of the required foreign exchange for the projects was applied for from the AID Non-Project loans. As AID Non-Project loans preclude such financing where requirements of any project exceed one million dollars, the Government of India found it necessary to get the U.S. Foreign Exchange from Export-Import Bank. As a pre-condition to processing this project through AID or Export-Import Bank, the Government of India appointed one of the approved American consultants...for undertaking a feasibility study of the project.

The consultants began functioning from October, 1964. The Ministry of Defence subsequently decided that the scope of study should include the manufacture of Crawler Tractors also in Collaboration with M/s. Komatsu of Japan. The Consultants completed their study in March, 1965. . . Their recommendations were put up to the Expenditure Finance Committee in June, 1965. Because of the uncertainty of Dollar Exchange and the easy availability of Yen Credit the Expenditure Finance Committee released the Project for the Crawler Tractor portion and minimum common facilities. . . The decision was conveyed to BEML in September, 1965.”

- (vi) The application for loan was filed by the Company with the EXIM Bank on 9-9-1965 the very date on which the U.S. Government announced their decision not to enter

into any new economic Aid Commitments to India. It was only in June, 1967 that the Company was advised by Government to work out revised foreign exchange requirements from different sources irrespective of the availability or otherwise of the EXIM assistance, and also to reduce the foreign exchange requirements. In August, 1967 the Government ultimately decided to withdraw the loan application from EXIM Bank and finance the project from other sources.

- (vii) On 23rd July, 1968 Government sanctioned an amount of Rs. 17.439 crores including a foreign exchange component of Rs. 5.504 crores for capital expenditure on plant and machinery of integrated project. On 23rd August, 1968 a further sum of Rs. 5.339 crores was sanctioned by Government for buildings and civil works.

4.7 The witness stated during evidence:—

“...in between came the other big change the Pakistani Aggression and soon after the aggression on the same day when we presented the application to the EXIM Bank came embargo on aid to India by U.S. Government. We pursued the matter even then with the EXIM Bank. Later it was decided to look for other sources. They comes an intervening period of critical situation of foreign exchange. With all the good intentions there was no availability of foreign exchange in the country at that time and therefore this project deliberately had to be kept in the cold storage for some time and as soon as the situation improved—it was in 1967—the clearance was given and other sources of foreign exchange were found.”

4.8. In a note furnished after the evidence the Ministry of Defence have stated:—

“At the time Agreement was entered into, a preliminary Project study had been undertaken; the location had been tentatively determined; and indication of availability of foreign exchange also existed. HAL, Bangalore, had been indentified as the agency for undertaking the initial exercises for the implementation of the Project. The delay in the implementation of the Project, it is considered has been due to unforeseen factors.”

4.9. Asked by the Committee as to why the Government took almost two years to decide the financing of the foreign exchange requirement when they became aware in September, 1965 of the embargo placed by the U.S. Government on new AID commitments in this country it was stated in a written reply:

“Even though the US Government embargo on new AID commitments to India and Pakistan became operative on 9th September, 1965 i.e. the same date on which the application for US EXIM loan for the BEML Project was filed, the US EXIM Bank did take up preliminary processing of the application and discussions with the Bank officials indicated that there was a reasonable prospect of foreign exchange under US EXIM Loan funds becoming available for this Project. Since the foreign exchange requirements was quite large and US was a suitable source for the procurement of capital machinery, it was considered advisable to wait for some time in view of the prospects of US EXIM loan becoming available. However, when in 1967 it was noted that the position was still uncertain and delay was taking place, Government decided to withdraw the US EXIM loan. Application and to meet the foreign exchange requirements of the project from other sources. The Foreign Exchange requirement also was by this time found to be substantially reduced on a review in the light of progress of indigenous machine tool industry.”

4.10. It may be mentioned that upto August, 1968 the undertaking made the following payments to the collaborators:—

1. U.S. \$ 6500000 as technical assistance fee in 7 instalments;
2. U.S. \$ 50,000 as royalty and research and development fee out of minimum fee of \$ 5,00,000 for the first fixe years; and
3. Rs. 3 lakhs to the foreign technicians as remuneration.

The Ministry of Defence have stated (February, 1969) as follows:—

- (i) “There has no doubt been a delay of about 3 years in establishing the Heavy Earth Moving Equipment manufacture of BEML.....”
- (ii) “As regards... infructuous payment of royalty to the extent of \$450,000 to M/s... this has resulted mainly from the delay in locating a suitable source for the foreign exchange financing of the project.”

- (iii) "It must be granted that certain limited benefits have already been derived by BEML by virtue of acquiring know-how and manufacturing techniques for the various items of equipment covered under the Collaboration Agreement, and savings in foreign exchange material costs as a result of assembly of the equipment from CKD packs with gradually increasing indigenous content. BEML are confident that in the balance period of the Agreement it would be possible to indigenise the production of the machines covered by the agreement and it may not be necessary to have technical assistance beyond the period of this Agreement."

4.11. In view of the above facts the Committee cannot help concluding that the Project was neither properly planned nor well executed. The important aspects concerning the Project were not dealt with in a systematic and expeditious manner. The Committee feel that the technical feasibility study should have been undertaken, the site for the location of the Unit determined, the source for meeting the foreign exchange requirements of the Unit and the organisation for the implementation of the Project decided before entering into the collaboration agreement.

4.12. The Committee regret to note that time taken by the Government at different stages was unduly long considering the fact that the collaboration agreement for a specified period had already been entered into and the payments thereunder amounting to \$7,50,000 representing Technical Assistance Fee, were falling due from time to time besides the minimum amount of \$5,00,000 payable towards Royalty, Research and Development Fee for the first five years of the Agreement.

4.13. The Committee are not convinced with the plea that delay in the planning and execution of the BEML project was due to "unforeseen circumstances". The decision of the U.S. Government not to enter into any new aid commitments to India became known to Government of India in September, 1965. There was no justifiable reason to keep the matter pending for two years in the hope of availability of foreign exchange from U.S. sources even after their inability had become definitely known. Had Government preplanned the alternative sources of foreign exchange for this project at an early stage and tapped them as soon as it was known that EXIM Bank Credit would not be forthcoming, the delay of two years could have been avoided.

V
PRODUCTION PERFORMANCE

(A) Product Mix

BEML has two production units i.e., Railcoach Factory at Bangalore and the Earthmover Factory at Kolar Gold Fields.

The Railcoach Division of the Company is producing Broad Gauge Integral Railcoaches for the Indian Railways while the product-mix of the Earth Mover Division is at present as under:

- (i) Motorised 'C' Scrapers (14|20 cubic yards)
- (ii) LW 35 Haulpaks (off-the-Highway 35 Ton Rear Dump Trucks)
- (iii) LW 440 Motor Graders (115 HP)
- (iv) D 80 Crawler Tractors (165|180 HP)
- (v) D120 Crawler Tractors (235|250 HP)
- (vi) D50 Crawler Tractors (90-HP)
- (vii) Tigar 120 SK wheeled tractors (130 HP).

(B) Value of Production

5.2. The value of production during the last four years has been as under:—

	(Rupees in lakhs.)			
	1966-67	1967-68	1968-69	1969-70
1. Sales (including spares) . . .	565.92	1392.68	2150.78	2286.21
2. Closing stock of finished goods and work-in-progress. . . .	163.35	314.53	529.07	489.24
3. Opening stock of finished goods and work-in-progress. . . .	117.56	163.35	314.53	329.07
4. Value of production (1+2-3) . . .	611.71	1543.86	2165.32	2446.38
5. Net worth	793.16	959.07	1114.57	1594.34
6. Percentage of value of production to net worth	77.1%	161.0%	194.3%	153.4%

5.3. It will be seen from the above that the percentage of value of production to net worth increased from 77.1 per cent in 1966-67 to 161.0 per cent in 1967-68 and from 161.0 per cent in 1967-68 to 194.3 per cent in 1968-69 but declined to 153.4 per cent in 1969-70. It is also noticed that the percentage of value of production to total net assets also increased from 48.0 per cent in 1966-67 to 63.9 per cent in 1967-68 and from 63.9 per cent in 1967-68 to 75.0 per cent in 1968-69 but declined to 67.1 per cent in 1969-70.

5.4. As to the reasons for decline in percentage of net worth/net assets to production, it has been stated in a written note by BEML that the Earth Mover Division of the Factory sanctioned at a total cost of Rs. 22.68 crores (excluding the township) is still in the construction and installation stages and as such it is pre-mature to apply the ratios like value of production to net worth/net assets as a yardstick to judge the performance of the Company. It will be seen that even during the stage of construction, the Company has been able to achieve considerable production/sales which has been steadily increasing. With the installation of the plants on order and under consideration, the ratio of value of production to net worth as well as total net assets will always vary. These ratios can give an indication of performance only when all plants are installed and brought into use and factory work attains stabilisation.

The following table††
 1970-71.

(Value Rupees in lakhs.)

	1969-70		1970-71		
	Target	Actual	Target (Qty.)	Actual	
	(Qty.)	Qty. Value		Qty.	Value*
270	270	708.62	270	270	704.00
200 (Original) 140 (Revised)	114	406.44	138	95	323.71
35 (Original) 14 (Revised)	16	68.67	45	40	192.40
38 (Original) 16 (Revised)	19	109.75	40		238.00
—	1	4.43	—	—	—
48 (Original) 60 (Revised)	60	503.48	75	65	552.50
21 (Original) 11 (Revised)	13	32.29	33	15	40.50
150 (Original) 125 (Revised)	110	154.90	118	92	138.00
57	104	13.11	187	72	106.83

Nos. of equipments produced. The figures in para 10.1 (V) on page 93 of the

(C) Targets of Production

5.5 It is also noted that the production of the various items has been generally lower than the targets laid down by BEML. The following table†† shows the targets set up by BEML and the actual production (with the value thereof) achieved during each of the years 1965-66 to 1970-71.

PHYSICAL RESULTS (PRODUCTION PROGRESS) AS AGAINST TARGETS

(Value Rupees in lakhs.)

Equipment	1965-66		1966-67		1967-68		1968-69		1969-70		1970-71	
	Target (Qty.)	Actual Qty. Value	Target (Qty.)	Actual Qty. Value	Target (Qty.)	Actual Qty. Value	Target (Qty.)	Actual Qty. Value	Target (Qty.)	Actual Qty. Value	Target (Qty.)	Actual Qty. Value
I. Railcoaches	2721	276 458.30	268	270 538.04	250	225 567.52	270 (Original) 258 (Revised)	269 637.00	270 708.62	270 708.62	270 704.00	
II. Heavy-Earth Moving Equipments												
(i) D-80 Tractors	Nil	Nil Nil	Nil	Nil (Original) 128 (Revised)	176 244.13	73 244.13	185 (Revised)	163 548.17	200 (Original) 140 (Revised)	114 406.44	138 333.71	
(ii) D-120 Tractors	Nil	Nil Nil	Nil	Nil	16 48.19	11 48.19	31 (Revised)	30 128.31	35 (Original) 14 (Revised)	16 68.67	45 192.40	
(iii) 'C' Scrapers	29	29† 24.42†	5	5† 6.59†	48 42†	42† 236.63	59 (Original) 52 (Revised)	40 195.36	38 (Original) 16 (Revised)	19 109.75	40 238.00	
(iv) 'C' Rear Dumps	16	16 0.74	1	1 2.39	15 86.84	15 86.84	40	40 183.79	1 4.43	1 4.43	—	
(v) LW 35 Haupaks	1	1 35.97	Nil	Nil	Nil	Nil	50 (Original) 15 (Revised)	15 124.80	60 503.48	75 552.50		
(vi) LW 440 Motor Graders	Nil	Nil	Nil	Nil 1.38	Nil	Nil	21 (Original) 10 (Revised)	10 30.18	13 32.29	33 40.50		
(vii) D-30 Tractors	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	110 154.90	118 138.00		
(viii) Tiger 120-S Tractors	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	104 13.11	87 72 106.83		

*NOTE: The values are provisional subject to finalisation of accounts for 1970-71.

†7 Nos. own programme (value Rs. 21.72 lakhs) and 22 Nos. customers' programme (Assembly charges Rs. 2.70 lakhs.)

†2 Nos. own programme (value Rs. 6.21 lakhs) and 3 Nos. customers' programme (Assembly charges Rs. 0.38 lakhs.)

††Against customers' programme only.

NOTE: At the time of factual verification the Ministry have clarified that the figures in this statement relate to production. Thus, the column "Actual" under each year in this statement gives the Nos. of equipments produced. The figures in para 10.1 (V) on page 93 of the Report, on the other hand give the number of equipment sold. This accounts for the difference between the two sets of figures.

5.6. It would be seen from the table at page 37 that there was a short fall of 23 equipment in respect of Crawler Tractors for the year 1968-69 and of 39 in the year 1969-70.

The Committee were also informed by B.E.M.L. that even the revised target for Crawler Tractors in 1968-69 as given in table at page 47, was further revised at the Board meeting held on 18.11.1968 when the revised target was fixed as follows:—

D 80—8	175 Nos.
D 120—6	25 Nos.
	<u>200 Nos.</u>

Taking the finished stock of 1 No. of D120-6 tractor from the previous year the production for 1968-69 should have been 199 as against which BEML produced 193 tractors. Thus there was a short-fall in production of 6 tractors.

As regards the reasons for short-fall in production, the BEML stated that the short-fall of 6 equipment in respect of Crawler Tractors in 1968-69 was due to non-receipt of sub-contracted parts from M/s. Mining and Allied Machinery Corporation Ltd., Durgapur.

In the year 1969-70, the net short-fall of 24 Nos. of D120 and D80 Crawler Tractors was mainly due to short supply of Track Frames and Radiator Guard Assemblies by sub-contractors who had certain practical difficulties. There had been no short-fall in production of railcoaches in these years.

5.7. The reasons for shortfall in production in the year 1970-71, were stated to be as follows:—

1. LW-35 Haulpaks	Non-availability of tyres interrupted the production considerably. It necessitated rotating the same sets of tyres on different equipment to facilitate inspection and shipment, which, in turn, created considerable disruption in Assy. Shops.
2. Tigar 120-S Tractor.	
3. 440 Motor Graders	Non-availability of lift Beams from M/s MAMC and Mold Boards from M/s GRW
4. D 120—Tractors.	
5. D 80—Tractors.	Mainly due to non-availability of Steel Castings.
6. D 50—Tractors.	

5.8. The Committee were informed that the Railcoach Factory, which has a planned capacity of 300 broad gauge integral coaches of one type per year or 270 coaches of 3 types per year, was taken over by BEML from HAL as a running unit with effect from 1.1.65. It had already achieved the targetted capacity in production of different types of coaches. The Heavy Earth Moving Equipment, Project (including Crawler Tractors) was approved in principle in July, 1965 but its implementation was sanctioned in two phases. The first phase of crawler tractors was sanctioned in August/September 1966 and the remaining part pertaining to Heavy Earth Moving equipment in July/August, 1968.

5.9. The targets for the production of crawler tractors prior to 1967-68 and of Heavy Earth Moving equipment prior to 1968-69 were *ad hoc* targets fixed by the Company taking into account the availability of imported complete knocked down (CKD) components procured against specific customer orders. Shortfalls in the production of Crawler Tractors as against the targets during the year 1967-68 which was the first year of initiating assembly of this equipment by BEML, were stated to be due to difficulties experienced by BEML in establishing satisfactory indigenous sources of supply of components/parts. The shortfalls in the production of Crawler Tractors and Heavy Earth Moving Equipment during the subsequent years were stated to be due to delay in the receipt of imported Complete Knocked Down components in some cases and non-availability in time of indigenous components/parts in the remaining cases."

5.10. In the Audit Report (C) 1969 it has been stated that according to the Consultants' Report the production programme in respect of Scraper, Rear Dump and Haulpack and actual achievement during the years 1965-66 to 1967-68 were as follows:—

(Figures in numbers).

	1965-66		1966-67		1967-68	
	Production programme as per Consultants Report.	Actual Production *	Production programme as per Consultants Report.	Actual Production *	Production programme as per Consultants Report.	Actual Production *
Scraper .	12	29	50	5	60	42
Rear Dump .	16	16	35	..	45	16
Haulpack .	..	1	10	..	20	..

*The actual production was limited to assembly of the equipment from customer's components and also on the Company's own account mostly from importer components.

During the evidence of the representatives of BEML the Committee drew the attention of the Managing Director of BEML to the above table and pointed out that the Company had done only assembly of the equipment from customer's components and that too mostly from imported components. The Committee further pointed out that this assembly too had not been done according to the production programme as per Consultants' Report.

5.11. The Managing Director stated that the shortfalls between 1965-68 in production were due to the fact that the 'project was released only in July-August, 1968. Prior to this only assembly against firm orders on available foreign exchange was permissible. The production during 1968-69 was but at 298 machines against 100 in the Consultant's Report and during 1969-70 at 343 against 215 in the Consultant's Report. It was only since 1968-69 that they were manufacturing equipment with increased indigenous content, a percentage of indigenous content between 40 to 60 per cent in the current year.

5.12. In this connection the Department of Defence Production have informed the Committee in a written note as follows:—

“Regular manufacture of heavy earthmoving equipment at BEML's Kolar Factory, even according to the Consultants' Report, was to commence only in 1968-69 and before that only assembly of such equipment was to be done in the Railcoach Factory at Bangalore. The targets for this indicated in the Consultants' Report were on the assumption that the project would be implemented immediately. Since Government sanction for the implementation of Heavy Earth Moving Project was given only in July/August, 1968, BEML could in the intervening period only take up assembly work against firm orders from Customers with the available foreign exchange. Comparison of actual production with the targets in the Consultants Report for the above period does not therefore serve any useful purpose.”

5.13 In a written note the B.E.M.L. has stated that the reason for reducing or revising the targets of production in Railcoach Division during 1968-69 was due to a strike followed by lock out in the Railcoach Factory for a fortnight in the first half of April, 1968. This resulted in reviewing and reducing production targets from 270 to 258 coaches during 1968-69. However, the original target of 270 coaches was achieved. In subsequent year i.e. 1969-70 there has been no revision of the target of 270 coaches. The targeted production

was kept up. In the year 1970-71, the estimated production of 280 coaches would have been kept up if all the material were received in time, but later during the year, the Board reviewed the position and revised the target to 270 coaches which was fully met.

As regards the reasons for reducing or revising the targets of production in Earth Mover Division the position is as follows:—

1968-69

- (a) Revision of schedule of deliveries indicated by M/S Kirloskar Cummins for the engines required for fitment on D 80 tractors.
- (b) Changes in the schedules of shipment of the CKD components for the Haulpaks and Motor Graders ordered on WABCO.
- (c) Development of certain purchased items like radiators for which there were no manufacturing drawings.
- (d) The project was not conceived for manufacture/production of castings and forgings. Hence, it was dependent on outside sources for these items. There have been failures on the part of MAMC and other sub-contractors to supply some of the items of steel castings inspite of our best efforts.

1969-70

- (a) Non-availability of CKDs of Scrapers and Motorgraders from Collaborators due to changes in their schedule of deliveries.
- (b) Lockout in Southern Structural affecting supplies of assemblies ordered on them.
- (c) There was a strike in the Works of Western Mechanical Industries affecting supplies.
- (d) Delivery commitments not fulfilled by Sub-contractors for indigenous components.

1970-71

- (a) There was a Lockout in the Works of Mukund Iron affecting their supplies.
- (b) Supplies of Sub-contractors not being maintained per delivery commitments in spite of continuous follow up.

(C) Non-receipt of tyres from Tyre manufacturers

5.14. The Committee note that target of production of almost all items have been revised downward by the B.E.M.L. Table in para 5.5 gives the definite impression that the targets of production for the year 1968-69, 1969-70 and 1970-71 in respect of most items have been revised downwards to match the actual production figures. Even the reduced target has not been achieved in production. The Committee are not convinced about the reasons given by B.E.M.L. justifying downward revision of targets fixed earlier. Consequently, they are inclined to believe that the fault may not be in fixing the targets but in making sustained effort to achieve them since the easiest way to cover failure is to revise the targets downward. The Committee, therefore, recommend that this tendency to revise targets downward should be checked forthwith and positive steps be taken to realise the targets once set.

5.15. The Committee observe that the shortfall in production in the past has been mainly due to non-availability in time, of component/parts whether imported or indigenous. The Committee hope that by learning from the past experience B.E.M.L. would take adequate steps to ensure necessary and timely supply of the required component/spare parts to enable it to adhere to its production schedule. Any delays in delivering of the earth moving equipment by the B.E.M.L. is bound to upset the production programme of the Public Undertakings who book their orders with B.E.M.L. for this type of equipment. The Committee therefore, need hardly emphasise that every effort should be made to adhere to the targets of production.

(D) Expansion Programme

5.16. The table below shows the revised product-mix approved by the Board to be achieved in due course, subject to various constraints such as demand for the equipment, availability of foreign exchange for import of components, indigenous development or purchase from abroad of manufacturing know-how and the fulfilment by Mining and Allied Machinery Corporation Ltd. of commitments from their side.

Sl. No.	Product	Nos. per annum	Names of Collaborators
1.	Crawler Tractors of above 300 HP	40	Either M/s. Komatsu or BEML Design.
2.	D-120 Crawler Tractors.	125	M/s. Komatsu Manufacturing Co., of Japan.
3.	D-80 Crawler Tractors	250	Do.
4.	D-50 Crawler Tractors.	300	Do.
5.	D-55 S/D-60-S Crawler Tractors-Front End Loaders.	125	Either M/s. Komatsu or BEML Design.
6.	Motorised Scrapers	80	M/s. WABCO of USA
7.	25 Tons/35 Tons and above 35 tons—off the Highway Rear Dumps	300	Do.
8.	Motor Graders	100	Do.
9.	Wheeled Front End Loaders..	50	M/s. Radeje Dakic of Yugoslavia.

5.17. The Board of Directors of BEML decided on this revised product-mix in January, 1969. This was done in order to enable BEML in coordination with the Mining and Allied Machinery Corporation Ltd., to suitably fill the gap between the licenced capacity and the anticipated demand based on the demand pattern projected by the working group for assessing the requirements in this field during the Fourth Five Year Plan period.

5.18. B. E. M. L. has also undertaken the manufacture of Tigar Equipment in collaboration with M/s. Radoje Dakic. BEML also plans to manufacture 25 ton and 50 ton Haulpaks as the present indications are that sufficient demand for these types of equipment is likely to materialise.

5.19. In connection with the future programme it has been stated that the scheme for expansion of production of D50-A15 Tractors from 300 Nos. per annum to 700 Nos. per annum have been accepted by the Directors of B.E.M.L. and the Industrial Licence application is awaiting the approval of the Ministry of Industrial Development and Company Affairs.

5.20. B.E.M.L.'s existing Agreement with the Railway Board is for the supply of 300 Broad Gauge coaches per annum. Based on the Railway Board's indication of a demand for 400 Rail coaches per annum to be supplied by BEML, the Company had submitted

a Project Report for expanding its capacity to 400 rail coaches per annum. The Company has since received formal orders of Government sanctioning the project.

5.21. Asked during evidence whether the Company was capable, of diversifying production in future, if necessary and whether there was any forward planning on those lines the Managing Director of BEML stated:

“Our present product-mix is for 800 equipments. We have got plans for enlarging that we are going in for additional types of equipments. There is frequent change in numbers and types. We have to be always on our toes so that we are able to provide what the customers need. We are thinking of 50-ton Haulpaks for which there is a demand; crawler tractor over 300 HP; dozers shovel for loading the LW 25 and 35 for which there appears to be a demand.”

5.22. Asked if all these required fresh collaboration, the Managing Director further stated that:—

“LW 50 is already included in the collaboration; for dozer shovel we need a fresh collaboration. It is being negotiated now with Komatsu.”

5.23. The Managing Director also informed the Committee that the revised product-mix had taken into consideration the utilisation of excess capacity of some of the existing sister Public Undertakings.

5.24. B.E.M.L. propose to enter into new collaboration agreements for certain items. In the revised product-mix, there are four new items for production i.e. (i) Crawler Tractors of above 300 HP; (ii) D-55-S/D-60-S Crawler Tractors—Front end loaders; (iii) 25-ton and above 35-ton. Off-the-Highway Rear Dumps Trucks (Haulpaks) and (iv) Wheeled Front End Loaders.

The Committee are not aware whether B.E.M.L. has carried out any comprehensive survey for its existing and planned products. While appreciating the endeavours of B.E.M.L. to expand and become flexible to suit rapidly changing market preferences from time to time, the Committee need hardly stress that the effort should be to meet the needs for diversification from within the existing resources of men and machinery. The Committee also stress that where foreign know-how is required for diversification of production, the existing collaborators may be approached to supply it

within the framework of existing agreements. The Committee would like to remind B.E.M.L. of its prime responsibility to make firm assessments of demand before committing its limited resources to diversification programme.

(E) Indigenisation

5.25. The Minister of Defence Production informed Rajya Sabha on 19.12.1968 in reply to a unstarred Question as follows:—

“The imported content in the case of rail coaches produced by BEML is at present only about 3 per cent. As regards Heavy Earth Moving Equipment, the production is by way of assembly from imported complete|knocked down packs with as much indigenous content as is possible. The present imported content of each moving equipment assembled by BEML is as under:

Equipment	Approximate imported content
'C' Tournapull Scraper	65%
'C' Tournapull Rear Dumps	82%
LW-35 Rear Dump Trucks	80%
D-80 Crawler Tractors.	50%
D-120 Crawler Tractors.	65%

5.26. The Committee enquired about the import contents of the equipment manufactured by the Company subsequent to the above period. BEML have stated in a written reply:—

“Except for the 'C' Rear Dumps, and LW-440 Motor Graders which were mainly assembled from imported CKD packs, the production of the other equipments involved progressive indigenisation. As regards the comparison of the indigenous content achieved during 1968-69 and 1969-70 with the indigenisation programme envisaged in the Project Report, such a comparison may not give a correct picture of the programme or performance of the Company

having regard to the delay in sanctioning the implementation of the Project. However, a comparison is given below:—

Equipment	Indigenous Content				Remarks
	1968-69		1969-70		
	Target as per Project approval (1965)	Actual achievement	Target as per Project approved (1965)	Actual Achievement	
'C' Scraper	31.1%	35%	44%	36.5%	
'C' Rear Dumps	25.2%	18.9%	44.8%	18.9%	
LW-35 Haulpacks		22.2%	19%	33%	
LW-440 Motor Grader . . . . .	..	16%	..	16%	
D-80 Tractors.	40%	41.08%	55%	53.9%	
D-120 Tractors. . . . .	..	26.7%	40%	30.45%.	"

5.27. During evidence the Managing Director of the Company stated that last year the indigenous content was about 30 per cent and this year the Company had reached 60 per cent and it hoped to reach 85 per cent by next year.

5.28. During the evidence of the representatives of the Department of Defence Production, the Secretary of the Department stated as follows with regard to indigenisation:—

“...we are persisting in our efforts to delete imported items as far as we could. From year to year, we have set some targets for ourselves and in the collaboration our aim is to reach a figure of 85 per cent of indigenous components in the course of next three or four years. As I said earlier, the spare parts will be continued to be supplied to us for seven years even after the agreement is over. The problem is for remaining 15 per cent. The items are mostly bought out items which are difficult to establish in manufacture but we shall certainly continue our efforts in this direction also.”

He further added that things like bearings, Hydraulics, seals and springs and certain valves which go into hydraulic systems will continue to be imported.

5.29. The Committee desired to know whether the collaborators were giving any assistance in having the spare parts developed indigenously. The Secretary Defence Production during evidence stated:

“They are giving all possible assistance. Drawing and designs are part of the agreement. They have to give all that and their technical people at our call come to us and assist us in process of manufacturing them.”

5.30. In a written note the BEML has stated that cent percent indigenisation was not possible and that it was not envisaged even in the production programme as approved by Government in 1965.

5.31. The Department of Defence Production have also stated in a written note that the Company was proceeding with its own plans to achieve the expected rate of indigenisation based on guide lines given by the Consultants.

5.32. Asked if the Government was considering any concrete proposal which would expedite indianisation of plant and machinery, the Department of Defence Production stated in a written reply: “Development of indigenous capacity in the machine tool industry is looked after by the Director General of Technical Development under the Ministry of Industrial Development and Internal Trade and the matter is receiving regular and constant attention of this Directorate General. Instructions already exist that all Government Departments/Agencies should obtain clearance of the Director General of Technical Development from the indigenous angle before deciding upon import of any plant and machinery. In order to assist in the utilisation/development of indigenous machine tool capacity to meet requirements of new projects, all Government Departments/State Governments/Ministries etc. have also been advised to plan their requirements well in advance associating DGTD at the very initial stages of the formulation of new projects. This would enable DGTD and the indigenous manufacturers to organise the necessary development action and to ensure that items, equipments needed by Project authorities from time to time would, by and large, be manufactured and made available from indigenous sources according to specifications required and in accordance with time scheduled stipulated. All requirements of capital machinery exceeding Rs. 7.5 lakhs in value are also required to be advertised in the Indian Trade Journal and before giving the import clearance response from indigenous machine tool manufacturers to these advertisements is taken

into account by the DGTD who have been instructed to be more rigorous in the scrutiny of the import applications and not to clear import of equipment which with a little extra effort could be made available from indigenous sources. Ministries, etc. have also been instructed not to make any commitments in regard to import of items of plant and machinery/equipment which could be procured from indigenous sources."

5.33. The Committee observe from the table given in para 5.26 that the progress as regards indigenisation lags far behind the targets. The Committee are therefore of the opinion that the pace of indigenisation needs acceleration. B.E.M.L. should spare no efforts to achieve a greater degree of indigenisation and the Committee expect that in coordination with other manufacturers of earth moving equipment in the country it should be possible for B.E.M.L. to bring about further reduction in the imported contents.

The Committee also urge the Government to keep special watch and to give timely help to the undertaking in intensifying efforts in utilising the spare capacity available in the existing Public Undertakings.

(F) Purchase of raw-materials

5.34. B.E.M.L. has been experiencing some difficulties in the procurement of some of the materials in sufficient quantities and in time required by it. Position in respect of some of these items is as under:—

- (a) **Steel:** All the requirements of steel for the Railcoach Division are projected on an indent and sent to the Railway Board cell of Iron & Steel Controller located in Calcutta, who, in turn places the demand of BEML before the Joint Plant Committee (JPC) for planning the production of Steel items on various indigenous manufacturers of steel depending upon the availability of indigenous capacity at the time of placing such indent. The requirements of the Earth Mover Division are projected to the JPC through the Defence Ministry. The JPC issues a Planning Note on the Producers and sends a copy of the same to BEML for placing formal purchase orders. On receipt of formal Purchase Orders, the producer issue Sale Orders/Work Orders on their respective Steel Plant and send a copy of the same to BEML. Due to limited capacity of manufacture and supply of steel items to the required specification, priority is allotted by the Steel Priority

Committee (SPC). Depending upon the priority allotted and the rolling programme, the Steel Mills supply steel to BEML. If the JPC finds that indigenous manufacturers cannot supply due to insufficient quantities, the JPC passes the indent to the Railway Board Cell of the Iron & Steel Controller, who recommends to the Railway Board for import of such items. Copies of releases for import are sent by the Railway Board Cell at Calcutta to BEML.

In case of Earth Mover Division releases for import are recommended by SPC and made by the Ministry. **Difficulties:**—Due to uncertain pattern of supplies (mainly due to uncertain labour conditions in the Eastern region) release for import sometimes gets delayed allowing very little time for imports which further depend upon availability of foreign exchange at that time. If no buffer stocks are held and if material is not available, shop loading programme is affected.

- (b) **Steel Forgings:** Although orders are placed on established manufacturers of steel forgings well in advance, they are sometimes not able to supply these forgings in time in view of the difficulties experienced by them in obtaining the required forging quality steel billets from the Steel Plants. They also depend upon the SPC for allotment of priority for steel billets. The SPC gives preference to supply of steel billets to products which are exported. This upsets, sometimes, supply of forgings in time.
- (c) **G.I. & Black Pipes:** Although orders are placed on the manufacturers of tubes and pipes well in advance, they have reported that there is a shortage of skelp, in the country and whatever skelp is made available to them is being used on Export Orders resulting in non-supply or slow-supply of G.I. and Black Pipes to indigenous Engineering Industries requiring these items.
- (d) **Helical Springs:** The manufacturers of Silicon spring rods have reported that they do not get required quota of silicon steel billets from the Steel Plants resulting in shortage of silicon steel spring rod to the firms who coil springs. Consequently, we have been experiencing delay in supply of helical springs from the manufacturers.

- (e) **Wheelsets:** This is the only major item which is being imported by the Railcoach Division. An experimental order for development and supply of Wheelsets of HSL, Durgapur for 300 coaches (for one year's requirement) has been placed on 22.7.1968. So far, we have received Wheelsets for two coaches. Since there is insufficient capacity in the country for manufacture and supply of Wheelsets required by the Railway Board and by the manufacturers of integral railcoaches, the Railway Board has been releasing foreign exchange for import of the same.
- (f) **Stainless Steel Lavatory Fittings:** Although orders have been placed in advance, the manufacturers have been complaining that they are neither getting sufficient quota in time for import of stainless steel sheets nor have been getting stainless steel sheets from Alloy Steel Plant, Durgapur in sufficient quantity in time. This, in turn affects the supply of stainless steel lavatory fittings required to be fitted into the Railcoaches. The Railcoach Division has also placed an order on Alloy Steel Plant, Durgapur for Stainless Steel Sheets on 20.12.1969. Supplies are still awaited. In the meanwhile, the Railway Board has released foreign exchange for one year's requirement of stainless steel sheets to be imported from abroad.
- (g) **Steel Castings:** The Crawler Tractor production requires considerable amount of steel castings of intricate nature. Supplies have not been forthcoming in adequate quantities. Non-supply or slow-supply does affect, at times, the scheduled programme.
- (h) **Other bought out items:** Other bought out items which are being procured from the Eastern Region depend upon the availability of material with the manufacturers and labour situation in that region. Non-supply or slow supply does affect, at times, the scheduled programme.

5.35. In his address to the 5th Annual General Meeting of the Share-holders, on the 29th September, 1969 the Chairman, of BEML had pointed out the danger which had cropped up due to the shortage of essential raw materials like steel plates and special steels.

5.36. The Committee desired to know whether any concrete efforts had been made to ensure a regular and sufficient flow of raw materials to enable the Company to adhere to its targets. In a written note the Department of Defence Production have stated:

“The company is given all assistance in the matter of follow up with the suppliers or concerned administrative Ministries of the Government as necessary.”

The Committee further desired to know whether the Company was confident to overcome the difficulty of shortage of raw materials and whether they proposed to revise the production targets?

The Department of Defence Production in a written note have stated:

“It is difficult to make a forecast particularly as steel is a major raw material for the industry. The production targets will have to be reviewed periodically.”

5.37. The Committee note from the above description that the undertaking has been experiencing difficulties in procurement of various materials especially Steel Forgings, G. I. and Black Pipes, Helical Springs, Wheelsets, Steel Plates and Special steels. The Committee hope that the position would ease as a result of the urgent action taken by the Government. The Committee recommend that all possible efforts should be made by the undertaking to ensure timely supplies of essential raw materials with a view to sustain its production programme and avoid gaps between the production targets and achievements which not only upset the time schedule of BEML but of all the undertakings that rely on BEML for their requirement of Heavy Earth Moving equipment.

5.38. The Committee also note that there is insufficient production in the country of wheels and axles because of which the Railway Board have to release foreign exchange for import of the same. The Committee would like to draw attention to the recommendations made in para 3.56 of their report on Hindustan Steel wherein they have pointed out that the production of the Wheel and Axle Plant in Durgapur in 1969-70 was as low as 15 per cent of the rated capacity. The Committee cannot too strongly urge the Government to take concerted measures to improve the production of wheels and axles at the Durgapur Plant so as to meet in full the requirements of wheel sets and axles for rolling stock manufactured in the

country and obviate the necessity of import. Moreover, indigenous supply of such parts will also ensure timely supply which is a very important factor.

(G) Stock of Raw materials

5.39. As per Annual Report of BEML for the year 1969-70 the following figures indicate the value of raw materials and components with B.E.M.L. for the last three years.

1967-68	1968-69	1969-70
Rs. 323.10 lakhs	Rs. 374.53 lakhs	Rs. 685.79 lakhs

It has been stated that the stock of raw materials and components was equivalent to about 6.2 months consumption for production requirements in 1969-70 as compared with 3.6 months in 1968-69 and 4.2 months in 1967-68.

5.40. The Committee recommend that the reasons for increase in the stock from a ratio of 3.6 months in 1968-69 to 6.2 months in 1969-70 should be looked into and steps to bring down the ratio, consistent with the needs of production, deserve to be taken by B.E.M.L.

(H) Sales and after—Sales Service

5.41. BEML has direct responsibility for the Sales and After-Sales-Service for WABCO equipment. The task of providing After-Sales-Services to the Komatsu fleet manufactured and sold by DGOF under the earlier Collaboration Agreement with M/s. Komatsu is also of the Company. Although the Company has developed rapidly recently and is establishing its position as a major unit of the Earthmoving Industry of the country, competition with other Enterprises in the field including International Enterprises is becoming more severe.

5.42. The after-sales-service as given by BEML includes initial commissioning of the machines and subsequent periodical visits to the Projects by BEML service representatives during warranty and the life time of the equipment. Immediately the machines are received at the customers' and, the service representative commissions the machines and imparts operation and maintenance training to the customers.

BEML gives warranty for every machine for a minimum period of six months during which period it is the responsibility of BEML to ensure the equipment work to the complete satisfaction of the customers. This warranty service is completely free and any manufacturing defect noticed during this period is repaired/replaced free of cost by BEML. In addition, BEML imparts complete training in operation and maintenance of the machine to the project staff.

BEML have gone all out to major projects and have stationed at their expense their field engineers to assist the projects in the maintenance and operation of the equipment to ensure least down-time and maximum utilisation of equipment supplied by BEML.

BEML Service Engineers and service staff obtain a signed delivery report each time an equipment is delivered wherein the customer certifies that the equipment are working to their satisfaction. Even after the warranty is over, BEML Service representatives keep visiting the Projects at intervals according to the population of the machines working at the Project so that the entire overhaul and repairs are carried out under the guidance and supervision of BEML field engineers. This service is also given free of charge.

To ensure, however, that both newly recruited service representatives and those of the customers are conversant with all the aspects of earthmoving equipment—both theoretical and practical—BEML have a training cell functioning under the Commercial Division. The training is imparted by very experienced service personnel with the help of training aids like Wall-Charts, Slides, Films, etc. Periodically, BEML invite specially qualified and highly skilled personnel from Collaborators' Factories abroad, to conduct Training Classes for the benefit of customers' as well as BEML own service personnel so that they also are kept abreast of the latest technological developments in the manufacturing process.

During the Courses conducted for Komatsu, WABCO and Tigar, both by BEML as well as Collaborators' representatives, at KGF Works, demonstration facilities are also available in the Production line. Here, the trainees can take advantage of seeing for themselves various components of each assembly/sub-assembly. Apart from this, during the course of training, components are dismantled and re-assembled by the trainees themselves, which will give them adequate practical knowledge of the equipment in the field.

5.43. During the course of the evidence of the representatives of the Undertakings the Committee asked whether the Company was directly responsible so far as their Sales and Service Agreement was concerned. The Managing Director replied that till June, 1967 M/s. William Jacks acted as their selling agents and that since June, 1967 BEML had set up their own commercial organisation for sales and servicing. He further stated that they had Commercial Headquarter in Bangalore and four Zonal Offices—Bombay, Delhi, Calcutta and Hyderabad. They were setting up District Offices and were also placing service teams for major projects with National Coal Development Corporation, National Mineral Development Corporation and Agro-Industries Corporation. The idea was that there should be service at the door for the major customers.

5.44. The Managing Director further informed the Committee in response to a question whether there had been complaints from customers regarding break down of equipment, the Managing Director admitted that there were some complaints. These complaints were usually about spare parts, which were not available and about the old equipment supplied. As regards servicing the machines which were in use in border areas by the armed forces, the Managing Director stated that they did initial service and servicing during the warrantee period. After warrantee period was over, it was the customers responsibility to look after the equipment.

5.45. The total value of sales (including spares) during the last three years was as follows:—

Year	Value in lakhs.
1967-68	Rs. 1,392.68
1968-69	Rs. 2,150.78
1969-70	Rs. 2,286.21

5.46. The Committee note the steady increase in production and sales of the Company year by year. They also find that Zonal Offices have been set up at Bombay, Delhi, Calcutta and Hyderabad and that service teams are placed for major Projects with N.C.D.C., N.M.D.C. and Agro-Industries Corporation. The Committee consider that it is only through efficient after-sales-service in the field that the Company can inspire confidence in their products and build up an assured and expanding market.

(I) Delivery Schedule of Earth Moving Equipment

5.47. The Committee were informed during evidence that for agricultural purposes the BEML was manufacturing only 90 H.P. Tractors. All the others were used for major construction projects.

5.48. With regard to customer composition the Managing Director stated:

“Army takes D-80 tractors and Motor Graders. They also evidence interest in the D-50 and D-120 Tractors. Recently they have asked for C-Scrapers. Our major customers are CWPC for irrigation projects. They take scrapers, tractors, dumpers etc. The N.M.D.C. and NCDC take our LW-35,etc. These are our major customers. I forgot Tigar 120-SK. There is a civil demand building for them.”

5.49. Asked how long will the Company take to execute an order for five tractors of 90 H.P., the Managing Director stated:

“Our delivery period depends on the type of tractor. In case, of D-50, the position is fairly easy. For 90 H.P., it could be supplied within three to six months. If you ask for D-120, you have to wait for a year.....D-80 and D-50 tractors we can give immediately. For D-120 and others the period of one and a half year may be taken. We shall try to produce more, if the demand goes up.”

5.50. The Committee are glad to note that the Company is in a position to deliver immediately on demand D-80 and D-50 tractors. They, however, feel that the delivery period of one and a half year in the case of D-120 tractors is rather long. Since D-120 tractors are required by the Army, the Committee emphasise the need to reduce to the minimum the time interval between the booking of the order and delivery of D-120 tractors.

Delay in delivery of Dumpers to M/s. Hindustan Steel Ltd.

5.51. While examining the working of the M/s. Hindustan Steel Ltd., the Committee came across a case of late delivery of dumpers by BEML.

The H.S.L. in their written reply explained that one of the reasons for shortfall in production in Barsua Iron Ore Mines was non-availability of Dumpers. It was stated by HSL that timely action was taken to place orders for Dumpers in the year 1965-66 but these were received in the year 1969 only. This was mainly due to the reason that initially the foreign exchange was not available and later M/s. Bharat Earth Movers manufacturer of Dumpers took time for delivery of the Dumpers.

5.52. The matter was taken up with M/s. Bharat Earth Movers Limited and the position explained by them in this regard is as follows:—

- (a) Against the first order dated 3rd June, 1965 received from M/s. H.S.L. for the supply of one 35 ton dumper, delivery was effected in 1965 itself.
- (b) Against the second order dated 4th August, 1967 for the supply of four 35 ton dumpers, scheduled to be supplied originally in July, 1968, but later amended to the end of March, 1969, two dumpers were delivered on 30th January, 1969 and two on 10th April, 1969.

5.53. The change in the schedule of supply of four dumpers was stated to be due to the fact that—

- (i) The foreign exchange for the import of CKDs for the above four dumpers was released on 2nd August, 1967 stipulating that all payments and delivery should be completed by 31st May, 1968.

Since it was not possible to utilise import license worth Rs. 250 lakhs, import license for Rs. 100 lakhs was asked for in October, 1967.

- (ii) Order on M/s. WABCO was placed on 25th February, 1968 indicating shipments to be completed by September, 1968.
- (iii) Meanwhile the balance foreign exchange was released on 28th February, 1968 when a letter of Credit was opened.
- (iv) All the four units were received by 28th August, 1968 but wheels of two units and one Generator missing were received in October, 1968.

5.54. The Committee note that there was lack of planning in arranging timely import of the various items mentioned in the preceding paras. Although the foreign exchange for the purpose was

released as early as August, 1967, the import of all the required items (including missing parts) was actually completed in October, 1968 resulting in abnormal delay in supply of Dumpers to M/s. Hindustan Steel Limited. The Committee feel that timely action should have been taken to ensure replacement of the missing parts viz. Generator & Wheels by the collaborators. /

5.55. The Committee also recommend that special care should be taken by BEML and other public enterprises in supplying capital equipments other Public Undertakings so as to avoid any adverse effect on the production programme of the Public Undertakings which have to depend on other Undertakings for supply of capital equipment.

VI

PRICING POLICY

The Committee have been informed that while fixing sale price for various items of equipment, due importance is assigned by BEML not only to estimated cost of production, but also to the various commercial aspects involved viz. the competitiveness of BEML's prices in respect of each equipment and various other constraints imposed by the market situation from time to time. The position varies from time to time and from market to market. While recognising this hard fact that the pricing policy cannot be rigid and has to be flexible to suit rapidly changing market conditions, the Company is stated to have kept in view the objective that the operations of the Company should, on an overall basis, yield a fair return consistent with the capital employed. The working results of the Company would indicate that the Company had been getting on an average a net return of about 6.5 per cent to 9.5 per cent over the past few years.

It has been stated that the Earthmover Project is still in its initial stages of establishment and a large number of parts are at present being bought out in view of the fact that full facilities for manufacture have not been established in the factory. The question of comparing the price of the products with the landed cost of similar products would, therefore, arise only in the case of Railcoach Division where the sale price of the railcoaches was lower than the landed cost of equivalent MAN coaches.

6.2. Asked by the Comptroller and Auditor General during the evidence whether they had any definite pricing policy, the Managing Director of BEML stated:

"We are at the present moment in the competitive market and by and large our prices are guided by market conditions and we try to ensure that our prices are as competitive as possible. Based on that particular policy we quote firm prices and these are examined by the user concerned and then we come to an agreement with them for a reasonable price. So far we had no major difficulty."

6.3. In reply to a question whether BEML were thinking to reduce the price of the tractors, the Managing Director stated:—

“We are actually looking at the normal market rates and we try to ensure that the prices we offer are reasonable. Based on the reasonable price, we keep the balance. The only thing that we have to remember is that as we indigenise, there is a tendency at the initial stage for the costs to go up a little, we may not be able to do any sizeable reduction in the next year or two, but once the indigenisation manufacture is established, we may be able to think of reduction.”

6.4. It has been stated in a written note that with the overall facilities being established for the manufacture of several products at Bharat Earth Movers Ltd., it should be possible for the Company to produce tractors on competitive prices.

Costing system

6.5. Asked whether their pricing formula was based on ‘cost plus’ or some other system, the Secretary Department of Defence Production stated:—

“They have a formula in which, whatever goes in dividends, whatever goes in income tax, depreciation funds, bonus to workers and this and that—all this is accounted for in the production figures and then they divide it and fix the prices of individual items. Of course, competitiveness in the market, is also one of the factors they keep in mind.”

6.6. The witness agreed with the idea that ‘cost plus’ pricing formula was not very helpful so far as production was concerned. He added that there was another formula of ‘fixed price contract’ already in existence and that the Company was trying to switch over to this ‘fixed price contract’ system which has generally been accepted.

6.7. The Committee are surprised to note that the Company has not developed any cost control scheme so far, with the result that no systematic and uniform pricing policy is being followed with regard to its products. The Committee are of the view that in the absence of a satisfactory cost control scheme, it would hardly be possible for the BEML to keep an eye on the trends of cost of production and to take timely remedial measures. They recommend that

BEML should take suitable steps to develop cost consciousness at various levels of management, keeping in view the instructions issued by Government from time to time for achieving efficiency, cost reduction and profitability.

6.8. The Committee consider that as most of the equipment and machinery are being produced by BEML with foreign collaboration, every effort should be made by the Undertaking to ensure that the cost of manufacture in India is kept as near as possible to that obtaining in the collaborator's own country. In fact, as latest type of equipment and machinery are being installed for manufacture, there is no reason why our cost should not even be lower than that obtaining in the collaborator country. The Committee are, therefore, not convinced with the Government's reply that the question of comparing the prices would arise only after the full facilities for manufacture have been established in the country. They consider that such a study should be continuously made as a part of the effort to control and reduce the cost of manufacture.

Now that the Bharat Earth Movers are going in for manufacture of agricultural equipment like tractors, the Committee would like the Undertaking to make special efforts to see that the cost of manufacture is kept at most competitive rate in order to encourage the use of machinery in this basic sector of our economy.

VII
FINANCIAL MATTERS

(A) Capital Structure

The Table below summarises the financial position of the Company under broad headings for the last three years:

(Rs. in lakhs)

	1967-68	1968-69	1969-70
Liabilities :			
(a) Paid-up Capital	899.80	899.80	1189.80
(b) Reserves and Surplus.	145.72	237.59	406.49
(c) (i) Loans from the Government of India	150.00	475.00	475.00
(ii) Deferred Credits.	277.29	246.66	217.19
(d) Trade dues and other current liabilities (including provisions)	941.46	1028.26	1356.15
TOTAL	2414.27	2887.31	3644.63
Assets :			
(e) Gross Block	511.55	758.71	1046.62
(f) Less Depreciation.	74.96	106.39	163.03
(g) Net fixed assets.	436.59	652.32	883.59
(h) Capital works-in-progress (including machinery and equipment in transit)	57.47	84.88	139.86
(i) Investments (Gratuity Fund)	9.30	14.36	19.97
(j) Current Assets, Loan and advances.	1824.46	2112.93	2599.26
(k) Miscellaneous expenditure.	86.45	22.82	1.95
TOTAL	2414.27	2887.31	3644.63

7.2. The debt equity ratio for the Company was approximately 0.6:1 in 1969-70 as against 0.8:1 in 1968-69 and 0.5:1 in 1967-68.

(B) Financial Results

7.3. The turn-over of the Company for the year 1969-70 was Rs. 22.86 crores as against Rs. 21.50 crores in the previous year. The gross profit before tax amounted to Rs. 386.59 lakhs and the net profit after provision for taxation and including the carry-over from the previous year's balance aggregated Rs. 204.68 lakhs. The financial results of the Company are mentioned below:—

	1969-70	Previous year 1968-69
	Rs.	Rs.
Gross Profit of	2,96,58,922	2,08,86,927
Provision for Taxation	92,00,000	90,00,000
Net profit after Taxation.	2,04,58,922	1,18,86,927
Which after adding the amount brought forward from last year's account of	9,220	51,693
Amounts to	2,04,68,142	1,19,38,620
Out of which the Directors recommend:		
(i) Dividend @3% on the paid up Capital of Rs. 1,189.80 lakhs.	35,69,400	25,99,400
(ii) General Reserve	62,00,000	20,00,000
(iii) Plant Rehabilitation Reserve.	10,00,000	2,48,041
(iv) Development Rebate Reserve	61,00,000	44,81,959
(v) Research and Development Reserve	20,00,000	15,00,000
(vi) Reserve for Price Fluctuations and Development of Overseas Markets.	15,00,000	10,00,000
Leaving a balance of to be carried forward to next year's Account.	98,742	9,220

7.4. The working capital (current assets, loans and advances excluding interest accrued on gratuity fund investments less trade dues and current liabilities excluding provision for gratuity) of the company at the close of three years ending 31st March, 1970 amounted

to Rs. 898.69 lakhs, Rs. 1,106.41 lakhs and Rs. 1,272.03 lakhs respectively and represented 8.3, 6.9 and 7.3 months value of production at cost (excluding depreciation) during these years. The working capital as on 31st March, 1970, was financed through deferred credit (Rs. 217.19 lakhs) share capital and loans (Rs. 487.27 lakhs) and internal resources (Rs. 567.57 lakhs).

7.5. It has been stated in the Director's Report for the year 1969-70 that the Company has been ranked third as on 31st March, 1969 in the country's Public Sector Undertakings. With regard to growth in internal resources the Company which came into existence in May, 1964 has in about six years of existence been able to generate internal resources to the tune of about Rs. 5.68 crores including depreciation.

7.6. The Committee note that there has been an over all improvement in the financial affairs of the undertaking in 1969-70 compared to the previous year 1968-69. Gross profit before tax as well as net profit after provision for taxation in 1969-70 has been on the increase. Moreover the undertaking has been able to generate internal resources to the tune of Rs. 5.68 crores in about six years of its coming into existence. The Committee hope that the undertaking would not only be able to maintain the present trend of its profitability and generation of internal resources, but would also be able to further improve on it.

7.7. As urged by the Committee elsewhere in the Report, Government/Undertaking should spare no efforts to reduce the price of equipment and machinery particularly of tractors so that the full benefit of efficient production is shared by the economy as a whole.

(C) Sundry Debtors

7.8. The following table indicates the volume of book debts and sales for the last three years:

As on	(Rs. in lakhs)			Percentage of debtors to sales
	Total Book debts		Sales	
	Considered good	Considered doubtful		
31st March, 1968	211.23	0.44	1,392.68	15.2
31st March, 1969	440.65	0.44	2,150.78	20.5
31st March, 1970	498.83	4.08	2,286.21	22.0

The sundry debtors represented 2.6 months turnover in 1969-70 as compared with 2.5 months during 1968-69 and 1.8 months in 1967-68.

7.9. Amounts outstanding from customers: The amounts outstanding from customers as on 31-12-1969 are indicated below:

(Rs. in lakhs)

Relating to Sales during the period	Amount outstanding	
	Railcoach Divn.	Earth Mover Divn.
Prior to 1969-70	99.51	68.11
During 1969-70	62.04	130.14
TOTAL	161.55	198.25

The break down of the amounts outstanding for more than six months from some of the major customers out of the amounts indicated above is given below customer-wise :—

(Rs. in lakhs).

Name of the Customer	6-12 months	More than 12 months
<i>Railcoach Division :</i>		
Railway Board	62.02	40.76
<i>Earth Mover Divisions :</i>		
E-in-C	0.89	11.93
DGBR	6.23	5.93
Ukai Project. . . . .	..	4.58
N.C.D.C.	9.33	..
Maharashtra Government	5.32	..
PAO	5.66	7.06
<i>Note : Against the above outstandings, the following amounts have been realised as of 31-1-1970:—</i>		
Railcoach Division	Rs. 35.70 lakhs.	
Earth Mover Division	Rs. 31.09 lakhs.	

7.10. Asked if the percentage of debtors to sales were not on the high side, it was admitted by BEML in a written reply that it was a little high and the efforts were being made to reduce it as much as possible.

7.11. The Committee are unhappy to note the increase in percentage of debtors to sales during the last three years. They have also noted with concern that there has been considerable increase in the Book Debts of BEML (as on 31st March, 1970) which were considered doubtful. Moreover, the Committee note with regret that most of the outstanding dues are against Government Deptts./Railways/Public Undertakings. Such large outstanding have the effect of reducing the profitability of the undertaking by straining its resources to meet the requirements of working capital. The Committee would like Government to issue general directions that Government Departments/Railways/Public Undertakings should accord high priority to settling of bills and effecting payment for machinery, equipment and goods received by them from public undertakings. The Committee would like to be informed of the instructions issued and follow up action taken to achieve this objective.

VIII

RESEARCH AND DEVELOPMENT

(A) Details of Research and Development programme

With a view to keeping abreast with the changing pattern of Customer preferences and latest developments in the Earthmoving equipment, the Company has set up a nucleus Research and Development Division. The main objectives are to develop new equipment based on customer requirements as well as improving models of equipment under production. Another object of Research and Development Division is to assist the factory in rapidly indigenising the manufacture of all components. The Research and Development Division has already taken up indigenisation of the sophisticated major assemblies like Engine, Transmission, Clutch, Hydraulics and product improvement like development of power shifts and attachments.

8.2. As regards the Research and Development programme, the Managing Director BEML stated during evidence:

“Large amounts are required for Research and Development for the Earth Mover Industry because customer’s preference changes and the requirement changes. So, all Earth Mover Industries all over the world spend large amount of money on Research and Development—4 to 5 per cent of the total sales value. We started our Research and Development Organisation last year. We are still dependent on the collaborators to keep us up-to-date regarding all the techniques. We will have to stand on our own feet. For that, we are building a Research and Development Fund now.”

8.3. It has been stated in a written note that “the main objectives behind the creation of R. & D. Fund was to set up a R.&D. Division to undertake design and development of new equipment as well as improved models of equipment under production, to develop indigenous assemblies/components for which no drawings/specifications

are available, to carry out laboratory and field trials for new equipment/assemblies, to assess their performance and suitability, to investigate defects on parts/assemblies and to organise technical information pertaining to earthmoving equipment."

8.4. Asked how has the amount of Rs. 15 lakhs earmarked in the year 1968-69 for the purpose of Research and Development Fund been utilised and with what results, the Secretary, Department of Defence Production stated during evidence that:—

"As a matter of policy a company does earmark funds for research and development and for market fluctuations, and they have done this to the tune of Rs. 15 lakhs—Not much has been utilised so far. They are as yet formulating their schemes and as and when there is more accrual of funds under this head they will take up the problems in research and development."

8.5. As per Annual Report of BEML for the year 1969-70 the 'Research and Development Reserve' of the company as at 31st March, 1970 was Rs. 45,50,000/-.

8.6. Research and Development activity is vital to the growth of modern industries and enable enterprises to explore and develop newer and better products and processes. They are a continuing activity and help to create a new basis for technology. The Committee are unhappy to note that the Company have not yet formulated their schemes for effective utilisation of the funds earmarked for Research and Development. The Committee feel that main objectives behind the creation of Research and Development Fund and setting up of Research and Development Division are to develop new equipment based on customer requirements and improving existing models of equipment under production. Apart from this, another important objective of Research and Development Division is to assist the company in rapidly indigenising the manufacture of all components and thereby increase productivity with particular reference to cost reduction. The Committee strongly recommend that the undertaking should formulate research schemes with the specific purpose of achieving the objectives for which the Research and Development Fund has been created including the Scheme to rapidly indigenise the manufacture of components.

(B) Demand Survey

8.7. The Committee desired to know the machinery for conducting Demand Survey so as to make sure that products would meet the requirements and that the demand for new products would be indentified well in advance so as to develop the requisite production capacity in time. In a written note the Government have stated:—

“We generally go by the projections given by our major Users like Defence, Border Roads, Central Water Power Commission, National Coal Development Corporation, National Mineral Development Corporation etc. In addition there are series of reviews made mainly for plan purposes and projections given by our main Users which give us the requirements as far as we are concerned. The latest study was done by a team constituted by the Industrial Development Ministry in 1968 for the Fourth Plan. The team’s report is our guideline for the present. When we wanted to diversify for the LW 25 or LW 50 dumpers, we consulted our major users as to what their likely demand would be for a certain number of years. Their demand pattern dictated our manufacturing programme.

8.8. Asked whether any ‘market survey’ had been conducted for their products. The Managing Director of BEML stated that “The latest survey was done for LW 50 and 25 and also for a Loader and the picture that we got was that LW 50 was required by NMDC. The requirement for LW 25 was for small numbers and there was no immediate requirement for the other types. Based on that we draw our programme.”

8.9. Asked whether possibilities have been explored to develop the foreign market, the witness stated:—

“We are exploring, but it may take sometime to develop our foreign market. Now Nepal is what we are considering immediately. There is a foreign aid programme. We are also considering Ceylon and the Middle East on that priority. We are not thinking of going further a field because competition would be keen and transport charges will be more. So, we are not concentrating beyond Nepal at the present moment. I would like to emphasise that our factory is in the formulative stage and we naturally cannot export anything which has not got a major indigenous content. We are exporting only the things which have

50 per cent or over indigenous content. But, by the time we develop the market for this, we may be able to reach the necessary indigenous content for export."

8.10. Asked how much time was required to export their products the witness stated that "It is very difficult to make a guess. I would say that we would be able to export between two and three years' time. We are trying to bring it down to one year or so. I think two to three years' period is a reasonable time."

8.11. The Committee note that latest demand survey was conducted by a team constituted by the Ministry of Industrial Development in 1968 for the Fourth Plan, which continue to be the guide-line for the Company even at present. The Committee are of the view that apart from long term survey such as the one conducted in 1968 for the Fourth Plan, the Undertaking should carry out annual surveys with reference to its specific products with a view to undertake production programme based on realistic assessment of demand of the major customers taking into account possible fluctuations of demand.

(C) Training Scheme

8.12. A Training Scheme was started by BEML in the year 1964. Thirty two Junior trainees and five Senior trainees were recruited during 1964-65. They underwent inplant training for a period of one year. These personnel were earmarked for manning the various positions in the Heavy Earth Moving Equipment Project.

8.13. The Company commenced training under the Apprentices Act with effect from July, 1965. Arrangements were made with the Technical Training Institute of H.A.L. to impart training to these apprentices.

8.14. During the year 1965-66 and 1966-67, a batch of 89 and 50 apprentices respectively were selected and put under training under the Apprentices Act. These apprentices underwent training in the HAL Training Institute under an agreement arrived at between the H.A.L. and B.E.M.L.

8.15. In reply to a question whether they had got any inplant scheme for imparting training to their workers so that the workers could improve their skills, the Managing Director, B.E.M.L. explained during evidence:—

"We have got at present an Apprentice Training Centre, and it

is working now. In addition, for those workers who show special skills, we try to give them training and even send them to factories, outside like the Hindustan Machine Tools on deputation and get them back again. We also send the slightly senior people the middle piece management—overseas for getting the latest techniques from our collaborators.”

8.16. Asked whether the provision for training of the personnel was a part of the Collaboration Agreement with Komatsu, the Managing Director of BEML stated:—

“A part of the Agreement. And they have given all the facilities in both the places. Even Yugoslavia have extended help to us. We are sending people for short training for familiarisation with difficult portions which have not been indigenised in India at present.”

8.17. The Committee were informed that a few persons from their staff were also sent on training for about two to three months who were given specific tasks of indigenising a particular part.

8.18. In a written note BEML have stated that Shop floor training is given for newly appointed workers and those who show aptitude for more skilful work are trained in BEML and outside. Service personnel are given special training through special training courses.

8.19. The Committee note that BEML arrange in plant training, apprenticeship training and shop floor training, etc, at BEML and at the H.A.L. Training Institute. The Committee, recommend that intensified and specialised training schemes may be launched with a view to achieve cent-per-cent Indianisation of technical personnel as quickly as possible.

8.20. The Committee also recommend drawing up of refresher courses for the various grades of technical personnel employed in order to ensure maintenance of high standards of skills and performance.

IX

ORGANISATION AND PERSONNEL MATTERS

(A) Organisation

(a) *Principal Functionaries*

Bharat Earth Movers Ltd. was inaugurated on 11th May, 1964. It is engaged in the manufacture of heavy earth-moving equipment and railcoaches. It has got the following two units:—

- (i) Rail-Coach Division; and
- (ii) Earth Mover Division

9.2. The Company has got at its Headquarters a Chairman/Board of Directors/Managing Director, supported by the General Manager, Rail Coach Division, General Manager, Earth Mover Division, General Manager, Commercial Division, Financial Controller, Chief Engineer, Chief Controller of Research & Development, Chief Administrative Officer, Secretary, Legal Adviser and a large number of Technical Officers whose list is contained in five charts reproduced at Appendices I to V. The Earthmoving equipment factory has its General Manager, staff and factory located at Kolar Gold Fields.

(i) *Chairman/Managing Director*

9.3. Under Article 107 of the Articles of Association of the Company, President may, from time to time:—

- (i) appoint one or more of the Directors to the office of the Chairman and the Board of Directors or Managing Director, or Managing Directors of the Company for such time and on such remuneration as he may think fit and may, from time to time, remove, or dismiss him or them from service and appoint another, or others in his or their place or places. Any such Director appointed to any such office shall, if he ceased to hold the office of the Director from any cause, *ipso facto*, and immediately ceases to be Chairman/Managing Director, as the case may be;

- (ii) appoint the General Manager for each of the constituent units/divisions of the Company, for such term and on such remuneration as he may think fit and may from time to time, remove him from office and appoint another in his place.

Provided that the appointment or removal, as the case may be, of the General Manager, shall be made in consultation with the Board;

- (iii) entrust to and confer upon the Chairman, Managing Director(s) General Manager(s), for the time being such of the powers exercisable under these Articles by the Directors as he may think fit and may confer such powers for such time and to be exercised for such objects and purposes and upon such terms and conditions and with such restrictions as he may think expedient and he may confer such powers either collaterally with or to the exclusion of and in substitution for all or any of the powers of the Directors in that behalf and may from time to time, revoke, withdraw, alter or vary all or any such powers.

9.4. At present, the Company has a Chairman, who is part-time. He presides over the meetings of the Board of Directors and gives necessary guidance and advice, but he has no direct executive function. The Company has also a Managing Director. He is the Chief Executive of the Company responsible for the implementation. He is directly responsible to the Board of Directors.

The Board of Directors have been from time to time reviewing the delegation of powers to the Managing Director and other officers and has been delegating the powers of the Board of Directors to the Managing Director and other Officers of the Company. Thus the Managing Director amongst others, has been delegated certain Executive powers by the Board of Directors.

9.5. Under the Article 159 of the Articles of Association of the Company, the President may, from time to time, issue such directions, as he may consider necessary in regard to the exercise and performance of the functions of the Company in matters involving national security or substantial public interest, and in like manner may vary and annul any such directions. The Directors shall duly comply with and give immediate effect to the directions so issued.

9.6. The Committee find that Bharat Earth Movers Ltd., have got a part-time Chairman and a full-time Managing Director. In their Report on Public Sector Undertakings, the Administrative Reforms Commission had recommended that a Board of Management of the Public Sector Corporations should have a full-time Chairman-cum-Managing Director. Government considered their recommendation and took a decision that as a rule there should be full-time Chairman-cum-Managing Director and in exceptional cases where the Chairman might be only a part-time one, there should be a full-time Managing Director. The Committee fail to understand why an exception was made in this particular case. The Committee desire that Government would examine the possibility of combining the posts of Chairman and Managing Director in Bharat Earth Movers Ltd., in the light of their own decision.

9.7. Article 95 of the Articles of Association of the Company provides that "subject to the provisions of Section 252 of the Act, the President shall, from time to time, determine in writing the number of Directors of the Company which, however, shall not be less than two and not more than twelve." The Directors shall not be required to hold any qualification shares.

The Board of Directors of the Company at present consists of twelve members including the Chairman and the Managing Director.

(ii) *Financial Director*

9.8. There is no Financial Director as such on the Board of Directors of BEML. However, there is a representative of the Ministry of Finance (Defence) (of the rank of Additional F.A.) as a Director of the Company.

(iii) *Director representing the Administrative Ministry.*

9.9. Joint Secretary, incharge of BEML in the Department of Defence Production, represents the Ministry on the Board of Directors of the Company.

The presence of such Directors facilitate the exchange of ideas and thoughts between Government and the Company through informal channels and helps to speed up decisions in matters which must come to Government. While the autonomy of the Company is respected, it is desirable that the Government through its representatives should apart from receiving the annual reports of the Company have intimate knowledge of the working of the company.

For ensuring the accountability of Government to parliament and realising the position of the Government as the dispenser of public funds, the overall responsibility of Government is to achieve the objectives underlying the formation of the company and to ensure that corrective action is taken in time when the affairs of an undertaking are tending to go wrong. Besides, the Officials/Directors keep the Government apprised of the periodic assessment of the performances/or problems.

No formal reports have however, submitted in the recent past, but Government have otherwise been kept informed of major developments/or problems.

(b) *Other Functionaries*

(i) *Financial Controller*

9.10. The Finance Division of the Company is organised taking into account the activities of the two Production Divisions and one Commercial Division. The Division is headed by Financial Controller and as his representatives in the three Divisions, three Accounts Managers are also detailed.

The Finance Department is responsible for Finance. Accounts and Internal Audit Departments. As Financial Adviser he renders advice to the Managing Director on all financial aspects:

The Finance Department is responsible for:—

- (i) Preparation of Annual Accounts, Audit of Accounts by Government Audit and statutory Audit.
- (ii) Preparation of budget for presentation to Directors and ensuring budgetary control and cost control.
- (iii) Preparation of Financial review periodically for presentation to directors and to the Ministry.
- (iv) As the Head of Internal Audit Department, the Financial Controller exercises control to ensure adherence to rules, procedures and delegation of powers, deals with all foreign exchange matters.
- (v) Renders financial advice to Divisional Heads.
- (vi) Reviews periodically the progress of activities of all the departments under the charge of Financial Controller.

The Internal Audit Department is directly responsible to the Financial Controller and thus he watches the correct adherence to rules, procedures etc.

The Financial Controller has in addition another responsibility to the Board of Directors. He attends all Board meetings by invitation and is available for consultation by the Board on all matters affecting Finance. It is also customary, the Financial Controller co-ordinates all agenda notes going to the Board of Directors. He has also the liberty to express his views to the Board of Directors even where the Managing Director disagree with the Financial Controller.

9.11. *Internal Audit.* Till September, 1969, the Internal Audit functions were carried out on "Pre-audit" basis. The Audit Manual was reviewed by the Management and revised to suit the requirement according to which monthly post audit of accounting documents, payments etc., is carried out, confining pre-audit to certain important aspects like Works Contract, Royalties, Technical Assistance fee, Sales Tax, Income Tax and settlements of accounts of employees whose services are terminated, gratuity and Provident Fund. The Purchase Orders and the Works Contract issued are also subject to Post-audit either 100 per cent or at fixed percentages depending on the values.

(ii) *General Managers (Rail Coach Division and Earth Mover Division)*

9.12. The Production Department are separately organised for the two Production Units of BEML, the Rail Coach Division and Earth Mover Division.

Both the General Managers are in charge of the respective units namely Rail Coach Division and Earth Mover Division. They are assisted in their duties by Factory Managers, Chief Inspector, Purchase Manager, Accounts Manager, Assistant Personnel Manager, Store Manager etc., a detailed list of whom is contained in Appendices III & IV.

The Production Engineering Departments in these two divisions are responsible for:

- (i) The technical control and administration of Planning, Programme and controlling the manufacture of the products in required quantities, at the required time by the best economic and practical methods;

- (ii) The preparation of Master Target Programme to meet the customers' requirements, and compilation of production-budget project-wise.
- (iii) Preparation of Annual Budget in relation to the Master Target Programme covering: The Machinery Equipment, Tools, Labour and Materials.
- (iv) Establishing ways and means for supply of manufacturing techniques and facilities; operation time, despatch and follow-up during operation, in a most rational and scientific method.
- (v) Overall Control of Methods, Tools Design, Tool Planning, Work Order Control and raising of Capital Appropriation Requests.
- (vi) Holding periodical review meetings to record progress of procurement of tools, materials, machinery and equipment, utilisation of foreign exchange, implementation of decisions of Technical Committee and review of rejected/re work stores and components.

It has been stated that BEML is sending monthly progress Report to the Ministry of Defence. The monthly progress and Performance Reports submitted by the Company are utilised for preparing quarterly assessment report regarding progress and performance of the company for the information of the Secretary and for transmission to the Bureau of Public Enterprises who also make a periodic assessment of the performance and progress of individual public undertakings. The monthly progress and performance reports also serve to bring to the notice of Government any serious bottle-necks in achieving the targets on which assistance or remedial action by the administrative Ministry could be of help.

(iii) *General Manager (Commercial)*

9.13. He is incharge of the commercial, namely, the sales activities of the undertaking. He is assisted by Sales Manager, four Zonal Managers, Public Relations Officer, etc., in the discharge of his duties in the organisation of the undertaking. The Organisation Chart of this Division is contained in Appendix V.

The total number of technical personnel employed at present in BEML Service organisation is 115. At present, they are posted in the four zonal offices located at New Delhi, Hyderabad, Calcutta, and

Bombay. In order to give further effective after-sales service to the equipment, arrangements have already been made for setting up offices with service personnel in other places in due course.

In addition to this, service personnel are located permanently in various projects, such as Beas, Ramaganga, different branches of NMDC and NCDC, UKAI, etc. to give efficient and satisfactory after-sales service to the fleet owners.

(iv) Industrial Relations Manager

9.14. One post of Industrial Relations Manager in the grade of Rs. 1,150—1,500 has been created at for the headquarters. His functions and duties and responsibilities are as follows:—

- (i) to advise the management on trade union matters and ensure adequate implementation of management's policies in regard to labour.
- (ii) Maintain and improve cordial relations between management and labour.
- (iii) To implement and secure implementation of labour laws, to develop and successfully work to joint consultative machinery, to advise and successfully work on various welfare measures and manage liaison with other industrial organisations and Governmental agencies/departments in the successful discharge of above duties and responsibilities.

9.15. The Committee note with satisfaction the importance given to the improvement of industrial relations in the undertaking and the creation of the post of Industrial Relations Manager is a step in that direction. They hope that person appointed to this new post will justify the purpose for which he has been appointed.

(c) Foreign Personnel

9.16. The Company has secured the services of a technician from M/s. Le-Tourneau Westing house Company under the Collaboration Agreement for assistance in planning of project.

9.17. In reply to Unstarred Question No. 2271 on 27th November, 1968, the Minister of Defence Production stated in Lok Sabha:

“No foreign expert has been engaged in the Railcoach Division. Only one foreign technician from USA, namely, Mr. Charles

Apacki, is at present engaged in the Earth Mover Division for rendering technical assistance in the production of Heavy Earth Moving Equipment. The annual cost of maintaining this technician is Rs. 60,000 approximately."

9.18. As per Annual Report of the Company for the year 1968-69, the tenure of the foreign technician which was initially for a period of one year, had been extended by another two years as his stay was found to be very useful for the Company.

9.19. In the course of evidence in August, 1970, the Managing Director, BEML stated:

"At present they had only one with them from M/s. WABCO. He is an American. The foreign technician was required now as the Company was going in for indigenous content of 85 per cent by next year. Last year it was 30 per cent. This year it was 60 per cent. So, this was a critical period when foreign technician was most needed."

The Managing Director, BEML also added:

"We get the Japanese technicians for three months. We get the Komatsu man occasionally for a particular job to help in expertise. He comes and helps and goes back. We do not have any Japanese technician on a permanent basis."

9.20. The Committee note that the term of the foreign technician from USA had to be extended by two years as he is now found very helpful for purposes of indigenisation. The Committee hope that the Company will now be able to utilise fully the services of this technician and would discourage the retention of foreign technicians unless absolutely justifiable.

B. Personnel Matters

(a) *Personnel Departments*

9.21. Separate Personnel Department are functioning in each of the factory divisions namely Rail Coach Division at Bangalore and the Earth Mover Division at Kolar Gold Fields. The duties and functions of the Personnel Department are furnished below:

- (i) Administration of Personnel Policies, Rules and Regulations of the Company.
- (ii) Selection and recruitment;

- (iii) Promotion;
- (iv) Service conditions;
- (v) Administration of Labour Laws;
- (vi) Passage and passport arrangement, statutory and joint consultative committee;
- (vii) Grievance procedure;
- (viii) Labour Welfare;
- (ix) Industrial Relations and liaison with labour union/including collective bargaining.

There are about 26 officers in Rail Coach Division including the Assistant Personnel Manager and the lowest official in the Department.

9.22. The Committee note the importance given to the Personnel Department in the organisation of the undertaking and hope that the department will justify the purpose for which it has been set up.

(b) *Staff Strength*

9.23. The actual staff strength (category-wise) is stated to be as under:—

Category of Posts	Total No.
1. Officers (Employees in the grade of Rs. 400—700 and above)	431
2. Other Supervisory Personnel Employees in the grade of 225—485)	321
3. Technical Staff (Technical employees in Group II to Group VII in the Wage Group i.e. Rs. 115—190, Rs. 160—285 and Rs. 190—340)	3222
4. Clerical and Other Non-Technical Staff (Non-technical employees in the Group II to VII in the Wage Group i.e. Rs. 115—165 to Rs. 190—340)	1100
5. Class IV and Unskilled workers Employees in Group I of the Wage Structure i.e. 100—140)	962
TOTAL	6036

9.24. While furnishing the above information in August, 1970 the BEML has stated in a written note that:

“There is no excess staff in our Company. The staff for Earth Mover Division was assessed by the U.S. Consultants

A. T. Kearne Inc., Co., who were responsible for preparing the detailed project for consideration of the Management. There is no record when the first assessment of Manpower for the Railcoach Division was made as the BEML has taken over the Railcoach Division in working condition from the erstwhile Hindustan Aircraft Limited on 1st January, 1965."

9.25. M/s. A. T. Kearne Inc., had estimated a total strength of 6253 employees in the Earth Movers Factory on its reaching the full capacity as per the Project Programme then envisaged (1965). The actual staff strength has had to be adjusted according to the progress of implementation of the Project.

9.26. A statement showing the staff strength of the Company sanctioned as well as existing for the past four years is appended below:—

Year		Supervi- sory	Non- supervi- sory	Total strength
31st December, 1967	Authorised	745	5,082	5,827
	Existing :	535	4,380	4,915
31st December, 1968	Authorised	917	5,829	6,746
	Existing	576	4,884	5,460
31st December, 1969	Authorised	1,058	6,609	7,667
	Existing	788	5,265	6,053
31st December, 1970	Authorised	1,264	8,385	9,649
	Existing	874	6,395	7,269

9.27. The Committee regret to note that BEML has not so far conducted any systematic assessment of staff strength since it took over the Rail-coach Division from erstwhile Hindustan Aircraft Ltd. in January, 1965. The Committee are not aware whether the BEML management have laid down systematic norms for different categories of staff and fixed any norms of work-load which are essential for efficient and economic utilisation of the staff. The Committee, therefore, recommend that BEML should make an immediate assessment of staff strength and determine the norms of workload for all categories of staff with the help of an independent specialised agency and

to re-assess and rationalise the staff strength accordingly. The Committee also suggest that such an assessment of man-power requirement should, in future, be made at regular intervals in order to determine the proper utilisation of working force so as to avoid over-staffing.

(c) *Method of Recruitment and Promotion*

9.28. There are different orders of recruitment to various posts in BEML. These are mentioned in extenso below :—

(i) *Direct recruitment by advertisement in Newspaper:*

Posts carrying total monthly emoluments above Rs. 500/- (i.e. Basic Pay of Rs. 400/- and above) which are reserved to be filled by direct recruitment, are advertised in all important papers in India and selections made on the basis of merit, by a Selection Committee.

(ii) *Through Employment Exchange:*

Posts carrying total monthly emoluments of Rs. 200/- and below are notified to the local Employment Exchange and candidates sponsored by the Employment Exchange are preferred.

Posts carrying total monthly emoluments of Rs. 200/- to Rs. 500/- are also notified to the local Employment Exchange and candidates sponsored by the Employment Exchange are preferred. If the local or Regional Exchange do not sponsor suitable candidates and on obtaining a non-availability certificate (within 7 days in the case of Local Employment Exchange and 3 weeks in the case of Regional Employment Exchanges of reporting the vacancy), the posts are advertised in local Newspapers.

(iii) *By Deputation etc:*

Deputationists are employed in the Civil Construction Department of the undertaking to tide over the temporary phase of work. Certain other posts requiring specialised knowledge and experience and where suitable internal candidates are immediately not available, have also been filled by deputation.

(iv) *Employment on Compassionate Grounds:*

Sons/Daughters/wives of employees who expire while in service/ whose services are terminated on medical grounds and sons/daughters of serving employees who retire on superannuation, and sons/daughters of serving employees who have completed a minimum

period of 12 years of continuous service, are given preference in employment on compassionate grounds.

(v) *Selection Committee:*

The Candidates are interviewed|trade tested by the Selection Committee duly constituted for various grades. Depending on the posts to be filled, written examinations are also conducted. For selection to the posts in the pay scale of Rs. 750-1350 and above, the Committee is constituted with the Managing Director as Chairman and an outside officer (specialist in concerned posts) preferably from one of the local Public Sector Undertakings as a Member, in addition to the concerned General Manager and the Departmental Head. The Personnel Manager is the Secretary of the Committee. For posts in the grade of Rs. 550-950, a common committee is constituted for all the divisions the concerned General Manager/Financial Controller/Chief Engineer as Chairman. For selection to the posts in the grade of Rs. 400—700 and below, General Manager/Financial Controller/Chief Engineer are empowered to constitute their own committees in their Division of which they are themselves the Chairman.

(vi) *Quota for Scheduled Castes/Tribes and Ex-servicemen:*

Vacancies are also reserved for Ex-servicemen and Scheduled Castes/Tribe candidates as follows:—

<i>Caste</i>	<i>Scheduled Tribe</i>	<i>Ex-Servicemen</i>
12½% of Posts filled by Open Selection Competition	5%	10% of Class III Posts.
12-2½% of Posts other wise than Open Competition.	5%	20% of Class IV Posts.

Age limit is also relaxable in each case. The Committee desired to know whether the management observed the Scheduled Caste Candidates ratio.

During the course of evidence the Managing Director of BEML stated that the ratio of scheduled castes was observed by them.

(vii) *Quota for Promotees:*

In accordance with the Company policy, 75 percent of the vacancies in the pay scales of Rs. 400-700 and below and 50 per cent of the vacancies in the grade of Rs. 550-950 and above in the Rail-coach Division are reserved to be filled by promotion, on the basis of an approved rating procedure.

The criterion for promotion is "Seniority-cum-Ability" for posts in the grade of Rs. 400-700 and below and "Ability-cum-Seniority" in respect of posts in the grade of Rs. 550-950 and above. A copy of the Promotion Rating Plan which is applicable to posts in the grade of Rs. 400-700 and below in indirect department and posts in the grade of Rs. 400-700 and Rs. 225-485 in direct departments is at Appendix VI. The rating procedure for direct labour in pay scales of Rs. 190-340 and below is at Appendix VII.

A promotion procedure will gradually be introduced in the KGF Factory as the labour strength stabilises.

9.29. Government (Ministry of Labour and Employment) have laid down certain principles in the matter of recruitment to Public Undertakings which is at Appendix VIII.

9.30. The Committee is not very clear as to whether exhaustive Recruitment & Promotion Rules have been framed by the BEML. They recommend that such rules should be codified from the existing rules and orders and modified, if necessary, taking into account the recruitment and promotion principles in well established Public Undertakings. The Committee urge that the directions issued by the Government of India (Ministry of Labour and Employment) in the matter of recruitment be taken serious note of by BEML and their implementation should not be ignored.

9.31. In regard to promotion policy, the Committee recommend that—

- (i) Promotion be based on seniority-cum-merit;
- (ii) adequate quota of vacancies in every cadre should be reserved for departmental promotees with a view to keep avenues of promotion open in all cadres.
- (iii) a procedure be evolved to raise the superior cadre out of the talented employees of the undertaking instead of depending on retired Government officials/deputationists/officers from other public undertakings.
- (iv) Due care be taken to see that the quotas reserved for Scheduled Castes and Scheduled Tribes under Government of India orders are filled up.

(d) *Workers Participation in Management*

9.32. The workers are associated with the Management in the following Bipartite Committees:

- (i) Works Committee;

- (ii) Canteen Managing Committee;
- (iii) Labour Welfare Fund Committee;
- (iv) Provident Fund Trust;
- (v) Housing Allotment Committee; and
- (vi) Safety Committee.

BEML do not have a Joint Managing Council.

9.33. To a question whether Government considered the desirability of associating the Unions with the general discussion and solution of production problems, the Secretary, Defence Production stated during evidence:

“There have been frequent consultations as far as welfare activities are concerned—social activities are concerned and that kind of a thing but in the Managerial sphere there has not been direct consultation.”

(e) *Labour Management Relations*

9.34. In December, 1969 a Memorandum of Settlement was signed between the Management and Labour Unions providing for revision of pay scales, dearness allowance and house rent allowance. The terms of the settlement were operative and binding on either party from 1st January, 1969 to 31st December, 1972. Both the parties to the Memorandum of Settlement have solemnly pledged that during the period of the settlement, there shall be industrial peace, so that all efforts could be focussed on the task of improving productivity for mutual benefit. If any differences arise between the parties, these were to be settled through Bipartite negotiations, failing which by recourse to constitutional means. The Labour Management relations have been cordial and generally satisfactory.

9.35. The Committee asked during evidence whether the Company had accepted or rejected the general decision of the Government, to include a member from Labour on the Board of Directors, the Secretary, Department of Defence Production stated:

“We have not tried it out and I do not think we have positively rejected or accepted it.”

9.36. In this connection, the Department of Defence Production in a written note stated:

“Government have in principle accepted the suggestion regarding appointment of workers representatives on the

Board of Directors of Public Sector Undertakings but details of the scheme in this regard are yet to be worked out. In the case of Defence Public Sector Undertakings, the Department of Defence Production are of the view that it will not be advisable to appoint representatives of the workers on the Board of Directors of these undertakings in view of security considerations."

9.37. The Committee note that as a result of the Memorandum of Settlement signed between the BEML Management and the Labour Union, industrial peace has been assured for three years. They are glad to note that the Labour Management Relations are cordial and hope it would continue in future to serve the cause of improvement of production.

9.38. The Committee recommend that Government should examine and take an early decision about constituting Council of Joint Management in BEML and of giving representation to workers on the Board of Directors of Public Undertakings in the Defence Sector.

(f) *Incentive Schemes*

9.39. The incentive scheme which was introduced in 1956 in the Railcoach Division has since been revised in August, 1970. The salient features of the new scheme are as follows:—

- (1) The Scheme starts with payment of Incentive Bonus at a performance of 60 per cent.

$$\frac{\text{performance-Output}}{\text{Actual Man Hours taken}} \quad \times 100$$

- (2) The incentive Bonus hours at 60 per cent performance is 10 per cent of the actual time taken.
- (3) The Incentive Bonus Hours increased uniformly at the rate of 1 per cent bonus for every 1 percent increase in performance, to 70 per cent bonus at 120 per cent performance.
- (4) For performance beyond 120, the incentive bonus hours are calculated as,

$\frac{7}{12} \times$ Standard man hours output during the month.

- (5) The Incentive Bonus Hours are based on the overall performance of the operator on the completed and accepted jobs done by the operator, during the month under consideration.

- (8) The Incentive amount payable is based on the basis pay, Details of the incentive scheme is at Appendix IX.

In the Earth Mover Factory, a suitable incentive scheme would be started after manufacturing operations get stabilised.

9.40. The Committee desired to know whether the incentive scheme for motivating the labour had any bearing on the increase of production. The Managing Director of BEML stated during the evidence that:—

“I would like to differentiate between the two factories. The Railcoach Factory has got an incentive scheme for quite some time. Since 1956 when we were part of HAL. This was based on rewarding from 40 per cent efficiency. In the Earth Mover Factory, we are still in the formative stage and we will take some time before we implement the incentive scheme. The production here is not yet stabilised.”

Workers Education Scheme

9.41. BEML are deputing their workers for the Worker Teacher Course conducted by the Workers Education Centre. The Company have also granted liberal facilities for the workers to undergo Unit Level Classes. The following concessions are extended to the employees who partake in the Workers Education Scheme.

Under the Scheme, workers undergoing Worker Teacher course are given the following facilities:—

- (i) Special leave with pay for the period of Training;
- (ii) Lunch allowance at the rate of Re. 1/- not exceeding Rs. 15/-;
- (iii) actual bus fare from the residence of the employees to the workers' Education Centre;
- (iv) treating the employees as on duty and payment of T.A. and D.A. as per Company's rules in the event of their proceeding on Education tour as part of the training.

The workers attending the Unit level classes are given the following facilities:

- (i) Special leave with pay for 3 weeks;
- (ii) Cash grant of Rs. 35 to each trainee;

- (iii) and cash advance of Rs. 60 to each trainee recoverable in easy instalments on educational tour.

9.42. The Committee note that the Earth Mover Factory of the BEML is in a formative stage and that accounts for the non-introduction of the incentive scheme there. But the Committee would expect the BEML to bear in mind that incentive scheme offering inducement to workers to put up better individual and group performances is the primary prerequisite in any industry. They hope that the incentive scheme in the Earth Mover Factory will also be introduced at an early date.

(g) *Labour Welfare Schemes*

9.43. The position regarding Labour Welfare Schemes introduced by the Undertaking is as follows:

(i) *Housing facilities*

Consequent to the separation of Railcoach Division from HAL and its merger with the company it was mutually agreed with HAL that until such time the Company is able to make its own arrangements, HAL will continue to provide such services as are required and that the Company shall pay for the services at such rates as may be mutually settled.

As per Annual Report of the Company for the year 1969-70, the construction of the township at Kolar Gold Fields is fast progressing.

Construction of:—

Type I	. . . . .	200 Nos.
Type II	. . . . .	270 Nos.
Type III	. . . . .	110 Nos.
Type IV	. . . . .	26 Nos.
Type V	. . . . .	8 Nos.
Type VI	. . . . .	1 No.

quarters has been completed and allotted for occupation. About 250 type II quarters are under construction. A first-aid centre is being opened at the colony for the benefit of the residents of the township.

A proposal for construction of a colony for Railcoach Division has been accepted by the Directors of the Company and is now awaiting the approval of the Government.

Asked what was the percentage of expenditure on the housing of the supervisory and managerial staff to the total capital expenditure on housing, it was stated in a written reply:—

The percentage of Capital expenditure of the House at KGF for non-supervisory, supervisory and managerial staff to the total capital expenditure on housing as on 31st March, 1970 was approximately as indicated below:—

Non-Supervisory	76½%	
Supervisory	12½%	Rs. 1150-1500/-
Managerial	11%	Rs. 1350-1710/- Rs. 1650-2150/- and above.

Certain quarters are still under construction, and the final picture will be known only when the construction of the Township is completed.

(ii) *Transportation*

Employees at Bangalore are provided with transportation facilities in the HAL buses at subsidised rates.

There is no transportation facilities to employees of the Earth Mover Division at KGF.

(iii) *Co-operative societies*

There is no separate co-operative society for employees at Bangalore as there is no township.

About 2400 employees at Bangalore are members of the Vimina-pura Co-operative Stores of HAL. The Company gives an annual subsidy of Rs. 6,000 and has a representative on the Board of Directors.

A Co-operative Society has been registered at KGF for the benefit of employees at KGF factory.

(iv) *Schools*

Children of B.E.M.L. employees are given school facilities in schools run by H.A.L. There are four schools including one high school in H.A.L. Township. Children of employees living in the Township and attending schools in the city are provided with free transport by bus to and fro. The Education is free of tuition fees.

In regard to K.G.F. a Nursery school has been started. A separate school building is under construction and is expected to be ready within one year.

(v) *E.S.I. Scheme/Medical facilities*

Employees drawing a salary upto Rs. 500 are covered by the Employees State Insurance Scheme. The benefits admissible to employees under this scheme broadly are:—

- (1) Free Medical Aid
- (2) Sickness benefit
- (3) Maternity benefit
- (4) Disablement benefit
- (5) Dependents benefit
- (6) Funeral benefit

Employees and families not covered under the ESI Scheme are given medical facilities (a) at HAL Hospital in respect of employees working at Bangalore; and (b) at the KGMU Hospital in respect of employees working at KGF. Employees and their families are entitled for free treatment. Employers requiring specialist treatment are given hospitalisation facilities in Government Hospitals wherever facilities do not exist in HAL/KGMU hospitals, on the recommendations of the Medical Officers. Free Hospitalisation is provided for T.B. patients on completion of 5 years of continuous service in the company and are in addition given subsistence allowance at the rate of 50 per cent of basic pay for a period of 6 months. In special cases, extensions of hospitalisation is also granted.

Employees undergoing Vasectomy/Sterilisation operation are granted six days special casual leave with pay.

First Aid Centres are functioning with a qualified Medical Officer in charge.

(vi) *Labour Welfare Fund*

About 4000 employees are members of the HAL Labour Welfare Fund. Facilities like Libraries, Reading Rooms, Adult Literacy Classes, Picture House and other amenities are provided to the employees. The Company makes a matching grant of Rs. 1.50 per employee member and also a lumpsum grant. There are two representatives on the Managing Committee of this Fund—one elected from among members and one nominated by Management.

A separate Labour Welfare Fund has been organised for the K.G.F. Factory. The Company makes a grant-in-aid to the Labour Welfare Fund at the rate of Rs. 2 per worker per annum. In addition, a grant-in-aid upto Rs. 1 per worker per annum will also be paid to match the subscription collected by the Labour Welfare Fund subject to the overall limit of Re. 1 per worker per annum.

(vii) *Sports Club*

About 300 Employees are members of the HAL Sports Club.

There are two representatives on the Managing Committee of the Sports Club one elected and one nominated by Management—Sportsman are encouraged by granting time off with pay for practice as well as participation in tournaments. The Company pays an annual subsidy at the rate of one rupee per employee.

Separate arrangements have been made for K.G.F. Factory.

9.44. The Committee recommend that the question of Government's approval for construction of a colony may be vigorously pursued and the construction of township at Bangalore completed as early as possible.

CONCLUSION

A. Introduction

(i) Set up of the Company

10.1. (i) Bharat Earth Movers Ltd. was incorporated on 11th May, 1964 with a view to manufacture heavy earth moving equipment and rail coaches. The Heavy Earth Moving Project was originally assigned to the erstwhile Hindustan Aircraft Ltd. in December, 1962 pending establishment of a new company for manufacture of heavy earth moving equipment. The Company took over on 1st January, 1965 Rail Coach Division and Earth Mover Division from the Hindustan Aircraft Ltd. The Crawler Tractor manufacturing programme in collaboration with the Japanese firm which was previously being handled by the Director General, Ordnance Factories was entrusted to the Company in December, 1965 side by side with the Director General of Ordnance Factories who had also to operate the agreement till the winding up of the tractor project in the Ordnance Factories.

(ii) Capital

(ii) The authorised share capital of the Company was increased from Rs. 10 crores to Rs. 15 crores. The total issued, subscribed and paid up capital on 31st March, 1970 was Rs. 1189.80 lakhs. No loans were drawn during the year from the Government and the total loan outstanding as on 3-3-1970 stood at the previous year's figure of Rs. 475.00 lakhs.

(iii) Objects and Functions

(iii) The objects and functions of BEML are to manufacture broad-gauge, third-class integral rail coaches, to manufacture and market in India and for export heavy earth moving equipment and crawler tractors of various types and to take steps to develop suitable products of BEML's design; and to render after-sales service to the equipment sold with adequate spare backing and help in the maintenance of the existing fleet of earth-moving equipment in the country.

(iv) Collaboration Agreements

(iv) The undertaking had entered into the following three collaboration agreements:

- (a) Agreement with M|s. Komatsu—Japanese firm.
- (b) Agreement with M|s. Radoje Dakic—Yugoslav firm.
- (c) Agreement with M|s. WABCO—U.S. firm .

The Collaboration agreements (a) and (b) viz. Agreement with M|s. Komatsu and Agreement with M|s. Radoje Dakic were for the purpose of manufacture of tractors and (c) Agreement with M|s. WABCO has been entered into with a view to produce heavy earth moving equipment. Agreements are still continuing, in some cases, under extension granted by the undertaking|Government.

(v) Production Performance and Financial Results

(v) The Committee note that the Company has maintained its progress upto 1969-70. Rail Coach Division has produced 270 numbers of rail coaches at the sale value of Rs. 708.62 lakhs as against the sale value of Rs. 637.00 lakhs in the previous year. The Earth Mover Division delivered 331 pieces (99 wheeled and 232 Crawler) of equipment against 316 pieces in the previous year. The sale of spares during the year amounted to Rs. 280.07 lakhs as against Rs. 210.07 lakhs in the previous year. It appears that the Board has recommended the declaration of dividend at the rate of 3 per cent on the equity capital of Rs. 1189.80 lakhs. At present, the Company has restricted its export activity to countries like Nepal, Ceylon and West-Asian countries. The Committee also note that new projects|expansions are contemplated. The project report for expansion of the installed capacity for manufacture of 300 broad-gauge rail coaches per annum to 400 broad-gauge rail coaches per annum has been proposed by the undertaking to the Ministry of Defence which has since been sanctioned. Another scheme for expansion of production of DE 50-A15 tractors from 300 numbers per annum to 700 numbers per annum have been proposed by the undertaking. The Committee note with pleasure that the undertaking has yielded a net profit of Rs. 2.05 crores in 1969-70, as against Rs. 1.19 crores in the previous year. Labour relations, the Committee, has been informed by the undertaking, have been satisfactory for the present.

(B) Important Findings of the Report

10.2. The Committee find that certain important deficiencies have

occurred in this undertaking about which detailed comments have been made in the body of the main report. Some of the deficiencies are as follows:—

(i) *Production Performance*

Agreement Signed before D.P.R.

(i) (a) The Government entered into an agreement on 27th October, 1962, with a U.S. firm M|s. WABCO (M|s. Westinghouse Air Brake Co.) for manufacture of wheeled equipments which is current up to 9th November, 1972. Whereas the Detailed Project Report was prepared and submitted by HAL to Government in October, 1963, i.e. nearly one year after the signing of the agreement with the collaborators. The Committee find from the evidence of the Secretary of the Ministry that the collaboration agreement was signed on the basis of the Preliminary project Report prepared by HAL but further processing of the agreement in the Ministry started on the basis of Detailed Project Report which was prepared by HAL in October, 1963. The chain of events, in other words, has been first preparation of the "Preliminary Project Report" followed by entering into a collaboration agreement with WABCO by the Government and thereafter the production of DPR by HAL and finally followed by study of the economic feasibility of the project which was considered necessary to obtain loan from EXIM Bank. Moreover, the collaboration agreement was entered into in the absence of a settlement of source of foreign exchange also. All these preliminaries to the commissioning of the production in the undertaking led to the production being delayed by six years. Due to the avoidable delay which could have been foregone by the Government/Undertaking an infructuous expenditure amounting to 4,50,000 Dollars had to be incurred in the form of payments to the consultants on account of not putting an effective use to their services for the first five years from the date of the signing of the agreements.

(b) The Committee are surprised to note that the Government/Undertaking went ahead with signing a collaboration agreement without the DPR being available to them. Such a practice is not only unusual but also lays down an unhealthy precedent for future. The Committee recommend that steps should be taken to avoid recurrence of such errors in future.

(ii) *Production below target*

(ii) (a) The Committee note that in the Earth Mover Unit of the Undertaking, that the production of almost all the items of the

products had been much below the targets laid down. Of the different types of tractors manufactured by the undertaking, the production in the years 1968-69, 1969-70 and 1970-71 had been lower than the target laid down. As for instance, in the year 1968-69, the actual production of crawler tractors was 193 as against target of 338 leaving a shortfall of 145. Similarly, in 1969-70 the actual production was 240 as against target of 385 leaving a shortfall of 145. In the year 1970-71, the actual production was 227 as against target of 301 leaving a shortfall of 74. Again with regard to Tigar Tractors, in 1969-70, as against the target capacity of 57, the actual production was 10 leaving a shortfall of 47. Likewise, in the year 1970-71, the target capacity was 87, the actual production 72, leaving a shortfall of 15. In other words, even in this case the target capacity fixed by the undertaking has not been attained in the last two years in spite of the fact that the target fixed was lower than the rated capacity of the plants.

(b) The primary duty of an undertaking is to adhere to the rated capacity of every plant and machinery. Thereafter, the performance and production should be judged against the rated capacity. The Committee recommend that the Undertaking should take steps to attain the rated capacity of the Plants if not done already. Moreover, any downward revisions of the targets of production should be done on the basis of valid grounds.

Castings and Forgings

(c) It has come to the notice of the Committee that castings and forgings for the products of the undertaking are made in HAL, Heavy Vehicle Factory and Praga Tools Ltd. Castings and forgings, the Committee feel, are the most vital processes for an undertaking like the BEML. The Committee note from the written material furnished by the undertaking that although orders are placed on established manufacturers well in advance, they were sometimes not able to supply these forgings in time in view of the difficulties experienced by them in obtaining the required forging quality steel billets from the steel plants. Crawler tractor manufacture requires considerable amount of steel castings of intricate nature whose supplies were not forthcoming in adequate quantities. Non-supply of or slow supply of steel castings does affect, at times, the scheduled programme. The Committee recommend that the Foundries in Jabalpur, Wardha and Avadi be advised by the Government to accord adequate priority to the work of the BEML as they are produc-

ing very important defence equipments like heavy earth moving machinery and tractors which are vital to the Border Roads Organisation, etc.

(iii) *Reasons for Shortfall in Attainment of Target of Production*

The Committee find that the shortfall in production in the past has been mainly due to non-availability in time of components/parts both imported and indigenous. The undertaking has also been experiencing difficulties in procurement of various materials, especially Steel Forgings, G.I. and Black Pipes, Helical Springs, Wheelsets, Steel Plates and Special steels. The Committee recommend that the undertaking should take special care to plan its requirements of components and raw materials both Indian and imported adequately in advance. The production of the undertaking should not be allowed to suffer on account of the non-availability of these two basic items, viz., raw materials and components. For this matter in the opinion of the Committee there is no harm if the undertaking were to make out a tentative requirement of components and raw materials particularly the imported ones for two to three years and move the Government if necessary from now itself for their timely procurement.

(iv) *Indigenisation Programme*

(iv) (a) The Committee also find that the progress regarding indigenisation of tools, equipments and components is going behind schedule. In fact, in 1969-70 only it was 30 per cent although the undertaking hope to attain a target of 85 per cent by 1971-72.

(b) The Committee note with satisfaction the fixation of the ambitious target for indigenisation at 85 per cent in 1971-72. As the Company is stated to have already attained indigenisation to the extent of 60 per cent in 1970-71 (*vide* para 5.27) the Committee hope the undertaking will spare no pains to attain the target of 85 per cent by 1971-72.

(v) *Personnel*

(v) (a) The Committee find that the number of persons working in the undertaking is on the increase. From 4915 as on 31st December, 1967, it has risen to 7269 on 31st December, 1970. With the increase in production the rise in number of staff strength is not unlikely. The Committee would like to be convinced of the fact that the increase in the staff strength is commensurate with the increase in production and no overstaffing is allowed by the undertaking.

In this connection the Committee would suggest that wage incentive scheme already in existence in the Rail Coach Division of the Undertaking should be introduced and extended to the Earth Mover Unit at Kolar Gold Fields to achieve higher production and obviate overstaffing.

(b) The Committee has not yet been able to find the basis on which the increase in staff has been agreed to by the Undertaking from time to time. They recommend that a systematic study of the staff requirement of the Undertaking should be carried out periodically before fresh recruitment is made. In this connection, they suggest that a work study cell should function in the Undertaking if not already in existence, to carry out the work study at regular intervals, taking into consideration the job requirements of the individual items of production. The staff strength should be determined after taking work study report into account.

(vi) *Organisation*

(vi) The undertaking is having both part-time Chairman and a full-time Managing Director which is contrary to the principles enunciated by the Administrative Reforms Commission and also recommendations of the Committee on Public Undertakings (8th Report of CPU on Hindustan Aeronautics Ltd).

The Committee are unable to locate in BEML any special reason justifying the maintenance of two principal functionaries viz. the Chairman and the Managing Director. The Committee while reiterating their earlier recommendations contained in the above mentioned report that when the Chairman has no executive functions and is simply required to preside over the meeting of the Board there is no point in having one such in addition to a Managing Director; recommend that the undertaking should implement it.

(vii) *Financial Matters*

(vii) (a) The Committee are glad to note that there have been improvements in the working results of the Company. The net profit has increased from Rs. 1.19 crores in 1968-69 to Rs. 2.05 crores, a definite improvement. The undertaking has also been able to generate internal resources to the tune of Rs. 5.68 crores in about six years of its coming into existence. The Committee hope that the undertaking will not only maintain its profitability, but would further improve upon it.

(b) The Committee find that a percentage of sundry debtors to sales have increased from 15.2 per cent in 1967-68 to 20.5 per cent in 1968-69, and further to 22 per cent in 1969-70. The Committee suggest that every step has to be taken by the Undertaking to arrest the increase in sundry debtors which has the effect of reducing the profitability of the undertaking by increasing the working capital.

(viii) *Pricing policy*

(viii) The Committee find that while fixing prices the undertaking is guided by market conditions and they try to ensure that their prices are as competitive as possible in regard to their products. In other words, it appears that no systematic or uniform policy in regard to pricing of the products (earth movers and tractors) has yet been framed and pricing is dependent on the competitive market price coupled with the negotiations with the customers. It is not clear to the Committee as to whether the prices agreed upon are on the basis of actual cost plus overheads and other incidentals or it is ad hoc or is based on fixed price contract system. The Committee recommend that the undertaking should consider and evolve a rational pricing policy to maintain and improve its profitability. The pricing policy should take into consideration market price, the cost of products including fair return on capital after providing for depreciation and interest on a realistic basis, keeping in view the competitive nature of the price level.

(ix) *Research Development and Training*

(ix) The Committee find that a sum of Rs. 45.50 lakhs has been provided for schemes in regard to research and development. The research and development activities are designed to attain indigenisation of equipment-cost reduction and increase in productivity. It appears to the Committee that no scheme has yet been evolved in that direction and the fund remains unutilised. The Committee would urge that undertaking should take immediate interest to evolve those research schemes which are so vital to its development. The Committee note that the undertaking has started attempting at Indianisation of their technical personnel by arranging inplant training, apprenticeship training and shop-floor training and they hope their efforts will be met with success.

(C) *Achievements of Objectives*

10.3. The Committee wanted to study the realisation of the three-

fold objectives set out by the undertaking viz.

(i) *Manufacture of rail-coaches, Tractors and Earth Moving equipment*

(a) *Rail Coaches*

The Committee find that the planned capacity of the plants of the undertaking for production of rail coaches is 270 coaches of three type per year and in the course of the last three years (1968-69 to 1970-71) they have produced almost to their full planned capacity of 270 coaches. The Committee are glad to notice this.

(b) *Tractors*

Out of the different types of crawler tractors manufactured by the undertaking, it appears the production in the year 1968-69, 1969-70 and 1970-71 had been lower than the targets. The details of production of different categories of tractors (Crawler Tractors and Tigar) are contained in the earlier paragraphs on PRODUCTION PERFORMANCE. As regards Tigar tractor, the Committee find the same shortcomings. In other words, the targets fixed by the undertaking for manufacture of Crawler and Tigar tractors have not been attained in the last two years although the target fixed by the Undertaking happens to be lower than the rated capacity of the Plant.

(c) *Heavy Earth Moving Equipment*

In regard to the items of heavy earth moving equipment, produced by the Undertaking, the Committee find that there has always been the shortfall against the targets. The Committee feel that in so far as the manufacture programme of these equipment is concerned, the Undertaking has not yet been able to attain the target capacity set by themselves. In this case also the target capacity of the plant was lower than the rated capacity of the plants and this revised (reduced) capacity also could not be attained.

(ii) *Marketing of Products*

As regards home sales, the Committee find that the sales have amounted to Rs. 13.93 crores in 1967-68 Rs. 21.51 crores in 1968-69 and Rs. 22.86 crores in 1969-70. To that extent, the undertaking has been able to sell its products in the home market.

The Committee also find that the undertaking has embarked upon exploring export markets. At present, its export activity is confined to countries in and around India, such as Nepal, Ceylon and

West Asian countries. Their sales agency has also been set up in Nepal. It is not known to the Committee whether any export has yet been made of its products to these countries.

The Committee recommend that the undertaking should strive hard to fulfil its objectives to export heavy earth moving equipment and tractors to the countries whose markets they have started exploring, namely, Nepal, Ceylon and West Asian countries.

As regards indigenisation, it has already been mentioned in the foregoing Chapter that the pace is, at the moment, quite slow and needs to be speeded up.

(iii) *After-sales service, spares, backing, maintenance of existing fleet*

(a) *After-sales services*

The Committee find that another important objective of the Company is to undertake after-sale service of its equipment sold to various projects and individual customers. With a view to render on the spot service, the undertaking has set up Zonal offices in important zones and have established spare parts godowns in Bombay, Calcutta and Kolar Gold Fields, Bangalore. It appears, there have been frequent failure of supply of components particularly from the North-Eastern India due to 'unsteady political and labour situation'. The Committee also find that there had been complaints about spare parts which were not available. This objective does not appear to have been fully achieved. The Committee hope that the Kolar Gold Fields factory would be able to stabilise its production of components in 1972-73 by which time BEML hope that they would take over a major share of indigenous production.

(b) *Maintenance and servicing*

The Committee find that by and large, the maintenance and servicing facility were made available to the Border Roads Organisation. In regard to the heavy earth moving equipments sold to them, the service was restricted mostly to the warranty period.

(iv) **TO SUM UP**, the Committee find that the undertaking has been performing its production activities consistent with profitability. Certain handicaps in the form of delay in the utilisation of the services of the collaborators, shortfall of raw materials and imported components etc., had appeared in the past. The Committee hope that it would be possible for the Undertaking to overcome these

difficulties and maintain its tempo of activity in production, sales and particularly, the export sales. The Committee hope that the profit that this undertaking is earning will not only be maintained but would be enhanced in future. The principal objectives for which the Company stands, the Committee expect, will ultimately be fulfilled.

M. B. RANA,
Chairman,
Committee on Public Undertakings.

NEW DELHI;
September 16, 1971.

Bhadra 25, 1893 (S).

APPENDICES

ORGANISATION CHART OF HEADQUARTERS

APPENDIX 1
(vide para 9.2)

MANAGING DIRECTOR

R1650-2150

R1350-1710

R1150-1500

R. 750-1350

R. 550-950

CHIEF ADMINISTRATIVE OFFICER

INDUSTRIAL RELATIONS MANAGER

ACQUISITION OFFICER

TECHNICAL STAFF OFFICER

EDP MANAGER

SENIOR SYSTEMS ANALYST

SENIOR PROGRAMMER

CHIEF SUPERVISORS (5 Posts)

ASST. SECRETARY (Technical)

COMPANY SECRETARY

DEPUTY SECRETARY

ASST. SECRETARY

TECH. COORDINATION OFFICER, NEW DELHI

SENIOR DEVELOPMENT ENGINEER

DEVELOPMENT ENGINEER

ASST. DEVELOPMENT ENGINEERS (5 Posts)

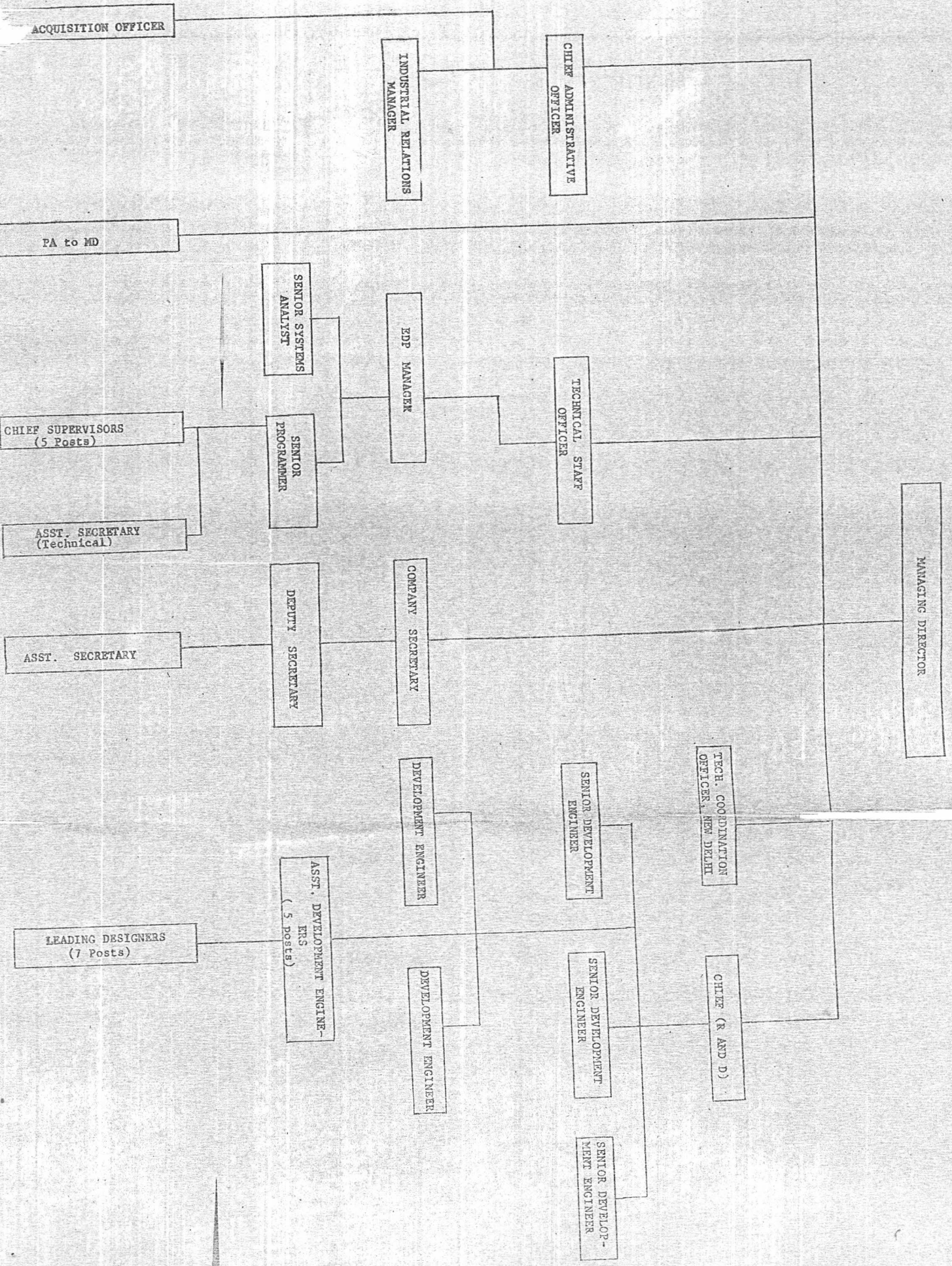
LEADING DESIGNERS (7 Posts)

CHIEF (R AND D)

SENIOR DEVELOPMENT ENGINEER

DEVELOPMENT ENGINEER

SENIOR DEVELOPMENT-
MENT ENGINEER



ORGANISATION CHART SHOWING FINANCE, AUDIT AND ACCOUNTS DEPARTMENTS

Rs. 2000-2250

Financial Controller

Rs. 1350-1710

Accts. Manager, E/M

Accts. Manager, Com. Dn.

Dy Financial Controller

Rs. 1150-1500

Accts. Manager, R/C

Rs. 750-1350

Asst. Accts. Manager, R/C

Asst. Accts. Manager, E/M

Asst. Accts. Manager, R/M

Asst. Accts. Manager

Asst. Finance Manager

Asst. Intl. Audit Manager

Rs. 550-950

Accounts Officer

Accounts Officer

Accounts Officer

Accounts Officer

Accounts Officer

Accounts Officer

Accounts Officer

Accounts Officer (Cal.)

Accounts Officer

Finance Officer

Audit Officer

Audit Officer

Intl. Audit Officer

Intl. Audit Officer

R. 2000-2500

R. 1650-2170

R. 1350-1710

R. 1150-1500

R. 750-1350

ORGANIZATION CHART OF RAILCOACH DIVISION

GENERAL MANAGER
(RAILCOACH DIVISION)

FACTORY MANAGER

WORKSHOP SUPERINTENDENT

MANUFACTURING SUPERINTENDENT

ASSEMBLY SUPERINTENDENT

DESIGN ENGINEER

PRODUCTION ENGINEER

CHIEF INSPECTOR

PURCHASE MANAGER

ACCOUNTS MANAGER

PLANT MANAGER

ASSEMBLY MACHINE SHOP

ASST. SUPERINTENDENT SHEET METAL

ASST. SUPERINTENDENT U/F, BOGIE & ERECTION

SHOP LOADING AND PROGRESS CONTROLLER

ASST. SUPERINTENDENT MAJ. ASSY. & ERECTION

ASST. SUPERINTENDENT FURNISHING

ASST. SUPERINTENDENT NIGHT SHIFT

ASST. DESIGN ENGINEER

INDUSTRIAL ENGINEER

METHODS ENGINEER

TOOL DESIGN ENGINEER

MATERIAL CONTROLLER

ASST. CONTROLLER OF STORES

DY. VIGILANCE AND SECURITY OFFICER

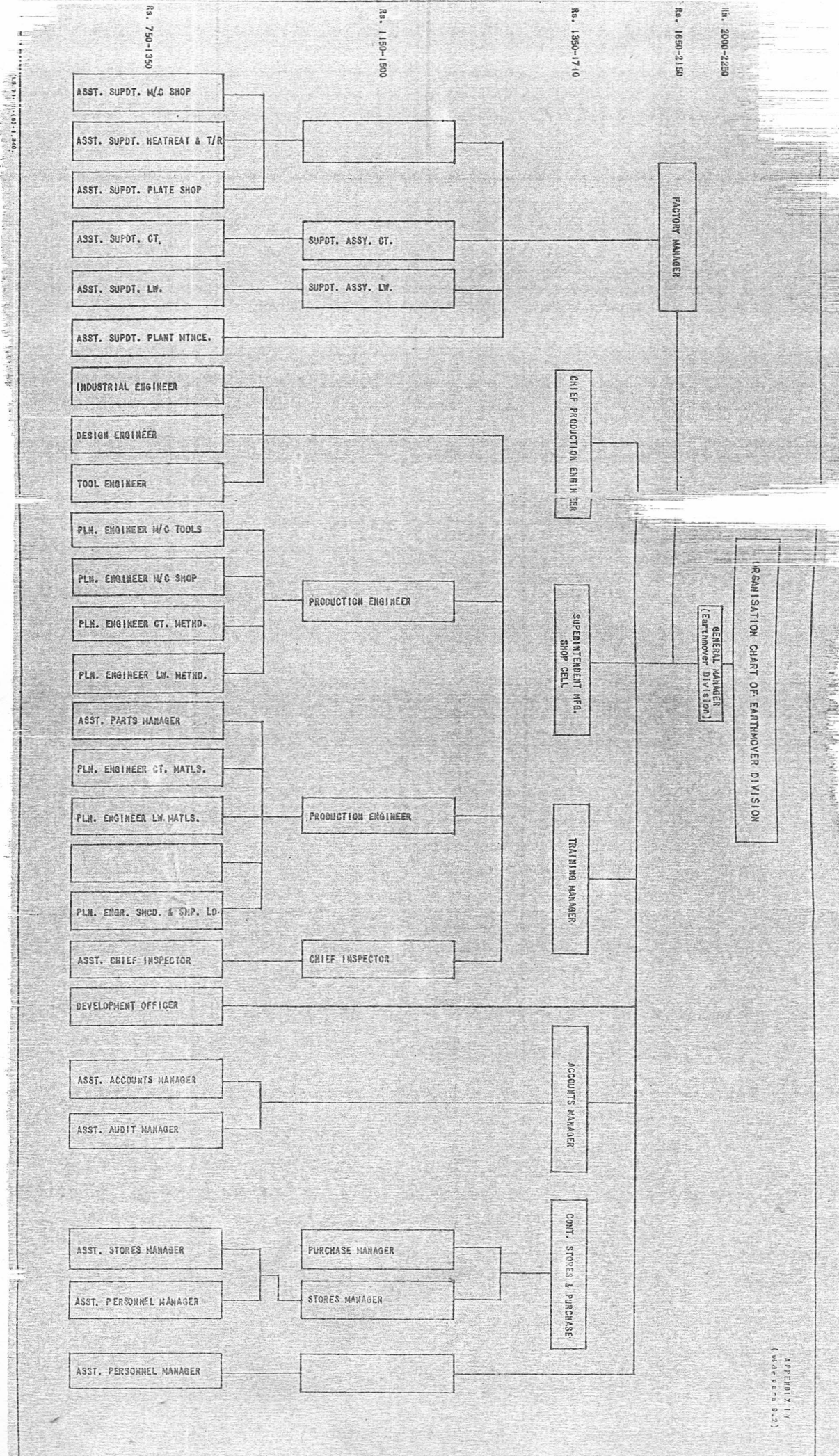
ASST. PERSONNEL MANAGER

ASST. ACCOUNTS MANAGER

R MILL & APPRENTIX

CHIEF SUP. INSPECTION

PURCHASE OFFICER



Rs. 750-1350

Rs. 1150-1500

Rs. 1350-1710

Rs. 1650-2150

Rs. 2000-2250

ORGANISATION CHART OF EARTHMOVER DIVISION

Rs. 2000-2250

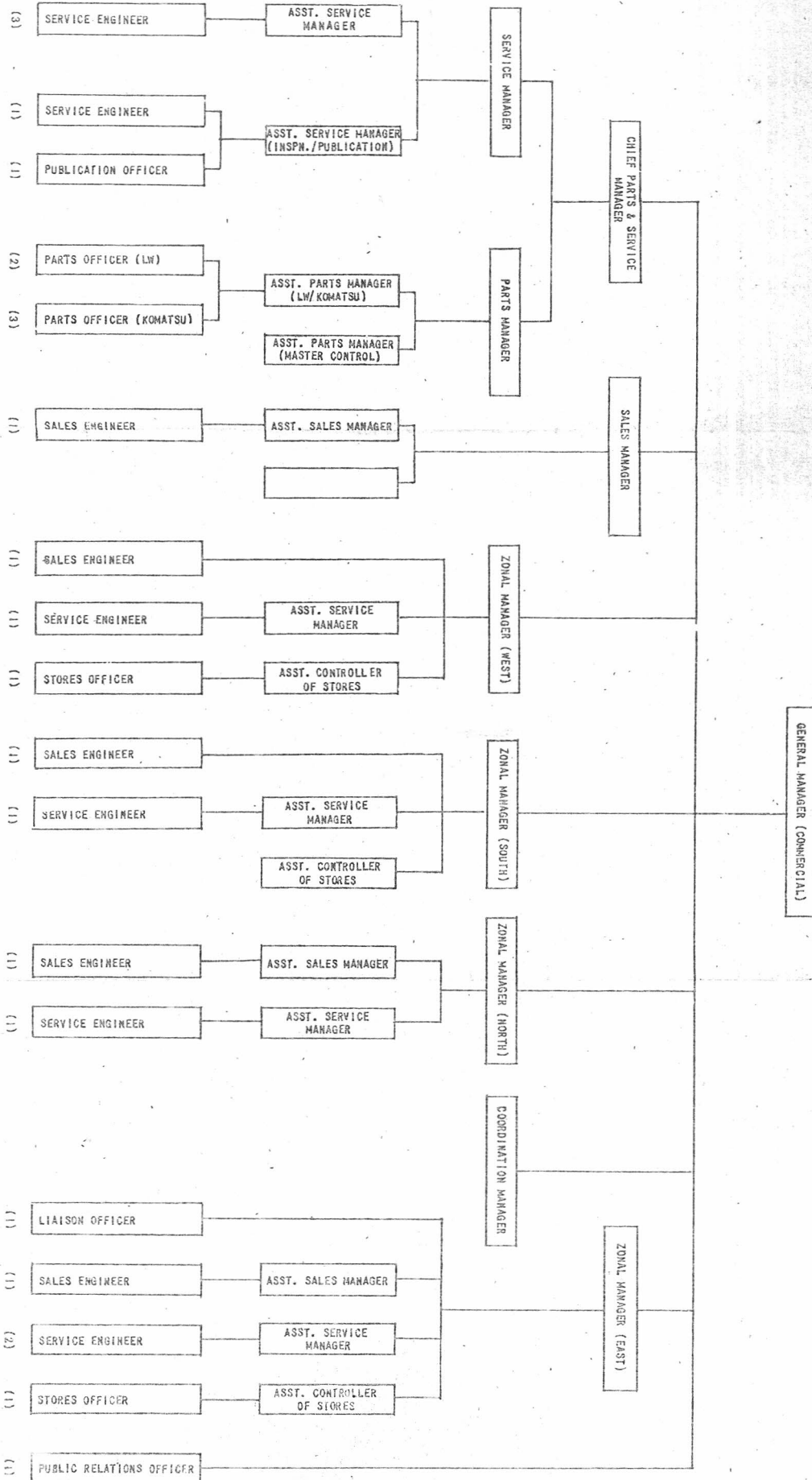
Rs. 1350-1710

Rs. 1150-1500

Rs. 750-1350

Rs. 550-950

ORGANISATION CHART SHOWING AUTHORISED ESTABLISHMENT OF COMMERCIAL DIVISION



APPENDIX VI

(Vide para 9-28 (vii))

Sheet No. ...

SELECTION COMMITTEE RATING SHEET FOR THE POST.....ADVT. No.....

- Meeting held on.....Members present.....
- No. of candidates applied.....
- No. of candidates called for interview.....
- No. of candidates reported for interview.....

Sl. No.	Name of the Candidate B. No. P.B. No. and Dept.	Date of Employment	Date of last promotion, present job, pay & date reached maximum	Length of service	Experience		Educational Qualification	Service Record	Viva Voce			Grand Total	Remarks
					Next Lower Grade	Other Grade			A.	B.	C.		
				20	15	15	15	10	5	5	20	100	

Knowledge of job, B. Personal qualities; (General knowledge, Personality & Leadership), C, Meritorious Service.

APPENDIX VII

(Vide para 9.28(vii))

**BHARAT EARTH MOVERS LIMITED
BANGALORE**

MEMBERS PRESENT:
Messrs:

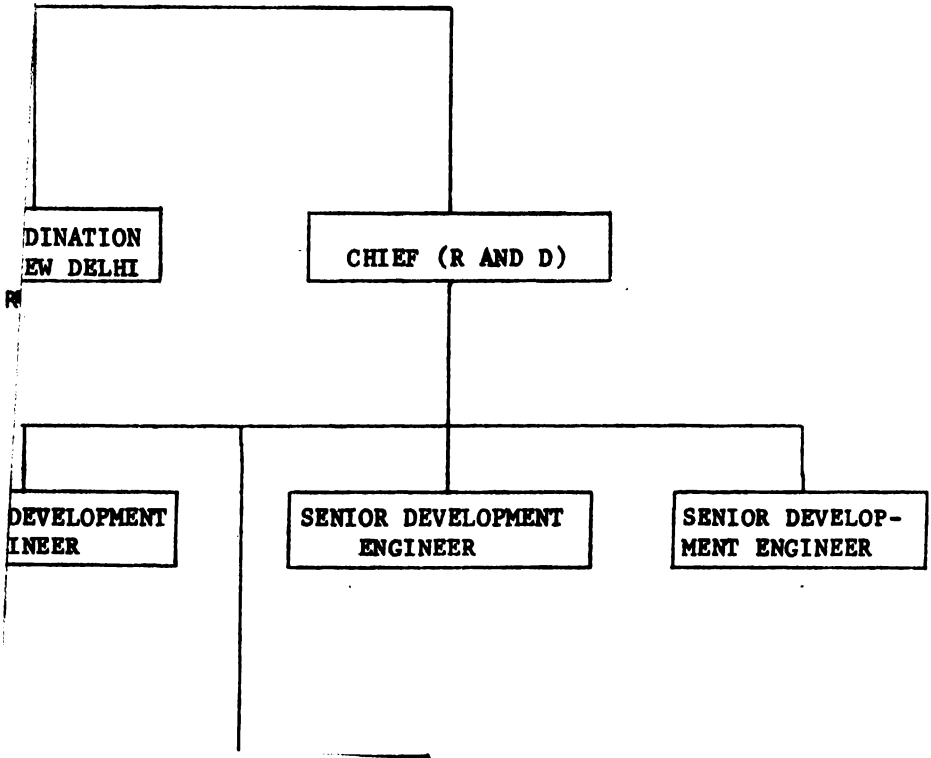
PROMOTION AND TECHNICAL BOARD RATING SHEET §
DEPARTMENT:

Tested on:

Minimum marks required for : Theory 15
Qualifying for promotion : Practical 35

Sl. No.	Names Messrs:	B.No.	Seniority	Present Recommen- Job ded Job	Theory 40	Practical 60	Total 100	Recommendation of the Committee.
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APPENDIX I
(vide para 9.2)



APPENDIX VIII

(Vide Para 9.29)

PRINCIPLES LAID DOWN BY GOVT. (MINISTRY OF LABOUR AND EMPLOYMENT) IN THE MATTER OF RECRUITMENT TO PUBLIC UNDERTAKINGS.

"It will be of advantage to the units in various directions, if persons who come from areas near about the place of location of the project secure appointment to posts in the lower scales. In the case of all unskilled workers, even without any special efforts, they are generally drawn from the locality where the project is situated. Every effort should be made in such recruitment to give preference to persons displaced from the areas acquired for the project especially of scheduled castes and scheduled tribes (e.g., Adivasis). Next should be preferred those, who even if they come from some distance, have been or are about to be retrenched from other government undertakings.

"In the case of skilled workers, clerks and other non-technical staff whose scales are comparatively low, so long as the basic qualifications and experience are forthcoming, preference should be given in the order of priority mentioned in the previous paragraphs.

"In the case of middle level technical and non-technical posts, having higher starting salaries equivalent to the Class I Junior scale of the Government of India (Rs. 350—850), recruitment should be made on an All-India basis, merit and qualifications being the principal criteria. Complaints have sometimes been made in the past that local candidates do not receive a fair deal. Special care should be taken to ensure that there is no reasonable ground for any such complaint.

"In the case of higher non-technical posts, e.g., top general management, finance and accounts, sales, purchase, stores, transport, personnel management and welfare and town administration carrying a salary of Rs. 600 and above, candidates available in the Industrial Management Pool should first be considered. Failing such candidates, there should be advertisements on all-India basis. This does not, however, preclude considering candidates who may have applied on their own or may have been retrenched from other Government projects.

"For the higher technical posts, the best qualified persons will have to be recruited, either by advertisement on an all-India basis or by personal contact.

"All vacancies of the kind referred to in paras above should be communicated to the Employment Exchange close to the project. Advertisements, which are made in the papers, should be in local languages and in the local newspapers. Such advertisements should specially mention that preference would be given to persons who are registered in Employment Exchanges. All the applications received, along with the list sent by the Employment Exchanges, should be screened and appointments made by Selection Committees specially set up for the purpose of each unit. These Selection Committees should include representatives from the State Government or their nominees.

"The Selection Committees set up for recruitment to all other medium level or higher technical or non-technical posts should include at least one representative of the State Government, preferably a State Government official who is on the Board of Directors.

"Representation for local interests in the shape of State Government nominees etc., as detailed above, should also be provided for in any standing committee that may exist for the purpose and not confined to only special *ad-hoc* committee.

"Where the exigencies of work require the making of urgent *ad hoc* appointments, it will be open to the Managing Director to make such appointments and then inform the Selection or Standing Committees.

"The above principles may be kept in view by Boards of Directors and Managing Directors/Chairmen of Public sector projects while making recruitments to posts within their projects."

APPENDIX IX

(Vide Para 9.39)

BHARAT EARTH MOVERS LIMITED BANGALORE-17

Incentive Scheme for Direct Workers Railcoach Division

The following are the broad characteristic features of the Incentive Scheme applicable to direct labour of Railcoach Division.

G. GENERAL:

(a) *Actual Effective Operational Time:*

Actual effective operational time is the time taken to perform an operation and this includes personal and Relaxation Allowance and all legitimate and unavoidable delays, but excludes time lost due to conditions, viz., want of parts, power failure, want of tools, etc., which are covered by separate standing orders.

(b) *Standards:*

The plan has been based on the operational standards obtained by work Study. The composition of the time standards is as under:—

- (i) The observed operational time is computed to the 'Normal' Time by taking the product of speed rating and the observed time.
- (ii) Fatigue allowances are separately allowed for, against operations depending on the effort involved, surrounding working conditions, etc.
- (iii) Contingency allowances, viz., process allowances, unavoidable lost time, etc., are separately allowed.

II. INCENTIVE PLAN:

- (1) The incentive plan is based on the principle of "Extra effort-Extra pay" dependent upon the performance of the individual/group of individuals, engaged on the production operational, in addition to basic pay as per entitlement.

- (2) (a) The incentive payment commences with a bonus of 10% of the actual time taken at the performance index of 60% and increases at a uniform rate, to a bonus of 70% at the performance index of 120%.
- (b) Where overall performance index goes beyond 120% the following formula will be applied to arrive at the bonus hours:

$$\text{Bonus Hours} = \frac{70}{100} \times \frac{I}{120} \times \text{Actual time taken} \times \text{Performance Index.}$$

Example:—

Total Actual time taken	.		150		
Total standard time	.		195		
Overall Performance Index	.	.		= $\frac{195}{150}$	× 100 = 130
Bonus Hours	.	.	.	= $\frac{70}{100} \times \frac{I}{120}$	× 150 × 130 = 113.75 Hrs.

- (3) The overall performance index arrived at based on the closed job cards processed during the month will be the basis to determine the bonus percentage.
- (4) The bonus hours will be arrived by applying the bonus % against the time taken.
- (5) The Hourly rate for incentive payment will be calculated as:

$$\frac{12 \text{ months} \times \text{Basic pay}}{300 \text{ days} \times 8 \text{ hours.}}$$

III. METHOD OF COMPUTATION:

- (a) Where more than one worker has contributed to the completion of a job, the share of standard time of each of the individual workers will be calculated as under:—

$$\text{Share of standard time} = \frac{\text{Total standard time on the job}}{\text{Total actual time taken for the job.}} \times \text{Actual time taken on the job by the worker.}$$

- (b) The actual time taken on the closed job cards processed during the month will be tabulated and totalled to arrive at the total actual time on jobs for the month. Similarly, the share of standard time on the jobs processed will be tabulated and totalled to arrive at the total standard time. The overall performance index will be calculated as under:

$$\text{Overall performance Index} = \frac{\text{Total standard time}}{\text{Total actual time}} \times 100$$

- (c) The bonus percentage against the overall performance index is obtained from the table *vide* (Annexure-A).
- (d) Bonus Hours are arrived by applying the Bonus % on the total actual time taken.
- (e) The incentive payment due is calculated as Bonus Hours X Hourly rate of incentive payment.

IV. CONDITIONS:

- (a) No Bonus will be paid for the time lost for reasons such as power failure, want of work, want of power, etc., which are recorded separately on Standing Orders (expense).
- (b) Whenever a Scheme of Incentive payment is introduced in any shop hereafter, the time standard may be revised for reasons other than those listed in sub-para (c) below within a period of one year from the date of introduction of the Incentive Scheme in the shop concerned.
- (c) Time standards are subject to change only if methods, tools, working conditions, etc., are altered.
- (d) Request for review of Incentive calculations under this scheme, will be entertained only within three months from the date incentive payment is made.

ANNEXURE A
(Vide para III(C) of Appendix IX)
BEML INCENTIVE SCHEME
PERFORMANCE BONUS PAYABLE

Performance Index	Bonus %	Performance Index	Bonus %
59	0	91	41
60	10	92	42
61	11	93	43
62	12	94	44
63	13	95	45
64	14	96	46
65	15	97	47
66	16	98	48
67	17	99	49
68	18	100	50
69	19	101	51
70	20	102	52
71	21	103	53
72	22	104	54
73	23	105	55
74	24	106	56
75	25	107	57
76	26	108	58
77	27	109	59
78	28	110	60
79	29	111	61
80	30	112	62
81	31	113	63
82	32	114	64
83	33	115	65
84	34	116	66
85	35	117	67
86	36	118	68
87	37	119	69
88	38	120	70
89	39	..	..
90	40	..	..

APPENDIX X

Summary of main Conclusions|Recommendations

S. No.	Reference to para No. in the Report	Summary of Conclusions|recommendations
1	2	3
1	2.15	The Committee note that BEML is making use of castings and forgings facilities available in the other public sector undertakings. They are not sure whether the existing arrangement is working satisfactorily for an important Defence Enterprise like the BEML. The Committee would like Government to review the position from time to time (at least once a year) to make sure that the requirements for castings and forgings of BEML are being met fully and in time.
2	3.7	The Committee are unable to appreciate the wisdom of entering into a Collaboration Agreement with a foreign firm without a Detailed Project Report. It is noted that in this case a team of HAL's Officers to whom the Agreement was assigned for execution, visited the works of the collaborators in February, 1963. The required Detailed Project Report was available in October, 1963 i.e. almost a year after the agreement was entered into in October, 1962. Later, when it was decided that a detailed appraisal had to be made in order to move an application for loan from EXIM bank, a second look on the profitability of the project was taken with the consequence that the agreement ceased to be in effective operation. The Committee are left with the impression that before entering into the collaboration agreement, Government assessed neither in depth the require-

1

2

3

ments of Defence, Border Roads and other organisations nor the profitability of the undertaking. The Government's whole approach appears to have been empirical instead of being based on a well prepared perspective plan for developing indigenous capacity for manufacture of earth moving equipment in the public sector. The Committee would like Government to take effective remedial measures to obviate recurrence of such costly lapses.

3.15

The Committee would like to point out that the agreement with the foreign collaborators suffers from several serious drawbacks. The main drawback is that the technical assistance fee of over Rs. 44 lakhs and Royalty, Research and Development fee of Rs. 15 lakhs have been paid in accordance with a time schedule which bears no relationship to the actual progress made in developing manufacturing capacity for earth moving machinery and equipment by BEML. The Committee would further like to point out that according to Government's own admission there was a liability to pay a minimum royalty of \$ 5,00,000 (Rs. 37,50,000) as on 27th October, 1967 whereas if it was related to equipment assembled and sold by BEML, it would amount to \$ 50,000 (Rs. 3,75,000) only. This clearly points to the fact that royalty to the tune of \$ 4,50,000 (Rs. 33,75,000) has been paid without any commensurate benefit. The Committee would like the Government to fix the responsibility for the negligence on the part of persons responsible for inclusion of such a clause in the agreement which has resulted in a huge loss to the Exchequer.

The Committee would like Government to take serious notice of these shortcomings in the Agreement and issue necessary standing instructions in consultation with the Ministry of Finance and Comptroller and Auditor General, to obviate

1

2

3

chances of incorporation of such clauses which are detrimental to our interests in Agreements with foreign collaborators.

4

3.16

While the Committee note that the Company will be able to acquire expertise in the manufacture of several items e.g., Motorised 'C' Scrapers LY-35 Off—the Highway Rear Dump Trucks and Motor Graders already taken up within the period of the current agreement i.e. by 8th November, 1972, they hope that earnest efforts would be made to acquire the know-how regarding the manufacture of the remaining items within the the remaining period of the agreement so that the extension of the period of of collaboration agreement with M|s. WABCO beyond 1972 may not be necessary.

5

3.23

The Committee regret to note that as the full indigenous production of these tractors could not be established within the original period of 10 years the BEML had to enter into agreement with M|s. Komatsu for a further period of three years with effect from the 19th February, 1969. The Committee feel that it would have been possible to establish indigenous production within a period of 10 years had the Government assigned the agreement earlier to a body exclusively entrusted with this task instead of loading the D.G.O.F. with the manufacture of tractors.

6

3.24

During evidence it was admitted that conditions contained in the old agreement "were more favourable." The representative of BEML further conceded that the earlier agreement "was probably a little better." It is noted that the earlier agreement was generally more favourable in the matter of prices for complete knocked downs components and spares as also in respect of supply of spare parts. Another favourable

1	2	3
		feature of the old agreement was that it made provision for regular and prompt supply by M/s. Komatsu of information relating to engineering changes with regard to material processing techniques and improvements and conditions to the equipment covered in the agreement. On the other hand the scope of the new agreement was restricted only to the current models of three types. The Committee are concerned to know that the new agreement was less favourable as compared to the old agreement.
7	3.25	The Committee, however, hope that the BEML will take full advantage of the assistance stated to be rendered by the collaborators in the matter of indigenisation and reach the maximum possible degree of indigenisation within the remaining period of Agreement so as to avoid any further extension to this collaboration agreement.
8	3.31	The Committee note that the high sick rate of 30 per cent of the Komatsu tractors was not due to any inherent defect in the machines but because of inadequate supply of spares for all the Komatsu Tractors put on field. The Committee are of the opinion that drawing up a long term procurement programme of spares in advance is not impossible of achievement. Had steps been taken to evolve a long term procurement policy for spares, the critical situation would not have arisen. The Committee hope that such situation would not arise in future since Komatsu have assured to supply spares for a period of 7 years after the termination of the new agreement.
9	3.35	As Tigar-120-SK tractors are stated to be suitable for such diverse functions as dozing, loading, trench digging and recovery work which are of vital use to the Defence Services and Border Roads, the Committee feel that the

1	2	3
		<p>Government should have evaluated results after usage in field before entering into collaboration agreement. Since it is essential to meet expeditiously demands for this equipment from Defence Services and Border Roads, the Committee hope that earnest endeavours would be made to achieve indigenous manufacture of this equipment within the period of Agreement.</p>
10	4.5	<p>The Committee note that one of the reasons for not locating the Factory at Bangalore was to avoid investment on transport facilities. It was thought that such expenditure would be unproductive and would add to the cost of the product. The Committee note, however, that the establishment of the earthmoving factory at Kolar has involved Government investment in the building of a township at an estimated cost of Rs. 1.66 crores. While the Committee are for provision of essential amenities to workers they would like Government to ensure that the expenditure on such infra-structure is kept within the economical and reasonable limits so that it does not unduly burden the cost of production.</p>
11	4.11	<p>The Committee cannot help concluding that the Project was neither properly planned nor well executed. The important aspects concerning the Project were not dealt within a systematic and expeditious manner. The Committee feel that the technical feasibility study should have been undertaken, the site for the location of the Unit determined, the source for meeting the foreign exchange requirements of the Unit and the organisation for the implementation of the Project decided before entering into the collaboration agreement.</p>
12	4.12	<p>The Committee regret to note that time taken by the Government at different stages was</p>

1	2	3
		unduly long considering the fact that the collaboration agreement for a specified period had already been entered into and the payments thereunder amounting to \$7,50,000 representing Technical Assistance Fee, were falling due from time to time besides the minimum amount of \$5,00,000 payable towards Royalty, Research and Development Fee for the first five years of the Agreement.
13	4.13	The Committee are not convinced with the plea that delay in the planning execution of the BEML project was due to "unforeseen circumstances". The decision of the U.S. Government not to enter into any new aid commitments to India became known to Government of India in September, 1965. There was no justifiable reasons to keep the matter pending for two years in the hope of availability of foreign exchange from U.S. sources even after their inability had become definitely known. Had Government pre-planned the alternative sources of foreign exchange for this project at an early stage and tapped them as soon as it was known that EXIM Bank Credit—would not be forthcoming, the delay of two years could have been avoided.
14	5.14	The Committee note that target of production of almost all items have been revised downward by the BEML. Table in para 5.5 gives the definite impression that the targets of production for the years 1968-69, 1969-70 and 1970-71 in respect of most items have been revised downwards to match the actual production figures. Even the reduced target has not been achieved in production. The Committee are not convinced about the reasons given by BEML justifying downward revision of targets fixed earlier. Consequently, they are inclined to believe that the fault may not be in fixing the targets but in making sustained effort to achieve them since the easiest

1	2	3
		<p>way to cover failure is to revise the targets downward. The Committee, therefore, recommend that this tendency to revise targets downward should be checked forthwith and positive steps be taken to realise the targets once set.</p>
15	5.15	<p>The Committee observe that the shortfall in production in the past has been mainly due to non-availability in time, of component|parts whether imported or indigenous. The Committee hope that by learning from the past experience BEML would take adequate steps to ensure necessary and timely supply of the required components|spare parts to enable it to adhere to its production schedule. Any delays in delivering of the earth moving equipment by the BEML is bound to up-set the production programme of the Public Undertakings who book their orders with BEML for this type of equipment. The Committee therefore need hardly emphasise that every effort should be made to adhere to the targets of production.</p>
16	5.24	<p>B.E.M.L. proposed to enter into new collaboration agreements for certain items. In the revised product-mix, there are four new items for production i.e.</p> <ul style="list-style-type: none"> (i) Crawler Tractors of above 300 HP. (ii) D-55-S D-60-S Crawler Tractor—Front End loaders. (iii) 25 ton and above 35-ton-off-the-Highway Rear Dump and Trucks (Haulpaks) and (iv) Wheeled Front End Loaders. <p>The Committee are not aware whether BEML has carried out any comprehensive survey for its existing and planned products. While appreciating the endeavours of BEML to expand and become flexible to suit rapidly changing market</p>

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		<p>preferences from time to time, the Committee need hardly stress that the effort should be to meet the needs for diversification from within the existing resources of men and machinery. The Committee also stress that where foreign know-how is required for diversification of production, the existing collaborators may be approached to supply it within the framework of existing agreements. The Committee would like to remind BEML of its prime responsibility to make firm assessments of demand before committing its limited resources to diversification programme.</p>
17	5.33	<p>The Committee observe from the table given in para 5.26 that the progress as regards indigenisation lags far behind the targets. The Committee are therefore of the opinion that the pace of indigenisation needs acceleration. BEML should spare no efforts to achieve a greater degree of indigenisation and the Committee expect that in coordination with other manufacturers of earth moving equipment in the country it should be possible for BEML to bring about further reduction in the imported contents.</p> <p>The Committee also urge the Government to keep special watch and to give timely help to the undertaking in intensifying efforts in utilising the spare capacity available in the existing Public Undertakings.</p>
18	5.37	<p>The Committee note that the undertaking has been experiencing difficulties in procurement of various materials especially Steel Forgings, G.I. and Black Pipes, Halical Springs, Wheelsets, Steel Plates and Special steels. The Committee hope that the position would ease as a result of the urgent action taken by the Government. The Committee recommend that all possible efforts should be made by the undertaking to</p>

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		ensure timely supplies of essential raw materials with a view to sustain its production programme and avoid gaps between the production targets and achievements which not only upset the time schedule of BEML but of all the undertakings that rely on BEML for their requirement of Heavy Earth Moving equipment.
19	5.38	The Committee also note that there is insufficient production in the country of wheels and axles because of which the Railway Board have to release foreign exchange for import of the same. The Committee would like to draw attention to the recommendations made in para 3.56 of their report on Hindustan Steel wherein they have pointed out that the production of the Wheel and Axle Plant in Durgapur in 1969-70 was as low as 15 per cent of the rated capacity. The Committee cannot too strongly urge the Government to take concerted measures to improve the production of wheels and axle at the Durgapur Plant so as to meet in full the requirements of wheel sets and axles for rolling stock manufactured in the country and obviate the necessity of import. Moreover, indigenous supply of such parts will also ensure timely supply which is a very important factor.
20	5.40	The Committee recommend that the reasons for increase in the stock from a ratio of 3.6 months in 1968-69 to 6.2 months in 1969-70 should be looked into and steps to bring down the ratio, consistent with the needs of production, deserve to be taken by BEML.
21	5.46	The Committee note the steady increase in the production and sales of the Company year by year. They also find that Zonal Offices have been set up at Bombay, Delhi, Calcutta and Hyderabad and that service terms are placed for major

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		Projects with N.C.D.C., N.M.D.C, and Agro-Industries Corporation. The Committee consider that it is only through efficient after sales service in the field that the Company can inspire confidence in their products and build up an assured and expanding market.
22	5.50	The Committee are glad to note that the Company is in a position to deliver immediately on demand D-80 and D-50 tractors. They, however, feel that the delivery period of one and a half year in the case of D-120 tractors is rather long. Since D-120 tractors are required by the Army, the Committee emphasise the need to reduce to the minimum the time interval between the booking of the order and delivery of D-120 tractors.
23	5.54	The Committee note that there was lack of planning in arranging timely import of the various items. Although the foreign exchange for the purpose was released as early as August, 1967, the import of all the required items (including missing parts) was actually completed in October, 1968 resulting in abnormal delay in supply of Dumpers to M/s. Hindustan Steel Limited. The Committee feel that timely action should have been taken to ensure replacement of the missing parts viz. Generator & Wheels by the collaborators.
24	5.55	The Committee also recommend that special care should be taken by BEML and other public enterprises in supplying capital equipments to other Public Undertakings so as to avoid any adverse effect on the production programme of the Public Undertakings which have to depend on other Undertakings for supply of capital equipment.

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25	6.7	<p>The Committee are surprised to note that the Company has not developed any cost control scheme so far, with the result that no systematic and uniform pricing policy is being followed with regard to its products. The Committee are of the view that in the absence of a satisfactory cost control scheme, it would hardly be possible for the BEML to keep an eye on the trends of cost of production and to take timely remedial measures. They recommend that BEML should take suitable steps to develop cost consciousness at various levels of management, keeping in view the instructions issued by Government from time to time for achieving efficiency, cost reduction and profitability.</p>
26	6.8	<p>The Committee consider that as most of the equipment and machinery are being produced by BEML with foreign collaboration, every effort should be made by the Undertaking to ensure that the cost of manufacture in India is kept as near as possible to that obtaining in the collaborator's own country. In fact, as latest type of equipment and machinery are being installed for manufacture, there is no reason why our cost should not even be lower than that obtaining in the collaborator country. The Committee are, therefore, not convinced with the Government's reply that the question of comparing the prices would arise only after the full facilities for manufacture have been established in the country. They consider that such a study should be continuously made as part of the effort to control and reduce the cost of manufacture.</p> <p>Now that the Bharat Earth Movers are going in for manufacture of agricultural equipment like tractors, the Committee would like the Undertaking to make special efforts to see that</p>

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		the cost of manufacture is kept at most competitive rate in order to encourage the use of machinery in this basic sector of our economy.
27	7.6	The Committee note that there has been an over all improvement in the financial affairs of the undertaking in 1969-70 compared to the previous year 1968-69. Gross profit before tax as well as net profit after provision for taxation in 1969-70 has been on the increase. Moreover the undertaking has been able to generate internal resources to the tune of Rs. 5.68 crores in about six years of its coming into existence. The Committee hope that the undertaking would not only be able to maintain the present trend of its profitability and generation of internal resources, but would also be able to further improve on it.
28	7.7	As urged by the Committee elsewhere in the Report, Government/Undertaking should spare no efforts to reduce the price of equipment and machinery particularly of tractors so that the full benefit of efficient production is shared by the economy as a whole.
29	7.11	The Committee are unhappy to note the increase in percentage of debtors to sales during the last three years. They have also noted with concern that there has been considerable increase in the Book Debts of BEML (as on 31st March, 1970) which were considered doubtful. Moreover, the Committee note with regret that most of the outstanding dues are against Government Departments/Railways/Public Undertakings. Such large outstandings have the effect of reducing the profitability of the undertaking by straining its resources to meet the requirements of working capital. The Committee would like Government to issue general directions that Government Departments/Railways/Public Undertakings should accord high priority to setting

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		of bills and effecting payment for machinery, equipment and goods received by them from public undertakings. The Committee would like to be informed of the instructions issued and follow up action taken to achieve this objective.
30	8.6	Research and Development activity is vital to the growth of modern industries and enable enterprises to explore and develop newer and better products and processes. They are a continuing activity and help to create a new basis for technology. The Committee are unhappy to note that the Company have not yet formulated their schemes for effective utilisation of the funds earmarked for Research and Development. The Committee feel that main objectives behind the creation of Research and Development Fund and setting up of Research and Development Division are to develop new equipment based on customer requirements and improving existing models of equipment under production. Apart from this, another important objective of Research and Development Division is to assist the company in rapidly indigenising the manufacture of all components and thereby increase productivity with particular reference to cost reduction. The Committee strongly recommend that the undertaking should formulate research schemes with the specific purpose of achieving the objectives for which the Research and Development Fund has been created including the Scheme to rapidly indigenise the manufacture of components.
31	8.11	The Committee note that latest demand survey was conducted by a team constituted by the Ministry of Industrial Development in 1968 for the Fourth Plan, which continues to be the guide-line for the Company even at present. The Committee are of the view that apart from long term survey such as the one conducted in

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		1968 for the Fourth Plan, the Undertaking should carry out annual surveys with reference to its specific products with a view to undertake production programme based on realistic assessment of demand of the major customers taking into account possible fluctuations of demand.
32	8.19	The Committee note that BEML arrange in-plant training, apprenticeship training and shop floor training, etc., at BEML and at the HAL Training Institute. The Committee recommend that intensified and specialised training schemes may be launched with a view to achieve cent-per-cent Indianisation of technical personnel as quickly as possible.
33	8.20	The Committee also recommend drawing up of refresher courses for the various grades of technical personnel employed in order to ensure maintenance of high standards of skills and performance.
34	9.6	The Committee find that Bharat Earth Movers Ltd., have got a part-time Chairman and a full-time Managing Director. In their Report on Public Sector Undertakings, the Administrative Reforms Commission had recommended that a Board of Management of the Public Sector Corporation should have a full time Chairman-cum-Managing Director. Government considered their recommendation and took a decision that as a rule there should be full-time Chairman-cum-Managing Director and in exceptional cases where the Chairman might be only a part-time one, there should be a full time Managing Director. The Committee fail to understand why an exception was made in this particular case. The Committee desire that Government would examine the possibility of combining the posts of Chairman and Managing Director in Bharat Earth Movers Ltd., in the light of their own decision.

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35	9.15	The Committee note with satisfaction the importance given to the improvement of industrial relations in the undertaking and the creation of the post of Industrial Relations Manager is a step in that direction. They hope that person appointed to this new post will justify the purpose for which he has been appointed.
36	9.20	The Committee note that the terms of the foreign technician from USA had to be extended by two years as he is now found very helpful for purposes of indigenisation. The Committee hope that the Company will now be able to utilise fully the services of this technician and would discourage the retention of foreign technicians unless absolutely justifiable.
37	9.22	The Committee note the importance given to the Personnel Department in the organisation of the undertaking and hope that the department will justify the purpose for which it has been set up.
38	9.27	The Committee regret to note that BEML has not so far conducted any systematic assessment of staff strength since it took over the Rail-coach Division from erstwhile Hindustan Aircraft Ltd. in January, 1965. The Committee are not aware whether the BEML management have laid down systematic norms for different categories of staff and fixed any norms of work-load which are essential for efficient and economic utilisation of the staff. The Committee, therefore, recommend and BEML should make an immediate assessment of staff strength and determine the norms of work-load for all categories of staff with the help of an independent specialised agency and to re-assess and rationalise the staff strength accordingly. The Committee also suggest that such an assessment of manpower requirement should, in future, be

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made at regular intervals in order to determine the proper utilisation of working force so as to avoid overstaffing.

- 39 9.30 The Committee is not very clear as to whether exhaustive Recruitment & Promotion Rules have been framed by the BEML. They recommend that such rules should be codified from the existing rules and orders and modified, if necessary, taking into account the recruitment and promotion principles in well established Public Undertakings. The Committee urge that the directions issued by the Government of India (Ministry of Labour and Employment) in the matter of recruitment be taken serious note of by BEML and their implementation should not be ignored.
- 40 9.31 In regard to promotion policy, the Committee recommend that:
- (i) Promotion be based on seniority-cum-merit;
 - (ii) adequate quota of vacancies in every cadre should be reserved for departmental promotees with a view to keep avenues of promotion open in all cadres.
 - (iii) a procedure be evolved to raise the superior cadre out of the talented employees of the undertaking instead of depending on retired Government officials/deputationists/officers from other public undertakings.
 - (iv) Due care be taken to see that the quotas reserved for Scheduled Castes and Scheduled Tribes under Government of India orders are filled up.
- 41 9.37 The Committee note that as a result of the Memorandum of Settlement signed between the
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- BEML Management and the Labour Union, industrial peace has been assured for three years. They are glad to note that the Labour Management Relations are cordial and hope it would continue in future to serve the cause of improvement of production.
- 42 9.38 The Committee recommend that Government should examine and take an early decision about constituting Council of Joint Management in BEML and of giving representation to workers on the Board of Directors of Public Undertakings in the Defence sector.
- 43 9.42 The Committee note that the Earth Mover Factory of the BEML is in a formative stage and that accounts for the non-introduction of the incentive scheme there. But the Committee would expect the BEML to bear in mind that incentive scheme offering inducement to workers to put up better individual and group performances is the primary prerequisite in any industry. They hope that the incentive scheme in the Earth Mover Factory will also be introduced at an early date.
- 44 9.44 The Committee recommend that the question of Government's approval for construction of a colony may be vigorously pursued and the construction of township at Bangalore completed as early as possible.
- 45 10.2(i) (b) The Committee are surprised to note that the Government/Undertaking went ahead with signing a collaboration agreement without the DPR being available to them. Such a practice is not only unusual but also lays down an unhealthy precedent for future. The Committee recommend that steps should be taken to avoid recurrence of such errors in future.

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46	10.2(ii) (b)	The primary duty of an undertaking is to adhere to the rated capacity of every plant and machinery. Therefore, the performance and production should be judged against the rated capacity. The Committee recommend that the Undertaking should take steps to attain the rated capacity of the Plants if not done already. Moreover, any downward revisions of the targets of production should be done on the basis of valid grounds.
47	10.2(ii) (c)	It has come to the notice of the Committee that castings and forgings for the products of the undertaking are made in HAL, Heavy Vehicle Factory and Praga Tools Ltd. Castings and Forgings, the Committee feel, are the most vital process for an undertaking like the BEML. The Committee note from the written material furnished by the undertaking that although orders placed on established manufacturers well in advance, they were sometimes not able to supply these forgings in time in view of the difficulties experienced by them in obtaining the required forging quality steel billets from the steel plants. Crawler tractor manufacture requires considerable amount of steel castings of intricate nature whose supplies were not forthcoming in adequate quantities. Non-supply of or slow supply of steel castings does affect, at times, the scheduled programme. The Committee recommend that the Foundries in Jabalpur, Wardha and Avadi be advised by the Government to accord adequate priority to the work of the BEML as they are producing very important defence equipments like heavy earth moving machinery and tractors which are vital to the Border Roads Organisation, etc.
48	10.2(iii)	The Committee find that the shortfall in production in the past has been mainly due to non-availability in time of components/parts both imported and indigenous. The undertaking

has also been experiencing difficulties in procurement of various materials, especially Steel Forgings, G.I. and Black Pipes, Helical Springs, Wheelsets, Steel Plates and Special Steels. The Committee recommend that the undertaking should take special care to plan its requirements of components and raw materials both Indian and imported adequately in advance. The production of the undertaking should not be allowed to suffer on account of the non-availability of these two basic items, viz. raw materials and components. For this matter in the opinion of the Committee there is no harm if the undertaking were to make out a tentative requirements of components and raw materials particularly the imported ones for two to three years and move the Government if necessary from now itself for their timely procurement.

- 49 10.2(v) (b) The Committee has not yet been able to find the basis on which the increase in staff has been agreed to by the Undertaking from time to time. They recommend that a systematic study of the staff requirement of the Undertaking should be carried out periodically before fresh recruitment is made. In this connection, they suggest that a work study cell should function in the Undertaking if not already in existence, to carry out the work study at regular intervals, taking into consideration the job requirements of the individual items of production. The staff strength should be determined after taking Work Study Report into account.
- 50 10.2(vi) The undertaking is having both part-time Chairman and a full-time Managing Director which is contrary to the principles enunciated by the Administrative Reforms Commission and also recommendations of the Committee on Public Undertakings (8th Report of CPU on Hindustan Aeronautics Ltd.)
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The Committee are unable to locate in BEML any special reason justifying the maintenance of two principal functionaries viz. the Chairman and the Managing Director. The Committee while reiterating their earlier recommendations contained in the above mentioned report that when the Chairman has no executive functions and is simply required to preside over the meeting of the Board there is no point in having one such in addition to a Managing Director; recommend that the undertaking should implement it.

- 51 10.2 (viii) The Committee find that while fixing prices the undertaking is guided by market conditions and they try to ensure that their prices are as competitive as possible in regard to their products. In other words, it appears that no systematic or uniform policy in regard to pricing of the products (earth movers and tractors) has yet been framed and pricing is dependent on the competitive market price coupled with the negotiations with the customers. It is not clear to the Committee as to whether the prices agreed upon are on the basis of actual cost plus overheads and other incidentals or it is *ad hoc* or is based on fixed price contract system. The Committee recommend that the undertaking should consider and evolve a rational pricing policy to maintain and improve its profitability. The pricing policy should take into consideration market price, the cost of products including fair return on capital after providing for depreciation and interest on a realistic basis, keeping in view the competitive nature of the price level.
- 52 10.3 (ii) As regards home sales, the Committee find that the sales have amounted to Rs. 13.93 crores in 1967-68, Rs. 21.51 crores in 1968-69 and Rs. 22.86 crores in 1969-70. To that extent, the undertaking has been able to sell its products in the home market.
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The Committee also find that the undertaking has embarked upon exploring export markets. At present, its export activity is confined to countries in and around India, such as Nepal, Ceylon and West Asian countries. Their sales agency has also been set up in Nepal. It is not known to the Committee whether any export has yet been made of its products to these countries.

The Committee recommend that the undertaking should strive hard to fulfil its objectives to export heavy earth moving equipment and tractors to the countries whose markets they have started exploring, namely, Nepal, Ceylon and West Asian countries.

53. 10.3(iv) TO SUM UP, the Committee find that the undertaking has been performing its production activities consistent with profitability. Certain handicaps in the form of delay in the utilisation of the services of the collaborators, shortfall of raw materials and imported components etc., had appeared in the past. The Committee hope that it would be possible for the Undertaking to overcome those difficulties and maintain its tempo of activity in production, sales and particularly, the export sales. The Committee hope that the profit that this undertaking is earning will not only be maintained but would be enhanced in future. The principal objectives for which the Company stands, the Committee expect, will ultimately be fulfilled.