C. P. U. No. 82

COMMITTEE ON PUBLIC UNDERTAKINGS (1967-68)

ELEVENTH REPORT

(FOURTH LOK SABHA)

NATIONAL MINERAL DEVELOPMENT CORPORATION LTD.

MINISTRY OF STEEL, MINES AND METALS

(DEPARTMENT OF MINES AND METALS)

सत्यमेव जयते

LOK SABHA SECRETARIAT
NEW DELHI
April, 1968/Chaitra, 1890 (Saka)
Price : Rs. 1·45 Paise

LIST OF AUTHORISED AGENTS FOR THE SALE OF LOK SABHA SECRETARIAT PUBLICATIONS

Sl. No.	Name of Agent	Agency No.
	ANDHRA PRADESH	
1.	Andhra University General Cooperative Store Ltd., Waltair (Visakhapatnam).	8
2.	G. R. Lakshmipathy Chetty and Sons, General Merchants and News Agents, Newpet, Chandragiri, Chittoor District.	94
	ASSAM	
3.	Western Book Depot, Pan Bazar, Gauhati.	7
	BIHAR	
4.	Amar Kitab Ghar, Post Box 78, Diagonal Road, Jamshedpur.	37
	GUJARAT	
5.	Vijay Stores, Station Road, Anand.	35
6.	The New Order Book Company, Ellis Bridge, Ahmedabad-6.	63
	MADHYA PRADESH	
7.	Modern Book House, Shiv Vilas Palace, Indore City.	13
	MAHARASHTRA	
8.	M/s. Sunderdas Gianchand, 601, Girgaum Road, Near Princess Street, Bombay-2.	6
9.	The International Book House (Private) Limited, 9 Ash Lane, Mahatma Gandhi Road, Bombay-1.	22
10.	The International Book Service, Deccan Gymkhana, Poona-4.	26
11.	Charles Lambert & Company, 101, Mahatma Gandhi Road, Opposite Clock Tower, Fort, Bombay.	30
12.	The Current Book House, Maruti Lane, Raghunath Dadaji Street, Bombay-1.	60
13.	Deccan Book Stall, Ferguson College Road, Poona-4.	65
	RAJASTHAN	
	Information Centre, Government of Rajasthan, Tripolia, Jaipur City.	38
	UTTAR PRADESH	
15.	Swastik Industrial Works, 59, Holi Street, Meerut City.	2
16.	Law Book Company, Sardar Patel Marg, Allahabad-1.	48
	WEST BENGAL	
17.	Granthaloka, 5/1, Ambica Mookherjee, Road, Belgharia, 24 Parganas.	10
18.	W. Newman & Company Ltd., 3, Old Court House Street, Calcutta.	44
19.	Firma K. L. Mukhopadhyay, 6/1A, Banchharam Akrur Lane, Calcutta-12.	82
	DELHI	
20.	Jain Book Agency, Connaught Place, New Delhi.	1

C O R R I G E N D A

Eleventh Report of the Committee
on Public Undertakings(1967-68)

Page	Para	Line	For	Read
4	8	12 from bottom.	'not'	'note'
12	34	Serial No.1 Col.6.	'+56.43'	'+56.42'
		Serial No.5 Col.5.	'35.22'	'35.52'
13	34	Serial No.12 Col.3.	'14.11'	'-'
		Serial No.12 Col.4.	'17.28'	'14.11'
		Serial No.12 Col.5.	' - '	'17.28'
		Serial No.16 Col.6	'+12.05'	'+38.43'
		Serial No.17 Col.6	'+16.59'	'+16.69'
14	36	5	'Rs.204,00'	'Rs.204.00'
18	48	8	'bandi-'	'handl-'
20	53	3	'E964-65'	'1964 -65'
33	88(ii)	3	'Rs.9,00'	'Rs.9.00'
35	91	2 from bottom	'Rs.250.60'	'Rs.285.60'
36	96	4	'r●pee'	'rupee'
36	Footnote	2	'of'	'or'
	"	2	'3.25'	'39.25'
40	106	S.No.A(ii) Col.5.	'(+)7.839'	'(+)7.83'
45	Footnote	2	delete "been"	
46	119	6	'scheduled'	'schedule'
47	121	1 from bottom	'pellatising'	'pelletising'
49	125	7	'recommended'	'recommend'
54	139	1	after 'it'	'is'
60 61	158	2 from bottom	'it'	'is'
61	162	2 from bottom	'Hugarian'	'Hungarian'
67	181	Item 1	'Niriburu'	'Kiriburu'
69	188	6	'other'	'order'
75	205	5 from bottom	'recommended'	'recommend'
79	218	8 & 9	delete 'it cannot be established beyond doubt,'	

CONTENTS

COMMITTEE ON PUBLIC UNDERTAKINGS
(1967-1968)

Pandit D. N. Tiwary—*Chairman.*

MEMBERS

2. Shri C. C. Desai
3. Shri Surendranath Dwivedy
4. Shri S. S. Kothari
5. Shrimati T. Lakshmi Kanthamma
6. Shri Krishnan Manoharan
7. Shri Manubhai Patel
8. Shri S. N. Shukla
9. Shri Prem Chand Verma
10. Shri Chandrajeet Yadava
11. Shri Arjun Arora
12. Shri Vimalkumar M. Chordia*
13. Shri Banka Behary Das
14. Miss M. L. Mary Naidu
15. Shri Awadheshwar Prasad Sinha

SECRETARIAT

Shri A. L. Rai—*Deputy Secretary.*

Shri M. M. Mathur—*Under Secretary.*

---

*Ceased to be a Member of the Committee consequent on his retirement from Rajya Sabha on 2-4-1968.

INTRODUCTION

I, the Chairman, Committee on Public Undertakings, having been authorised by the Committee to submit the Report on their behalf, present this Eleventh Report on the National Mineral Development Corporation Ltd.

2. This Report is based on the examination of the working of the National Mineral Development Corporation Ltd., upto the year ending 31st March, 1967. The Committee took the evidence of the representatives of the National Mineral Development Corporation Ltd. on the 31st January and 1st February, 1968 and of the Ministry of Steel, Mines and Metals (Department of Mines and Metals) on the the 5th April, 1968.

3. The Report was considered and adopted by the Committee on the 5th April, 1968.

4. The Committee wish to express their thanks to the officers of the Ministry of Steel, Mines and Metals (Department of Mines and Metals) and the National Minerals Development Corporation Ltd. for placing before them the material and information that they wanted in connection with their examination. They also wish to express their thanks to the non-official organisations/individuals who on, request from the Committee, furnished their views on the working of the Corporation.

5. The Committee also place on record their appreciation of the assistance rendered to them in connection with the examination of audit paras pertaining to the National Mineral Development Corporation Ltd. by the Comptroller and Auditor General of India.

NEW DELHI;
April 5, 1968.
Chaitra 16, 1890 (*Saka*).

D. N. TIWARY,
Chairman,
Committee on Public Undertakings.

HISTORICAL

In pursuance of the Industrial Policy Resolution of April, 1956, the National Mineral Development Corporation Ltd. (N.M.D.C.) was registered on the 15th November, 1958 as a private limited company under the Companies Act, 1956 with an authorised capital of Rs. 15 crores for exploitation of minerals in the public sector excluding oil, natural gas and coal. The immediate need for its formation was a contract entered into by the Government of India with the Japanese Steel Mills on the 19th March, 1958 for the supply of 2 million tonnes of iron ore per annum to Japan with effect from January, 1964 and the consequent need to develop and exploit iron ore at Kiriburu for fulfilling the above contract. The authorised capital of the Corporation was raised to Rs. 30 crores by a resolution passed at an extra-ordinary general meeting of the Corporation held on the 4th March, 1967.

2. Although there is no restriction in the Memorandum of Association on the establishment of mines by the Corporation, in actual practice N.M.D.C. does not on its own take up any new project. Projects are specifically assigned to the Corporation by the Government of India from time to time. To begin with, NMDC was entrusted with the development of an iron ore mine at Kiriburu for the production of 2 million tonnes of sized ore per annum for export to Japan. Thereafter the Corporation was assigned the task of development of an iron ore mine at Bailadila Deposit No. 14 (capacity 4 million tonnes of iron ore per annum); Khetri Copper Project; and Diamond Mining Project, Panna. With the formation of the Hindustan Copper Ltd. on the 9th November, 1967 the Khetri Copper Project was transferred to that company. The Committee, therefore, have not examined the working of the Khetri Copper Project.

3. Working of the National Mineral Development Corporation was examined by the Estimates Committee in 1961-62 and their observations were included in the Hundred and Fifty-sixth Report of the Estimates Committee (Second Lok Sabha). Action taken by the Government on the recommendations contained in that Report and the Committee's comments thereon were incorporated in the Fortieth Report of the Estimates Committee (Third Lok Sabha).

II

KIRIBURU IRON ORE PROJECT

A. The Project

4. The Kiriburu Iron Ore Project, located on the border of Bihar and Orissa, came to be executed in pursuance of an agreement concluded between the Japan Steel Mills and the Government of India on the 19th March, 1958, for the supply of 2 million tonnes of high grade iron ore to Japan for a period of 10 years commencing from January, 1964. The Kiriburu mine is a part of a multipurpose project comprising *inter alia* of a rail link between Sambalpur and Titlagarh (111 miles) designed to open up the interior of the Orissa State and the improvement of the port facilities at Vishakhapatnam to provide an adequate outlet for the growing trade of the hinterland. Financial assistance (to the extent of $ .8 million) in the shape of deferred payment for the purchase of equipment for the mine was made available by the Japanese Steel Mills.

B. Feasibility Study

5. No techno-economic feasibility study as such was carried out before taking up the execution of the Kiriburu Projects. Kiriburu was selected as the site on the basis of three reports. The first report was prepared by the Japanese Survey Team sponsored by the Japanese Government, which came to India for survey of the area. The team examined a number of iron ore deposits in various parts of the country and indicated Rourkela area as the suitable site for development of the Mine. Later on, Government of India set-up a Working Group consisting of representatives of various Ministries, geologists and mining engineers to look into the matter. After considering the economics of various sites, the Working Group came to the conclusion that Kiriburu was the most suitable site for development of a mine with a production capacity of 2 million tonnes of iron ore per annum. Thereafter, the Indian Bureau of Mines (I.B.M.) did the work of detailed drilling and geological investigations and submitted a report. During evidence the Secretary, Ministry of Mines and Metals stated that although the I.B.M. Report gave no indication about the profitability of the projects, it was known to the Government that because of long railway lead to the port, the Kiriburu iron ore project might not be profitable at all. Quoting from the repirt of the Working Group of the Ministry he stated that:

the following were the main considerations for going ahead with the project:—

(1) Visakhapatnam port would be adequately expanded;

(2) While initial supply of iron ore would be from Rourkela area which means Kiriburu, the eventual supply from Bailadila would be more economical,

(3) Opening of new mines for export purposes in Rourkela area would assist in making ore available for our own steel plants in addition to the ore mined within the Hindustan Steel Properties.

(4) The construction of Sambalpur—Titlagarh line and additional railway facilities on the line would open a new outlet for the production in the area irrigated by the Hirakud Canal system and would economise on the cost of moving Bailadila ore to Visakhapatnam.

6. Taking into account the above factors and the expectation of earning foreign exchange on the sale of iron ore to Japan on long term basis, the Planning Commission approved the project.

7. On the subject of the estimated profit on the project it was stated in the note prepared for the Expenditure Finance Committee in 1960 that:—

"The project was undertaken to enable securing of a loan from the U.S. President's Fund for Asian Development for an essential Railway and Port Development Project. The cost of production per ton inclusive of royalty works out to Rs. 11.687. The rail haulage is 480 miles. With this haulage and without any concession in freight and handling charges at the port, there is no likelihood of any profit in sight while there is every likelihood of a loss. The project, however, is being undertaken in an area most suitable for supply of ore to steel plants in that part of the country and only when supplies are diverted to the steel plants, the project may show profitability".

8. During evidence the representative of NMDC stated that as regards the examination of feasibility study by N.M.D.C. the question did not arise because the decision that the Kiriburu Project should be taken up and developed for a capacity of two million tonnes per annum was taken up by the Government of India even before the Corporation was floated. The way the project had to be

developed was already indicated and the Corporation was launched with a view to developing it on those lines. There is also no evidence to show that the Ministry had insisted upon N.M.D.C. or its consultants to carry out a technoeconomic feasibility study before preparing the Detailed Project Report. While an indication about the probable economics of the project was given in the not prepared for the Cabinet, no mention about the technical feasibility of the project was made therein. The report submitted by the Indian Bureau of Mines was tentative and indicative only. Later experience showed that the principal reason for major modifications in the Project Report was that the prospecting work done by the I.B.M., on the basis of which Detailed Project Report was prepared by the Japan Consulting Institute, was insufficient. The Bureau had clearly mentioned that the scheme prepared by it was based on taking up a site in the Rourkela area prospected by it for Hindustan Steel Ltd. and several assumptions had been made in the preparation of that project scheme.

9. The Committee are of the view that the Ministry should have had detailed prospecting done of the Kiriburu area before asking the Japan Consulting Institute to prepare a Detailed Project Report on the basis of the I.B.M. Scheme. It is also regrettable that the management of N.M.D.C. knowing that the scheme prepared by the I.B.M. was only an indicative one took no initiative to have a more detailed survey conducted. As subsequent events proved, the nature of the geological strata was not correctly worked out in the I.B.M. Scheme. This resulted in an excess generation of fines which has affected the whole economics of the project to a large extent, besides necessitating the purchase of extra machinery.

C. Engagement of Japan Consulting Institute

10. The Japan Consulting Institute (J.C.I.) was engaged as consultants by the National Mineral Development Corporation for the development of iron ore deposits at Kiriburu. An agreement to this effect was concluded with the Institute on the 31st January, 1959 initially for a period of five years on a consolidated fee of Rs. 16.8 lakhs payable in 10 instalments.

11. The consultants were selected in the following manner:

In May, 1958, Government of India in the Ministry of Steel, Mines and Fuel (Department of Mines & Fuel) addressed an enquiry to 38 firms, furnishing them with a description of the Kiriburu Iron Ore Project as well as the services which the consultant was expected to perform and requesting them to intimate their qualifications and experience in the field of open cast mining, the fee which they would expect, as well as the terms of payment etc. Twentysix tenders were received in response. These were considered by a Committee constituted for the purpose. That Committee decided that those tenderers who obviously did not possess the requisite qualifications and experience to undertake a project of this type and magnitude should be eliminated in the first scrutiny. Accordingly that Committee eliminated 15 tenderers in the first scrutiny for want of requisite qualifications and experience and came to the conclusion that only the following firms could be considered technically suitable:—

1. Powell Duffryn.
2. Japan Consulting Institute.
3. Henry J. Kaiser.
4. Van Sickle Associates Inc.
5. Utah Construction Co.
6. Wright Engg. Ltd.
7. E. J. Longyear Co.
8. John Meissner Engineers.
9. Western Knapp Engineering Co. Ltd.
10. J. W. Womer & Associates.
11. Behre Delber & Co.

12. As the charges quoted by these firms varied widely and in consideration of the fact that some of these tenderers might not have fully appreciated the extent of professional services required, these firms were addressed again, furnishing fuller details of the consultancy services to be rendered by them and requesting them to confirm that their quotations covered all the services required to be rendered.

13. The details furnished by the above firms as well as by two Indian firms, viz. M|s. N. P. Nayar and M|s. Dastur & Co. were considered by another Committee constituted for the purpose. This Committee came to the conclusion that, on eliminating firms who were either technically not capable of handling the work or whose quotations were incomplete, the choice before it was only of two firms, viz. the Japan Consulting Institute and the Utah Construction Co. While examining the various offers, the Committee had considered the advisability of selecting the Japanese firm in view of the fact that it

might be necessary to obtain mining plants and equipment from Japan only and the Japanese consultants would probably be in a better position to recommend their best use. On further consideration, it was thought that this handicap would not be a serious one as any competent consultant's firm would be able to draw out fully comprehensive specifications to which manufacturers of machinery from all over the world including Japan, should be able to conform. It was, however, felt that an American consultant would be greatly handicapped if he happened to confine his specifications to the procurement of machinery only from Japan. On this consideration and also for the greater interest of the scheme itself, that Committee strongly felt that an effort should be made to make it possible for procuring mining machinery on an open global tender from manufacturers of various countries instead of confining to Japanese manufacturers only. But the Financial Adviser of Department of Mines & Fuel pointed out that it might become difficult to find foreign exchange, particularly in American dollars, for this purpose. Taking all these into consideration, the Government of India decided that the Japan Consulting Institute, whose quotation was the lower of the two should be appointed as consultants. Later on, when N.M.D.C. came into existence it entered into a detailed agreement with the Institute.

14. Regarding the experience of the firm, the Estimates Committee in their 156th Report (1961-62) had observed that the Institute was constituted recently and had no previous experience of serving as consultants to any mining project, but its principal employees had developed large scale iron ore mines in other countries. During evidence the Managing Director N.M.D.C. stated that the firm was selected on the following considerations:

(i) the Institute had the Yen credit that was being utilised in the project;

(ii) the product of the mines was to be given to the Japanese Steel Mills; and ..

(iii) the Japan Consulting Institute was a body which was running on a no-profit-no-loss basis.

However, both the Managing Director N.M.D.C. and the Secretary of Department of Mines and Metals admitted that the firm as a whole had no experience in the field.

15. From the actual services rendered by the consultants, it has been observed that the project estimates prepared by them were in-

adequate and required a good deal of modifications. Even the mining plant installed by the consultants failed to give satisfactory service. All these defects upset the programme of production at Kiriburu and affected the cost of production adversely.

16. The Committee regret to note that the contract for the consultancy services was given to a firm which was not fully qualified for the job since it had no previous experience in the line and whose quotation was not the lowest. They are surprised that the appointment of the consultants was made on the consideration of availability of foreign exchange in their country rather than on their technical competence.

17. The Japan Consulting Institute were engaged with effect from 25th February, 1959 for a period of five years. The agreement provided that if works were not completed at the expiry of five years the employment of the consultants might be extended for such further period and on such terms as might be agreed upon between the two parties. The duties entrusted to the Japan Consulting Institute provided, *inter alia* that "The consultants shall be responsible for the performance of the plant erected in accordance generally with the designs prepared by them to achieve the level stipulated. These performance tests were to be carried out for a period of two months either immediately after the erection of the plant or as soon as the consultants desired them to be carried out."

18. The installation of the plant was completed in August, 1963 at a cost of Rs. 4 crores and test run was held only for a week's time. As there was no arrangement for off-take of the iron ore owing to non-completion of mechanical ore handling plant at Visakhapatnam and non-expansion of the projected railway link, performance tests at the required scale could not be carried out. The performance test for two months at the rated capacity of 2 million tonnes per annum would have given an output of 3.32 lakh tonnes of ore for which there was no off-take.

19. To ensure that the plant works satisfactorily to give an optimum production of 2 million tonnes per annum without any difficulty, the management felt it necessary to extend the period of consultancy for one year from the 5th August, 1964 to 4th August, 1965 so that the plant could undergo trial runs directly under the supervision of the consultants and the short-comings, if any, or other teething difficulties experienced during the initial operation would be rectified under the guidance of the consultants.

20. The plant went into production on a limited scale on a single shift basis from the month of April, 1964. When the first shipment took place in July, 1964, it was found that the lump fine ratio of the ore was 50:50 against the anticipated ratio of 60:40 provided for in the Project Report. The consultants, therefore, were asked to study the problem of ore handling on account of excessive generation of fines and suggest remedial measures. The terms of consultancy were also extended by another period of two months, i.e., from the 5th August, 1965 to 4th October, 1965. Minor modifications and adjustments to the plant were carried out as suggested by the consultants. An additional expenditure of about Rs. 2:26 lakhs was incurred on account of extension of consultancy period.

21. Although the stipulated test runs were not completed, the Corporation paid in July, 1964, the last instalment of Rs. 1.47 lakhs to the consultants. The management of N.M.D.C. stated that it held discussions with Japan Consulting Institute but the latter were insistent that the last instalment should be paid to them immediately since they were not in any way responsible for the position in which performance tests could not be held before the expiry of the agreement in February, 1964. The legal opinion also was that N.M.D.C. could not hold back this payment.

22. Again, even though the provision for satisfactory performance of the plant was included in the supplementary agreement for one year, the performance tests as envisaged could not be carried out for the following reasons:—

(i) The off-take of ore to the target capacity was not possible due to the inability of Vizag port to handle the quantity as scheduled; the mechanical ore handling plant was not ready until August, 1965, by which time, the extended supplementary agreement also expired.

(ii) Adequate space for stockpiling of ore also was not available at Kiriburu or Vizag.

(iii) Railways had also not been able to maintain the supply of required number of wagons in a sustained manner.

(iv) The consultants were engaged in the meantime mostly on modifications to the crushing plant to minimise fines.

23. At last it was decided by the management to conduct the performance tests independently in the absence of the consultants; and to seek their assistance only if any difficulty was experienced during the operations.

24. It will be seen that excess generation of fines came to the notice of the management in July, 1964, when the first shipment took place. The last instalment of the consultancy fee was paid in July, 1964. During evidence the Managing Director N.M.D.C. stated that since there was no specific clause in the agreement about the performance of the plant in regard to lump-fine ratio and the consultancy period expired in February, 1964, the payment could not be withheld legally. The last instalment was paid, after a decision to that effect was taken by the Board of Directors. The Secretary of the Ministry expressed the same view during evidence.

25. In reply to another question, the Managing Director N.M.D.C. stated that on the basis of the investigation report prepared by the Indian Bureau of Mines, the consultants stated in the Project Report prepared by them that the plant would give a lump-fine ratio of sixty-forty. **The Audit pointed out that since the agreement was based on the investigation report of the Indian Bureau of Mines, a clause in regard to lump-fine ratio should have been included in the agreement. The Managing Director admitted that non-inclusion of such a clause was an omission. The Committee agree with the views expressed by Audit and desire that the responsibility should be fixed on the person responsible for the lapse.**

26. The Committee have time and again come across defective agreements which have resulted in excessive or over payments to consultants or failure to protect our interests. As already recommended the Government have to strengthen their agreement scrutinizing agency.

27. The Committee regret to note that although the production started in April, 1964, excess generation of fines came to the notice only at the time of shipment in July, 1964 which implies that there was no test-check on the plant site. They take a serious view of the failure of the management to notice such faulty performance of the machinery and trust that such omissions will not recur in future.

28. It will be observed from Paras 17—19 that the consultants were to carry out the performance test within a period of two months either immediately after the erection of the plant or as soon as the consultants desired them to be carried out. Owing to the failure of the management of NMDC to carry out the performance test within the period of five years of the consultancy period, a supplementary agreement with the consultants for a period of one year was concluded with the sole object of getting the performance

test carried out in their presence. But the performance test could not be carried out within the extended period of the agreement due to reasons well foreseeable. The agreement was further extended for two months without carrying out performance test. **In the circumstances the Committee cannot help but conclude that the management lacked foresight. They also feel that after engaging the consultants, the project authorities depended entirely on them in the matter of erection and performance of the plant and did not exercise any control over the progress of their work. This resulted in further extensions of the constultancy periods and payments of further amounts to the consultans without achieving the desired benefits.**

D. Project Report

29. The Project Report for Kiriburu Iron Ore Project was prepared by the Japan Consulting Institute, who were engaged as consultants for the purpose. The capital cost of the project, as estimated by the consultants in the Project Report, was Rs. 8.31 crores with a foreign exchange component of Rs. 3.93 crores. On actual implementation the cost of the project, however, increased to Rs. 12.38 crores.

30. The project estimates prepared by the Consultants needed the following modifications and additions:—

(a) Mines

(i) Changing the mine faces to "across the strike" from that of "along the strike" for better blending and working of all types of ores.

(ii) Rearranging of transmission lines and power supply round the mines.

(iii) Re-organising road layout.

(iv) Road lighting to meet the problem of fog in the monsoon season.

(v) Workshop.

(vi) Introduction of power wagons.

(b) Plant

(i) Installation of Tertiary screen.

(ii) Redesigning of lighting.

(iii) Emergency switches.

(c) Procurement of additional equipment for development with a view to keeping pace with mining operations.

31. During evidence the Managing Director N.M.D.C. stated that the Project Report did not take into consideration the requirements of the workers' housing colony, townships and roads communication with the port. Certain other factors such as taxation royalty, etc. were underestimated. As regards the omission and underestimation of other items, the Chief of Iron Ore of NMDC, stated that having come to the practical field the management found that it required some particular facilities more than those envisaged in the Project Report, such as, washing dumpers, provision of some specialised tools etc. Kiriburu was in fact the first integrated mechanised mine in the country which was conceived at that time. He added that in the operations, a very efficient blending of the ore to get the optimum results from the plant was very essential and that type of thing, as the deposits varied from place to place, had to be built up progressively as the experience was built up.

32. About the tertiary screen, the Chief of Iron Ore stated that it became necessary because there was an apprehension that the fines tolerances which might be insisted upon by the Japanese Steel Mills, might be much lower than what N.M.D.C. would be able to deliver in Japan. This discrepancy arose not because of what happened at the mines but because of their difficulty in anticipating the likely degradation of the ore when it travelled from the mine to the port and passed through the port handling plant to the ship. When asked to explain if the inexperience of the consultants was the reason for omission of all these items, the witness stated that this was so to the extent the consultants were inexperienced of the Indian conditions. To this the Managing Director, N.M.D.C. added the following view:—

> "The Consultants submitted a report to NMDC and we, on our part, should have also looked into this aspect. After all, we are more conversant with the conditions here. We were in an infancy. So far as mining operations are concerned, wherever foreign collaboration is sought for, mostly the Consultants work within the perimeter of operational field. About the social services that the project provides like hospitals they did not incorporate a hospital and, in fact, we had to insist on a hospital for workers in that area. Certainly, we, on our part, should have incorporated those things in the report. Therefore, there has been a slight mix up all around."

33. From the foregoing it will appear that the consultants, because of their inexperience, failed to prepare a satisfactory project report and the management of NMDC on its part did not take care to examine the Project Report. The Committee fail to understand how so many important aspects of the project were omitted from the Project Report. They hope that in view of long experience such omission would not recur in future.

E. Project Estimates

34. Capital estimates as envisaged in Project Report, as revised and the actual expenditure incurred till December, 1966 in respect of the Kiriburu Iron Ore Project are given below:

(Rs. in lakhs)

Sl. No.	Head of Expenditure	Project Report Estimate	Actual to end of December, 1966	Revised capital estimate	Variation between col 3 & 5
1	2	3	4	5	6
1	Mining equipment	139·54	186·64	195·96	+56·43
2	Dressing, stock-pile including installation and building and stock-pile crab erection . . .	313·96	378·19	368·15	+54·19
3	Power house building & air compressor building . . .	1·81	2·20	2·20	+0·39
4	Maintenance equipment, electrical installations	17·35	17·78	20·64	+3·29
5	Civil works of maintenance division administration, training institute and general office including canteen, store, House Magazine .	24·58	35·11	35·22	+10·94
6	Roads	22·10	37·02	38·68	+16·56
7	Vehicles	6·05	10·87	11·47	+5·42
8	Water supply	44·85	39·97	44·62	—0·23
9	Working face preparation & removal of overburden . . .	18·32	17·10	17·10	—1·22

1	2	3	4	5	6
10	Initial facilities and administrative expenses	30·21	139·30	139·30	+109·09
11	Consultancy charges .	—	17·07	17·07	+17·07
12	Mining lease, prospecting .	14·11	17·28	—	+17·28
13	Share of Head Office expenses	—	20·00	20·00	+20·00
14	Township .	85·00	88·34	88·72	+3·72
15	Railway siding .	5·95	17·00	18·00	+12·05
16	Interest during construction	—	38·43	38·43	+12·05
17	Spare parts .	25·16	41·75	41·75	+16·59
18	Electricals	76·22	65·40	73·54	—2·68
19	Import duties	50·56	—	—	—50·56
20	Reserve Funds . .	56·78	—	—	—56·78
		918·34	1146·28	1188·41	+270·07
	Less Credit .	—	—23·11	—23·11	—23·11
		918·34	1123·17	1165·30	+246·96

Increase in capital outlay due to Devaluation

(a) On outstanding (on 8-6-66) deferred payment in respect of machinery already purchased from Japan .	—	—	58·82	+58·82
(b) On other items to be procured from abroad	—	—	13·55	+13·55
	915·04	1123·17	1237·67	+319·33

35. The original estimates were prepared by the Japan Consulting Institute in 1959. The estimates were revised in 1966 and were sanctioned by the Government in February, 1967. Reasons for increase in the estimates may be classified under the following broad heads:

(i) Items omitted in the original estimates . Rs. 47 lakhs

(ii) Items which could not be anticipated at the time of preparing the original Project Report . . . . Rs. 130·00 lakhs

(iii) Increase due to change in plant and additional equipment such as dumpers, drills, etc., and tertiary screening necessitated due to change in the scope of operations	Rs. 69·00 lakhs
(iv) Inadequacies in provision . .	Rs. 76·00 lakhs
(v) Provision for civil works	Rs. 128·00 lakhs
	Rs. 450·00 lakhs
Less due to savings and Adjustments .	—Rs. 130·00 lakhs
TOTAL	Rs. 320·00 lkhs

36. From the above it is clear that the project estimates prepared by the Japan Consulting Institute had many shortcomings. The consultants omitted items worth Rs. 47.00 lakhs and provision made by them for certain items were inadequate to the extent of Rs. 204,00 lakhs. At the time of preparing the estimates consultants failed to make a correct assessment about the structure of the ore, for which later on the management had to make an extra provision of Rs. 63.00 lakhs for procuring alternative plants and additional equipment, such as, dumpers, drills, etc.

37. The Committee regret to note that even though the project estimates prepared by the Japan Consulting Institute were unrealistic and suffered from many defects, there is no evidence to show that the management of NMDC or the administrative Ministry took any steps to locate and rectify the deficiencies with the result that the project estimates have increased over 33 per cent. Such under estimates not only mislead the Cabinet but also the Parliament and do no credit to the executing Ministry.

F. Initial Facilities and Administrative Expenses

38. The Japan Consulting Institute in the project estimates made a provision of Rs. 30.21 lakhs on account of 'initial facilities and administrative expenses'. The revised estimates on this account prepared in November, 1962 were for Rs. 139.30 lakhs i.e. an excess of nearly Rs. 109.00 lakhs. The revised estimates were approved by the Board on the 3rd January, 1963 and subsequently sanctioned by the Government.

39. The following reasons have been advanced for increase in the expenditure:—

Rs. in lakhs

(i) No provision was made in the JCI estimates for construction of residential accommodation at the Base Camp and Hill-top, including services hospitals, dispensary,

	(Rs. in lakhs)
shopping centres, recreation centres, schools etc., Completion of these works involved an extra-expenditure of	21·00
(ii) Travelling allowances, contributions to G. P. Fund, Office furniture and equipment, telephone and wireless charges, stationery, books and periodicals, banks charges etc. amounted to	14·00
(iii) Additional expenditure on transportation (including running expenses of vehicles and construction equipment) was	12·00
(iv) Increase in the establishment charges was .	32·00
(v) No provision was made in the project report for the cost of transmission and distribution of water to various sites of work. The JCI estimates further did not take into account the requirement of electric energy during the construction phase for fabrication shops, compressors and mixtures etc. More office and stores accommodation, extended length of roads, additional turbine pumps, transformers for stepping down the voltage for purposes of distribution cranes, tractors, transport trucks and vehicles and the like had also to be provided to meet the inescapable requirements. All these resulted in an additional expenditure of .	30·00
TOTAL	109·00

40. The omissions and inadequacies in estimation of development expenditure were revealed only after the project was taken up for actual execution. It has been stated that these omissions and inadequacies could not be foreseen at the time the J.C.I. estimates were approved because the project of that nature and size was never taken up before. During evidence the representative of N.M.D.C. failed to give any satisfactory reply as to how so many items of essential expenditure were omitted or underestimated in the original project estimates.

41. The Committee appreciate that N.M.D.C. had never before taken up for execution a project of this size and type. It is also true that Kiriburu area was inaccessible and extremely under-developed and therefore a good deal of developmental expenditure had to be incurred there. But it was for these very reasons that an expert foreign firm of consultants was engaged to develop the mine

and it should have been their first task to study the local conditions fully before preparing the estimates. The management at least should have known the under-developed nature of the area. It should have pointed out the essential omissions from the project estimates. It is also surprising how the administrative ministry, failed to make a proper assessment in the beginning. The Committee can only express regrets at this stage at such failures of the management of N.M.D.C. and the administrative Ministry.

G. Establishment charges

42. Establishment charges which were originally estimated at Rs. 17 lakhs had gone upto Rs. 49 lakhs, i.e., an increase of 185 per cent over the original project estimates. Furnishing a break-up of the establishment charges, the Financial Controller of NMDC stated during evidence that the provision for salaries of staff which was Rs. 10 lakhs in the original estimates rose to Rs. 47.85 lakhs. The staff originally provided for were only 25 but it had to be increased to 112 by the end of the phase of construction in three years because of the remoteness and inaccessibility of the area, manpower requirements proved to be insufficient. Besides this, a sum of Rs. 6 lakhs had already been spent before the project report was accepted in 1960 and before that a preliminary expenditure of Rs. 6 lakhs was incurred. The Committee were given to understand that increase in expenditure under this head did not add to the prospect of making profit.

43. The Committee are not convinced with the reply of the representatives of N.M.D.C. They feel that the management must accept the responsibility for not including in the project estimates expenditure incurred on Establishment charges prior to 1960. The increase in the staff strength to 112 instead of the original provision of 25 also led to increase of establishment charges from Rs. 10 lakhs to Rs. 49 lakhs, which appears to be an excessive increase from all standards. The Committee are of the view that considering the economics of the project, expenditure under this head should have been kept to the minimum. The management should effect reduction in this respect at an early date.

H. Construction and Operation

44. The scheduled dates provided in the Project Report prepared by the consultants and the actual time taken in the completion of

various works at Kiriburu Project are given below:—

Sl. No.	Brief description of the work	Target date	Date of completion
1	Exploratory work and field survey	February—April, 1959	April, 1959
2	Submission of detailed mining scheme . . .	May—June, 1959	May, 1959—October, 1959
3	Preparation of a detailed Project Report . . .	July—December, 1959	November, 1959 to January, 1960
4	Examination and approval of detailed Project Report . .	January—April, 1960	January—May, 1960
5	Execution of scheme .	May 1960—December, 1962	June, 1960—July, 1963
6	Initial operation . . .	January, 1963	August, 1963

45. According to the time schedule given by the Japan Consulting Institute, the project was to be completed by December, 1962 and export of ore to Japan was to commence from January, 1964 leaving a cushion of one year for trial and performance test. The completion of the project was, however, delayed by about 7 months. Reasons for delay have been attributed to the following factors:—

(i) Delay in awarding contracts for civil construction works;

(ii) Delay in finalisation of purchase of machinery.

46. Although the project was completed in July, 1963, trial production commenced much later. It has been stated that trial production could not start immediately after the completion of the project because there was no off-take of the ore owing to non-completion of mechanical ore handling plant at Visakhapatnam and due to the land-slides on the railway line between Kiriburu and Visakhapatnam. When the trial production on a limited scale started in April, 1964, it was found that the plant was generating exces fines. The consultants were, therefore, asked to look into the matter and suggest remedial measures. Certain modifications were carried out in the plant as suggested by the consultants. However the performance test of the plant at full rated capacity could not be carried out even within the extended period consultancy agreement, *i.e.*, by 5th October, 1965. The plant is now likely to achieve the rated production of 2 million tonnes per annum only during 1968-69.

47. As regards the control exercised by the Ministry of Mines & Metals for expeditious completion of the project, the Secretary stated that the Ministry had been getting monthly progress reports from N.M.D.C. about individual projects and in addition, half-yearly progress reports in case of iron ore projects. On the basis of those progress reports periodical discussions were held with the Managing Director and other officers of N.M.D.C. He added that the Ministry provided whatever assistance was sought from it. The matter was also discussed in the Secretaries Committee several times and the progress of the project reviewed.

48. The consultants were responsible for completion of the project as per given schedule and for the performance of the plant to the rated capacity of 2 million tonnes per annum. There was some delay on the part of the consultants in the finalisation of purchase of machinery. There was also some delay in awarding contracts for the civil construction works.

In fact, the main factor responsible for upsetting the completion schedule of the project was the non-completion of the iron ore handling plant at the Visakhapatnam Port. It would, however, be seen that the Ministry of Mines & Metals was unaware of this factor, till the trial production at full rated capacity could not take place immediately after completion of the project in July, 1963. It has been stated that the matter was discussed in the Secretaries, Committee and the progress of the project reviewed every now and then but there is no evidence to show that non-completion of mechanical Ore Handling Plant at the port was taken up with the Visakhapatnam Port Authority*. Taking all these into account, the Committee regret to observe that neither the management of N.M.D.C. nor the administrative Ministry took any timely action to complete the project expeditiously.

1. Production

49. Kiriburu Project was taken up for development with a view to produce 2 million tonnes of iron ore per annum for supply to Japan from 1964. The supply was due to commence from January, 1964. The project has not been able to obtain the rated capacity of 2 million tonnes per annum so far. It produced 1.95 lakh tonnes in

---

*During factual verification it was stated that the Ministry was aware of the delay in the commissioning of the Ore Handling Plant at Vizag and had been pursuing the matter with the Ministry of Transport from time to time. The matter was also taken up to Minister's level. A copy of D.O. letter dated 24-6-64 signed by Shri P. C. Sethi and addressed to Shri Raj Bahadur, Minister of Transport and a copy of an extract from the minutes of the meeting of the Informal Committee of Secretaries on Iron Ore Export held on the 30th July and 4th August, 1964 were also enclosed.

1964-65, 9.37 lakh tonnes in 1965-66 and 16.50 lakh tonnes in 1966-67. Although the construction of the project was completed by July, 1963, full production could not take place because of insufficient off-take of ores.

50. The other reasons for not reaching the rated capacity were as follows:—

(i) Fall in the lump ore-fine recovery ratio to about 50:50 as against the anticipated ratio of 60:40;

(ii) The ore was more sticky than was anticipated. The result was that the plant which was basically designed to run as a dry plant had to be run as wet plant during major part of the year.

(iii) The necessity to continue wet operations for major portion of the year called for installation of additional water supply facilities and further provision of proper drainage scheme in the plant area for the easy and quick disposal of fines|slimes accumulated at various points inside the plant;

(iv) Mechanical ore handling plant at Visakhapatnam port was not ready till August, 1965. The port capacity at the manual berth was limited and the vessels at the port for the Kiriburu iron ore could not be loaded till January, 1965;

(v) Interruption in the transportation of the ore by rail due to landslide between Kiriburu and Visakhapatnam during the monsoon of 1964; and

(vi) Arrangements had also to be made for screening of Kiriburu ore at Vizag port to reduce the percentage of fines so that the ore could meet the export specifications.

51. During evidence the Committee enquired as to why instead of keeping the production limited during this period, efforts were not made to sell ores to the steel plants of Hindustan Steel Limited. The Secretary, Ministry of Mines and Metals stated that about 96,000 tonnes of ore were supplied to the Rourkela Steel Plant during the period. The Rourkela Steel Plant did not take more ore from the Kiriburu Project because specifications of ore required by it were different from those produced by the Kiriburu Project. The supply of ore to the Durgapur Steel Plant did not materialise because the Railways failed to provide necessary facilities for the movement of the ore from Kiriburu to Durgapur. The Managing Director

N.M.D.C. was not sure if the Minerals and Metals Trading Corporation was asked to take the supply of ore during this period for distribution among the indigenous steel plants.

52. It will be seen from the above facts that although the plant was ready for production in July, 1963, no concerted efforts were made to go into full production and sell that output within the country for use by the Indian steel plants. On the contrary the management kept waiting till April, 1964 for trial production. If non-completion of the mechanical Ore Handling Plant at Visakhapatnam had been the reason for not starting trial run then there is no reason why the management started trial production in April, 1964 because the mechanical ore handling plant was ready only in August, 1965. The Committee could not find out any valid reason for which the management should have waited till April, 1964 for trial production. They feel that the management of N.M.D.C. did not take care initially to have the test run performed in time and when it saw that the matter was getting too much delayed it allowed the plant to go into production in April, 1964. The Committee are of the opinion that had the test run been performed in August, 1963 at least the deficiencies of the plant would have come to notice and timely action could have been taken to remove the defects. They are unhappy to note that the project authorities failed to use foresight in this respect. It is also regrettable that the Ministry of Mines and Metals, inspite of getting periodical reports, did not take any initiative in the matter.

53. The Committee feel that there was not enough justification for limiting the production to a level much lower than the rated capacity of 2 million tonnes per annum during the years 1964-65 and 1965-66. This would be evident from the fact that M.M.T.C. who was responsible for distribution of iron ore among the Indian Steel Plants, was not approached during these periods for taking supply of ore from Kiriburu for use within the country. The administrative Ministry also does not appear to have given any guidance in this regard. The Committee are not happy with the situation in which the production level was kept limited. They hope that in future in case of emergence of any export difficulty the management would take all possible measures to dispose of ore within the country.

54. It is also seen that the plant failed to achieve the rated production of 2 million tonnes per annum during 1966-67 also, even though there were no outside impediments during that year. The

plant is, now expected to attain the rated capacity of 2 million tonnes only during 1968-69. **From this it would appear that besides external hindrances there are other internal reasons due to which the plant failed to attain the rated capacity of 2 million tonnes per annum. The Committee recommend that reasons for non-attainment of rated capacity of 2 million tonnes per annum should be analysed and the management should make concerted efforts to remove those difficulties so that the plant may achieve the rated capacity without any further delay.**

J. Generation of Fines

55. During evidence the Chief of Iron Ore, stated that of the total production, about 10 to 15 per cent was slime, about 50 per cent was lump ore and the remaining 35 per cent was treated as washed fines. Total accumulation of fines till the 31st October, 1967 was 3 million tonnes. These fines were stacked systematically without assessing their value. The value of the fines were not assessed primarily because it was difficult to assess their value and secondly because auditors might not accept their valuation. The management treated the fines as potential assets but it did not take financial credit for the fines in the account.

56. It will be seen that with production of 2 million tonnes of lump ore per annum, the project will be accumulating 1·4 million tonnes of washed fines per year. The Chief of Iron Ore informed the Committee that Australia, who was the principal competitor of India in the field of iron ore export, was able to sell or export its fines at an economic price because of availability of transport facilities there. He further stated that the Kiriburu Project would be able to sell its fines to the Bokaro Steel Plant from 1970-71. Besides, provision for beneficiation of fines had been made in the Kiriburu Expansion Scheme which was under consideration of the Government. It would take about 3 years to instal the beneficiation plant from the date of its sanction.

57. **The Committee feel that to a considerable extent economics of the project depend on the commercial utilisation of the fines. They consider it unfortunate that no provision was made in the beginning either for beneficiation of the fines or for their sale. The Committee suggest that immediate steps should be taken for the beneficiation of the fines and their sale.**

K. Cost of Production

58. Cost of production per tonne as estimated from time to time on the basis of production level of 2 million tonnes per annum was as given below:—

	1961 estimate	1965 estimate revised	Post devaluation estimate 1966	Post devaluation of £ sterling 19-11-67
	Rs.	Rs.	Rs.	Rs.
A. Operating Costs .	5·15	7·05	7·44	10·11
B. Interest on Government loan . . .	1·50	1·80	2·17	2·17
C. Interest on Yen Credit & Working Capital . .	0·50	0·50	0·57	0·40
D. Royalty . . .	1·75	1·75	1·75	1·50
E. Share of H.O. Expenses	—	0·36	0·36	0·36
F. Depreciation . .	2·71	3·40	3·55	3·55
Cost of production (For Kiriburu) . . .	11·61 per tonne	14·86 per tonne	15·84 per tonne	18·09 per tonne

59. Actual cost of production worked out on the basis of actual production during the first three years of production are as given below:—

	1964—65	1965—66	1966—67
Actual production . . .	1·95 lakh tonnes	9·37 lakh tonnes	16·50 lakh tonnes
Cost of Production	Rs. 61·00 per tonne	Rs. 23·96 per tonne	Rs. 16·48 per tonne

60. In the preliminary Project Report prepared by the Indian Bureau of Mines, cost of production was worked out to be Rs. 9·00

per tonne. The cost of production estimated by the Japan Consulting Institute in their Project Report of 1959 was Rs. 10.44 per tonne. The reasons for increase in estimated cost of production from Rs. 10:44 per tonne to Rs. 15:84 were stated to be:—

(i) Against the consultants' estimate of capital outlay of Rs. 8·3 crores, the sanctioned revised capital outlay is Rs. 12·33 crores. This has resulted in higher depreciation, interest charges etc.

(ii) The consultants' estimate was based on a lump: fine ratio of 60:40. whereas it was later found to be 50:50 or less, necessitating larger quantity of ROM to be mined to get the same output.

61. As regards the recent increase in the estimated cost of production to Rs. 18·09, the management has given the following reasons:—

(a) The earth moving equipment at Kiriburu is of foreign manufacture and for maintenance purposes, considerable spares have to be imported, the cost of the spares has increased substantially again, due to devaluation of the rupee;

(b) The Kiriburu plant has not yet achieved the full rated capacity of 2 million tonnes per year. Hence to meet the export commitments, a part of the production is obtained from hand mining operations for which the cost is higher than mechanical mining; and

(c) As a consequence of successive increases in D.A., the wage bill has gone up considerably. In fact the award of the Wage Board on Iron Ore Industry has since been accepted by Government. The implementation of this award by NMDC is still under consideration as in the case of Kiriburu mine alone its implementation would involve a further increase in the wage bill by nearly Rs. 8 lakhs per year.

62. During evidence the financial Adviser of N.M.D.C. attributed the reasons for increase in the cost of production to a number of factors, such as, under-estimated Project Report, increase in taxes, increase in the capital cost, increase in wages, additional duties on spares and other elements, devaluation and increase in repayment liabilities. In reply to a question the Managing Director stated during evidence that even before the estimation of cost of production it was known to the Government that the project would run into

losses. When asked to explain if at the time of entering into sales agreement with the Japanese Steel Mills, the cost of production was worked out to be much lower and later on due to increase in the cost of production the project was running into losses, he repeated that at the time of entering into agreement with Japan, it was known to the Government that the project would run into losses, which would be borne by Mining, Port and Railways.

63. **It will thus be seen that the operating cost which was estimated to be Rs. 5.15 per tonne in 1961 had increased to Rs. 10.11 per tonne in 1967. It appears to the Committee that merely because the Government were aware about the uneconomic nature of the project, the management has been indifferent towards controlling the operating cost. As costs are still continuing to rise the Committee urge that all efforts should be made to bring down the operating cost. The Committee also hope that vigorous efforts will be made by the management to raise the production to the stipulated level of 2 million tonnes per annum as early as possible so that the overhead cost per tonne is minimised.**

L. Cost Reduction Cell

64. With a view to improving efficiency and reducing cost of production a Cost Reduction Cell comprising technical and finance officers was constituted in the Kiriburu Project. Its function was to study cost trends and to investigate value analysis in the selected sectors of operations and administrative functions. Since the performance of the cell did not come up to expectation, the management did away with the cell and approached the Administrative Staff College, Hyderabad for looking into the problem. In its report the Administrative Staff College gave suggestions on the basis of which cost reduction was possible; one was control over consumption of spare parts and stores and the other was to reduce the surplus manpower. **The Committee hope that the suggestions of the Administrative Staff College would be carefully implemented and all possible measures would be taken to reduce the cost of production without further delay.**

M. Sale of Kiriburu Ore

65. According to the terms of an agreement executed on the 19th March, 1958 between the Indian Iron Ore Negotiating Committee and the Japanese Steel Mission the Government of India undertook to supply, with effect from January, 1964, two million tonnes of high

grade iron ore per annum to Japan for a period of 10 years in the first instance.

66. The sale price of Kiriburu iron ore exported to Japan was to be fixed by negotiations between the MMTC and the Japanese Steel Mills on the basis of the prevailing international iron ore prices, taking into consideration also the provisions in the Memorandum of Agreement (Para 2 of Addendum) dated the 19th March, 1958 between the Indian Iron Ore Negotiating Committee and the Japanese Steel Mission, which stated as follows:—

"*Price*.—The fair and reasonable price of iron to be agreed upon between the two parties in accordance with part 4 of the Memorandum shall be decided as follows:—

(i) The prices of the two grades 65|63 and 60|62 Fe content respectively to be determined from year to year—(April to March) shall be the separate weighted average of f.o.b.t. prices for these grades of comparable specifications of Indian iron ore sold to all countries other than Japan during the preceeding 12 months, less a rebate Any shipment analysing about 62 Fe and below 63 Fe will be priced at a unitage over 60|62 price; unitage to be determined at the time of annual negotiations. In fixing the rebate for each year of supply the following shall be taken into consideration:—

(a) The contracted purchase price of ores of comparable specifications bought by Japan from other sources; and

(b) the loss, if any, to India in supplying the annual quantities to Japan *vide* Appendix 'A'.

(ii) Negotiations for determining the price shall be conducted each year prior to the commencement of the shipment."

Appendix 'A'

"With reference to paragraph 2 of the addendum, in computing the loss, the following items will be taken into account as certified by the Auditors:—

(1) All direct and indirect costs of mining including interest and depreciation and excluding amortization of the mining installations and equipment.

(2) Railway freight at prevailing public tariff rates less 4 per cent from the loading station to the port.

(3) Port charges as notified by the Port authorities, excluding amortization charges on the port installations for the project.

(4) Analysis, moisture loss and other administrative charges.

As it is to the mutual advantage of both parties that this project should be worked in the most economical and efficient manner possible, Government of India will be prepared to give full consideration to any recommendations in this behalf that may be made from time to time by the Japanese experts."

67. For reasons stated earlier, N.M.D.C. failed to supply iron ore at the rate of 2 million tonnes per annum from January, 1964. On the 25th April, 1964 an interim agreement was entered into between the Minerals and Metals Trading Corporation and the Steel Mills of Japan providing for the interim purchase by the latter of 3,50,000 tonnes of iron ore from the Kiriburu mines between the 1st June, 1964 and 31st January, 1965. Against this contract N.M.D.C. was able to export only 43,687 tonnes upto January, 1965 because of the Kiriburu ore containing excess fines. Subsequently two interim agreements were entered into—one to cover the undelivered quantity under the interim agreement of April, 1964 and the other for the supply of 6,10,000 tonnes of iron ore. Against these three interim contracts for supply of 9,60,000 tonnes of iron ore, NMDC has been able to supply 8,98,000 tonnes. Against a fresh agreement entered into between MMTC and the Steel Mills of Japan in March, 1966 for supply of iron ore from Kiriburu at the rate of 2 million tonnes per annum for a period of 3 years commencing from 1st April, 1966, N.M.D.C. was able to supply about 17 lakh tonnes during 1966-67.

68. The prices to be paid by the Japanese Steel Mills for different supplies were indicated in the agreements as entered into between MMTC and the Steel Mills of Japan from time to time. A seperate agreement was entered into between MMTC and NMDC on the 27th May, 1967 indicating details of prices to be paid to NMDC for its different supplies. Under this agreement, MMTC was required to pay NMDC fixed prices for Kiriburu ore (exported during the period upto 5th June, 1966) not related to the F.O.B.T. price indicated in MMTCs interim contracts with the Japanese Steel Mills, MMTC

was to pay railway freight and port charges. Approximate F.O.B.T. costs per tonne to MMTC for supplies made during these periods were as follows:

	Paid to NMDC (D.M.T.)	Railway freight	Port charges	MMTC's total F.O.B.T. cost
	Rs.	Rs.	Rs.	Rs.
1964-65 .	15·50	21·20	8·00	44·70
1965-66	15·60	21·20	8·00	44·80
1966-67 (from 1-4-66 to 5-6-66) . .	16.25	21·20	8·00	45·45

69. Allowing for a provision of 5 per cent for moisture content, freight and port charges, MMTC's F.O.B.T. cost per D.M.T.* would be Rs. 46.16, Rs. 46.26 and Rs. 47.91 for the years 1964-65, 1965-66 and for the period 1st April, 1966, to 5th June, 1966, respectively. against the above FOBT costs, MMTC was realising from Japan about Rs. 37 per D.L.T.* for first interim supplies and about Rs. 38 per D.L.T. for the Second interim supplies. Therefore, losses for these supplies were suffered by MMTC.

70. This, however, does not mean that NMDC suffered no loss during this period. It suffered a loss of Rs. 182·48 lakhs in 1964-65, Rs. 68·17 lakhs in 1965-66 and Rs. 44·65 lakhs in 1966-67 primarily because it failed to produce at the rated capacity of 2 million tonnes per annum which resulted in very high cost of production.

71. With the devaluation of the rupee from June 6, 1966, all the risks and liabilities of MMTC under the Japanese contract were assumed by N.M.D.C. For the post-devaluation period, sales realisation of N.M.D.C. would be as follows:

	1966 Post devaluation estimate	Revised Post devaluation estimate	Post Devaluation of £ sterling estimate (19-11-67)
1	2	3	4
	(Rs. per tonne)		
A. FOBT sale realisation @ 54·23 shilling per wet metric tonne (5% moisture)	56·94	56·94	48·81

*1 long ton = 1·0 16 m/tonnes.

1	2	3	4
B. FOR cost Kiriburu .	15·84	18·09	18·09
C. 1. Railway freight .	23·00	23·00	23·00
2. Port charges .	9·00	9·00	9·00
3. Incidentals. .	1·50	1·50	1·50
4. MMTC's commission . .	1·00	1·00	1·00
5. Export duty	10·00	10·50	10·50
TOTAL : C.	44·50	45·00	45·00
Net earnings (A—B+C). .	(—) 3·40	(—) 6·15	(—) 14·28

72. It will thus be seen that during the pre-devaluation period NMDC suffered losses on its sale because its cost of production was much higher than the price received by it from MMTC. After devaluation the Corporation could have earned some profit but owing to imposition of export duty it failed to do so. With the devaluation of £ sterling the sales realisation of NMDC from Japan has been reduced by about Rs. 8 per tonne. The execution of the Kiriburu Iron Ore Project has been taken up for the mutual advantage of both India and Japan, but under the existing terms of the contract N.M.D.C. cannot make any profit out of this deal unless it lowers its cost of production.

73. It is pertinent to mention here that even after knowing the uneconomic nature of the project, the Kiriburu Iron Ore Project was assigned to NMDC in pursuance of an agreement entered into between the Government of India and the Japanese Steel Mission in 1958. The Committee feel that if the Government want NMDC to function as a commercial undertaking, they should devise ways and means so that the earnings of the Corporation from sale of iron ore do not fall below its cost of production.

N. Commission to MMTC

74. According to the terms of the agreement entered into between the Government of India and the Japanese Steel Mission in 1958, NMDC was to supply iron ore from Kiriburu at the rate of 2 million tonnes per annum from January, 1964. Since the Corporation failed

to supply iron ore at the stipulated rate from January, 1964 MMTC entered into three interim agreements with the Japanese Steel Mills for export of 9,60,000 tonnes of ore from Kiriburu during the period June, 1964 to March, 1966. For its supply of ore during this period NMDC was paid at fixed rates (FOR Kiriburu) by MMTC. From April, 1966 ore was being supplied from Kiriburu on long-term basis at the rate of 2 million tonnes per annum. Under this agreement also NMDC was paid a fixed price for its supply till the date of devaluation of the rupee.

75. With the devaluation of the rupee from June 6, 1966 all the risks and liabilities of MMTC under the Japanese contract were assumed by NMDC and MMTC were to be paid commission at the rate of Re. 1 per tonne for its services.

76. During evidence the Managing Director NMDC stated that under the policy of the Government of India, the Corporation was required to route its supplies through MMTC and the latter being a trading concern would not accept commission at a rate less than Re. 1 per tonne. When the Managing Director was asked to state if NMDC could export its ore without the services of MMTC, he replied that it was quite competent to handle the work independently if permission was granted.

77. NMDC has been incurring continuously losses in its supply of ore to Japan. Payment of commission to MMTC adds to its losses by Rs. 2 million per annum. Since the actual supplies are being shipped directly by NMDC, there seems to be no reason why it cannot service other aspects of the contract itself. In any case, a commission of Re. 1|- per tonne seems to be on the high side, particularly in view of the fact that MMTC is also a public undertaking. The Committee would, therefore, suggest that NMDC might work out its cost of exporting ore independently. If the management is competent enough to handle the work and the cost does not work out to be more than the commission now paid to M.M.T.C., it might be more economical if the work is taken over by N.M.D.C.

O. Sales Realisation

78. Statement given below indicates the amount of iron ore shipped by N.M.D.C. from Kiriburu and money received by it from

M.M.T.C. till 31st January, 1968:—

	Quantity shipped (Lakh tonnes)	Amount received from MMTC: Date of receipt	Amount (Rs. in lakhs)	
1964-65	1·44	..	Nil	
1965-66	7·98	30-3-66	100	100
1966-67				
(i) Pre-devaluation	3·00	..	Nil	
(ii) Post devaluation .	14·68	5-7-66	25	
		30-7-66	30	
		30-8-66	13	
		21-9-66	14	
		25-10-66	12	
		1-11-66	30	
		7-12-66	25	
		16-1-67	40	189
1967-68 (Upto 31-1-1968)	16·06	20-4-67	60	
		13-6-67	15	
		14-9-67	10	
		9-10-67	10	
		29-11-67	10	
		8-1-68	15	
		10-1-68	35	
		14-1-68	40	195
TOTAL .	43·16			484

79. It will be seen that NMDC did not receive any payment from MMTC before 30th March, 1966. The fact of non-receipt of money from M.M.T.C. for the sale of Kiriburu ore was brought to the notice of the Government in February, 1965. But N.M.D.C. actually requested M.M.T.C. to make payment against the ore supplied for export from Kiriburu for the first time on the 24th March, 1966.

80. The question of payments by M.M.T.C. to N.M.D.C. for the ore supplies was considered by the Committee of Secretaries at the meeting held in June, 1965 and it was, *inter alia* decided that M.M.T.C. should pay a sum of Rs. 8:82 per tonne (direct cost of ore to N.M.D.C. However, no payment was made by M.M.T.C.

81. Due to non-receipt of payments from M.M.T.C., N.M.D.C. had to carry on its revenue operations during 1964-65 and 1965-66 by diverting its capital funds. To tide over the situation, a proposal was sent to the Government on the 4th February, 1965, requesting for raising the limit of overdraft to Rs. 60 lakhs from Rs. 20 lakhs. The Government agreed to this for a period of three months but this was not accepted by the State Bank of India. Having realised that the export price of Kiriburu ore was not sufficient to meet the collective costs of all the agencies and in view of various other considerations, the Informal Committee of Secretaries, at the meeting held on the 10th March, 1966, decided that M.M.T.C. should pay to N.M.D.C. the market price prevalent from time to time for the particular grade of ore exported (The price payable was to be settled between the two agencies). For this purpose that Committee recommended that the Ministry of Finance should consider sanctioning a short-term loan of Rs. 1 crore to M.M.T.C. to enable it to make payment to N.M.D.C. for the ore supplied. On this basis, N.M.D.C. approached M.M.T.C. and in response received Rs. 1 crore as an 'on-account' payment on the 30th March, 1966. Thereafter, "on account" payments have been made from time to time.

82. Prices of iron ore supplied from Kiriburu through MMTC during the period 1964-65, 1965-66 and 1966-67 were fixed only on the 27th May, 1967. During evidence when the Managing Director N.M.D.C. was asked to explain the reasons for supplying ore without fixing the price, he stated that the ore was supplied on the consideration that both NMDC and MMTC were in the public sector. This view was also shared by the Secretary of the Ministry. During evidence the Secretary added that in the beginning NMDC could not make a correct claim because due to teething troubles its cost of operation was very high. Only in March, 1966, N.M.D.C. demanded from M.M.T.C. a price of Rs. 17 per tonne for its supplies.

83. It would be seen that the Government had advanced loans to N.M.D.C. amounting to Rs. 615:62 lakhs. These loans carried interest @ 6 per cent per year in respect of loans drawn upto 30th April, 1965 and 7 per cent per year for loans drawn thereafter. The amount of penal interest accrued to the end of 1966-67 for Kiriburu amounted to Rs. 6.65 lakhs due to default by N.M.D.C. in repayment of the principal and interest thereon on the due dates.

84. The elementary principle of any commercial operations is that the sale price of goods or services should be settled before entering into any commitment. The management of N.M.D.C. obviously failed to follow this basic principle and the price for iron ore was settled only on the 27th May, 1967. The Managing Director of N.M.D.C. stated during evidence that the question of prices was left unsettled as it was considered that N.M.D.C. and M.M.T.C. were both public undertakings and this aspect of the matter could be settled later. In a written reply to a question N.M.D.C. has, however, stated that the question of payment of the amount was first broached by N.M.D.C. in March, 1966, only.

85. This goes to prove that N.M.D.C. itself was not vigilant and anxious to realise its dues from M.M.T.C. Had the management made serious efforts to realise the outstandings the payment which MMTC made in March, 1966, could have been obtained earlier.

86. This regrettable lapse on the part of NMDC to realise its outstandings from MMTC had serious repercussions on its finances. On the one hand it had to divert its capital loans to meet its revenue operations and on the other it had to default in the re-payment of the loans. Had this outstanding amount been obtained earlier, NMDC would have been able to meet its revenue operations and pay back its own liabilities towards Government loans drawn by it.

87. It is curious that even the administrative Ministry, although it was aware of the financial difficulties of NMDC, did not take any action to solve this financial tangle. The Committee regret to note that in this case, NMDC was too complacent to look after its own good and the Ministry also failed to give proper advice and direction at the appropriate time.

88. According to NMDC, taking into account all the payments received by it so far, a total amount of Rs. 182·5 lakhs was due from MMTC. The matter was stated to have been taken up with MMTC. The points under discussions were:—

(i) The Railways initially collected the railway freight at the rate of Rs. 32·96 per tonne and refunded the excess over the approved rate of Rs. 23·00 per tonne later on. Besides, the rebate on railway freight was allowed only on the quantity exported (only on proof of export and not on the quantity shipped from Kiriburu to Visakhapatnam). MMTC had already been debiting NMDC for the railway freight actually paid and not on the basis of amounts payable for the quantities shipped. The refunds received from the Railways were adjusted in the accounts as and when received by MMTC.

(ii) In respect of port charges, MMTC had been debiting NMDC at the rate of Rs. 10·75 per tonne instead of Rs. 9,00 per tonne (for the post-devaluation period). Government had since decided that the Vizag Port Trust should charge only Rs. 9·00 per tonne from 1st February, 1968 and arrange for the refund of the excess amount recovered during the period 6th June, 1966 to 31st January, 1968. The matter regarding the refund is being pursued with the Ministry of Transport and Shipping and the Vizag Port Trust. In the meanwhile, NMDC has obtained an interim payment of Rs. 40 lakhs on this account from MMTC.

(iii) In the pre-devaluation period MMTC had excess debited NMDC in respect of railway freight and port charges for the moisture content of the ore shipped. Under the arrangements agreed to, there was, however, no stipulation that NMDC would have to bear these charges in respect of the moisture element. At that time, MMTC was to bear the railway freight and port charges for the quantity of ore shipped.

(iv) *Discrepancies in computations.*

89. NMDC has been passing through period of acute financial stringency. Non-receipt of sale-proceeds in time has compelled NMDC to divert its capital funds to meet the increasing working capital requirements which ultimately result in increased interest charges. Due to incurring heavy losses and the difficult ways and means position, in the past the Corporation has not been able to pay interest charges on the capital loans from the Government resulting in the payment of penal rate of interest. In view of this position the Committee recommend that the Government should take immediate steps to ensure that NMDC gets its full dues realised without any further delay.

P. Profitability

90. Statement given below shows the profitability of Kiriburu Iron Ore Project as estimated from time to time:—

	1961 estimate	1966 Post-devaluation estimate	Revised Post-devaluation estimate	After-devaluation of £ Sterling w.e.f. 19-11-1967
				(Rs. per tonne
A. 1. Operating cost . .	5·15	7·44	10·11	10·11
2. Interest on Govt. loan	1·50	2·17	2·17	2·17
3. Interest on Yen credit and working capital .	0·50	0·57	0·40	0·40
4. Royalty . .	1·75	1·75	1·50	1·50
5. Depreciation . .	2·71	3·91	3·91	3·91
Cost F.O.R. Kiriburu . .	11·61	15·84	18·09	18·09
B. 1. Railway freight	23·00	23·00	23·00	23·00
2. Port charges . .	9·00	9·00	9·00	9·00
3. Incidentials . .	1·50	1·50	1·50	1·50
4. M.M.T.C.S Commission	1·00	1·00	1·00	1·00
5. Export Duty . .	—	10·00	10·50	10·50
FOBT Cost (Vizag) (A+B) .	46·11	60·34	63·09	63·09
C. FOBT sale realisation @ 54·23 shilling per west metric tonne (5% moisture) . . .	56·94	56·94	56·94	48·81
D. 1. Loss per tonne .	+10·83	(—)3·40	(—)6·15	(—)14·28
2. Annual loss for 2 million tonnes shipment (Rs. in lakhs) . .	236·60	(—) 68·00	(—) 123·00	(—)285·60

91. It will be seen that as per 1961 estimate the Kiriburu Project should have earned an annual profit of Rs. 236·60 lakhs. But the

project could not earn any profit during this period upto devaluation because the production during this period was much below the rated capacity of 2 million tonnes per annum which resulted in very high cost of production. After devaluation the project would have earned some profit but owing to imposition of export duty @ Rs. 10 per tonne, it started incurring losses. Its losses increased further as the cost of production showed an upward trend. Then came the devaluation of pound sterling which forced the project to run into further heavy losses. As the position stands today the project will go on incurring a loss of Rs. 250·60 lakhs per annum. Besides, the project has accumulated losses of Rs. 295·30 lakhs till the end of 1966-67.

92. From an analysis of the figures it has been observed that while the devaluation of the £ sterling, has certainly had an adverse effect on the profitability of the project, the other factors such as imposition of export duty at the rate of Rs. 10:50 per tonne and increased cost of production to the extent of Rs. 6 per tonne are equally responsible for making the project an uneconomic one.

93. The wisdom of taking up a losing commercial venture is in itself questionable. But having launched the project and invested huge funds therein the Government and management should have taken all steps to keep the losses to the minimum. The Committee are not sure whether there is any hope of the project becoming profitable in the near future. They can only urge that no efforts should be spared to reduce costs and increase production so that losses can be minimised to the extent possible, if they cannot be eliminated.

Q. Sharing of Losses

94. In the context of taking up the Kiriburu Iron Ore Project for development a note (Appendix I) put up to the Cabinet in March, 1958 stated, *inter alia*, as follows:—

> "Since this is a developmental project and involves a long lead from the mines to Port, it is difficult to estimate whether the Project will be profitable. In the event of market prices going down, there may be losses which will have to be borne by the Government of India, the allocation of the losses between the Mining, Port and Railway Ministries being decided in due course."

95. Losses incurred by the Kiriburu Project during the last three years are as given below:—

Year	Loss	Commu-lative loss
	(Rs. in lakhs)	
1964—65	182·48	182·48
1965—66	68·17	250·65
1966—67	44·65	295·30

96. During evidence when the Managing Director was asked to explain how these losses have been distributed among various authorities, he informed the Committee that till the date of devaluation of the rcpee, NMDC was paid fixed prices for its supplies and the entire loss on the sale of iron ore to Japan was being borne by MMTC. After devaluation the entire losses on the sale of iron ore were being borne by NMDC. It was also stated that the Government were not specifically requested for distribution of the losses among the Mining, Railways and Port authorities.

97. As regards the losses shared by the different authorities since devaluation in June, 1966, the Secretary, Ministry of Mines & Metals stated during evidence that the Railways and the Port Trust had given some relief to NMDC by reducing their charges. Normally the Railways would have charged Rs. 30 per tonne but actually they were charging only Rs. 23 per tonne. Similarly, normal charges of the Port Trust were Rs. 10·75 per tonne but they were charging only Rs. 9 per tonne from NMDC.

98. The note put up to the Cabinet had stated that "In the event of market prices going down, there may be losses which will have to be borne by the Government of India, the allocation of the losses between the Mining, Port and Railway Ministries being decided in due course". For its supplies during the periods 1964-65 and 1965-66, NMDC was paid fixed prices, which were the prevalent market price of iron ore in 1958. **While the Corporation failed to furnish the information regarding the international market price* of iron ore in 1958, it is clear from the various costs of production worked out by NMDC and the prices of iron ore received by it from time to time, that high cost of production was the principal reason for incurring losses by NMDC during the pre-devaluation period. The losses**

*As per information furnished by the Department of Mines and Metals on 3-1-68 the price was stated to be $ 8.26 (FOB) per tonne of Rs. 3.25 per tonne.

were therefore not due to the "market prices going down" and NMDC therefore, cannot claim from other authorities a share of the losses accumulated by it during that period. The Committee, however, feel that, as a major reason for the Project's inability to reach full production in time was the delay in the completion of the Ore Handling Plant at Visakhapatnam, the Port authorities cannot be absolved of bearing some part of the initial losses.

99. The Committee were informed that the whole question of distribution of losses being incurred by the Kiriburu Project right from the beginning was being reviewed comprehensively. Negotiations were also taking place with the Japanese whether to some extent the adverse effects of the devaluation of the pound-sterling could be made up. The Committee hope that some settlement on this matter will be reached in the near future.

III

BAILADILA IRON ORE PROJECT (DEPOSIT NO. 14)

A. The Project

100. Bailadila Iron Ore Project is situated in the Bastar District of Madhya Pradesh. In pursuance of an agreement entered into between the Government of India and the Japanese Steel Mission in March, 1960 for supply of 4 million tonnes of sized iron ore per annum to Japan commencing from the end of 1966 for a period of 15 years in the first instance, the Bailadila Iron Ore Project (Deposit No. 14) was assigned to N.M.D.C. in the year 1961 for development and exploitation. The Bailadila area contains 14 identifiable deposits of iron ore numbered from 1 to 14. The Japanese Steel Mills agreed to provide financial assistance to the extent of $ 21 million to meet the foreign exchange cost for the import of plant and machinery required for the mining and railway portion of the Bailadila-Visakhapatnam Project.

B. Feasibility Study

101. The Asada Mission, a delegation sent by the Japanese Steel Mills in 1957, after surveying major iron ore deposits in the country recommended amongst other places, Bailadila as the major source of iron ore supply to Japan. Following the recommendation of the Japanese Mission, Government of India took up the prospecting work at Bailadila Deposit Nos. 10, 14 and 5 through the Indian Bureau of Mines. When the work of prospecting of these deposits was in an advanced stage, the Japanese Steel Mills sent another technical mission in June, 1963. The engineers from Japan and the technical officers of N.M.D.C. surveyed and reconnoitered these deposits. They studied the results of the detailed prospecting done till then and came to the conclusion that Deposit No. 14 might be exploited in the first instance.

102. The Indian Bureau of Mines had conducted surveys, geological mapping, core drilling, shallow and deep pitting, aditing, chemical analysis, etc. On the basis of these prospecting works, the Iron Ore Division of N.M.D.C. prepared a Project Report and submitted it to the Government some time towards the end of September, 1963. **While the merit of the prospecting work done by the I.B.M. is not known to the Committee, they fail to understand why the Planning**

Division of N.M.D.C. which is equipped with highly paid technical officers did not carry out detailed prospecting work but depended solely on the data furnished by the Indian Bureau of Mines. In the case of Kiriburu Project the detailed prospecting was done by the I.B.M. The troubles and losses of N.M.D.C. at that project were attributed to the defective prospecting done by the IBM. The Committee wonder if N.M.D.C. has not again assigned the work to the I.B.M. in order to escape responsibility. They feel that if NMDC was not capable of undertaking the job itself its Planning Division should have supervised and checked the performance of the IBM so that it could be held responsible for the shortcomings if any noticed later on.

C. Project Report

103. As has already been stated N.M.D.C. prepared the Project Report of Bailadila Deposit No. 14 on the basis of prospecting data furnished by the Indian Bureau of Mines. The Project Report so prepared was scrutinised by the Japanese and Indian iron ore experts and the revised Project Report was submitted to the Government of India in April, 1964 for approval.

104. The Nittetsu Mining Consultants Company Ltd., Tokyo, who were requested to examine the Project Report on behalf of the Japanese Steel Mills commented that after taking topographical conditions of the area and other factors into consideration, it would be almost impossible to raise 4 million tonnes of concentrates per annum from Bailadila Deposit No. 14 alone. They suggested a maximum of 2 million tons per annum as the most reasonable figure that could be produced continuously with assurance. During evidence the Chief of Iron Ore, N.M.D.C. stated that to overcome the difficulties as pointed out by the Japanese firm, some changes in the lay-out of the mine and provision for some specialised equipment were required. Since those things had been provided in the revised Project Report, now there would be no difficulty in raising 4 million tonnes of ore per annum from the Bailadila Deposit No. 14.

105. Performance of N.M.D.C. in regard to exploitation of iron ore at Kiriburu has not been very happy. This was so primarily because it started the work there on the basis of a defective Project Report. While it is satisfying to note that certain changes have been included in the revised Project Report to remove the doubts expressed by the Japanese firm in raising 4 million tonnes of ores per annum from Deposit No. 14, the Committee cannot be sure about the outcome till the project goes into full production. The

'Committee hope that the management will exercise utmost care promptitude and make concerted efforts in executing the project and avoid the repetition of sad performance in Kiriburu.

D. Project Estimates

106. Project estimates for Bailadila Deposit No. 14 as estimated in the original Project Report and as revised recently are given below:—

S. No.	Project Estimates	Sanctioned capital estimate	Revised capital estimate	Excess(+) Savings(—)
1	2	3	4	5
		(Figures in lakhs of rupees)		
A.	(i) Share of preliminary expenses .	12·34	12 34	—
	(ii) Proportionate liability for payment to I.B.M. . . .	9·00	9·00	—
	(iii) Detailed prospecting, exploration, removal of over-burden and preparation of Mining Benches .			
	(a) Exploration & Prospecting .	5·00	12.83	(+)7·839
	(b) Preparation of Mining benches	10·00	53·95	(+)43·95
B.	Land Compensation and Leases .	5·00	1·80	(—)3·20
C.	(i) Plant and Machinery. . .	677·15	1184·08	(+)506·93
	(ii) Foundation and supports for Plant & Machinery . . .	71·70	101·81	(+)30·11
D.	(i) Civil Works Township . .	118·20	170·71	(+)52·51
	(ii) Civil Construction (Other than township)	321·60	378·72	(+)57·12
E.	Initial facilities and Establishment expenses.			
	(i) Initial facilities	29·00	31·09	(+)2·09
	(ii) Establishment and other expenses	54·50	130·00	(+)75·50
	(iii) Railway siding . . .	15·00	51·00	(+)36·00

1	2	3	4
F. Miscellaneous			
(i) Proportionate share of Head Office Expenses	25·00	40·00	(+)15·00
(ii) Interest during construction .	76·22	154·37	(+)78·15
(iii) Spare parts & Inventories	10·80	107·00	(+)4·20
G. Contingencies .	42·00	—	(—)42·00
TOTAL . .	1,574·51	2,438·70	(+)864·19
Less Credits .	(—)	75·85	(—)75·85
Net Total .	1,574·51	2,362·85	(+)788·34

107. The original capital estimates were for Rs. 15.75 crores with a foreign exchange component of Rs. 4.78 crores. The revised capital estimates are for Rs. 23.63 crores (Rs. 24.39 crores less credits for Rs. 0.76 crores) with a foreign exchange component of Rs. 6.87 crores. Reasons for increase in the revised estimate may be classified under the following broad heads:—

A. *Items which could not be anticipated.*	(Rs. in lakhs)
(1) *Plant and Equipment*	
(i) Increase in customs duty	161·00
(ii) Increase on account of devaluation of rupees . .	164·00
(2) *Civil Works*	
(i) Increase in tunnel work. . .	19·00
(ii) Increase in water supply augmentation . . .	24·00
(3) Increase in railway siding	36·00
(4) Interest (on yen credit) during construction (devaluation component)	15·00
	419·00

(Rs. in lakhs)

B. *Increase in scope of work*		
1. Plant & Machinery . . .	76·00	
2. Additional mining benches	30·00	
3. Drilling operation for exploration & prospecting—additional	8·00	
4. Construction equipment for which credit is obtained on completion of work . . .	32·00	146·00
D. *Delay in Completion*		
1. Share of H. O. expenses . . .	15·00	
2. Establishment expenses	45·00	
3. Interest charges	63·00	1 23·00
Escalation & inadequate provision and higher construction cost by NBCC for civil works.		
1. Preparation of Mining Benches . .	14·00	
2. Plant & Machinery	73·00	
3. Foundations & supports for Plant & Machinery	30·00	
4. Civil works for township	53·00	
5. Civil construction other than township	14·00	
6. Establishment & other expenses . . .	31·00	215·00
E. Miscellaneous excess .	6·00	
Total excess : .	909·00	
F. *Savings*		
(i) Land compensation	3·00	
(ii) Contingencies . . .	42·00	(—)45·00
		864·00

108. The figures for revised estimate furnished by the management of NMDC in July, 1967 were stated to be provisional. During evidence the Financial Adviser, N.M.D.C. stated again that the revised estimates had not yet been finalised. The management, however, furnished no satisfactory reasons for not finalising the estimates so far. The Project was originally scheduled to go into production by December, 1966. During evidence the Managing Director stated that by the 15th February, 1968 construction and installation of the plant would be completed.

109. The Committee regret to note that the capital estimates have not been finalised uptil now even though the project is nearing completion. There has been increase of about 50 per cent in the provisional revised estimates over the original estimates. The failure of NMDC to finalise the estimates indicates that the management has not been able to assess the project requirements up till now. The Committee take a serious view of this lapse and urge that the capital estimates for Bailadila Deposit No. 14 should be finalised without any further loss of time.

110. It will be observed that there has been an increase of Rs. 146.00 lakhs due to increase in the scope of work; an increase of Rs. 123.00 lakhs for delay in completion of the work including Rs. 63 lakhs interest charges and an increase of Rs. 215.00 lakhs for inadequacies in provision for various works. **These upward revisions in estimates are bound to reflect adversely in the cost of production. The Committee consider such upward revisions most undesirable from the point of view of economics of the project. They regret to note** that the management of N.M.D.C. even after its initial failure **in making a correct estimate for the Kiriburu Project and an experience of 10** years has not learnt from its past mistakes and again failed to prepare a satisfactory project estimate for the Bailadila Project.

E. Establishment Charges

111. Establishment charges as per original Project Report estimates, as per revised estimates from time to time and actual expenditure are given below:—

	Sanctioned Project Estimate	Expenditure till end of Dec. 66	Revised Estimate (Provisional)	Actual till Dec. 1967	Second Revised Estimate
					(Rs. in lakhs)
Establishment Charges	54·50	138·45	108·00	158·00	158·00

112. Principal reasons for increase in the establishment charges are stated to be that the construction phase could not be completed by the scheduled time on account of late receipt of machinery requiring foreign exchange. There has also been time lag between the date of completion of the construction phase and the production phase due to delay in the availability of power supply from Madhya Pradesh Electricity Board. The expenditure on account of establishment and other charges over the extended period of construction has been mainly responsible for the excess over the original estimates.

113. Over a period of 4 years, there has been a considerable increase in the Dearness Allowance which has also been responsible for the increase in expenditure over the original estimates.

114. During evidence the Financial Adviser, N.M.D.C. stated that the original estimates were sanctioned in December, 1964. Thereafter there had been no formal revision of the estimate and the figures of actual expenditure had been given from time to time. The revised estimates for establishment charges was now being finalised.

115. **It is clear from the foregoing paragraphs that the management of N.M.D.C. has neither adhered to the original project estimates of establishment charges nor made any formal revision of the estimates. On the contrary, for some reason or the other it allowed the expenditure to run on the high side without fixing any limit. The Committee are not satisfied with the manner in which the establishment charges have been allowed to be increased. There may be some justification for marginal increases but a three hundred per cent increase in establishment charges is hardly justifiable. The Committee regret to note that the management of N.M.D.C. exercised little control over the establishment charges of Bailadila Deposit No. 14. Taking account of this with its performance at the Kiriburu Project the Committee cannot but recommend replacement of the whole set up responsible for this state of affairs.**

F. Construction of the Project

116. Bailadila Iron ore Project (Deposit No. 14) was taken up for execution on the 8th March, 1961. The project was scheduled to be completed by December, 1966. The target date for completion has been revised from time to time. Till June, 1966 management of NMDC was of the view that the project would be completed by December, 1966. The management changed its view in September,

1966 when it was stated that the project would be completed by April, 1967. In December, 1966 it was indicated that the project would be completed by June, 1967 and this view was held till March, 1967.

117. The target date for the completion of the various phases of works as per the revised* time schedule drawn by the Corporation, probably after March, 1967, are given below:—

	Revised scheduled date of completion	Expected date of completion
1. Detailed Prospecting . . .	10/66	In time (complete)
2. Preparation of Mining benches	10/66	This is a continuous process and will continue till the project is commissioned
3. Township . . .	6/67	10/67
4. Colony & Public Buildings	10/67	Almost complete
5. Civil Works other than Township	6/67	11/67
6. Hill Top Road .	3/67	12/67
7. Mine Road . . .	3/67	10/67
8. Crushing Plant & Primary Surge-pile	4/67	11/67
9. Screening Plant & Intermediate stockpile	6/67	11/67
10. Tunnel & Conveyor to screening plant	3/67	11/67
11. Lump Ore & Fine Ore Conveyor .	8/67	11/67
12. Thickeners . . .	3/67	11/67
13. Lump Ore Stockpile Conveyor .	2/67	11/67
14. Structural Steel works .	7/67	11/67
15. Wagon Loading arrangements	7/67	11/67
16. Excavation . .	6/67	9/67
17. Dam at Kirindul. . .	3/67	10/67

*Date of drawing this schedule is not given. Even though the management was asked to furnish original schedule for construction, the same was not been furnished.

1	2	3
18. Erection of Plant . .	5/67	10/67
19. Conveyor . . .	5/67	10/67
20. Screening Plant conveyers	6/67	10/67
21. Water Supply .	4/67	10/67
22. Power Supply	The power supply to Bailadila by Madhya Pradesh Electricity Board is now expected to be ready by April, 1968,. Civil works in connection with the main receiving sub-station on the project site are progressing.	

118. During evidence, tne Managing Director, NMDC stated that the construction of the plant and its installation would be completed by the 15th February, 1968. The plant was likely to go into trial production only after getting power supply from the Madhya Pradesh State Electricity Board by the end of April, 1968 and the operation at the rated capacity of 4 million tonnes per annum would start by the end of 1968 monsoon season.

119. It will be seen that the construction of the project has been delayed by more than one year and an additional expenditure of Rs. 123.00 lakhs had to be incurred due to this reason. The Committee are constrained to note that NMDC has not been able to complete its second iron ore project even according to the latest revised scheduled drawn less than a year ago. Constant revision of the schedules indicates lack of coordinated planning on the part of the management. Even now commencement of the initial trial production depends upon getting the power supply. The Committee would urge upon the Management to take all steps to ensure that there is no delay on the part of the M.P. Electricity Board to supply the power by the end of April as promised.

G. Agglomeration of Bailadila Fines

120. With a view to economically utilise the fines generated during the exploitation of the various iron ore deposits at Bailadila and to make the best possible use of the blue dust likely to be made available during mining operations in the area, NMDC has commissioned M/s. Mitsubishi Shoji Kaisha of Japan to take up the techno-economic feasibility study on the agglomeration of iron ore fines and blue

dust. Under this agreement, Mitsubishi would depute their expert engineers for collection of suitable samples of iron ore from the Bailadila area. They would arrange for tests on the samples of iron ore to be conducted at the laboratories of the Battelle Memorial Institute, Columbia, Ohio, USA. Based on their evaluation of the results of these tests Mitsubishi would prepare a techno-economic study on the feasibility of beneficiation and agglomeration by pelletisation of the iron ore fines and blue dust at Bailadila. For the services to be rendered by Mitsubishi, they were required to be paid a sum of $ 12,000 in rupees.

121. In this connection Dr. T. Banerjee, scientist-in-charge of National Metallurgical Laboratory and a Director of NMDC has stated as follows:—

"Technical consultancy and testing of our captive iron ore on a laboratory on pilot plant scale for feasibility studiies to evaluate the possibility of their economic exploitation and necessary beneficiation etc. should be entrusted to the National Metallurgical Laboratory where we have got plant scale facilities and a cadre of trained and competent scientists who have been engaged on similar work for all the major captive Indian iron ore mines of private and public sectors, including the NMDC and have earned international repute for outstanding work on iron ore studies including—beneficiation, sintering and pellatising, etc."

122. In the written replies, NMDC has stated that necessary technical know-how for preparing techno-economic feasibility study on the pelletisation of iron ore fines and blue dust at Bailadila and other iron ore deposits in the country is not available in India. However, samples of the iron ore fines from Bailadila for tests in foreign countries were prepared at the National Metallurgical Laboratory. They also carried out parallel tests on the samples drawn by foreign experts. During evidence when the Committee wanted to know if the National Metallurgical Laboratory was consulted before entering into the agreement with M/s. Mitsubishi Shoji Kaisha of Japan, the representative of NMDC stated that National Metallurgical Laboratory was not consulted categorically but the Director of the National Metallurgical Laboratory was also a member of the Board of Directors of NMDC. When the Committee further enquired about the opinion expressed by the Director of National Metallurgical, Laboratory in the matter, the Managing Director stated that he was not present at the meeting in which the decision was taken. He was probably not favourably inclined towards it but there was nothing on record. During evidence when the Secretary of the Ministry was asked to explain why the National Metallurgical

Laboratory was not consulted before entering into the agreement he stated that the Government were doubtful if the National Metallurgical Laboratory could take up the job and therefore the Laboratory was not consulted specifically for the purpose. The Secretary also stated that the National Metallurgical Laboratory had not prepared any feasibility report of the kind so far. One of the reasons for giving the job to the Japanese firm was that the fines were to be sold abroad and it might be better to have the test carried out abroad so that they could carry conviction in the export market. During evidence the Chief of Iron Ore, NMDC stated that the National Metallurgical Laboratory had got first class testing facilities and in fact, the Laboratory had done more work on behalf of NMDC than on behalf of any other agency but no organization within the country possessed the know-how or the capacity to produce the feasibility report, which was something more than mere testing facilities.

123. All this goes to show that the National Metallurgical Laboratory was not given a chance to say if it had developed the capacity of preparing a feasibility study by that time. The committee regret to note that the decision to engage M/s. Mitsubishi Shoji Kaisha for preparing the feasibility report on the pelletisation and beneficiation of iron ore fines and blue dust at Bailadila was taken more on the consideration of export market rather than on the merit of the firm. It is surprising that on the plea of creating conviction in the export market, an Indian laboratory like National Metallurgical Laboratory was ignored and denied any opportunity of consultation. If Indian institutions of standing are not given chance to take up advance projects in their line the prospects of developing indigenous know how are very bleak. The Committee suggest that preference should be given to Indian institutions.

124. It had been provided in para 16 of the agreement with M/s. Mitsubishi Shoji Kaisha that "N.M.D.C. agreed that until the completion of the works to be done by Mitsubishi hereunder, it shall not retain the services of any other party for the purpose of feasibility study as described herein". When the Committee wanted to know the justification for including such a preventive clause in the agreement, the Financial Adviser, N.M.D.C. stated during evidence that the clause was agreed to on the consideration that there was no other party in view for that purpose. About the merit of the clause the Secretary of the Ministry stated during evidence that the agreement provided for a time schedule within which the work was to be completed by the firm and there was no point in entrusting the same studies to any other party at an extra cost.

125. The Committee are unhappy at the inclusion of such an unfavourable clause in the contract. It prevented N.M.D.C. from getting a feasibility study made by other sources. The existence of such a clause is all the more regrettable because it restricted the autonomy of NMDC for a specific period of time, and made it wholly dependent for that purpose on one foreign agency. The Committee recommended that the undertakings should exercise due care and caution while drawing up agreements and ensure that such one-sided and unfavourable clauses are not allowed to be inserted in the agreements.

H. Contract with N.B.C.C.

126. It is seen that the contract for construction of 175 quarters at Hill Top at Bailadila was given by NMDC to the National Buildings Construction Corporation by negotiation. Tenders for these quarters were advertised in April, 1964, on an all India basis. In response thereto only two tenders from M/s. A.B.C. Financiers (P) Ltd., and Sunil Construction Co., Ltd., were received. An estimated provision of Rs. 19·63 lakhs was made in the Project Report for the construction of these quarters but the tender quotations of the above firms were as given below:—

M/s. A.B.C. Financiers (P) Ltd., Rs. 29,13,339.88.

M/s. Sunil Construction Co., (P) Ltd., Rs. 25,83,910.27.

127. As the lowest tender was considered to be substantially higher than the estimated provision in the Project Report and the performance of M/s. A.B.C. Financiers in regard to construction of 200 quarters awarded to them earlier was extremely poor, the construction of these 175 quarters was entrusted to N.B.C.C. in November, 1964, on cost plus 15 per cent basis subject to the provision that the accounts of N.B.C.C. would be open for scrutiny by N.M.D.C. There was neither any provision for ceiling on cost nor any penalty clause included in the agreement. Against the estimated cost of Rs. 19.63 lakhs included in the Project Report for the construction of these quarters, the completed cost of construction of N.B.C.C. worked out to be about Rs. 40 lakhs. On a point of clarification N.B.C.C. has stated that on the basis of tender estimates received by N.M.D.C. for Hill Top Works in 1965, N.B.C.C. had brought about a saving in the construtcion of these quarters.

128. N.M.D.C. expected that the Construction of these quarters would be completed by December, 1965, but actually only from April, 1966, N.B.C.C. started handing over completed quarters in batches and most of these quarters were stated to have been completed by December, 1966. N.B.C.C. has stated that no period was stipulated for completion of quarters at Hill Top to start with. How-

ever, keeping in mind the various difficulties at site, certain periods for completion were laid down in the various meetings with the General Manager, Bailadila Iron Ore Project. NBCC by and large kept upto these stipulated periods of completion.

129. The Committee regret to note that there has been appreciable increase in the cost of construction of these 175 quarters at Hill Top at Bailadila and the construction was not completed within the scheduled period. The management could blame NBCC if in the agreement, there were any provision for ceiling on costs and a penalty clause in regard to non-completion of the quarters within the stipulated period but no such stipulation were laid down in the agreement. They trust that the management would enter into agreements in future, with due regard to the cost of construction and lay down schedules for completion. The Committee recommend that responsibility should be fixed for drawing up such a faulty agreement.

I. Profitability

130. Statement below shows the profitability of Bailadila Deposit No. 14 as estimated from time to time:

		Original sanctioned estimate (Pre-devaluation of rupee)	Revised estimate (Post devaluation rupee)	Revised after devaluation of £ sterling with effect from 19-11-67
1	2		3	4
		(Rs. per tonne)		
A.1.	Operating cost	6·28	6·74	6·74
2.	Depreciation	3·53	4·20	4·20
3.	Interest on working capital	0·15	0·25	0·25
		9·96	11·19	11·19
4.	Royalty & Cess	2·50	2·50	2·50
5.	Interest on Yen Credit	..	0·80	0·80
6.	Interest on Government Loan	1·15	2·01	2·01
	F.O.R. Bacheli	13·61	16·50	16·50

1	2	3	4
B. 1. Railway freight	20·65	23·90	23·90
2. Port charges	9·49	10·75	10·75
3. Incidentals	1·50	1·50	1·50
4. MMTC's commission	1·00	1·00	1·00
5. Export Duty	..	10·50	10·50
	32·64	47·65	47·65
FOBT cost (Vizag) (AB)	46·25	64·15	64·15
C. FOBT sale realisation @ 64·98 shilling per wet metric tonne (5% moisture)	48·00	68·28	58·48
D. 1. Profit/Loss per tonne	(+) 1·75	(+)4·13	(—)5·67
2. Annual profit/loss for 4 million tonne shipment (Rs. in lakhs)	(+)70·00	(+)165·20	(—)226·80

131. It will be seen that the project, which was estimated to run on an annual profit of Rs. 165·20 lakhs, after devaluation of the rupee, would now run on a loss of Rs. 226·80 lakhs per annum. Consequent on devaluation of the pound sterling, sales realisation would be reduced by about Rs. 10 per tonne and this would result in loss of Rs. 226·80 lakhs on the sale of 4 million tonnes of iron ore per annum. The Committee were given to understand that the Minerals and Metals Trading Corporation had taken up the matter with the Japanese Steel Mills in order to get neutralised the adverse effect of devaluation of £ sterling.

132. Profitability of the Bailadila Project has been worked out on the basis of railway freight of Rs. 23·90 per tonne, the prevalent public tariff rate. It is, however learnt that the Railways have been charging Rs. 30·90 per tonne on an inflated mileage basis. In case the Railways continue to charge the inflated rate of Rs. 30·90 per tonne, the aggregate loss of the project would be further increased by Rs. 280 lakhs per annum. It is also seen that consequent on devaluation of the rupee, the Government imposed an export duty @ Rs. 10·50 per tonne and this had reduced the profit margin of the project by Rs. 10·50 per tonne which it would have earned otherwise. However, consequent on the devaluation of the pound sterling the Government have given no rebate to NMDC on his account.

133. The Bailadila Iron Ore Project was assigned to NMDC for development in pursuance of an agreement between the Government of India and the Japanese Steel Mission in March, 1960. **The Committee feel that it is the duty of the Government of India to see that the project does not suffer losses for reasons beyond its control. They hope that the Government of India will consider the advisability of giving necessary relief to the project by way of providing rebate on the export duty, reducing the railway freight and port charges, etc. so that the project may give a reasonable return on the huge investment made therein.**

134. The Committee have learnt with great regret that the Kiriburu and the Bailadila Iron Ore Projects are going to run at loss. According to the present estimates the annual loss will be Rs. 512.40 lakhs. Considering the fact that the private sector is also exporting iron ore to Japan and is making a profit, the Committee draw the only natural conclusion that the projects will be running into losses because of the failure of the management of N.M.D.C. As recommended earlier the Government should immediately weed out from N.M.D.C. those who do not come up to the mark.

IV

PANNA DIAMOND MINING PROJECT

A. The Project

135. The earliest mention about the occurence of diamonds in India is found in the Ain-e-Akbari, in which the Panna District of Madhya Pradesh is referred to as the only diamond producing area. The diamond belt of Panna stretches over an area of over 400 sq. miles. There are three essentially different types of diamondiferous deposits—(i) the volcanic pipes; (ii) the conglomerates and (iii) the alluvial gravels. Being aware of the importance of the diamond mining industry, the Government of India set up a committee towards the middle of 1955, to investigate into the problems of the diamond mining industry in the former state of Vindhya Pradesh, of which Panna formed a part. That Committee recommended that the industry should receive a very high priority in the Second Five Year Plan. That Committee observed that the methods of mining and washing were generally primitive and suggested that the Government should take over the diamond mining industry and create an independent Corporation with financial support from the Government which could employ experts to carry out all operations on modern lines. Following this, in December, 1959, the Government of India decided to entrust the development of diamond deposits of Madhya Pradesh to the National Mineral Development Corporation Ltd.

136. The existing Panna Diamond Mining Project comprises of two main mines *viz.*, Majhgawan with volcanic pipe deposits and Ramkheria with alluvial gravels.

B. Feasibility study

137. The Government of India in the Third Five Year Plan of the Department of Mines and Fuel, included a tentative target production of 90,000 carats of diamonds per annum from the diamond bearing areas of Madhya Pradesh. Following this decision, the Panna Diamond Mining Project was entrusted to the National Mineral Development Corporation for execution. While handing over the project to NMDC in December, 1959, the Department of Mines and Fuel stated as follows:—

> "Government expect that such prospecting, as is necessary, would be completed as early as possible and not later than March 31, 1961 and the Company would be in a position to

commence exploitation on a commercial scale by March/ June 1963 at the latest".

138. The then Chief Engineer of Panna Diamond Mining Project carried out prospecting and exploratory work in the area till March, 1961 and on the basis of that work he prepared a Project Report contemplating production of 65,000 carats of diamond per annum from the year 1963. However, the execution of the various works as envisaged in the Project Report prepared by the Chief Engineer in 1961 could not be taken up because the consultants on their appointment in 1962 expressed the view that the data, on the basis of which the Project Reports were prepared, were insufficient and more exploratory works were required. In reply to a question it was stated that no detailed knowledge was available in India about the exploration and exploitation of diamondiferous deposits, on the scale contemplated in the Project Report, adopting modern scientific methods.

139. From this it clear that although necessary technical know-how was not available with NMDC, the task of carrying out detailed prospecting and exploration works was entrusted to its Chief Engineer only to satisfy the administrative Ministry. The administrative Ministry also does not appear to have considered the ability of NMDC and its Chief Engineer in this regard before acccording its sanction. These primary lapses led to inordinate delay in the preparation of the final Project Reports and their execution. The detailed prospecting and exploratory works are the pre-conditions for successful execution of a project. The Committee regret to note that NMDC proceeded with the development of the project without getting those basic requirements fulfilled.

C. Project Report

140. As already stated the original Project Reports on Ramkheria and Majhgawan mines were prepared by the then Chief Engineer of Panna Diamond Mining Project on the basis of data collected through prospecting and detailed exploration carried out by the project till March, 1961. Project Reports of Ramkheria and Majhgawan mines were approved by the Government in November, 1961 and February, 1962 respectively. As per original Project Reports, Ramkheria and Majhgawan Mines were to produce 65,000 carats of diamonds per annum as under:—

(1) Ramkheria	..	12,500 carats
(2) Majhgawan		
(i) 1st Shift	..	30,000 carats
(ii) 2nd Shift	..	22,500 carats

141. The balance of 25,000 carats required to make up the target of 90,000 carats per annum laid down for the Third Five Year Plan, was proposed to be achieved, subject to feasibility, by the establishment of a third mine based on the conglomerates in respect of which prospecting operations were being undertaken to establish the necessary reserves.

142. When the Project Reports were prepared no detailed knowledge was available in India about the exploration and exploitation of *diamondiferous* deposits, on the scale contemplated in the Project Reports, adopting modern scientific methods. The Board of Directors, therefore, while considering the Project Report for the exploitation of Majhgawan volcanic pipe felt the necessity of appointing consultants for the project. Accordingly, a letter of enquiry was sent out, with the approval of the Government, to a few selected foreign firms. On the basis of the offers received, M/s. John Taylor & Sons, London, were appointed as Consultants in February, 1962. The Consultants after examining the Project Reports expressed the view that the quantum of prospecting and exploration work done in the two areas was not adequate. The Consultants, therefore, advised further pitting and sampling before undertaking the projects.

143. Following the advice of the consultants execution of the projects were suspended till exploratory works were over. Based on the exploratory works done by the Consultants, revised Project Reports for Ramkheria and Majhgawan mines were submitted in October and November, 1965 respectively. The Government did not sanction these reports and in September, 1966 deferred the projects for reasons of economy. Again in June, 1967, Ramkheria Scheme as prepared by the Consultants in October, 1965 and revised Majghawan Scheme based on the Second Hand Treatment Plant were submitted to the Government for approval. These schemes were stated to have been agreed to by the Government in December, 1967. The approved schemes envisage production of 11250 carats of diamonds from Ramkheria and of 12,000 carats from Majhgawan mines per annum.

144. From the above facts the Committee come to the conclusion that even though detailed technical know-how for exploiting various diamond deposits was not available with NMDC the Corporation prepared the Project Reports for Ramkheria and Majhgawan mines in 1961 and this resulted in revisions of the Project Reports. There is no evidence to show that the administrative Ministry examined the feasibility of these reports before according its sanction. The Committee consider it unfortunate that the management of NMDC started working on an entirely unrealistic project report with the full

knowledge of the Government. It is still more regrettable that the Project Reports had to be revised more than once and may have to be revised again in future, if the targets envisaged in the original project Report are to be achieved.

D. Engagement of Consultants

145. The Project Reports for Ramkheria and Majhgawan mines were prepared in April, 1961 by the then Chief Engineer, Diamond Mining Project, Panna on the basis of data which had become available as a result of prospecting operations conducted in the area from the time the diamond mining project was assigned to NMDC till March, 1961. No detailed knowledge was available in India about the exploration and exploitation of diamondiferous deposits, on the scale contemplated in the Project Reports, adopting modern scientific methods. While considering the Project Report for the exploitation of Majhgawan volcanic pipe, the Board of Directors, therefore, felt the necessity of appointing Consultants for the project.

146. A letter of enquiry was sent out, with the approval of the Government to a few selected foreign firms. Offers and expressions of interest were received from 9 firms (4 in U.K., 4 in Canada and 1 in U.S.A.). All these offers and expressions of interest were carefully examined by NMDC with reference to the scope of the consultancy as set forth in the letter of enquiry. The important points of consideration were whether the firms had the requisite specialised experience of diamond mining and prospecting for diamonds and whether they possessed, or could command, the necessary resources for the work, by way of acquiring expert personnel and other services to be employed specifically on the consultancy. Applying these tests and on comparative assessment of the offers/expressions of interest, the choice fell on M/s. John Taylor & Sons, London who were already well known in India having been associated with Kolar Gold Fields for a great many years.

147. The first consultancy agreement provided, *inter alia* that the Consultants would advise and assist the Corporation on all aspects connected with (a) programmes of exploration and prospecting already in hand as well as those to be taken up in due course; and (b) establishment of mines at Ramkheria and Majhgawan, including introduction of a second shift at Majghawan, as well as of a third mine based on the conglomerates. The Consultants were, in particular, to review and evaluate the results of the prospecting already done by the Corporation at Ramkheria and Majhgawan, draw up a programme for obtaining additional information, if, any, to enable detailed engineering of these two mines; and examine the Project

Reports and propose modifications, if any, from the point of view of (i) suitability of the mining methods as well as plant and equipment proposed and (ii) estimates of capital investment, operating costs, manpower requirements and time schedules for construction.

148. M/s. John Taylor & Sons, London were initially appointed as technical consultants for the project for a period of 3 years from the 15th February, 1962. The consultancy fees paid to the firm were £ 5000 in sterling and Rs. 1,23,000 in Indian rupees per annum. Their consultancy period was further extended for 3½ years with effect from the 15th February, 1965.

149. The appointment of the Consultants for a second term of 3½ years was considered essential for the following reasons:—

(i) to complete the programme of further prospecting at Ramkheria and Majhgawan mines, and prepare fresh Project Reports on these mines;

(ii) to have the benefit of their advice on all matters connected with and incidental to the establishment of these mines, on development of standard and raw materials analysis, installation, efficient working and proper care and maintenance of all equipment.

150. It was considered that it would take about 30 months, after the Government approval was received, to bring Majhgawan mine into operation and that the Consultant's service would be required during the initial phase of working of the mine. On this consideration and in order to complete the items of work mentioned above, the Consultants were engaged for a further period of 3½ years with effect from the 15th February, 1965.

151. The management of NMDC stated that the Consultants had rendered the services, for which they were engaged, satisfactorily. The consultancy fees to be paid to them for the second spell are £ 5000 in sterling and Rs. 1,30,000 in Indian rupees, per annum. The sterling fees for the first six months of this agreement (*i.e.* from 15th February, 1965 to 14th August, 1965) were paid by the Corporation and the sterling fees for the remaining period of the agreement (15th August, 1965 to 14th August, 1968) would be financed by the U.K. authorities under the Colombo Plan.

152. Following the devaluation of the rupee the Consultants represented that they were obliged to incur increased costs on salaries,

leave pay, passages, incidental charges, etc. as a result of devaluation, to the extent of Rs. 63,533 per year as per details given below:—

	Pre-devaluation	Post devaluation	Increase due to devaluation
	Rs.	Rs.	Rs.
Salaries . . .	62,040	98,424	36,384
Leave Pay	20,000	31,500	11,500
Passages .	18,520	29,169	10,649
Incidental expenses .	16,170	21,170	5,000
Total	1,16,730	1,80,263	63,533

153. The details were certified by M/s. Rowley, Pambarton and Company, Chartered Accountants of London, after examining the accounts, correspondence and estimates of expenditure in India of M/s. John Taylor & Sons in connection with the contract for the year ended 31st December, 1966. On this consideration the fee of Rs. 1,30,000 was increased with the sanction of Government by Rs. 63,533 per year with effect from the 6th June, 1966.

154. The first consultancy agreement laid down that the Consultants would not ask for any remittance facilities in sterling in regard to the rupee portion of the fee payable to them. The agreement was further extended for a further period of 3½ years on similar conditions.

155. The sum of Rs. 1,30,000 to be paid to the Consultants in Indian rupees, was utilised by them for salaries, leave pay, passages and incidental expenses. All these items were required to be paid by the Consultants to their staff in rupees in India and the question of increased costs of these items did not arise. According to the terms of the contract there was no scope for increased payments on these items due to devaluation. The Committee are therefore not convinced that there was any valid ground for the enhancement of the fees by Rs. 63,533 per year.

E. Project Estimates

156. Capital estimates for Panna Diamond Mining Project as originally estimated and as revised from time to time are given below:—

(Rs. in lakhs)

	Original estimate (April, 1961)	First revised estimate (Jan. 1964)	Second revised estimate (Nov., 1965)		Third revised estimate (April, 1967)	Fourth revised estimate as sanctioned in Dec. 1967
			Pre-devaluation	Post devaluation		
(i) Ramkheria	46·00	66·20	85·00	85·00	86·00	68
(ii) Majhgawan .	90·00	150·00	180·00	202·00	257·00	120
Total .	136·00	216·20	265·00	287·00	343·00	188

157. The main reasons for frequent revisions of the estimates are stated to be:

(i) Non-inclusion of certain items of expenditure like prospecting, development expenses and consultancy charges in the original estimates;

(ii) Under estimation of certain items;

(iii) Additional funds were required for further prospecting at Ramkheria and underground sampling at Majhgawan.

(iv) General escalation in the prices of plant and machinery, labour and material charges since 1961.

(v) Increases in customs duty, sales tax etc.

(vi) Better technology provided in the plant for Majhgawan offered by the Hungarians, by incorporating additional equipment.

(vii) Devaluation of the rupee; and

(viii) Longer construction period of the two mines resulting in increased overhead expenditure.

158. Original project estimates were for producing 12,000 carats of diamond per annum from Ramkheria and 30,000 carats of diamond per annum from Majhgawan. Project estimates sanctioned by the Government in December, 1967, however, envisage production of 11,250 carats of diamond per annum from Ramkheria and 12,000 carats of diamond per annum from Majhgawan. Although the increase in estimate due to devaluation and increase in customs duty, sales tax etc. could not be foreseen, the expenditure on other items could have been estimated with a fair degree of accuracy. Upward revision of the estimates for undertaking more developmental work and for providing better technology can be accepted if they lead to higher production. But according to the latest sanctioned schemes, the production at both the mines and particularly at Majhgawan, would be much less than that stipulated in 1961 estimates. It seems that the project estimates for Majhgawan will be revised again when the second hand plant it to be replaced and production higher than 12,000 carats of diamond per annum is to be achieved.

159. **The Committee feel that the project estimates which are so frequently revised—four times in this case since 1961—have no utility. Moreover, economic viability and profitability of a project cannot be judged if its capital estimates are revised so often. The Committee hope that NMDC in consultation with the Government of India will draw up a realistic project estimates for Panna Diamond Mining Project, and then make every effort not to exceed them.**

F. Construction and Operation

160. Panna Diamond Mining Project was Scheduled to come into production by 1963. The Consultants, immediately after their appointment in 1962, however, expressed the view that the existing data was insufficient and before taking up the mining operations more exploratory works were required. The Board of Directors considered the matter in August and November, 1963 and deferred the projects till the exploratory works were over.

161. Further prospecting was conducted at Ramkheria in two phases. The first phase of further prospecting at Ramkheria commenced in March, 1964, and was completed in June, 1965. On the basis of this prospecting the Consultants submitted a Project Report in October, 1965 and the same was forwarded to the Government in November, 1965 for approval. The second phase of prospecting was completed in May, 1966, which disclosed additional reserves.

162. During the course of exploration it was also found that the Majhgawan deposit was a primary volcanic pipe consisting of agglomeratic tuff. The crushing and screening of tuff and recovery of

diamond therefrom required a treatment plant. An offer for the supply of the plant was received from NIKEX, a Hugarian firm, in October, 1965. A Project Report for Majhgawan on the basis of the Hugarian plant was prepared and forwarded to the Government in November, 1965.

163. In September, 1966 the Government decided that in view of the need for economy, the Ramkheria and Majhgawan Projects should be deferred for the present and the expenditure on the two projects reduced to the irreducible minimum. The NMDC examined the financial implications of putting the two projects on a purely "Care and Maintenance" basis, in conformity with the above directive of the Government. It was found that even on the "Care and Maintenance" basis, a recurring expenditure of the order of Rs. 10 lakhs per year would have to be incurred in any case. Against this background, NMDC submitted to the Government in November, 1966 two interim schemes of production at the Ramkheria and Majhgawan mines. The schemes were proposed to be worked for 2 years at Ramkheria and 2 years at Majhgawan, during which period the two main capital projects would have been commissioned. The anticipated production was 1000 carats per month from each of the two mines (in the initial 6 months the rate of production would be somewhat less). The two schemes were expected to yield about 50,000 carats in all, giving a cash surplus of Rs. 58 lakhs after meeting all the recurring expenses at Panna and the mine sites and the repayment of the additional capital investment of Rs. 20.40 lakhs required for the two schemes. As the interim schemes were not considered practicable and economical, in March, 1967 the Government asked for revised figures of the capital costs of Ramkheria and Majhgawan projects for considering the revival of the two projects. Following this in June, 1967 NMDC submitted to the Government revised Ramkheria scheme (based on the Consultants Project Report of October, 1965) and revised Majhgawan Scheme (based on the second hand ore dressing equipment available from Garividi mine of Andhra Pradesh). These schemes were approved by the Government in December, 1967. Revised Project Reports submitted in June, 1967 envisage production of approximately 12,000 carats of diamond per annum from each of the two mines.

164. It is seen that the revised Project Reports for Ramkheria and Majhgawan based on further prospecting and exploratory work carried out by the Consultants were submitted to the Government in November, 1965 for approval but the Government took the decision for their deferment only in September, 1966. If the Majhgawan scheme had been sanctioned in November, 1965 and all the formalities in regard to placement of contract for the treatment plant were

completed with the Hungarian firm by December, 1965, the plant would have come into rated production of 22,500 carats of diamond per annum from August, 1967. But the Government did not take any decision till September, 1966. As regard the reasons for delay in taking the decision, the Secretary of the Ministry stated during evidence that the economics of the project were under examination and it appeared that the economics were at best only marginal. A lot of time was also taken in collecting various information to satisfy that the project would be worth taking. Besides, the project was a low priority one and at that time the need for economy was very great.

165. The Committee feel that the execution of the projects has been inordinately delayed. Principal reasons for delay were that NMDC at the beginning started working on Project Reports based on incomplete data and later the Ministry did not sanction the projects promptly. The Committee while regretting the past delay, hope that the projects as sanctioned now will be completed expeditiously.

166. It will also be seen that when the Government decided for the deferment of the Panna Project in September, 1966 for reasons of economy, the economics of putting the project on "Care and Maintenance" basis were not considered by the Government and as a result when NMDC pointed out the financial implications of deferring the project, the Government asked for a revised scheme.

167. The Committee fail to understand how the project could be deferred for reasons of economy without working out the economics of deferring the project. They regret to observe that the Government's decision regarding deferment of the project was taken without taking into account the financial implications of the deferment. The Committee desire that in future before taking any such decision the Government should have the financial implications of deferring a project in midstream worked out.

G. **Treatment Plant**

168. It was found that the Majhgawan deposit was a primary volcanic pipe consisting of agglomeratic tuff. The crushing and screening of tuff and recovery of diamond therefrom required a treatment plant. An offer for the supply of the plant was received from NIKEX, a Hungarian firm, in October, 1965. The plant as offered by NIKEX was to consist partly of Hungarian/West German equipment and partly of Indian equipment. The predevaluation cost of the Hungarian/West German equipment was estimated at Rs. 37 lakhs approximately including designing fees the payment of which was to be spread over a period of years. The post-devaluation cost of the plant was Rs. 109 lakhs (inclusive of Rs. 20 lakhs

for civil works) of which Rs. 58 lakhs were in rupee foreign exchange. The plant was proposed to be obtained against the Trade Plan with Hungary. The Hungarian offer was forwarded to the Government in November, 1965 for approval but the Government did not sanction it. The cost of the second hand treatment plant included in the revised Majhgawan scheme and approved by the Government in December, 1967 was Rs. 8.25 lakhs.

169. It was stated during evidence that the estimated annual production from Majhgawan mine by installation of the Hungarian plant was 22,500 carats whereas the production capacity of the second hand plant was estimated to be 12,000 carats per annum. The profits under the sanctioned scheme would be Rs. 5 lakhs per annum and under the scheme based on Hungarian plant profits were estimated to be Rs. 17 lakhs per annum. Moreover, the life of the second hand plant was 4 to 5 years and thereafter it had to be replaced either by a plant with indentical capacity or by a plant with bigger capacity.

170. During evidence the Secretary, Ministry of Mines & Metals stated that the scheme based on the Hungarian plant was not sanctioned because it involved very heavy capital outlay and also expenditure of substantial amount by way of foreign exchange. The object of sanctioning the scheme based on the second hand, plant was stated to be that the management should proceed cautiously with a small scheme rather than embark on an ambitious scheme.

171. The Committee agree that scheme based on the Hungarian plant involved higher capital cost including some foreign exchange but it cannot be denied that the scheme would have given five times more profit than the present sanctioned scheme. Moreover, the Hungarian Plant was a new plant with a longer life. The Committee feel that the sanction of the scheme based on the second hand plant was not a wise step in view of the fact that the plant will have to be replaced after four or five years and NMDC will again be faced with the difficulty of procuring another treatment plant, which would involve much greater capital outlay owing to increase in price during the intervening years.

172. As regards the Government's plea for cautious approach it may be observed that N.M.D.C. has spent more than eight years in the exploration work and it is high time for the government to decide whether the exploration of diamond deposists at Majhgawan at the envisaged scale is feasible on a commercial basis or not.

H. Profitability

173. As per the latest revised estimates sanctioned by the Gov-

ernment in December, 1967, Ramkheria mine would earn an annual profit of Rs. 10 lakhs per annum and Majhgawan mine a profit of Rs. 5 lakhs per annum. The present sanctioned Majhgawan scheme is based on the second-hand treatment plant with a production capacity of 12,000 carats of diamond per annum. Revised Majhgawan Scheme based on the Hungarian Treatment plant as prepared by the Consultants and submitted to the Government for approval in November, 1965 envisaged an annual production of 22,500 carats of diamond. The profitability of the two Majhgawan schemes, as shown by N.M.D.C., is given below:

		Majhgawan scheme (based on the Hungarian Plant) November, 1965.	Majhgawan scheme (based on the second-hand ore dressing equipment) June, 1967 (approved in December, 1967)
		Pre-devaluation Estimate (Nov., 1965)	
		Rs. in lakhs	Rs. in lakhs
1. Estimated capital cost.	Gross	210·55	188·96
(inclusive of Rs. 15 lakhs for underground samplig)	Credit from sale of diamonds.	30·55	68·78
	Net :	180·00	120·18
		Post-devaluation estimate (April, 1967)	(No foreign exhange involved).
		Rs. in lakhs	
	Gross	291·94	
	Credit	35·00	
	Net :	256·94	
		(including F.E. content of Rs 58·36 lakhs)	
2. *Production* . . .		22,500 carats per year.	12,000 carats per year.
3. *Economics*			
(i) Estimated cost at capacity rate of production (excluding royalty)		Rs. 208 per carat (pre-devaluation) Rs. 265 per carat (post-devaluation)	Rs. 318 per carat

1	2	3
(ii) Assumed sale price per carat.	Rs. 275 per carat (pre-devaluation) Rs. 425 per carat (post-devaluation)	Rs. 450 per carat
(iii) Annual Profit .	Rs. 3 lakhs (pre-devaluation) Rs. 17 lakhs (post-devaluation)	Rs. 5 lakhs

174. It will be seen that while working out the profitability of the Majhgawan Scheme sanctioned by the Government, a credit of Rs. 68.78 lakhs has been given for sales of diamond but in the case of the scheme based on the Hungarian plant credit for only Rs. 35.00 lakhs was given, although the schemes were drawn up within three months of each other. If the credit of Rs. 68·78 lakhs is given to the scheme based on the Hungarian Plant, the estimated cost of production under that scheme would be much lower. Similarly, if the price difference, between Rs. 450 and Rs. 425 per carat is also added, the scheme would show a profit of over Rs. 25.00 lakhs per annum.

175. The scarcity of resources and lower priority assigned to the Panna Diamond Mining Project are stated to be the reasons for not sanctioning the revised Majhgawan scheme based on the Hungarian Plant. Moreover, while sanctioning the revised Ramkheria and Majhgawan schemes, the Government stipuated that the capital outlay from 1968-69 onwards was to be financed from the internal resources expected to be generated by the sale of diamond. During evidence the Secretary of the Ministry stated that the first scheme, which was based on imported equipment from Hungary, involved heavy capital outlay and loss of a substantial amount by way of foreign exchange.

176. It would thus be seen that the Majhgawan Scheme based on the Hungarian Plant involved an additional expenditure of about Rs. 1 crore including foreign exchange content of Rs. 58.36 lakhs but the anticipated profit of the Majhgawan scheme based on the Hungarian plant would have worked out to more than Rs. 25 lakhs, i.e. five times more than that of the present sanctioned scheme. Thus if this scheme had been sanctioned, the additional investment required for the purpose could have been made up within a period of

5 years by enhanced income. The argument about scarcity of foreign exchange is not very convincing. The plant required rupee foreign exchange of only Rs. 58 lakhs and the plant was proposed to be obtained against the Trade Plan with Hungary. Moreover, the Majhgawan mine has been designed and developed for the production of 22,500 carats of diamond per annum whereas the production capacity of the second hand plant is only 12,000 carats per annum and the plant has to be replaced after 4 or 5 years.

177. The Committee are not convinced of the wisdom of the Government's decision in not sanctioning the Majhgawan Scheme based on the Hungarian Plant. They feel that the decision of the Government in sanctioning the scheme based on the second hand plant was taken on consideration other than those of the profitability of the scheme.

178. A committee set up by the Government of India towards the middle of 1955 to look into the problems of diamond mining industry recommended that the diamond industry should receive a very high priority in the Second Five Year Plan. The Government took the decision in December, 1959 to hand over the Panna Diamond Mining Project to N.M.D.C. for development and a tentative target of production of 90,000 carats of diamond per annum was included in the Third Five Year Plan.

179. The original Project Report of the project as prepared by the Chief Engineer of the Panna Diamond Mining Project in 1961 was sanctioned by the Government. In November, 1965 when the Project Report based on detailed prospecting done by the Consultants was submitted to the Government for sanction, Government decided in September, 1966 that the project having received low priority be deferred for reasons of economy. During evidence also the Secretary of the Ministry held the same view.

180. The Committee are surprised to note that a project having received priority in the Third Five Year Plan and taken up for development, was deferred by the end of that Plan for reasons of economy and low priority. The Committee feel that if the Government decisions are subjected to such frequent changes, investments on Public Sector Undertakings, are bound to be erratic and uneconomic. Of all the projects taken up by N.M.D.C. so far the Panna Diamond Mining Project alone has proved profitable where the Government could have earned the maximum return on minimum investment. The Committee trust that the Government would reconsider their decision and diamond mines at Panna would be exploited to their rated capacity.

V

MISCELLANEOUS

A. Stores ond Machinery

181. A statement showing the value of machinery and stores purchased from indigenous sources and imported from year to year for the various projects of N.M.D.C. is given below:—

Name of Project	Year of Purchase	Value of Stores & Machinery purchased.	
		Indigenous	Imported
1	2	3	4
		(Rs. in lakhs)	
Niriburu . . .	1959-60	7·61	1·78
	1960-61	33·71	15·64
	1961-62	42·32	27·77
	1962-63	39·84	124·74
	1963-64	31·84	86·45
	1964-65	104·26	386·74
	1965-66	68·97	30·28
	1966-67	123·34	36·16
Total		451·89	709·56
Panna . .	1960-61	6·11)	2·12
	1961-62	..)	0·89
	1962-63	5·76	15·75
	1963-64	2·61	..
	1964-65	1·10	2·87
	1965-66	2·65	0·16
	1966-67	3·34	..
Total		21·57	21·79
Bailadila	1961-62	9·99	..
	1962-63	13·06	..
	1963-64	15·56	1·15
	1964-65	58·92	8·24
	1965-66	119·10	78·85
	1966-67	179·10	568·66
Total		395·73	656·90

182. It will be observed that for the Kiriburu and the Bailadila Projects about sixty percent of the total requirements of stores and machinery have been imported. In this connection Mining and Allied Machinery Corporation Ltd., Durgapur in a memorandum to the Committee has stated as follows:—

> "As things stand today, it is possible to design mines for N.M.D.C. with practically 100 per cent indigenous equipment. The new mines designed on the basis of indigenous equipments are not likely to be inferior to the modern mines of any other part of the country."

183. During evidence the Secretary, Ministry of Mines and Metals, stated that in the past before issuing import licences the D.G.T. & D. scrutinised the list of items to be imported in order to see if any of those items could be procured indigenously. In the case of bigger projects, the practice was that N.M.D.C. kept the D.G.T. & D. in the picture right from the beginning so that the D.G.T. & D. could give suggestions, if any, for the procurement of some of the items of equipment from the indigenous sources. At present, N.M.D.C. was trying to procure most of the machinery required for its new projects from the indigenous sources. This view was shared by the Managing Director of N.M.D.C. also.

184. From the statement given earlier, it is noticed that even during the year 1966-67, N.M.D.C. imported machinery worth Rs. 568.66 lakhs for the Bailadila Project as against machinery worth Rs. 179.10 lakhs purchased from indigenous sources. Probable reason for importing so much machinery for Bailadila Project even now was that out of 5.1 crores Yen credit received from Japan, 90 percent had to be utilised for machinery to be purchased from Japan.

185. The import of machinery from abroad affects the interests of the country in two ways, (1) payment has to be made in the scarce foreign exchange and (2) development of indigenous industries is adversely affected. **The Committee feel that as far as possible, in future, Government should not enter into such agreements with other countries which will put them under the obligation of importing machinery from those countries. In view of what the Mining and Allied Machinery Corporation Ltd. and the Managing Director of N.M.D.C. have stated the Committee expect that N.M.D.C. would procure its future requirements of machinery and stores from the indigenous sources. The Committee suggest that the government should strictly control the purchase of foreign mining machinery.**

B. Development of Port facilities

186. The Managing Director of N.M.D.C. stated during evidence that the main competitor of India, in iron ore trade was Australia. He stated that in Japan the steel industry was expanding. In the United Kingdom the industry did not provide a brighter future for consumption of iron ore from India. There were, however, other countries where the steel industry would be thriving. The greatest danger to Indian iron ore exports came through Australia, which had suddenly come into the field with very big iron ore deposits. Australia had certain very basic advantages over India, like deep draught ports and big ships that could be brought to load the iron ore. In India there was no port where ships bigger than 30,000 tonnes could be brought in for loading the iron ore. The Australians were on the other hand thinking in terms of ships of 1,00,000 tonnes. He was of the view that the major cost of operation for export of iron ore was not because of the operating of mines but due to the transportation cost which was very high. The cost of mine operation was only Rs. 16 but ultimately it came to Rs. 58 as Rs. 30 was charged by Railways, Rs. 9 to Rs. 10 by the port and there was export duty and freight. He was of the view that with the building of bigger ships and development of ports the shipping freight on iron ore per ton could be brought down to two dollars per ton while the existing charges were four to five dollars per ton.

187. India has entered into a long term agreement for the supply of 2 million tonnes of iron ore per year to Japan from Kiriburu. Another contract for the supply of 4 million tonnes per annum from Bailadila is in the offing. In addition there are prospects of supply of 20 million tonnes of iron ore per annum from Bailadila alone. Visakhapatnam is the only port in the region which is suitable for the offtake of iron ore, at present Paradeep which can accommodate 60,000 tonnes cargo ships is not connected with the hinterland by railway. The chances are that Visakhapatnam will continue to be used for a foreseeable period in the future for export of iron ore. It has been observed that the development of Kiriburu Project had to be delayed as loading facilities at Visakhapatnam were inadequate and ships of larger tonnage could not be brought in.

188. The Committee feel that the future economics of the Iron Ore Projects depend to a large extent on the development of the ports. The distance between India and Japan is about the same as that between Australia and Japan, while the freight charges paid for carrying iron ore from India to Japan are more than for that carried from Australia to Japan. In other to compete with Australia keep-

ing in view their developmental plans and to earn larger foreign exchange it is necessary that the freight charges be brought down. This can be achieved only if Visakhapatnam port is enlarged and developed to take in ships of 1,00,000 tonnage. The ore handling and loading equipment with a rate of 6,000 tons per hour will also have to be installed there to speed up loading of iron ore into ships. The Committee recommend that the Government should give the highest priority for establishment of these facilities in the shortest possible time.

C. **Motor Vehicles**

189. Value of Motor vehicles and cycles owned by N.M.D.C. are given below: —

(Rupees in lakhs)

Value as on 31-3-62	Value as on 31-3-63	Value as on 31-3-64	Value as on 31-3-65	Value as on 31-3-66
11.48	18.58	26.26	36.09	53.11

190. The above figures indicate that within a period of five years motor vehicles and cycles have increased by about 5 times. It is true that mining activities of N.D.M.C. have been expanding and it has been taking up more mines for development and exploitation. But the rate at which motor vehicles have been added seem very high and also the total number maintained now in comparison with its operations. Keeping in view its strained financial position the Committee recommend that expenditure under this head should be brought down.

D. **Losses under the Ore Supply Deal**

191. Ore supplied by MMTC from Kiriburu under the various agreements with Japan and the prices received by it till the devaluation of the rupee are given below:—

	Ores supplied (lakh tonnes)	FOBT cost of MMTC (Rs. per tonne)	Prices received by MMTC from Japan (Rs. per tonne)	Loss per tonne	Total loss
				(Rs. in lakhs)	
1. First interim agreement	2.77	46·16	37.00	9.16	25.37
2. Second interim agreement	6.21	46.26	38.00	8·26	51.29
3. Long term agreement for 3 years	3.44	47.91	38.00	9.91	34.00

192. It will be clear from the above figures that MMTC suffered a loss of about Rs.* 110.66 lakhs in these deals between the period 1964-65 to the 5th June, 1966. Besides, NMDC suffered a loss of Rs. 295.30 lakhs till the end of 1966-67 in the supply of ore mainly because of its high cost of production.

193. The Committee are unhappy to note that the public undertakings suffered a loss of Rs. 405 lakhs in a total transaction of Rs. 469·10 lakhs.

*During the factual verification MMTC stated that it incurred a trading loss of Rs. 84·67 lakhs in the export of 12/42 lakh tonnes of Kiriburu ore till 5-6-1966.

VI

AUDIT REPORT

(COMMERCIAL 1965, SECTION VI)

A. Loss on road construction (Para 4 page 67)

194. In July, 1960, the Kiriburu Project constructed a link road (7 miles) from Barbil to Base Camp at a cost of Rs. 3,32,434 with the bridge over the Karo River at a cost of Rs. 56,004. On 14th/ 15th August, 1960 just after one month of its completion the bridge was damaged. An Enquiry Committee appointed by the Managing Director in September, 1960 to investigate into the matter attributed the damage to (a) bad planning (b) incorrect site selection and (c) defective design. That Committee also held that no repairs of a permanent nature were possible and a new bridge would have to be constructed at a proper site. The expenditure of Rs. 1,66,815 (Rs. 56,004 incurred on the construction of the bridge and 1,10,811 on that of 2½ miles of road which became useless) was thus rendered infructuous.

195. The management of N.D.M.C. stated to the Audit in July, 1964 that there was no proposal to construct a new bridge and that the existing bridge had been in use even after damage to it in August, 1960. In its written reply, N.D.M.C. stated to the Committee that the old bridge was not in use. **The Committee consider it regrettable that the management gave a wrong statement to the Audit in 1964. This was due either to negligence or willfully done. The government should investigate and take suitable action against the person concerned.**

196. It has been noted that the Enquiry Committee held the Chief Engineer of the project who was on deputation from the C.P.W.D. responsible for the lapse. The report of the Enquiry Committee was considered by the Board of Directors in February, 1961 but prior to that the Chief Engineer of the project who was on deputation on year to year basis, was sent back to the C.P.W.D. before the expiry of his one year term. A copy of the report of the Enquiry Committee was also sent to the Ministry of Works, Housing and Supply for taking necessary action against the officer. During evidence, when the Managing Director was asked to explain why

pending action, the Chief Engineer was sent back to the C.P.W.D. he gave the following reply:—

> "The Kiriburu Project was in the construction stage. If the Chief Engineer of the Project who was going to build the entire project was kept at that place while the enquiry had been completed—he knew that something was going on against him—that would very adversely affect the progress of the project. Apart from this when there is no major defalcation involved, penalty could be inflicted only by the parent department where he belonged".

197. As regards the action taken against the officer, N.M.D.C. was informed by the C.P.W.D. in 1967 that on the advice of the Central Vigilance Commission the officer had been severely warned to be careful in designing bridges in future.

198. The Committee deplore the delay that has taken place in taking action against the officer. If the inefficiency and negligence of an officer is not brought to light immediately, and necessary action is not taken against him in time, it will create an impression that the management is powerless to take action against inefficient and negligent persons. The Committee recommend that such cases of inefficiency and negligence should be dealt with effectively and promptly. The Committee are also not satisfied with giving of a warning only to the defaulting officer.

B. **System of Accounting and Book Keeping (Para 6 page 68)**

199. Quoting from the observations made by the Company Auditors from time to time in their various reports the Audit pointed out the following **deficiencies** in the system of accounting of the Corporation.

Supplementary report for 1962-63

(a) There was no standardised list of account heads to be followed by the various projects.

(b) *Subsidiary Records.*—At Bailadila Project adequate subsidiary records were not being maintained.

(c) *Store Accounts.*—The accounting of stores was far from satisfactory. There were numerous errors in the preparation of stock sheets. Balances had been wrongly extracted in many cases and there were numerous additional mistakes. There were also many pricing errors. Proper stores ledgers had not been maintained. The physical verification of stores undertaken in some of the projects was inadequate.

(d) At Kiriburu, owing to inordinate delay in obtaining receipt vouchers from the stores section, certain items of Plant and Machinery which had been received and installed were left without any record in the financial books.

Supplementary Report for 1964-65

(i) The existing system of internal audit was not considered to be comprehensive and effective.

(ii) There were wide variations between the budget estimates and the actuals.

(iii) The targets fixed were not achieved.

(iv) Effective and integrated costing system was not introduced during the year.

(v) The maximum and minimum limits of stores were not prescribed.

200. During evidence the Managing Director stated that on the lines of model Accounts Manual submitted by the Administrative Staff College, Hyderabad, deficiencies in the system of accounting and book-keeping were being removed.

201. The Committee feel that the various deficiencies pointed out by the Company Auditors indicate lack of proper control on the part of the management. They recommend that necessary steps should be taken immediately to remove the defects in the system of accounting of the various projects of N.M.D.C.

C. Faulty storage of Cement [Para 7(ii) pages 68-69]

202. N.M.D.C. purchased 13,208 bags of cement valuing at Rs. 88,494 during the period from October, 1960 to September, 1961 for the construction of a Crushing Plant for the Kiriburu Iron Ore Project and stored them in godowns at Kiriburu. Out of the stored cement, 10,499 bags were partially damaged and 2,709 bags clotted and became completely useless. The partially damaged cement was used on minor works where it could be used on technical considerations having regard to the safety of the buildings. In respect of the clotted cement, N.M.D.C. suffered a loss of Rs. 24,291 (clotted cement Rs. 18,150; cost of sieving Rs. 5,803 and testing charges Rs. 338). The Departmental Enquiry Committee which was appointed in October, 1961 to investigate the case, in its report submitted in November, 1961 attributed the damage to the following factors:—

(1) Defective construction of cement godowns and non-observance of general precautions necessary for the storage of cement;

(2) Storage of cement for a long period because of lack of planning in receipt and utilisation by the contractor;

(3) Defective stacking of cement bags with the result that the issues were not regulated on the first-in-first-out principle.

203. It has been noted from the report of the Enquiry Committee that it was only towards the beginning of October, 1961 that the General Manager conducted a general inspection of cement godowns in the project and noticed that considerable quantities of cement had deteriorated on account of long and improper storage and lack of planning in receipt and issue.

204. As regards the procedure for periodical inspection of stores, it has been stated that for control of storage of cement, all the projects were provided with copies of "Concrete Workers Guide" Vol. I and "How to Store portland cement", along with the connected literature on the subject. The Officer-in-Charge of the stores and the Senior Officers of the Civil Engineering Wing/Project designated for the purpose also periodically inspected, at least once in a month, the cement in stock as well as the arrangements for storage to verify that the storage and issues were in accordance with the general principles. Apart from Departmental verification, all stores were verified by Accounts Stock verifiers at least twice in a year. Detailed instructions regarding stock verification were included in the Accounts Manual of N.M.D.C. Necessary procedure regarding reporting of losses was also in force.

205. The Committee cannot accept the reply of the management without reservation. If the procedure for periodical checking of cement stock was in vogue, then the loss should have come to notice earlier. But no loss or damage to cement bags was brought to the notice of General Manager till he himself in the course of his inspection noticed it. This only shows that all these rules and procedures existed only on paper and were not being fully implemented. The Committee recommended that procedures for periodical stock verification and inspection of storage arrangements should be strictly enforced, so that up-to-date stock position of various items is maintained and losses, if any, are brought to the notice of the General Manager immediately.

206. It is also seen that the Board of Directors at the meeting held on the 25th January, 1964, endorsed the views of the General Manager on the question of fixation of responsibility for the loss. The General Manager had stated that as the then Chief Engineer (Mech. & Elect.) and the then Assistant Controller of Stores, who

were responsible for the loss had since left the service of the Corporation, it would not be possible to take any action against them to recover the loss caused by their default, under NMDC Employees Conduct, Control and Appeal Rules. The Board were of the view that these officials were responsible for the deterioration and loss of 2,709 bags of cement and that they should be awarded a censure, notwithstanding the fact that they had since left the service of the Corporation. The Board also decided that the censure should be formally communicated to them through their present employers. The Board was subsequently informed that as the then Chief Engineer (Mech. & Elect.) had already retired, no disciplinary action was possible against him. Further, the Chief Vigilance Commissioner had in an another case stated that the disciplinary action pre-supposes existence of the relationship of an employer and employee and if this did not subsist, no such action would be possible against officers who had left the service of the Corporation and had taken up employment under another organisation. The Chief Vigilance Commissioner was also of the view that in such cases the Corporation might consider bringing the facts to the notice of their present employers. In the case of the Assistant Controller of Stores, who was then working in the Heavy Engineering Corporation, Ranchi, the Chairman, Heavy Engineering Corporation was apprised of the facts of the case.

207. The Committee are unhappy to note that although the Enquiry Committee submitted its report in November, 1961, the question of fixation of responsibility for the loss was decided by the Board of Directors only in January, 1964, *i.e.* after a lapse of 2-1/4 years, due to which it was not possible for N.M.D.C. to take any disciplinary action against the persons held responsible. Had action been taken by the Managing Director/Board of Directors soon after the submission of the Enquiry Report, it would have been possible to bring the guilty persons to book. The Committee urge that in future the question of fixing responsibility should be decided immediately after the presentation of the report of an Enquiry Committee. The Committee would also like to know what action was taken by the Heavy Engineering Corporation, Ranchi, against the officer who had been adversely commented upon by a Departmental Enquiry Committee of the Public Undertaking for his negligence during his employment with them.

D. Failure to re-negotiate a contract [Para 8(iii) page 70]

208. For the construction of 'E' and 'F' type quarters in the township area at Kiriburu at an estimated cost of Rs. 24.84 lakhs, N.M.D.C. on the 16th September, 1961 entered into a negotiated contract

with a firm at the rate of Rs. 229 per hundred cft. for brick-work in foundation and plinth and Rs. 233.50 per hundred cft. for brick-work in super-structure. The negotiated rate was settled on the presumption that because of non-availability of suitable clap in the vicinity of the township most of the bricks would be manufactured near Karo River at Barbil or near Barajamada, *i.e.*, at a distance of about 11-15 miles from the site.

209. On the 30th September, 1961, the contractor informed NMDC that really good bricks could not be manufactured any where in the nearby area. Thereupon he was allowed to put up a kiln at the site of the township. In other civil works under construction at the time the rate of transportation was Rs. 30 per thousand bricks for a distance of about 8½ miles. In respect of the distance of 11-15 miles the contractor thus saved an expenditure of about Rs. 40 per thousand bricks. No rebate on account of the saving of transport charges was, however, claimed by N.M.D.C. Failure to renegotiate the contract resulted in a loss of about Rs. 1.75 lakhs (transport charges at the rate of Rs. 40 per thousand bricks for 43.8 lakhs bricks) to N.M.D.C.

210. During evidence the Managing Director stated that although no rebate was claimed, a sum of Rs. 175 lakhs had been withheld from the final bill of the contractor and the matter was under arbitration. The deal was investigated by the C.B.I. Orissa Branch, Bhubaneshwar. After scrutinising the case, a reference was made to the Ministry of Steel, Mines and Metals for taking up the case with the Central Vigilance Commission. C.V.C. has advised that in the light of the comments from N.M.D.C. there is not enough justification for taking departmental regular action against the officers and it would be enough, if the officers are asked to be more careful in future.

211. The Committee are constrained to observe that the management of N.M.D.C. failed to re-negotiate the contract in time and later on involved itself in litigation which was avoidable. While the Committee refrain from commenting upon the facts of the case as it is under arbitration, they hold the view that the responsibility should be fixed for the lapses and action taken against the persons responsible for it.

E. Misappropriation of 30.63 M. Tons of M.S. Angles [para 7(iii)-P. 69]

212. In November, 1962, it came to the notice of the management that a consignment of 30.63 M. tonnes of M.S. Angles valued at Rs 20.520 purchased by the Kiriburu Project in February, 1961 had

not been received at the project site and remained unaccounted for. The consignment was received at the Barbil Railway siding on the 9th March, 1961. The Special Police Establishment also came to know of this incident and one of their officers visited the project in December, 1962. The then General Manager of the Kiriburu Project advised the officer of the Special Police Establishment that the matter was being investigated departmentally. The General Manager made a detailed report in February, 1963 to the Chairman, N.M. D.C. Meanwhile, the Special Police Establishment, Orissa Branch, had registered the case on the 29th February, 1964. The report of the S.P.E. was forwarded by Central Bureau of Investigation to the Deputy Secretary and Vigilance Officer in the Ministry of Mines and Metals on the 7th April, 1964.

213. The findings of the Special Police Establishment were as follows: —

> "Considering all the pros and cons of the evidence and assessing the material on record, it is fully established that the suspects deliberately contravened the rules and procedure of the Iron Ore project (N.M.D.C.) Kiriburu by showing false receipts of vouchers and disposal of iron materials received at Barbil Railway Siding and thus abused their position as responsible officers of the project. There is also evidence against the conduct of accused 1 to 5 and 7 who connived at the misappropriation of iron materials, and in order to surpress the misappropriation manufactured a false Receipt Voucher. In the case of accused 6 to 8, they by negligence in respect of their duties occasioned a large loss to the Project.

Accordingly regular departmental action is recommended against all the 8 accused officers. The Branch (S.P.E.) Law Officer is of the same opinion.

214. Necessary charge sheets and statement of allegations were served on all the officers and they were asked to submit their explanations. The case was also discussed at the meeting with the Central Vigilance Commissioner on the 18th May, 1966.

215. As advised by the Central Vigilance Commissioner, the explantations received from the officials concerned and the various documents/records connected with the case alongwith the views of the General Manager, Kiriburu Iron Ore Mines were considered and forwarded to the Ministry of Mines and Metals with comments, that the collusion and misappropriation had not been established and the charges were not substantiated.

216. On the basis of the report of N.M.D.C., the Chief Vigilance Commissioner on the 6th July, 1967, observed that no misappropriation charge against the officers concerned was established/proved. He held that though there had been no doubt some negligence on the part of the officers in not following up the cancellation of the original Receipt Voucher and seeing that the consignment was properly accounted for, but in view of the circumstances under which they were working and particularly in view of the fact that it could not be said that there was any disappearance or misappropriation of material, no action also appeared to be called for against them.

217. In view of the above advice of the Chief Vigilance Commissioner, no action was taken against the officials and the case was treated as closed.

218. From the facts of the case, it would appear that the Project Authorities were hesitant to have the case investigated by the Special Police Establishment. When the Special Police Establishment made a report holding six persons of N.M.D.C. guilty on charges of misappropriation of iron materials and two persons guitly on charges of negligence of duty, the General Manager found the accused persons innocent. **Even though the charges of misappropriation against the accused persons could not be established beyond doubt, it cannot be established beyond doubt, it cannot be denied that the management of the project was responsible for lack of control on the accounting and custody of stores which resulted in loss of Rs. 20,520. The Committee deplore the laxity on the part of the Management and recommend that measures should be taken for avoiding recurrence of such incidents in future.**

VII

HEAD OFFICE

A. Projects Division

219. Pursuant to a decision taken by the Board of Directors, the Projects Division was set up at the head office of NMDC with effect from the 2nd May, 1961 to deal with matters pertaining to Bailadila, Kiriburu, Khetri and Panna Projects. The following items of work were assigned to the Projects Division:—

(i) Investigation of arrangements for water supply, electricity, provision of temporary accommodation, selection of sites for the township, layout of the township, improvement of existing communications and opening of new ones.

(ii) Administrative sanction for the various works and other expenditure being executed by the projects from time to time;

(iii) Preparation of the Board notes;

(iv) Maintaining data in respect of production, despatch and shipment of iron ore.

(v) Submission of various returns to the Government viz., monthly, quarterly and half-yearly;

(vi) Furnishing of information in respect of Parliament questions.

(vii) Obtaining mining lease;

(viii) Obtaining prospecting licences;

(ix) Procurements of cement for all the projects.

(x) Preparation of feasibility and project reports;

(xi) Correspondence with various Central and State Governments regarding the projects.

(xii) To deal with specific problems (including scrutiny of schemes and issue of sanctions) that arise at the projects during the implementation stage which may require reference to the head office for approval of the Chairman and Board of Directors.

220. The Projects Division deals with matters which are non-technical nature. The head of the Projects Division and its other personnel are mostly non-technical. Annual expenditure on the Projects Division is Rs. 1,14,700.

221. During evidence when the Managing Director was asked to explain on what considerations, decision regarding setting up of a non-technical Projects Division at the head office was taken, he only stated that with the bifurcation of the Copper Projects from N.M.D.C., the whole position was being reviewed. As regards the utility of maintaining a non-technical Projects Division, he stated that there were certain aspects of technical projects where administrative planning was also necessary. He however, admitted that the head of the Projects Division should be a technically qualified person.

222. The Committee are of view that there is no utility in maintaining a non-technical Projects Division at the head office for a highly technical mining organisation like NMDC. If administrative planning was the main consideration, then this work could be shared by other non-technical divisions of NMDC such as Board's Secretariat and Administration and Establishment Division. The Committee hope that with the bifurcation of N.M.D.C. this division would be wound up.

B. Planning Division

223. The Planning Division of NMDC functioning within its head office at Faridabad deals with all aspects of forward planning in the technical field i.e., matters relating to exploration of mineral deposits, preparation of feasibility studies, formulation of mining techques, preparation of project reports, preparation of mine development plants, etc. It also advises project administrations on technical points referred to it.

224. The Division was headed by two Chiefs. One unit was headed by the Chief Executive (Planning) who was responsible for planning works relating to nonferrous minerals. With the formation of the Hindustan Copper Ltd., this unit of the Planning Division along with its staff has been transferred to the Hindustan Copper Ltd. The other wing of the Planning Division is headed by the Chief of Iron Ore. The works done by the Iron Ore Wing relate to Iron ore projects which are under execution and feasibility studies in respect of which have been taken up. All these projects are located in the South-East India.

225. As regards the justification for retaining the Planning Division of Iron Ore within the head office, the Managing Director stated as follows:—

> "In the iron ore production industry we are closely tied with the trading corporation, MMTC and every day we have to have negotiations, talks and discussions with them. Iron Ore is delivered right up to sea-shore. We have to advise also the Railway Board how to lay the rail lines, what will be the railway connections and how they have to be laid out. So we have to deal with the Ports, Roads, and Railways, which are all here. Therefore, in the planning stage of our project, it is important that we keep very very close touch with them".

226. The Committee are not convinced with the arguments of the Managing Director in regard to retention of the Planning Division (Iron Ore) at the head office of NMDC at Faridabad. They feel that for the effective planning of development of iron ore deposits, it is necessary that the Planning Division should be located somewhere near one of the iron ore projects. The work of coordination with the Port and Railways etc. can be handled by the non-technical staff at the headquarters. By virtue of its location near a project site, the Division and the Chief of Iron Ore would be in a better position to understand and advise on the practical problems of running the projects. This would enable the Planning Division to plan effectively for the future projects and to suggest remedies for the present difficulties of the projects. This is more true in view of the fact that the feasibility studies carried out by it so far and project reports prepared by it in the past have not been realistic. The Committee desire that the Planning Division (Iron Ore) of NMDC now located at its head office be transferred to either of the projects sites, i.e. Kiriburu or Bailadila.

C. Location of Head Office

227. The head office of N.M.D.C. is located at Faridabad in its own building whereas its registered office is located in New Delhi in hired accommodation. N.M.D.C. has to pay an annual rent of Rs. 42,000 for hiring the building for its Registered office in New Delhi where sit the Chairman, the Financial Controller and the Secretary of the Board of Directors. During evidence when the Managing Director was asked to explain the necessity of maintaining two units of the head office viz., one at Faridabad and another in Delhi,

and what was the difficulty in transferring the Delhi office to Faridabad head office, he stated that there were difficulties of making telephone calls, providing transport to the staff, etc. Besides, there were many other things for which very high level discussions had to be held and for which the presence of the Managing Director in Delhi was very necessary.

228. As regards the justification for maintaining two units of the head office the Secretary of the Ministry stated during evidence that with the bifurcation of N.M.D.C. the whole position regarding the location of the head office was being reviewed with a view to decide whether the head office should remain at Faridabad or should be brought to Delhi or whether Delhi office should be taken to Fridabad or the whole office or part of it might be taken to some project site. site.

229. The Committee are not convinced with the arguments of the Managing Director for maintaining two offices—one in a hired building in New Delhi where the top functionaries sit and another in its own building in Faridabad where rest of the staff of the head office are located.

230. There is an acute scarcity of accommodation in Delhi. The distance between Delhi and Faridabad is not much. The Committee feel that there should be no difficulty in transferring the Delhi office to the head office at Faridabad.

VIII

RECRUITMENT AND PROMOTION

231. The percentages of vacancies to be filled in by direct recruitment and by promotion have been laid down in NMDC Recruitment and Promotion Rules. However, there is no percentage fixed for taking people on deputation. In the initial stages, in view of the need for experienced personnel, some posts had to be filled up by obtaining people on deputation. It has been stated that only against posts for which sufficiently experienced persons were not available with NMDC and or where the duties and functions attached to the post so necessitated, people were taken on deputation in the interest of work. The persons were taken on deputation initially for a period of 1 to 2 years depending on the exigencies of work. In certain cases, however, the deputation period was extended according to the nature and duration of work assigned to a particular post.

232. There are 30 cases where initially people were taken on deputation and later on absorbed in the regular service of NMDC. It has been submitted that such of the deputationists whose performance was good and were considered useful from the point of view of their knowledge and experience in their respective fields of work were absorbed.

233. During evidence the Secretary of the Ministry stated that for particular and specific jobs there might be still some necessity of having deputationists, but in general there was no more any need for deputationists remaining with NMDC. In reply to a question he informed the Committee that taking people on deputation had caused dissatisfaction among the employees of NMDC. In this connection the management of NMDC and the Ministry received a number of representations and ultimately some deputationists were sent back and some were absorbed. The Committee were also informed that as on January 1968 there were 95 deputationists in NMDC.

234. The Committee feel that taking such a large number of people on deputation has created dissatisfaction and bitterness among the employees of NMDC. Deputationists, besides being costly on account of the incidence of deputation pay, leave salary and

pension contribution, cannot always give their best to an organisation because they have no permanent stake in the undertaking. Moreover most of the staff coming from the government departments are used to a different way of working which might not be suitable for a mining undertaking like NMDC. NMDC was set up about 10 years ago. The Committee find no justification for its failure in not having recruited, trained and developed adequate number of personnel for the efficient running of the organisation. The Committee recommend that steps should be taken to build up a strong cadre of staff from within the organisation so that dependence on deputationists is minimised.

IX

BIFURCATION OF N.M.D.C.

235. National Mineral Development Corporation was assigned the task of development of the Khetri Copper Project in March, 1961. The project was originally envisaged to produce 10,000 tonnes of copper per annum. Subsequently, in the light of the results of further exploration to realise the economies of scale and improve the profitability by utilisation of by-products, it was decided to enlarge the scopes of the project for production of 31,000 tonnes of electrolytic copper per annum (21,000. tonnes from Khetri and 10,000 tonnes from the nearby deposit at Kolihan). In addition, it was also decided to set up a sulphuric acid plant based on the sulphur values to be realised in the course of roasting of copper ore. The acid thus produced would be used as raw material for the production of 2,29,500 tonnes of triple super phosphate per annum. With the expansion and enlargement of the Khetri Copper Project the government felt that development of copper deposits would require the concentrated efforts of a strong self-contained body geared for the task with adequate specialisation. Following this a new company under the title of Hindustan Copper Ltd. was registered on the 9th November, 1967. To start with, Hindustan Copper Ltd. would manage the Khetri Copper Complex, Rakha, Dariba and Agnigundala Copper Projects.

236. During evidence the Managing Director of NMDC stated that the bifurcation of NMDC and formation of a separate company *i.e.* Hindustan Copper Ltd. was the policy decision of the Government. He however, added that NMDC was quite competent to develop and run the Khetri Copper Complex efficiently. When this view of the Managing Director was placed before the Secretary, Ministry of Mines & Metals during evidence he stated that the principal reason for bifurcation of N.M.D.C. was that both iron ore and copper ore were expanding sectors of the economy and each of them required separate attention of a company. Besides, mining of iron ore and copper ore was enitrely different. While in the case of copper it was underground operation, in the case of iron ore it was otherwise. When the Committee pointed out that although technology was different Marketing and Refinery Divisions of Indian Oil Corporation were working under the same Corporation to reduce the overhead charges, the Secretary stated that Khetri was a difficult and big project. In reply to a question he further stated that some members of the Boards of Directors of both the companies would be common. He added that there might be one Chairman for both the companies.

CONCLUSION

237. The present study of the working of the National Mineral Development Corporation reveals that the performance of the management so far has been far from satisfactory. The Kiriburu Iron Ore Project which was scheduled to come into rated production of 2 million tonnes of ore per annum from 1964, has failed to attain the rated capacity even now. The principal reason for taking up this project was to export iron ore to Japan at the rate of 2 million tonnes per annum commencing from 1964 and thus earn foreign exchange. Total quantity of iron ore exported to Japan till the 31st March, 1967 was 27.10 lakh tonnes and sales realisation therefrom were Rs. 1292.95 lakhs.

238. In three years of its going into production, it has accumulated a loss of about Rs. 295.30 lakhs. **The Committee were surprised to note that without carrying out the techno-economic feasibility study of the project, the Government entered into an agreement with the Japanese Steel Mission for supply of 2 million tonnes of ore per annum from 1964 and subsequently assigned the project to N.M.D.C. for development on a set line.**

239. The Committee noted with regret that the selection of the consultants for preparation of the Project Report of Kiriburu and installation of mining plant there was based merely on the availability of foreign exchange in that country rather than on merit. In fact the history of the Kiriburu Project right from the beginning to the present stage of development is full of bad planning and ineffective performance.

240. Similarly was the case in respect of the execution of Bailadila Iron Ore Project (Deposit No. 14). The project has not been completed uptil now against the scheduled date of December, 1966 and the delay has resulted in higher capital costs.

241. The net results of wrong planning and ineffective management at all levels has been that N.M.D.C. has incurred a loss of Rs. 295.30 lakhs up to 31-3-1967 on the working of the Kiriburu Project alone. Further losses of Kiriburu and Bailadila Projects are estimated to be Rs. 285.60 lakhs and Rs. 226.80 lakhs per annum respectively. There appear to be no prospects of earning profit in the near future.

242. The iron ore projects are vital for the economy of the country both from the point of view of exports as well as internal requirements of the steel plants. Therefore every effort has to be made to work them at the lowest cost. The Committee hope that the

various deficiencies pointed out in this Report will be overcome with a view to make these projects fully productive and economically viable.

243. Of all the projects taken up by NMDC, Panna Diamond Mining Project appears to be the only one where the Government could have the maximum return with the minimum of investment. However, the approach for development of that project has not been systematic and it had to face deferments.

244. The Committee were surprised to note that a project which had received priority for development in the Third Five Year Plan was deferred by the end of that Plan for reasons of economy and low priority, and that the Government decision to defer the project was taken without working out the economics of deferment.

245. The Committee also fail to appreciate the decision of the Government in sanctioning the present Majhgawan Scheme for the production of 12,000 carats of diamond per annum as against the scheme based on the Hungarian Treatment Plant for the production of 22,500 carats of diamond per annum. The Committee believe that full scale exploitation of Panna Diamond mines would have resulted in profit.

NEW DELHI;
April 5, 1968.
Chaitra 16, 1890 (*Saka*).

D. N. TIWARY,
Chairman,
Committee on Public Undertakings.

APPENDIX I

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY

NOTE FOR THE CABINET

26th March, 1958.

SUBJECT:—*Long-term iron ore supplies to Japan—Rourkela-Vizag. Project.*

In the paper submitted to the Planning Commission on the above subject, Rourkela-Vizag Project for supply of iron ore has been described.

2. In view of the benefits which we will derive under this Project besides earning foreign exchange on the sale of iron ore to Japan on long term basis, namely, the development of Vizag and the building of the Sambalpur-Titalagarh Railway line in the Hirakud area, the Planning Commission has approved of the Project.

3. Japan and India being joint beneficiaries under this Project, the Project qualifies for assistance under the U.S. President Asian Economic Development Fund. On the strength of Japan buying iron ore on a long basis, India will be able to obtain from the Fund a loan to the extent of 23 million dollars. Japan has also agreed to give 8 million dollars, on long term deferred payment terms, for the purchase of equipment, machineries and other materials required for the Project.

4. The Negotiating Committee which was appointed to hold discussions with the Japanese Steel Mission have concluded the negotiations and Mr. M.K. Vellodi, ICS, Chairman, Indian Iron Ore Negotiating Committee has signed an Agreement with the Addendum, Appendices and letters exchanged between the Indian Team and the Japan Steel Mission is placed below.

5. Since this is a developmental project and involves a long lead from the mines to Port, it is difficult to estimate whether the Project will be profitable. In the event of market prices going down, there may be losses which will have to be borne by the Government of India, the allocation of the losses between the Mining, Port and Railway Ministries being decided in due course.

6. A reference is also invited to Cabinet Secretariat's No. 79/20/58 dated 19th March, 1958. Shri K. B. Lall gave an account of the negotiations conducted by the Indian Negotiations Committee with the Japan Steel Mission with regard to the scheme for the mining and export of iron ore to Japan and indicated the lines on which it was proposed to sign an agreement with Japan. The Cabinet approved the proposals.

These papers may be circulated for the information of Cabinet.

Sd/- D. SANDILYA,

Joint Secretary to the Govt. of India.

D/26th March 1958.

APPENDIX II

Summary of Recommendations/Conclusions of the Committee on Public Undertakings contained in the Report.

Sl. No.	Ref. to Para No. in the Report	Summary of Conclusions/ Recommendations
(1)	(2)	(3)
1.	9	The Committee are of the view that the Ministry should have had detailed prospecting done of the Kiriburu area before asking the Japan Consulting Institute to prepare a Detailed Project Report on the basis of the I.B.M. Scheme. It is also regrettable that the management of N.M.D.C. knowing that the scheme prepared by the I.B.M. was only an indicative one took no initiative to have a more detailed survey conducted. As subsequent events proved, the nature of the geological strata was not correctly worked out in the I.B.M. Scheme. This resulted in an excess generation of fines which has affected the whole economics of the project to a large extent, besides necessitating the purchase of extra machinery.
2.	16	The Committee regret to note that the contract for the consultancy services was given to a firm which was not fully qualified for the job since it had no previous experience in the line and whose quotation was not the lowest. They are surprised that the appointment of the consultants was made on the consideration of availability of foreign exchange in their country rather than on their technical competence.
3.	25	The Audit pointed out that since the agreement with the Japan Consulting Institute was

(1)	(2)	(3)
		based on the investigation report of the Indian Bureau of Mines, a clause in regard to lump-fine ratio should have been included in the agreement. The Managing Director admitted that non-inclusion of such a clause was an omission. The Committee agree with the views expressed by Audit and desire that the responsibility should be fixed on the person responsible for the lapse.
4.	26	The Committee have time and again come across defective agreements which have resulted in excessive or over payments to consultants or failure to protect our interests. As already recommended the government have to strengthen their agreement scrutinizing agency.
5.	27	The Committee regret to note that although the production started in April, 1964, excess generation of fines came to the notice only at the time of shipment in July, 1964 which implies that there was no test-check on the plant site. They take a serious view of the failure of the management to notice such faulty performance of the machinery and trust that such omissions will not recur in future.
6.	28	It will be observed from Paras 17—19 that the Consultants were to carry out the performance test within a period of two months either immediately after the erection of the plant or as soon as the consultants desired them to be carried out. Owing to the failure of the management of N.M.D.C. to carry out the performance tests within the period of five years of the consultancy period, a supplementary agreement with the consultants for a period of one year was concluded with the sole object of getting the performance test carried out in their presence. But the performance test could not be carried out within the extended period of the agreement due to

(1)	(2)	(3)
		reasons well foreseeable. The agreement was further extended for two months without carrying out performance test. In the circumstances the Committee cannot help concluding that the management lacked foresight. They also feel that after engaging the Consultants, the project authorities depended entirely on them in the matter of erection and performance of the plant and did not exercise any control over the progress of their work. This resulted in further extensions of the consultancy periods and payments of further amounts to the Consultants without achieving the desired benefits.
7.	33	From the foregoing it will appear that the Consultants, because of their inexperience, failed to prepare a satisfactory project report and the management of N.M.D.C. on its part did not take care to examine the Project Report. The Committee fail to understand how so many important aspects of the project were omitted from the Project Report. They hope that in view of long experience such omission would not recur in future.
8.	37	The Committee regret to note that even though the project estimates prepared by the Japan Consulting Institute were unrealistic and suffered from many defects, there is no evidence to show that the management of N.M.D.C. or the administrative Ministry took any steps to locate and rectify the deficiencies with the result that the project estimates have increased over 33 per cent. Such under estimates not only mislead the Cabinet but also the Parliament and do not credit to the executing Ministry.
9.	41	The Committee appreciate that N.M.D.C. had never before taken up for execution a project of this size and type. It is also true that Kiriburu area was inaccessible and extremely under-developed and therefore a good deal of developmental

(1)	(2)	(3)
		expenditure had to be incurred there. But it was for these very reasons that an expert foreign firm of consultants was engaged to develop the mine and it should have been their first task to study the local conditions fully before preparing the estimates. The management at least should have known the under-developed nature of the area. It should have pointed out the essential omissions from the project estimates. It is also surprising how the administrative ministry, failed to make a proper assessment in the beginning. The Committee can only express regrets at this stage at such failures of the management of N.M.D.C. and the administrative Ministry.
10.	43	The Committee are not convinced with the reply of the representatives of N.M.D.C. They feel that the management must accept the responsibility for not including in the project estimates, expenditure incurred on Establishment charges prior to 1960. The increase in the staff strength to 112 instead of the original provision of 25 also led to increase of establishment charges from Rs. 10 lakhs to Rs. 49 lakhs, which appears to be an excessive increase from all standards. The Committee are of the view that considering the economics of the project, expenditure under this head should have been kept to the minimum. The management should effect reduction in this respect at an early date.
11.	48	In fact, the main factor responsible for upsetting the completion schedule of the project was the non-completion of the iron ore handling plant at the Visakhapatnam Port. It would, however, be seen that the Ministry of Mines and Metals was unaware of this factor, till the trial production at full rated capacity could not take place immediately after completion of the Project in July, 1963. It has been stated that the matter was discussed in the Secretaries' Committee and the progress of the project reviewed

(1)	(2)	(3)
		every now and then but there is no evidence to show that non-completion of mechanical Ore Handling Plant at the port was taken up with the Visakhapatnam Port Authority. Taking all these into account, the Committee regret to observe that neither the managemnt of N.M.D.C. nor the administrative Ministry took any timely action to complete the project expeditiously.
12.	52.	It will be seen that although the plant was ready for production in July, 1963, no concerted efforts were made to go into full production and sell the output within the country for use by the Indian steel plants. On the contrary the management kept waiting till April, 1964 for trial production. If non-completion of the mechanical Ore Handling Plant at Visakhapatnam had been the reason for not starting trial run then there is no reason why the management started trial production in April, 1964 because the mechanical ore handling plant was ready only in August, 1965. The Committee could not find out any valid reason for which the management should have waited till April, 1964 for trial production. They feel that the management of NMDC did not take care initially to have the test run performed in time and when it saw that the matter was getting too much delayed it allowed the plant to go into production in April, 1964. The Committee are of opinion thah had the test run been performed in August, 1963, at least the deficiencies of the plant would have come to notice and timely action could have been taken to remove the defects. They are unhappy to note that the project authorities failed to use foresight in this respect. It is also regrettable that the Ministry of Mines and Metals, inspite of getting periodical reports, did not take any initiative in the matter.

(1)	(2)	(3)
13.	53	The Committee feel that there was not enough justification for limiting the production to a level much lower than the rated capacity of 2 million tonnes per annum during the years 1964-65 and 1965-66. This would be evident from the fact that M.M.T.C. who was responsible for distribution of iron ore among the Indian Steel Plants, was not approached during these periods for taking supply of ore from Kiriburu for use within the country. The administrative Ministry also does not appear to have given any guidance in this regard. The Committee are not happy with the situation in which the production level was kept limited. They hope that in future in case of emergence of any export difficulty the manage ment would take all possible measures to dispose of ore within the country.
14.	54.	It would appear that besides external hinderances there are other internal reasons due to which the plant failed to attain the rated capacity of 2 million tonnes per annum. The Committee recommend that reasons for non-attainment of rated capacity of 2 million tonnes per annum should be analysed and the management should make concerted efforts to remove those difficulties so that the plant may achieve the rated capacity without any further delay.
15.	57.	The Committee feel that to a considerable extent economics of the project depends on the commercial utilisation of the fines. They consider it unfortunate that no provision was made in the beginning either for benefication of the fines or for their sale. The Committee suggest that immediate steps should be taken for the benefication of the fines and their sale.
16.	63.	It will thus be seen that the operating cost which was estimated to be Rs. 5·15 per tonne in

(1)	(2)	(3)
		1961 had increased to Rs. 10.11 per tonne in 1967. It appears to the Committee that merely because the Government were aware about the uneconomic nature of the project, the management has been indifferent towards controlling the operating cost. As costs are still continuing to rise the Committee urge that all efforts should be made to bring down the operating cost. The Committee also hope that vigorous efforts, will be made by the management to raise the production to the stipulated level of 2 million tonnes per annum as early as possible so that the overhead cost per tonne is minimised.
17.	64.	The Committee hope that the suggestions of the Administrative Staff College regarding cost reduction would be carefully implemented and all possible measures would be taken to reduce the cost of production without further delay.
18	72	It will be seen that during the pre-devaluation period NMDC suffered losses on its sale because its cost of production was much higher than the price received by it from MMTC. After devaluation the Corporation could have earned some profit but owing to imposition of export duty it failed to do so. With the devaluation of £ sterling the sales realisation of NMDC from Japan has been reduced by about Rs. 8 per tonne. The execution of the Kiriburu Iron Ore Project has been taken up for the mutual advantage of both Indian and Japan, but under the existing terms of the contract N.M.D.C. cannot make any profit out of this deal unless it lowers its cost of production. It is pertinent to mention here that even after knowing the uneconomic nature of the project, the Kiriburu Iron Ore Project was assigned to NMDC in pursuance of an agreement entered into between the Government of India and the Japanese Steel Mission in 1958. The Committee

(1)	(2)	(3)
		feel that if the Government want N.M.D.C. to function as a commercial undertaking, they should devise ways and means so that the earnings of the Corporation from sale of iron ore do not fall below its cost of production.
19	77	NDMC has been incurring continuously losses in its supply of ore to Japan. Payment of commission to MMTC adds to its losses by Rs. 2 million per annum. Since the actual supplies are being shipped directly by NMDC, there seems to be no reason why it cannot service other aspects of the contract itself. In any case, a commission of Re. 1/ per tonne seems to be on the high side, particularly in view of the fact that MMTC is also a public undertaking. The Committee would therefore, suggest that NMDC might work out its cost of exporting ore independently. If the management is competent enough to handle the work and the cost does not work out to be more than the commission now paid to M.M.T.C., it might be more economical if the work is taken over by N.M.D.C.
20	85 87	This goes to prove that N.M.D.C. itself was not vigilant and anxious to realise its due from M.M.T.C. Had the management made serious efforts to realise the outstanding the payment which MMTC made in March, 1966 could have been obtained earlier. This regrettable lapse on the part of NMDC to realise its outstandings from MMTC had serious repercussions on its finances. On the one hand it had to divert its capital loans to meet its revenue operations and on the other it had to default in the re-payment of the loans. Had this outstanding amount been obtained earlier. NMDC would have been able to meet its revenue operations and pay back its own liabilities towards Government loans drawn by it.

(1)	(2)	(3)
		It is curious that even the administrative Ministry, although it was aware of the financial difficulties of NMDC, did not take any action to solve this financial tangle. The Committee regret to note that in this case, NMDC was too complacent to look after its own good and the Ministry also failed to give proper advice and direction at the appropriate time.
21	89	N.M.D.C. has been passing through period of acute financial stringency. Non-receipt of sale proceeds in time has compelled NMDC to divert its capital funds to meet the increasing working capital requirements which ultimately result in increased interest charges. Due to incurring heavy losses and the difficult ways and means position, in the past the Corporation has not been able to pay interest charges on the capital loans from the Government resulting in the payment of penal rate of interest. In view of this position the Committee recommend that the Government should take immediate steps to ensure that NMDC gets its full dues realised without any further delay.
22	92-93	From an analysis of the figures it has been observed that while the devaluation of the £ sterling has certainly had an adverse effect on the profitability of the project, the other factors such as imposition of export duty at the rate of Rs. 10·50 per tonne and increased cost of production to the extent of Rs. 6 per tonne are equally responsible for making the project an uneconomic one.
		The wisdom of taking up a losing commercial venture is in itself questionable. But having launched the project and invested huge funds therein the Government and management should have taken all steps to keep the losses to the minimum. The Committee are not sure whether there is any hope of the project becoming profitable in the near future. They can only

(1)	(2)	(3)
		urge that no efforts should be spared to reduce costs and increase production so that losses can be minimised to the extent possible, if they cannot be eliminated.
23	98-99	The Committee feel that as a major reason for the Project's inability to reach full production in time was the delay in the completion of the Ore Handling Plant at Visakhapatnam, the Port authorities cannot be absolved of bearing some part of the initial losses. The Committee were informed that the whole question of distribution of losses being incurred by the Kiriburu Project right from the beginning was being reviewed comprehensively. Negotiations were also taking place with the Japanese whether to some extent the adverse effects of the devaluation of the pound-sterling could be made up. The Committee hope that some settlement on this matter will be reached in the near future.
24	102	While the merit of the prospecting work done by the I.B.M. is not known to the Committee, they fail to understand why the Planning Division of N.M.D.C. which is equipped with highly paid technical officers did not carry out detailed prospecting work but depended solely on the data furnished by the Indian Bureau of Mines. In the case of Kiriburu Project detailed prospecting was done by the I.B.M. The troubles and losses of N.M.D.C. at that project were attributed to the defective prospecting done by the I.B.M. The Committee wonder if NMDC has not again assigned the work to the IBM in order to escape responsibility. They feel that if NMDC was not capable of undertaking the job itself its Planning Division should have supervised and checked the performance of the IBM so that it could be held responsible for the shortcomings if any noticed later on.

(1)	(2)	(3)
25.	105	Performance of N.M.D.C. in regard to exploitation of iron ore at Kiriburu has not been very happy. This was so primarily because it started the work there on the basis of a defective Project Report. While it is satisfying to note that certain changes have been included in the revised Project Report to remove the doubts expressed by the Japanese firm in raising 4 million tonnes of ores per annum from Deposit No. 14, the Committee cannot be sure about the outcome till the project goes into full production. The Committee hope that the management will exercise utmost care and promptitude and make concerted efforts in executing the project and avoid the repetition of sad performance in Kiriburu.
26.	109-110	The Committee regret to note that the capital estimates have not been finalised up till now even though the project is nearing completion. There has been increase of about 50 per cent in the provisional revised estimates over the original estimates. The failure of NMDC to finalise the estimates indicates that the management has not been able to assess the project requirements up till now. The Committee take a serious view of this lapse and urge that the capital estimates for Bailadila Deposit No. 14 should be finalised without any further loss of time.
		It will be observed that there has been an increase of Rs. 146.00 lakhs due to increase in the scope of work; an increase of Rs. 123.00 lakhs for delay in completion of the work including Rs. 63 lakh interest charges and an increase of Rs. 215.00 lakhs for inadequacies in provision for various works. These upward revisions in estimates are bound to reflect adversely in the cost of production. The Committee consider such upward revisions most undesirable from the point of view of economics of the project. They regret to note that the management of N.M.D.C. even after its

(1)	(2)	(3)
		initial failure in making a correct estimate for the Kiriburu Project and an experience of 10 years has not learnt from its past mistakes and again failed to prepare a satisfactory project estimate for the Bailadila Project.
27.	115	It is clear that the management of N.M.D.C. has neither adhered to the original project estimate of establishment charges nor made any formal revision of the estimates. On the contrary, for some reason or the other it allowed the expenditure to run on the high side without fixing any limit. The Committee are not satisfied with the manner in which the establishment charges have been allowed to be increased. There may be some justification for marginal increases but a three hundred percent increase in establishment charges is hardly justifiable. The Committee regret to note that the management of N.M.D.C. exercised little control over the establishment charges of Bailadila Deposit No. 14. Taking account of this with its performance at the Kiriburu Project Committee cannot but recommend replacement of the whole set up responsible for this state of affairs.
28.	119	It will be seen that the construction of the project has been delayed by more than one year and an additional expenditure of Rs. 123.00 lakhs had to be incurred due to this reason. The Committee are constrained to note that N.M.D.C. has not been able to complete its second iron ore project even according to the latest revised schedule drawn less than a year ago. Constant revision of the schedules indicates lack of coordinated planning on the part of the management. Even now commencement of the initial trial production depends upon getting the power supply. The Committee would urge upon the Management to take all steps to ensure that there is no delay on the part of the M.P. Electricity Board to supply the power by the end of April as promised.

(1)	(2)	(3)
29.	123	The Committee regret to note that the decision to engage M/s. Mitsubishi Shoji Kaisha for preparing the feasibility report on the pelletisation and beneficiation of iron ore fines and blue dust at Bailadila was taken more on the consideration of export market rather than on the merit of the firm. It is surprising that on the plea of creating conviction in the export market, an Indian laboratory like National Metallurgical Laboratory was ignored and denied any opportunity of consultation. If Indian institutions of standing are not given chance to take up advance projects in their line the prospects of developing indigenous know-how are very bleak. The Committee suggest that preference should be given to Indian institutions.
30.	125.	The Committee are unhappy at the inclusion of such an unfavourable clause in the contract. It prevented N.M.D.C. from getting a feasibility study made by other sources. The existence of such a clause is all the more regrettable because it restricted the autonomy of NMDC for a specific period of time, and made it wholly dependent for that purpose on one foreign agency. The Committee recommend that the undertakings should exercise due care and caution while drawing up agreements and ensure that such one-sided and unfavourable clauses are not allowed to be inserted in the agreements.
31.	129	The Committee regret to note that there has been appreciable increase in the cost of construction of these 175 quarters at Hill Top at Bailadila and the construction was not completed within the scheduled period. The management could blame NBCC if in the agreement, there were any provision for ceiling on costs and a penalty clause in regard to non-completion of the quarters within the stipulated period but no such stipulation were laid down in the agreement. They trust that the management would enter into agreements in future with due regard to the cost of construction and lay down schedules for completion.

(1)	(2)	(3)
		The Committee recommend that responsibility should be fixed for drawing up such a faulty agreement.
32.	133	The Committee feel that it is the duty of the Government of India to see that the Bailadila Iron Ore Project does not suffer losses for reasons beyond its control. They hope that the Government of India will consider the advisability of giving necessary relief to the project by way of providing rebate on the export duty, reducing the railway freight and port charges, etc. so that the project may give a reasonable return on the huge investment made therein.
33.	134	The Committee have learnt with great regret that the Kiriburu and the Bailadila Iron Ore Projects are going to run at loss. According to the present estimates the annual loss will be Rs. 512.40 lakhs. Considering the fact that the private sector is also exporting iron ore to Japan and is making a profit, the Committee draw the only natural conclusion that the projects will be running into losses because of the failure of the management of N.M.D.C. As recommended earlier the Government should immediately weed out from N.M.D.C. those who do not come up to the mark
34.	139	It is clear that although necessary technical know-how was not available with NMDC, the task of carrying out detailed prospecting and exploration works was entrusted to its Chief Engineer only to satisfy the Administrative Ministry The Administrative Ministry also does not appear to have considered the ability of NMDC and its Chief Engineer in this regard before according its sanction. These primary lapses led to inordinate delay in the preparation of the final Project Reports and their execution. The detailed prospecting and exploratory works are the pre-conditions for successful execution of

(1)	(2)	(3)
		a project. The Committee regret to note that NMDC proceeded with the development of the project without getting those basic requirements fulfilled.
35.	144	The Committee come to the conclusion that even though detailed technical know-how for exploiting various diamond deposits was not available with N.M.D.C., the Corporation prepared the Project Reports for Ramkheria and Majhgawan mines in 1961 and this resulted in revisions of the Project Reports. There is no evidence to show that the administrative Ministry examined the feasibility of these reports before according its sanction. The Committee consider it unfortunate that the management of N.M.D.C. started working on an entirely unrealistic project report with the full knowledge of the Government. It is still more regrettable that the Project Reports had to be revised more than once and may have to be revised against in future, if the targets envisaged in the original project Report are to be achieved.
36.	155	The sum of Rs. 1,30,000 to be paid to the Consultants in Indian rupees, was utilised by them for salaries, leave pay, passages and incidental expenses. All these items were required to be paid by the Consultants to their staff in rupees in India and the question of increased costs of these items did not arise. According to the terms of the contract there was no scope for increased payments on these items due to devaluation. The Committee are therefore not convinced that there was any valid ground for the enhancement of the fees by Rs. 63,533 per year.
37.	159	The Committee feel that the project estimates which are so frequently revised—four

(1)	(2)	(3)
		times in this case since 1961—have no utility. Moreover, economic viability and profitability of a project cannot be judged if its capital estimates are revised so often. The Committee hope that NMDC in consultation with the Government of India will draw up a realistic, project estimates for Panna Diamond Mining Project and then make every effort not to exceed them.
38.	165	The Committee feel that the execution of the project has been inordinately delayed. Principal reasons for delay were that NMDC at the beginning started working on a project report based on incomplete data and later the Ministry did not sanction the projects promptly. The Committee while regretting the past delay, hope that the projects as sanctioned now will be completed expeditiously.
39.	167.	The Committee fail to understand how the project could be deferred for reasons of economy without working out the econmics of deferring the project. They regret to observe that the Government's decision regarding deferment of the project was taken without taking into account the financial implications of the deferment. The Committee desire that in future before taking any such decision the Government should have the financial implications of deferring a project in midstream worked out.
40.	171-172.	The Committee agree that the scheme based on the Hungarian plant involved higher capital cost including some foreign exchange but it cannot be denied that the scheme would have given five times more profit than the present sanctioned scheme. Moreover, the Hungarian Plant was a new plant with a longer life. The Committee feel that the sanction of the scheme based on the second hand plant was not a wise step in view of the fact that the plant will have to be replaced after four or five years and

(1)	(2)	(3)
		NMDC will again be faced with the difficulty of procuring another treatment plant, which would involve much greater capital outlay owing to increase in price during the intervening years. As regards the Government's plea for cautious approach it may be observed that N.M.D.C. has spent more than eight years in the exploration work and it is high time for the government to decide whether the exploitation of diamond deposits at Majhgawan at the envisaged scale is feasible on a commercial basis or not.
41.	176-77.	It would thus be seen that the Majhgawan Scheme based on the Hungarian Plant involved an additional expenditure of about Rs. 1 crore including foreign exchange content of Rs. 58·36 lakhs but the anticipated profit of the Majhgawa Scheme based on the Hungarian plant would have worked out to more than Rs. 25 lakhs, *i.e.* five times more than that of the present sanctioned scheme. Thus if this scheme had been sanctioned, the additional investment required for the purpose could have been made up within a period of 5 years by enhanced income. The argument about scarcity of foreign exchange is not very convincing. The plant required rupee foreign exchange of only Rs. 58 lakhs and the plant was proposed to be obtained against the Trade Plan with Hungary. Moreover, the Majhgawan mine has been designed and developed for the production of 22,500 carats of diamond per annum whereas the production capacity of the second hand plant is only 12,000 carats per annum and the plant has to be replaced after 4 or 5 years. The Committee are not convinced of the wisdom of the Government's decision in not

(1)	(2)	(3)
		sanctioning the Majhgawan Scheme based on the Hungarian Plant. They feel that the decision of the Government in sanctioning the scheme based on the second hand plant was taken on consideration other than those of the profitability of the scheme.
42.	180.	The Committee are surprised to note that a project having received priority in the Third Five Year Plan and taken up for development, was deferred by the end of that Plan for reasons of economy and low priority. The Committee feel that if the Government decisions are subjected to such frequent changes, investments on Public Sector Undertakings, are bound to be erratic and uneconomic. Of all the projects taken up by NMDC so far the Panna Diamond Mining Project alone has proved profitable where the Government could have earned the maximum return on minimum investment. The Committee trust that the Government would reconsider their decision and diamond mines at Panna would be exploited to their rated capacity.
43.	185.	The Committee feel that as far as possible, in future, Government should not enter into such agreements with other countries which will put them under the obligation of importing machinery from those countries. In view of what the Mining and Allied Machinery Corp. Ltd. and the Managing Director of N.M.D.C. have stated the Committee expect that N.M.D.C. would procure its future requirements of machinery and stores from the indigenous sources. The Committee suggest that the government should strictly control the purchase of foreign mining machinery.
44.	188.	The Committee feel that the future economics of the Iron Ore Projects depend to a large

(1)	(2)	(3)
		extent on the development of the ports. The distance between India and Japan is about the same as that between Australia and Japan, while the freight charges paid for carrying iron ore from India to Japan are more than for that carried from Australia to Japan. In order to compete with Australia keeping in view their developmental plans and to earn larger foreign exchanges it is necessary that the freight charges be brought down. This can be achieved only if Visakhapatnam port is enlarged and developed to take in ships of 1,00,000 tonnage. The ore handling and loading equipment with a rate of 6,000 tons per hour will also have to be installed there to speed up loading of iron ore into ships. The Committee recommed that the Government should give the highest priority for establishment of these facilities in the shortest possible time.
45.	190.	The figures indicate that within a period of five years motor vehicles and cycles have increased by about 5 times. It is true that mining activities of N.M.D.C. have been expanding and it has been taking up more mines for development and exploitation. But the rate at which motor vehicles have been added seem very high and also the total number maintained now in comparison with its operations. Keeping in view its strained financial position the Committee recommend that expenditure under this head should be brought down.
46.	193.	The Committee are unhappy to note that the public undertakings suffered a loss of Rs. 405 lakhs in a total transaction of Rs. 469.10 lakhs.

(1)	(2)	(3)
47.	195	The Committee consider it regrettable that the management gave a wrong statement to the Audit in 1964. This was due either to negligance or willfully done. The government should investigate and take suitable action against the person concerned.
48.	198	The Committee deplore the delay that has taken place in taking action against the officer. If the inefficiency and negligence of an officer is not brought to light immediately, and necessary action is not taken against him in time, it will create an impression that the management is powerless to take action against inefficient and negligent persons. The Committee recommend that such cases of inefficiency and negligence should be dealt with effectively and promptly. The Committee are also not satisfied with giving of a warning only to the defaulting officer.
49.	201	The Committee feel that the various deficiencies pointed out by the Company Auditors indicate lack of proper control on the part of the management. They recommend that necessary steps should be taken immediately to remove the defects in the system of accounting of the various projects of N.M.D.C.
50.	205	The Committee cannot accept the reply of the management without reservation. If the procedure for periodical checking of cement stock was in vogue, then the loss should have come to notice earlier. But no loss of damage to cement bags was brought to the notice of general Manager till he himself in the course of his inspection noticed it. This only shows that all these rules and procedures existed only on paper and were not being fully implemented. The Committee recommended that procedures for periodical stock

(1)	(2)	(3)
		verification and inspection of storage arrangements should be strictly enforced, so that up-to-date stock position of various items is maintained and losses, if any, are brought to the notice of the General Manager immediately.
51.	207	The Committee are unhappy to note that although the Enquiry Committee submitted its report in November, 1961, the question of fixation of responsibility for the loss was decided by the Board of Directors only in January, 1964, *i.e.* after a lapse of 2 1|4 years, due to which it was not possible for N.M.D.C. to take any disciplinary action against the persons held responsible. Had action been taken by the Managinf Director/Board of Directors soon after the submission of the Enquiry Report, it would have been possible to bring the guilty persons to book. The Committee urge that in future the question of fixing responsibility should be decided immediately after the presentation of the report of an Enquiry Committee. The Committee would also like to know what action was taken by the Heavy Engineering Corporation, Ranchi, against the officer who had been adversely commented upon by a Departmental Enquiry Committee of the Public Undertaking for his negligence during his employment with them.
52.	211.	The Committee are constrained to observe that the management of N.M.D.C. failed to re-negotiate the contract in time and later on involved itself in litigation which was avoidable. While the Committee refrain from commenting upon the facts of the case as it is under arbitration, they hold the view that the responsibility should be fixed for the lapses and action taken against the persons responsible for it.
53.	219.	From the facts of the case, it would appear that the Project Authorities were hesitant to have

(1)	(2)	(3)
		the case investigated by the Special Police Establishment. When the Special Police Establishment made a report holding six persons of N.M.D.C. guilty on charges of misappropriation of iron materials and two persons guilty on charges of negligence of duty, the General Manager found the accused persons innocent. Even though the charges of misappropriation against the accused persons could not be established beyond doubt, it cannot be denied that the management of the project was responsible for lack of control on the accounting and custody of stores which resulted in loss of Rs. 20,520. The Committee deplore the laxity on the part of the management and recommend that measures should be taken for avoiding recurrence of such incidents in future.
54.	222.	The Committee are of view that there is no utility in maintaining a non-technical Projects Division at the head office for a highly technical mining organisation like N.M.D.C. If administrative planning was the main consideration, then this work could be shared by other non-technical divisions of N.M.D.C. such as Board's Secretariat and Administration and Establishment Division. The Committee hope that with the bifurcation of N.M.D.C. this division would be wound up.
55.	226.	The Committee are not convinced with the arguments of the Managing Director in regard to retention of the Planning Division (Iron Ore) at the head office of N.M.D.C. at Faridabad. They feel that for the effective planning of development of iron ore deposits, it is necessary that the Planning Division should be located somewhere near one of the iron ore projects. The work of coordination with the Port and Railways etc. can be handled by the non-technical staff at the headquarters. By virtue of its location near a project site, the Division and the Chief of Iron Ore would

(1)	(2)	(3)
		be in a better position to understand and advise on the practical problems of running the projects. This would enable the Planning Division to plan effectively for the future projects and to suggest remedies for the present difficulties of the projects. This is more true in view of the fact that the feasibility studies carried out by it so far and project reports prepared by it in the past have not been realistic. The Committee desire that the Planning Division (Iron Ore) of N.M.D.C. now located at its head office be transferred to either of the projects sites, *i.e.* Kiriburu or Bailadila.
57	229-30	The Committee are not convinced with the arguments of the Managing Director for maintaining two offices—one in a hired building in New Delhi where the top functionaries sit and another in its own building in Faridabad where rest of the staff of the head office are located. There is an acute scarcity of accommodation in Delhi. The distance between Delhi and Faridabad is not much. The Committee feel that there should be no difficulty in transferring the Delhi office to the head office at Faridabad.
57	234	The Committee feel that taking such a large number of people on deputation has created dissatisfaction and bitterness among the employees of N.M.D.C. Deputationists besides being costly on account of the incidence of deputation pay, leave salary and pension contribution, cannot always give their best to an organisation because they have no permanent stake in the undertaking. Moreover most of the staff coming from the government departments are used to a different way of working which might not be suitable for a mining undertaking like N.M.D.C. N.M.D.C. was set up about 10 years ago. The Committee find no justification for its failure in not having

(1)	(2)	(3)
		recruited, trained and developed adequate number of personnel for the efficient running of the organisation. The Committee recommend that steps should be taken to build up a strong cadre of staff from within the organisation so that dependence on deputationists is minimised.
58.	238	The Committee were surprised to note that without carrying out the techno-economic feasibility study of the project, the Government entered into an agreement with the Japanese Steel Mission for supply of 2 million tonnes of ore per annum from 1964 and subsequently assigned the project to N.M.D.C. for development on a set line.
59.	239	The Committee noted with regret that the selection of the Consultants for preparation of the Project Report of Kiriburu and installation of mining plant there was based merely on the availability of foreign exchange in that country rather than on merit. In fact the history of the Kiriburu Project right from the beginning to the present stage of development is full of bad planning and ineffective performance.
60.	240-41	The Bailadila Iron Ore Project (Deposit No. 14) has not been completed uptil now against the scheduled date of December, 1966 and the delay has resulted in higher capital costs. The net results of wrong planning and ineffective management at all levels has been that N.M.D.C. has incurred a loss of Rs. 295.30 lakhs up to 31st March, 1967 on the working of the Kiriburu Project alone. Further losses of Kiriburu and Bailadila Projects are estimated to be Rs. 285.60 lakhs and Rs. 226.80 lakhs per annum respectively. There appear to be no prospects of earning profit in the near future.
61.	242.	The iron ore projects are vital for the economy of the country both from the point of view of ex-

(1)	(2)	(3)
		ports as well as internal requirements of the steel plants. Therefore every effort has to be made to work them at the lowest cost. The Committee hope that the various deficiencies pointed out in this Report will be overcome with a view to make these projects fully productive and economically viable.
62.	243-45	Of all the projects taken up by NMDC, Panna Diamond Mining Project appears to be the only one where the Government could have the maximum return with the minimum of investment. However, the approach for development of that project has not been systematic and it had to face deferments. The Committee were surprised to note that a project which had received priority for development in the Third Five Year Plan was deferred by the end of that Plan for reasons of economy and low priority and that the Government decision to defer the project was taken without working out the economics of deferment. The Committee also fail to appreciate the decision of the Government in sanctioning the present Majhgawan Scheme for the production of 12,000 carats of diamond per annum as against the scheme based on the Hungarian Treatment Plant for the production of 22,500 carats of diamond per annum. The Committee believe that full scale exploitation of Panna Diamond mines would have resulted in profit.

Sl. No.	Name of Agent	Agency No.
21.	Sat Narain & Sons, 3143, Mohd. Ali Bazar, Mori Gate, Delhi.	3
22.	Atma Ram & Sons, Kashmere Gate, Delhi-6.	9
23.	J. M. Jaina & Brothers, Mori Gate, Delhi.	11
24.	The Central News Agency, 23/90, Connaught Place, New Delhi.	15
25.	The English Book Store, 7-L, Connaught Circus, New Delhi.	20
26.	Lakshmi Book Store, 42, Municipal Market, Janpath, New Delhi.	23
27.	Bahree Brothers, 188, Lajpatrai Market, Delhi-6.	27
28	Jayana Book Depot, Chapparwala Kuan, Karol Bagh, New Delhi.	66
29.	Oxford Book & Stationery Company, Scindia House, Connaught Place, New Delhi-1.	68
30.	People's Publishing House, Rani Jhansi Road, New Delhi.	76
31.	The United Book Agency, 48, Amrit Kaur Market, Pahar Ganj, New Delhi.	88
32.	Hind Book House, 82, Janpath, New Delhi .	95
33.	Bookwell, 4, Sant Narankari Colony, Kingsway Camp, Delhi-9.	96

MANIPUR

Sl. No.	Name of Agent	Agency No.
34.	Shri N. Chaoba Singh, News Agent, Ramlal Paul High School Annex, Imphal.	77

AGENTS IN FOREIGN COUNTRIES

Sl. No.	Name of Agent	Agency No.
35.	The Secretary, Establishment Department, The High Commission of India, India House, Aldwych, LONDON, W.C.-2.	

Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Fifth Edition) and printed by the General Manager, Government of India Press, Minto Road, New Delhi.