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NATIONAL MINERAL DEVELOPMENT CORPORATION LIMITED

MINISTRY OF STEEL

COMMITTEE ON PUBLIC UNDERTAKINGS 1991-92

TENTH LOK SABHA

LOK SABHA SECRETARIAT
NEW DELHI

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SIXTH REPORT

COMMITTEE ON PUBLIC UNDERTAKINGS (1991-92)

(TENTH LOK SABHA)

NATIONAL MINERAL DEVELOPMENT CORPORATION LTD.
(MINISTRY OF STEEL)

Presented to Lok Sabha on 27 April 1992
Laid in Rajya Sabha on 27 April 1992

LOK SABHA SECRETARIAT
NEW DELHI

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(1991-92)

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INTRODUCTION

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

2. The Committee's examination of the working of the Company was mainly based on the Report of the Comptroller & Auditor General of India, 1989, Union Government (Commercial) No. 5.

3. The subject was examined by the Committee on Public Undertakings (1990-91). The Committee took evidence of the representatives of the National Mineral Development Corporation Limited on 29 and 30 November, 1990 and also of the representatives of Ministry of Steel and Mines (Department of Steel) on 7 February, 1991. The Committee, however, could not finalise their Report due to the dissolution of Ninth Lok Sabha on 13th March, 1991.

4. The Committee on Public Undertakings (1991-92) considered and adopted the Report at their sitting held on 5 February, 1992.

5. The Committee feel obliged to the Members of the Committee on Public Undertakings (1990-91) for the useful work done by them in taking evidence and sifting information which forms the basis of this Report.

6. They would also like to place on record their appreciation for the valuable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

7. The Committee wish to express their thanks to the Ministry of Steel and Mines (Department of Steel) and National Mineral Development Corporation Ltd. for placing before them the material and information they wanted in connection with examination of the subject. They also wish to thank in particular the representatives of the Department of Steel and National Mineral Development Corporation who appeared for evidence and assisted the Committee by placing their considered views before the Committee.

8. The Committee also place on record their appreciation of the assistance rendered by the Comptroller and Auditor General of India.

NEW DELHI;
April 3, 1992
Chaitra 14, 1914(S)

A. R. ANTULAY,
Chairman,
Committee on Public Undertakings

CHAPTER I

OBJECTIVES

The National Mineral Development Corporation Limited was incorporated on November 15, 1958 with the objective of the exploration and development of mineral resources in the country other than Coal, Natural Gas, Oil and Atomic Minerals. NMDC's activities are mainly confined to the iron ore. The Company also has with it the Panna Diamond Mines in Madhya Pradesh. NMDC has been operating the following projects:

(i) Bailadila Iron Ore Project Deposit-14
(ii) Bailadila Iron Ore Project Deposit-5
(iii) Donimalai Iron Ore Project
(iv) Bailadila Iron Ore Project Deposit-11-C
(v) Diamond Mining Project, Panna

NDMC's production of iron ore from Bailadila Units has all along been exported through the Minerals and Metals Trading Corporation Limited (MMTC); which is the canalising agency for export of iron ore, the bulk of which was exported to Japan. With the commissioning of Visakhapatnam Steel Project (VSP), NMDC has started making supplies of ore to Vizag Steel Plant. Bailadila ore has also been found suitable for making sponge iron in gas based sponge Iron Plant. NMDC has already been supplying this special quality iron ore to these sponge Iron Plants.

1.2) In accordance with the guidelines issued by the Bureau of Public Enterprises (BPE), the Government directed the Public Sector Undertakings in May, 1979 and February, 1984 to frame their micro objectives consistent with the broad objectives spelt out in the Government of India Industrial Policy statement of December, 1977 and get them approved by their Administrative Ministry to facilitate meaningful evaluation by Government. Audit has pointed out that the National Mineral Development Corporation Ltd. had sent its long term Corporate objectives to the Government in August, 1979 but the same had not been approved by Government till December, 1988. But the Ministry of Steel & Mines informed Audit in January, 1989 that the long term Corporate objectives were still under discussion within the Company.

1.3 The Committee were informed in a written reply by NMDC that the Company had prepared long term Corporate objectives in 1977 and sent the same to Steel Authority of India Ltd. (the then holding

Company) for approval. The Company did not get any approval either from SAIL or Government.

1.4 The Company, however, informed the Committee in a note that NMDC had been preparing Annual Corporate Plans which also included Micro Objectives like (i) Cost Reduction and Improvements; (ii) Human Resource Development; (iii) Diversification etc. taking into consideration the Long Term Objectives framed in July, 1977. The Company, however, could not update the Long Term Objectives framed in July 1977 as the system of distribution of sale proceeds of iron ore exported by NMDC through MMTC could not be settled by Government of India and the Company could not forecast its internal resources. NMDC has now stated that the matter had since been settled between MMTC and NMDC. Department of Steel, Ministry of Steel & Mines had also outlined a long term policy on 'Steel Production' within the country. It had now become possible for the Company to frame long term Corporate objectives and long range Corporate plans. These have now been prepared.

1.5 When enquired about the reasons for the unduly long time of more than a decade taken by the Company in finalising the long term objectives, the NMDC informed the committee in a note that the Company was incorporated in 1958 to take up exploration of minerals in Public Sector. The understanding was that while NCDC (now Coal India) would engage in mining of coal, NMDC would be entrusted with mining of minerals other than coal. However, in course of time the Government went on changing its thinking and policies as can be seen from the following:—

(i) A separate Company called 'Hindustan Zinc Limited' was set up to undertake mining of lead and zinc.

(ii) Copper Projects of NMDC were transferred to a new Company 'Hindustan Copper Limited' set up for the purpose.

(iii) Kudremukh Iron Ore Project was transferred by Government in 1974-75 to a new Company 'KIOCL'.

(iv) Other Public Sector Companies like BALCO and NALCO were set up by Government of India for exploitation of bauxite deposits.

(v) NMDC was a part of Department of Mines. However, in 1973, it was made a subsidiary of SAIL which was set up in 1972-1973, with the idea that all mines of SAIL would be operated by NMDC and NMDC will be responsible for raw material supply to steel plants. This did not take place. The Steel Plants continued their hold on their captive mines. In 1977, NMDC was again taken out of SAIL and was brought directly under Department of Steel.

(vi) There was also attempt by MMTC to make NMDC their subsidiary. However, the Cabinet turned down the proposal made by MMTC/ Ministry of Commerce.

1.6 According to the Company the Government of India had been changing its policies off and on thus resulting in uncertainty in role of NMDC.

1.7 On being asked to clarify their position with respect to the frequent changes made in the role of NMDC, the Ministry of Steel & Mines (Department of Steel) informed in a written reply as under:

> "Originally NMDC was a public sector undertaking under the administrative control of Department of Mines. In 1973, it became a subsidiary of SAIL with the idea that all the mines of SAIL would be operated by NMDC and NMDC would be responsible for its raw material supply to steel plants. In 1978, NMDC was brought under the control of the Department of Steel.
>
> Prior to this, it is a fact that many minerals like copper, zinc and aluminium which were being investigated and exploited by NMDC were transferred to separate organisations such as Hindustan Copper Ltd., Hindustan Zinc Limited, BALCO etc. As the long term corporate objective statement of NMDC submitted in 1977 indicates, the basic objective of the company was to function as the premier national enterprise for exploration, development and optimum utilisation of iron ore resources of the country and also to produce and supply iron ore and other major requirements of minerals like limestone, dolomite etc. for the public sector steel industry. Thus by 1977 it may be said that the NMDC's role was more or less clearly defined as the premier organisation for the development of minerals, related to the steel industry. It also set up for itself and active role in the processing industry for processing minerals to value added products like pellets, sponge iron etc."

1.8 When the Committee enquired whether NMDC had discussed the Long Term Corporate Objectives with the Government after 1977, the Chairman & Managing Director of NMDC stated during evidence that after submission of Long Term Corporate Plan, the Company did not, discuss the matter with the Government. When asked about the reasons, the witness stated:

> "I must confess that we could not discuss the Long Term Corporate Plan in the Board meeting after that because of uncertainties. But as the role NMDC is required to play in the steel making in India in the coming years has now been made clear by the Ministry, we have made a Corporate Plan recently and we have submitted it to the Government. About one month back we have got it approved by the Board. It will come up for discussion now."

1.9 The Long Term Objectives now framed by NMDC *Inter-alia* include:—

1. To be the leading public sector organisation in exploration and exploitation of mineral other than coal and oil with special emphasis on raw materials for steel making like Iron Ore, Limestone, Magnesite, Dolomite, etc.
2. To produce and supply the entire future demands of iron ore of Vizag Steel Plant and also to endeavour to meet the requirement of other Public Sector Steel Plants which may come up in future in the country.
3. To develop products like calibrated ore/pellets to meet the requirements of Direct Reduction Steel Plants of the country.
4. To establish sound production basic for international trade in iron ore and other minerals that are consistent with country's long-term planned objectives.
5. To diversify and to go into production of value added products like ferric oxide, iron powder, ferrites, pig iron, sponge iron, etc.
6. To be major producer of Diamonds in the Public Sector in India.
7. To ensure a reasonable return of not less than 15 per cent on the invested capital and to generate adequate internal resources to finance the growth of the Company.
8. To continue to put in efforts in the direction of cost control on the products of the Corporation.
9. To enhance technical expertise and know-how to develop total technology of open cast mining and mineral processing from the investigation stage to the processing of value added items.
10. To strengthen the Research and Development work with the objective of fully developing the indigenous technology to satisfy the growing needs of R&D for mining industry.
11. To render mining consultancy services to other open cast mines in the country and also abroad.
12. To develop proper marketing intelligence and organisation for coping up with the short and long-term demand of the products and services of the Corporation.

1.10 On being enquired about the reasons for not approving the objectives of the Company early, the Secretary, Ministry of Steel & Mines, Department of Steel stated during evidence:—

> "This Company first prepared the objective statement in August, 1977. At that time, it was a subsidiary of SAIL. Afterwards it became an independent company by itself. So, it was sent to the Government in 1979. The Government went over it. Then the

Government returned it to the Company with suggestions for reviewing it. Thereafter, in October, 1990 the Corporate objective statement came to the Government, the Government went over it and had suggested a few changes in order to get the objectives more specific. We are in touch with the Corporation and we hope to settle it within a very short time. I do admit that from 1979 till about October, 1990 it remained under consideration within the Company. Somehow, it so happened that the Government also did not pursue it with the Company. It still needs some further specification. We would be able to finalise that within a very short time."

1.11 Elucidating further, the witness stated:

"I do entirely agree that 11 years' time is certainly a very long time, for reviewing the long term objectives which had been sent earlier. The approval would come after the Corporation would have reviewed and got it passed by the Board of Directors. The role of the Government would have been to remind the Corporation. But the fact is that the Corporation sent it to the Government again in October, 1990. It remained under consideration in the Corporation during this time. One reason which they have mentioned is about the uncertainties in their prospects even in respect of iron ore. But I do agree that it should not have taken such a long time. But at the same time I may mention that since the broad role of the Corporation was well identified since the beginning of seventies — before that there were other roles with it — it was only pursuing its broad objectives in respect of iron ore production, catering to steel factories and for export. Thus, developing of the iron ore, improving technology, these were broadly the objectives which were very clear. And even though technically this Corporation's objective statement did not get firmly adopted during this time and did not get firmly approved by the Government, by and large the role of the Corporation *vis-a-vis* these minerals was quite clear and the Corporation therefore, in view of this also prepared some five year plans for its activities, particularly from 1980-81 to 1984-85 and another long term plan for 1985-86 to 1990-91 and these were approved by the Board of Directors and within the context of these plans the Corporation went on preparing its annual corporate plan of activity also."

1.12 Admitting delay in finalisation of the objectives, the witness state that "I cannot say that it was a justified delay and certainly the delay was there."

1.13 When specifically asked about the Ministry's responsibility in the matter, the Secretary stated:—

> "The Ministry of course is responsible in both ways as the owner of the Company and also participating in the management through nomination of the Board of Directors, in which some senior officials of the Government also are participating. In this particular case, it did get missed from the Government in not getting it pursued. We received it in October, 1990 again some suggestions have been made. And we hope to finalise it in a month or so."

1.14 In reply to a querry if the revised objectives have been approved, the Ministry stated:—

> "The objectives have not been set out in quantifiable terms. Further it is felt that the long term objectives have to be compatible with the allocations of 8th Five Year Plan. The matter has been discussed with NMDC and they have been advised to revise their document."

The Government have informed that the Long Term objectives of the Company were approved by them on 25.4.1991.

1.15 In terms of BPE's guidelines issued in 1979 and 1984 each public undertaking was required to formulate with the specific approval of the administrative Ministry, a statement of micro objectives consistent with the broad objectives spelt out in Industrial Policy statement of December, 1977 to facilitate realistic and meaningful evaluation of the enterprise by Parliament and the Government. The National Mineral Development Corporation is stated to have framed its Long Term Corporate objectives and submitted the same to the Steel Authority of India Limited (the then holding Company) and the Government in 1979 for approval but were not approved by them all these years. The Secretary, Ministry of Steel & Mines (Department of Steel) clarified in evidence that Government had examined the objectives and returned the same to the Company suggesting their revision. The revised objectives were resubmitted by NMDC for approval of Government in October, 1990 *i.e.* after a gap of 11 years but these were again returned to them for making them more specific. The delay of 11 years in submission of the objectives to Government has been attributed by the Company to the frequent changes in their controlling agencies between 1973 and 1977 and non-settlement by Government of apportionment of sale proceeds of iron ore between MMTC and NMDC. The Company's contention that frequent change of their masters was the inhibiting factor in framing their long term objectives does not hold good because since 1978. NMDC has been continuously under the control of the Department of Steel. It is surprising that neither the Ministry sent any remainder to NMDC nor the NMDC pursued the matter with Ministry for 11 long years. It is also very strange that the objectives were not even discussed in the Board Meeting during this period. The Secretary, Department of Steel had

stated during evidence, "I do entirely agree that 11 years' time is certainly a very long time for reviewing the Long Term objectives which had been sent earlier." The Committee are not able to understand how in the absence of Long Term objectives the performance of the Company was being evaluated by the Government. The Committee cannot but strongly deprecate the lackadaisical manner in which both NMDC and the Ministry have handled this matter.

1.16 The Committee have now been informed that the long term objectives of the Company have been approved by Government in April, 1991. The Committee desire the Government to now strengthen its monitoring machinery with a view to keeping constant rapport with NMDC to ensure that concerted efforts are made by the Company to achieve the objectives laid down after such a long time and are not allowed to remain tall claims on paper only.

CHAPTER II

PROJECTS AND THEIR PERFORMANCE

The Company had developed and commissioned the following projects for production of iron are:—

1. Bailadila Iron Ore Project — Deposit-14 and 11-C.
2. Bailadila Iron Ore Project —Deposit-5.
3. Donimalai Iron Ore Project.

A: Bailadila Iron Ore Project-14

2.2 The project was commissioned in April, 1968 to raise iron ore by open cast mining. The rated capacity of mine was 4 million tonnes of lump ore. A Committee appointed by the Management to look into the designing of the mine, held in May, 1968 that there were 2 lines of crushers while even a single line of crusher was in a position to treat enough ore to produce 4 million tonnes of sized ore per annum. According to that Committee the second line of crusher was an expensive stand-by. While giving evidence before the Committee on Public Undertakings (1972-73) the then Chairman of the company has also accepted that there was over-designing in the crusher capacity.

2.3. In this connection, the Committee on Public Undertakings in paragraph 20 of their sixtieth Report (1974-75) while reiterating their earlier recommendation made in paragraph 5.30 of their Thirty-seventh Report (1972-73) re-emphasised that the matter should be probe into and responsibility fixed for unnecessary installation of a second line of crusher.

2.4 According to Audit, Government asked in March, 1976 the Steel Authority of India Limited (the then holding company) to probe into the matter and submit a report to the Government. The Company requested the SAIL in April, 1976 to indicate the action to be initiated in the matter.

2.5. As per Audit there was no evidence whether SAIL had conducted any probe except for a decision taken in May, 1978 for shifting one Line of crusher from Bailadila iron ore Project-14 to Bailadila 11-C.

2.6 The Ministry, however, informed Audit in January, 1989 that a spare crushing line was essential as this was an export-oriented project and the investment on spare crushing line was insignificant as compared to the loss of foreign exchange in case spare line was not installed. In case of Bailadila-14, the Crusher had to be of a minimum size of 54" × 74" size on technical grounds. This corresponded to the designed capacity of

Bailadila-14. The spare crusher had also to be minimum 54" × 74" size. This turned out to be 100% spare capacity. The Company could not have designed an arrangement with a total 15% capacity in such situations.

2.7 When asked about the need for a stand-by crusher, the Company informed in a note that the operating experience of various mines in the country had demonstrated that in Indian conditions a stand-by crusher line even today was essential. The Company, however, had also admitted in a note that "It is a fact that one crusher at Bailadila-14 alone could handle 5.5-6.0 million tonnes of Iron ore per annum." However, in case this crusher is down either on account of breakdown or on account of regular maintenance, the production comes to a standstill resulting in idling of all other equipment and loss to the country. The spare capacity in the single crusher alone does not help.

2.8 When enquired whether any enquiry, as recommended by the Committee, was conducted and the responsibility for the lapse fixed; the Chairman & Managing Director of NMDC informed the Committee during evidence that "As far as the enquiry is concerned, to the best of my knowledge no enquiry was done."

2.9 When the Committee enquired as to why the enquiry was not instituted by the Government, the Secretary, Department of Steel stated:—

> "It appears from various papers relating to this case that Government kept on considering this issue about the justification, appropriateness of having the second crusher right from the beginning. Government was, all the time, satisfied that the second line of crusher was necessary. Then, on the basis of the directions of this Committee, a reference was made to SAIL (In March, 1976) to probe into it because at that time NMDC was subsidiary of SAIL. Since NMDC came up, SAIL was not in picture thereafter. Based on the facts available, the Government felt that this was really necessary. This matter was also raised by C&AG. By then, the Government had awaited further facts relating to the actual experience in Bailadila Project. Based on those facts also again it appears that the Government took the view that the second line of crusher was necessary. In that light, it appears, a formal probe, so to say, was not initiated. But Government did consider these aspects and came to the view that it was necessary."

2.10 When asked if it was not a lapse on the part of the Government, the witness stated:—

> "It will be difficult for me to conclude that in view of the facts before the Government. However, if the Committee still feels that there was need for an enquiry, we will do that."

2.11 When the Committee enquired why their recommendation was not implemented even after a lapse of more than fifteen years, the witness replied:—

> "We shall fully abide by it in future. At one stage Government did ask SAIL to go into it, but we have not been able to trace out those papers. But the fact is that no probe has been ordered on this."

2.12 On being pointed out that if Government had any difficulty in implementing their recommendation, they should have approached the Committee with justification for that, the witness replied:—

> "The Government did consider it and was quite satisfied on the basis of the facts. I agree that this view of the Government should have been communicated to the Committee and then the Government could have awaited for the response of the Committee."

2.13 He, however, stated "If the Committee directs we can institute a probe immediately into this issue and report to the Committee."

2.14 In reply to a question if a technical enquiry Committee could be constituted to go into the technical aspects of the matter and its report submitted to the Committee, the Secretary assured the Committee, "It will be done."

2.15 In a note submitted to the Committee on 3 October, 1991, the Ministry of Steel have stated that an Enquiry Committee was constituted by Government on 11 March, 1991 to examine the question of installation of 2nd line crusher at Bailadila-14 deposits. That Enquiry Committee is stated to have served in its report submitted to the Government in July, 1991, *inter-alia* as under:—

> "NMDC had taken the right decision in installing two crusher lines at Bailadila-14. The 2nd line crusher was an integral part of the total system ensuring un-interrupted production and export of iron ore. It was noted that there was no objection to this decision at any level of scrutiny before this investment decision was taken."

2.16 According to Audit the Detailed Project Report (DPR) of Bailadila-11(C) contained a provision to transfer the spare line of crusher from Bailadila-14 to 11C at a cost of Rs. 92.43 lakhs. Contrary to this a new line of crusher was assembled by utilising spares from Bailadila-14 by additional procurement worth Rs. 389.51 lakhs which was charged to Bailadila-14. The project cost of 11(C) of Rs. 3089 lakhs did not include this expenditure.

2.17 When asked to explain the reasons for taking a decision to shift the second line of crusher from Bailadila-14 to Bailadila 11-C if it was considered essential at Bailadila-14, the C&MD stated:—

> "In 1977 we wanted to develop a new mine (11/C) next door to this project (Bailadila-14) as replacement of project BIOP-14. In our project report we provided for shifting our crusher from BIOP-14 to 11/C, considering the fact that production at BIOP-14 would gradually taper off and the crushers still have some life. The project got delayed for different reasons and it was completed in 1987. In 1987, the crusher to be shifted was examined by crusher experts. It was opined that the crusher had already lived its life and shifting of old crusher to the new mine would not be advisable. We had no alternative but to build a new crusher with some old and new parts."

2.18 On an enquiry why the Project cost of 11/C did not include the cost of additional spares procured on Bailadila-14 account but utilised for 11/C, the NMDC informed in a written reply:—

> "Since the decision was to utilise one of the crushers from Bailadila-14 Crushing Plant, no provision was made in the estimated project cost of Bailadila-11/C mine on this account. The expenditure on overhauling the crusher (including spare parts) was to be booked against Bailadila-14 Project as 'revenue expenditure'. In any case, Bailadila-11/C. Project was to become part and parcel of Bailadila-14 project as Bld. 11/C mine is replacement of Bld-14 mine, other infrastructure of Bailadila-14 Project including the screening plant, loading system, township, hospital, school etc. being common. In such a situation, booking the cost to 11/C or Bailadila-14 would not make any difference."

Utilisation of Crushers

2.19 during evidence the Committee were informed that one of the crushers (main crusher) was used about 50% of the utilised time and the other for about 38% of the utilised time. In a statement furnished to the Committee after evidence, the percentage of utilisation of each crusher at Bailadila-14 during the years 1984-85 to 1989-90 was however, stated by the Company to be as under:—

2.20 On being pointed out that the idle capacity of the crushers was 70% from 1984 onwards, the Chairman & Managing Director stated that it was because the production level had gone down due to depletion of reserves at Bailadila-14 mine.

2.21 The Committee desired to know whether with the installation of second crusher at a cost of Rs. 1.70 crores there had been any increase in the cost of production. To this the Secretary, Department of Steel stated during evidence:—

> "By the installation of second crusher, there was higher capital input and to that extent, the total cost went up. Considering that

Sl. No.	Year	'A' Line Crusher		'B' Line Crusher		Utilised hours of Crusher Plant as a whole	'A' Line Crusher percentage utilisation on available hours	'A' Line Crusher percentage utilisation on crushing plant utilised hours	'B' Line Crusher percentage utilisation on available hours	'B' Line Crusher percentage utilisation on crushing plant utilised hours
		Available hours	Utilised hours	Available hours	Utilised hours					
1.	1984-85	3616	1103	2896	778	1881	31%	59%	27%	41%
2.	1985-86	2888	839	3376	995	1834	29%	46%	29%	54%
3.	1986-87	2904	592	4256	1025	1618	20%	37%	24%	63%
4.	1987-88	27	6	3647	1288	1294	22%	0.4%	35%	99.6%
5.	1988-89	3265	779	1713	388	1167	24%	67%	23%	33%
6.	1989-90	2931	967	2289	506	1473	33%	66%	22%	34%
	Cumulative	15631	4286	18177	4981	9267	27%	46%	27%	54%

(NMDC has informed that information in respect of the years 1977-78 to 1983-84 is not available with them.)

the production would have been merely zero in one year and production might have been severely affected in other years also, the total loss or gain should really be seen in that context. But certainly by installing another crusher, the total cost went up. In one year, the crusher was utilised only for a very short time because of heavy repair. In other years also, the second crusher has been utilised."

B. *Bailadila Iron Ore Project-5*

2.22 To meet the export commitment, the Company undertook the development of Bailadila deposit-5 and commissioned the mine in January, 1977. BIOP-5 was sanctioned in November, 1968 with the full knowledge that it would be a losing venture for all time to come. The decision to set up the project was stated to have been taken by the Government keeping in view the need to earn valueable foreign exchange.

2.23 After examining the above aspect, the Committee on Public Undertakings in para 6.32 of their 37th Report (1972-73) had recommended as under:—

> "The Committee are at a loss to understand as to how an investment decision on the project with a capital outlay of more than Rs. 38 crores had been taken even with the full knowledge of the fact that it would be a losing venture for all times.
>
> The Committee would like that Government should carefully analyse the various components of cost and take concerted measures to ensure that the cost of production and transport charges do not exceed the sale price which is fixed with reference to the international conditions."

2.24 Since inception, the project never achieved the designed capacity of 40 lakh tonnes and due to increased cost of production, the project incurred losses upto 1980-81. Profits made during the years 1981-82 to 1985-86 were mainly due to accretion of dollar *vis-a-vis* rupee. The project again incurred loss of Rs. 531.70 lakhs, Rs. 1120.24 lakhs and Rs. 913.11 lakh in 1986-87, 1987-88 and 1988-89 respectively. According to the Company this project suffered losses during 1986-87 to 1988-89 mainly due to non-payment of fair price to NMDC by MMTC. However, with effect from 1.4.1989. NMDC and MMTC have entered into a commercial agreement setting the price for the next 4 years. This project had earned a profit of Rs. 15.60 crores in 1989-90 and is expected to make profits from now onwards, in case the Company is allowed to sell this high grade ore in domestic market to meet domestic demands.

2.25 In reply to a question whether the company had approached the Ministry for permission to sell the ore from the Project in the domestic market only and if so, what was the Ministry's reaction thereto, the Company informed in a written reply as under:

> "The Company does not require permission from the Ministry to sell the ore in the domestic market, as Company is competent to take a decision on sale of its ore. The position, however, could

change in case Government directs NMDC to continue exports and MMTC decides not to pay a 'fair price' to NMDC."

2.26 When the Committee enquired whether at the time of taking up this project payment of fair price to NMDC by MMTC and also that the project would remain a losing venture were considered, the C&MD stated in his evidence:

"The Government of India decided to use Iron Ore Export as one of the means for earning foreign exchange as early as 1958 and at that time Government of India conceived those projects *viz.* Kiriburu, Bailadila-14 and Bailadila-5. They knew that they will be losing on these projects to some extent. But, since it was a question of earning foreign exchange for the country, I think, they still decided to go ahead with the projects...... The project in particular and NMDC in general went into a total profit from 1989-90. That was largely because of domestic demands of iron ore. As long as we were dependent upon one buyer that is MMTC we did not have enough strength to bargain a commercial price. But when the Vizag Steel Plant started we settled the commercial price with the Vizag Steel Plant. This made a base for negotiating and finalising a commercial price with MMTC and that is precisely the turning point in the history of NMDC that we made a profit in 1989-90 and from now onwards we would continue to make profits."

2.27 The Committee were informed during evidence by the CMD that because of defect in the equipments supplied to them the Company could not achieve more than 70% of its designed capacity.

2.28 Asked if the loss suffered by the Company was attributable to their inability to utilise the designed capacity, the witness stated that some loss might be due to that also but it was mainly due to non-receipt of remunerative prices. Bailadila-5 was, however, stated to have been able to achieve a level of about 70% of its designed capacity. In this connection the C&MD stated during evidence:

"BIOP says that with this equipment 5 million tonnes can be achieved against the designed capacity of 6 million tonnes. But we have been able to achieve upto 4.7 million tonnes. Now we are on the job of further upgrading these equipment. Some of the equipment we are importing now."

2.29 Audit had brought out that Bailadila-5 designed for annual rated capacity of 40 lakh tonnes of lump ore had to settle down for a low capacity due to design deficiencies in mine, plant and equipments and inferior quality of plant equipments supplied by indigenous manufacturers/suppliers. When asked about this, the Secretary, Department of Steel stated:

"This project came into being as an export effort....... It met with various problems during the course of implementation. It has a time over-run and cost over-run. The companies which were selected for earth work and also for supplying machinery did not fulfil the commitment. Finally there was a good deal of delay for the project to come up. It has been the experience of the company that the machines have not been functioning properly and full working is also difficult to achieve."

2.30 The Committee desired to know whether at the time of commissioning of the project the company had fixed any norms of operation to control the cost of production and increase the productivity and if so, what were those norms and to what extent their application had helped in reducing the cost of production and losses of the Company. In a written reply the Company informed as under:

"The Company prepares annual budget for each project indicating there in physical as well as financial targets as also some other norms like the following:

1. Availability and utilisation norms for the equipments.
2. Energy consumption.
3. POL consumption.
4. Absenteeism.
5. O.T. norms.
6. Rate of production/processing in various sections of plant.
7. Consumption of other stores/spares.
8. Inventory Levels.

The performance of the Project is regularly monitored *vis-a-vis* the budgetary targets/norms. While it is not possible to quantify the extent to which their application has helped in reducing cost of production and losses to the Company, these budgeted targets/norms have definitely helped in controlling the cost.

The Company has been successful in developing domestic market for its products. As a result, the Company has been in a position to realise better prices than the prices which were received by NMDC when NMDC was depending solely on MMTC for sale of its products. This strategy has already helped NMDC in turning Bailadila Deposit-5 from a losing Project to a profit making Project."

2.31 In this connection, the Department of Steel (Ministry of Steel and Mines) informed in a written reply as under:

"Because of the fluctuations in the market for iron ore and the contract of shipment getting finalised on a yearly basis, the budgeted cost of production, depending upon such volumes, had to be necessarily varied on year to year basis. Taking into account the standard cost of production suggested by BIOP and also the budgeted cost of production, necessary cost controls and reviews were being done to keep the costs within limits.

In case of Bailadila-5 the cost of production and the profitability depended very much on the sale/despatch of produced fines which were being dumped in the valley.

Government was aware of the situation obtaining on the export of iron ore from Bailadila-5 project and had been reviewing the budgeted cost of production and also the projected cost of production and improvement plans as per the annual plans/annual corporate plans of NMDC."

2.32 Asked whether there was any improvement in the working of the Project, the Secretary, Department of Steel stated during his evidence that the cost of production had been contained, though the cost was varying from year to year because of the fixed cost and sometimes low production.

Certain significant aspects noticed in implementation of the BIOP-5 Project are dealt with in the succeeding paragraphs.

(i) *Project Estimates*

2.33 The project report approved in April, 1970 for Rs. 3,653 lakhs (inclusive of foreign exchange component of Rs. 218 lakhs) was revised to Rs. 6,749 lakhs (inclusive of foreign exchange of Rs. 775.5 lakhs) in February, 1978. The project scheduled to be completed by January, 1974 was actually commissioned in January, 1977, *i.e.* after 3 years of the scheduled time.

2.34 Audit has stated that the principal factors that contributed to the increase of Rs. 3,096 lakhs over the estimates of April, 1970 were escalation in prices of plant and equipment (Rs. 1,553 lakhs), increase in costs consequent on increase in period of construction (Rs. 808 lakhs) increase in scope of work (Rs. 384 lakhs) increase in quantities (Rs. 332 lakhs) and fresh items included in revision (Rs. 52 lakhs). While the increase in the total cost of project was about 85 per cent, the establishment charges and head office expenses alone increased by 419 per cent as compared to the original estimates.

2.35 Asked about the reasons for abnormal cost escalation and time overrun of the project, the company informed in a written reply as under:

"This has already been investigated by the Bureau of Public Enterprises. The main reasons for the time and cost overrun amongst others have been the then policy of the Government of India (i) to utilise indigenous manufacturing capacity to the maximum extent and also (ii) to entrust the works to other Public Sector Organisations. Some of the heavy equipments used in this Project were manufactured in the country for the first time and were tried in this Project. These equipment had many problems with regard to delivery and quality."

2.36 During evidence, the CMD stated:

"I must confess, I certainly do not defend the time and cost overrun. It is certainly not the sign of efficiency."

2.37 Regarding increase in project cost, the BPE observed in November, 1982:

"The establishment and interest accounted for about 25 per cent, quantity variation about 19 per cent and the rest of the increase being explained by price escalation, etc. It is felt that if the project had been completed by scheduled date of January, 1974 almost half of the total cost overrun of Rs. 31 crores could have been avoided."

2.38 The Bureau of Public Enterprises further pointed out in November, 1982 as follows:

"NMDC submitted the DPR much too early before the final concept of the project had been evolved after detailed investigations had been completed. NMDC had neither enough field data nor conceptual plan to estimate correctly the cost of the project and time of completion of various activities."

2.39 Before taking up of Bailadila-5, the Company had already developed two mines, viz. Keriburu (April, 1964) and Bailadila-14 (April, 1968) in collaboration with foreign Consultants. When enquired that with the experience already gained, why the DPR in respect of Bailadila-5 was not subjected to critical scrutiny before an investment decision was taken, the NMDC informed in a written reply as under:—

"The DPR of Bailadila-5 was prepared by NMDC with the assistance of Consultants like National Industrial Development Corporation (A Government of India Undertaking) and Nittetsu Mining Consultants of Japan. The DPR was appraised at different levels of Government of India i.e. (i) Technical Committee, (ii) Planning Commission and (iii) Finance Ministry. As such the DPR was subjected to critical scrutiny before an investment decision was taken. The delay in completion of the project was on account of factors which have nothing to do with the DPR. The delay was largely due to delay in execution of works by various Government agencies involved and delay in supply of equipment by indigenous suppliers like HEC."

2.40 However, during evidence, the CMD admitted:

"There was perhaps limitation also with NMDC partly because DPR not being upto the mark."

2.41 When enquired why the Government sanctioned the project with such insufficient data, the Department of Steel informed in a written reply as under:—

> "In November, 1986, the Cabinet Committee on production, prices and exports, approved a proposal from the then Department of Mines for the development of an iron ore mine at Bailadila Deposit No. 5 at an estimated cost of Rs. 38 crores for the production of 4 million tonnes per annum of sized ore for exports to Japan. Based on detailed scrutiny of the estimate by BPE, Government approval was, however, accorded in April 1970 for an estimated cost of Rs. 36.53 crores.
>
> The project which was scheduled to be completed by 1972 experienced inordinate delays in supply of equipment by the indigenous manufacturers viz. HEC and MAMC, as also serious technological problems in the drivage of the 2025 metre long tunnel, as a result of which the construction schedule had to be altered many times. The project was finally completed and commissioned in 1977-78 at a revised cost of Rs. 67.49 crores."

2.42 The increase of Rs. 3096 lakhs (85%) over the original cost has been explained by the Deptt. of Steel as follows:

	Amount (Rs. lakhs)	%
Due to escalation in price	1553	50
Due to enlargement of construction period	808	26
Due to change in scope of work	384	12
Due to increase in quantities	332	11
New items	52	1
Total	3129	
Less saving	33	
Total	3096	

2.43 Explaining the above increase the Deptt. of state that the increase due to change in scope of the work was due to certain aspects not anticipated in the Detailed Project Report (DPR). While the DPR was based on maximum available data with respect to geological strata, quality of minerals etc., there was need to recognise that there can always be escalation due to unexpected geological problems that necessitate change in cost estimates.

2.44 When asked to explain the increase in cost by Rs. 8.08 lakhs due to enlargement of construction period, the Secretary, Department of Steel stated:

> "The main problems came here in two ways. One was that there was a serious technical problem; secondly there was a delay by the main equipment suppliers in supplying the machines. There was a tunnel to be dug up which posed a great difficulty."

(ii) *Structural Works*

2.45 The structural works were divided into two parts and were entrusted to Hindustan Steel Works Construction Limited (HSCL) and Triveni Structural Limited—both Public Sector Undertakings. There were abnormal delays in completion of work as given under:

	HSCL	TSL
Date of award of work	30.11.1971	4.1.1971
Stipulated date of completion as per the contract	31.7.1974	13.9.1973
Actual date of completion	31.12.1976	31.12.1976

2.46 Audit has stated that the increase in cost attributable to the delay on the part of these two firms could not be assessed by the Company. The Company could not levy any penalty / liquidated damages on these firms though delay was abnormal and increased the project cost by Rs. 8.08 crores on account of overall increase in the period of construction.

2.47 In reply to a question why the increase in cost on account of delay in completion of the works could not be assessed by the Company informed the Committee as under:

> "It is fact that there was lot of delay on the part of the two structural contractors, both of which were Public Sector Undertakings. In integrated Operations like that of Bailadila, it was not possible to exactly evaluate the cause of delay by each agency and increase is approximately Rs. 8.08 crores on account of overall time overrun."

2.48 Asked why the Company did not levy any penalties on the firms even when the delays were abnormal, the Company stated that both NMDC as well as Contractors had raised claims on account of delays and penalties against each other on various accounts. Finally a negotiated settlement was reached between these contractors and NMDC taking into consideration their claims and NMDC's claims.

(iii) Conveyor Tunnel and Equipments

2.49 According to Audit the construction of a tunnel for a length of 2.135 Kms. for the conveyer belt which was a critical activity in the project was entrusted to National Projects Construction Corporation (NPCC), a Public Sector Undertaking, in December, 1969 even though the Company had reservations about the capabilities of NPCC to undertake the work. The termination of Contract of NPCC was under correspondence between Ministry of Steel and Mines and Ministry of Irrigation and Power. As it was ultimately felt that the NPCC was not having the technical capability required for chemical grouting, the work was then split up in January, 1975 between NPCC and M / s. R.J. Shah Limited (who had the technical capabilities for chemical grouting etc. as stated by NMDC) and the tunnel was completed by September, 1976 as against the stipulated date i.e. April 1973 resulting in a delay of nearly 3½ years and increase in cost from Rs. 85.10 lakhs to Rs. 165.60 lakhs. The Management/Ministry informed Audit in December, 1988 that the execution of the tunnel work was delayed due to encountering of very bad and flowing strata and due to inadequate expertise of NPCC to whom the work was initially awarded in keeping with the policy to encourage Public Sector Undertakings.

2.50 Audit had observed that with a view to developing the indigenous sources of supply, the project was constructed with about 80% indigenous equipment and machinery. But the local agencies belied the expectations. Almost all the suppliers, particularly HEC had inordinately delayed the supplies. As stated by Audit the delay on the part of HEC ranged from 46 months to 75 months.

2.51 Though the equipments were ordered on indigenous sources viz. HEC and Tata Robins Frasers. (TRF), Jamshedpur, it was observed that the HEC had to make foreign collaboration with USSR for manufacturing crushers (April, 1970) and with DEMAG of West Germany for manufacturing the reclaimer and the wagon loader (May, 1971) and TRF, Jamshedpur had foreign collaboration with Robins Engineers and Constructions Limited, USA for manufacturing the downshill conveyor system. While the total cost of plant and machinery was increased by about 76.5 per cent of the original sanction, the foreign exchange component was increased by 255 per cent and total foreign exchange incurred amounted to 46.84 per cent of the total cost of plant and machinery against 23.25 per cent envisaged in the original estimate.

2.52 The Committee wanted to know whether the company had verified that NPCC, HEC etc. were having the organisation, expertise, experience and necessary resources normally expected from leading tunneling contractors and further how without such a verification the Company was satisfied that NPCC could execute efficiently the tunneling works and the HEC manufacturing the equipments to the desired specifications and supply them within the time scheduled. Explaining the reasons for awarding the job of construction of tunnel to NPCC and manufacture of equipments to

HEC, the Company informed in a note that at the time of award of tunnel work for Bailadila, the country had hardly any contractors having expertise in driving tunnel of this length i.e. 2.14 Kms. The Company had to entrust the work to National Projects Construction Corporation (A Government of India Undertaking) keeping in view the general guidelines by Government of India to encourage use of indigenous know-how and equipment and performance to Public Sector Undertakings. This was despite the fact that NMDC had reservations about the capacity of NPCC to complete the tunnel work in time. According to NMDC the tunnel met with some unforeseen and unexpected problems nearby halfway because of flowing strata. NPCC could not tackle this problem. It came to notice that a private company M / s. R.J. Shah had some experience in chemical grouting which they had done in some other tunnel in that country. After due deliberations by a High Powered Committee appointed by Government of India, it was decided to give part of the work particularly length involving chemical grouting to M / s. R.J. Shah. The tunnel work was ultimately completed by the two contractors by September, 1976 as against the stipulated date i.e. April, 1973.

2.53 During evidence, the Committee enquired whether NMDC, despite their having reservations about the capability of NPCC in doing the tunneling work, were compelled to place orders on NPCC because Government desired that the orders should be placed on a Public Sector Undertaking, the CMD stated:

> "That decision was not taken by us, but by a high-powered committee of Government."

2.54 In a post evidence note furnished to the Committee the Department of Steel clarified the position as under:

> "The proposal received from NMDC was considered in the Government and a question was raised about the ability of NPCC to perform the job and adhere to the time-schedule. It was also suggested that their experience in tunneling field should be ascertained and that NMDC should take all necessary precautions before orders are placed on NPCC. NMDC vide their letter No. PS/D(M)286/69 dated 3.12.1969 indicated that the view taken by the Board of Directors at their meeting on November 12, 1969 was that NPCC were technically competent to undertake the work and that they also had the equipment, machinery etc. to enable them to complete the work in accordance with the schedule. In addition, NPCC had agreed to give adequate guarantee for timely completion of the work within the stipulated 36 months from the date of the award of the work. For this they had also agreed to provide for a 'Penalty Clause' in the agreement together with a provision for suitable 'bonus' in case they were able to finish the work ahead of time. Further, NMDC had written to NPCC that a suitable clause

should be inserted in the agreement according to which the NPCC would undertake to equip themselves with necessary equipment etc. to the satisfaction of NMDC. After having been satisfied with the explanations given by NMDC the proposal of NMDC to award contract to NPCC for tunnel work was approved by the Government vide sanction No. 5/43/68-M. VI dated 22.12.1969."

2.55 As regards the award of contract for supply of equipment by HEC and MAMC, the Committee enquired whether the Company had no other alternative except buying equipment from one indigenous companies, the CMD stated during evidence:—

> "We were told by the Government that only they would handle such a gigantic size of equipment. We were asked to place orders of HEC and MAMC. MAMC made apron feeders, steel conveyor belts, without any foreign collaboration. So the then Chairman of the Company wrote to the Ministry that MAMC had no experience, 'that they had no collaboration also. The doubt was whether equipment of this magnitude could really be successfully manufactured by them. The Government directed NMDC to place orders on MAMC. This is on record."

2.56 The witness further stated:—

> "We did bring to the notice of the Government and the Ministry that the company as such is not convinced about the capability and capacity of these public sector companies but we were advised that we have to place orders on them and I think, perhaps we had no alternative and we had to abide by the direction. The least we could do was to see in the situation what best could be done. Having received the advice how best in the given circumstances we could collaborate with these people was certainly our onus of the company."

2.57 When enquired how Government satisfied itself about the capability of HEC and MAMC to undertake the jobs, the Department of Steel informed in a written reply as under:

> "While approving the decision to develop Bailadila-5 in November, 1986 the Cabinet Committee on Production, Prices and Exports directed that NMDC should place immediate orders on HEC for all the machinery required for the mine on the basis of a belt conveyor transport system from mine to railway yard. One of the important reasons for going in for indigenous manufacturers was due to the necessity to keep the foreign exchange component to the minimum. In fact, the Expenditure Finance Committee, while concurring to the project on 5.9.1967, stipulated that NMDC should straightway settle with HEC and MAMC all the items that could be fabricated by them."

2.58 Asked how the purpose of saving foreign exchange was served in this case, except creating a middle agency as HEC had to enter into foreign collaboration for manufacturing of crushers, the Company in a written reply informed that it was true that the purpose of saving foreign exchange by awarding work to HEC etc. as envisaged by Government of India had not been fully achieved.

2.59 Regarding the foreign exchange savings, the Department of Steel stated that it was true that certain machineries had to be imported by HEC as it had to have foreign collaboration for manufacturing crushers for the first time. It was further stated that it appeared that the decision to place orders on indigenous manufacturers was taken with a view to developing indigenous technology in the country and more specifically for development of indigenous capabilities in plant and machinery manufacturing.

(iv) *Design Deficiencies/Defects in Equipments*

2.60 According to Audit the performance guarantee tests conducted in February, 1979 revealed certain defects. The reclaimer and wagon loader supplied by Heavy Engineering Corporation (HEC) were based on the design supplied by DEMAG, a West German firm. As the defects could not be rectified by HEC, the Company (NMDC) called the German experts in April-June, 1980 and the performance tests for accepting them as satisfactory could be carried out only in June 1980. The Company had not taken any action against the suppliers for the inordinate delay and/or inferior/defective supply of plant equipments. Certain inherent design deficiencies, like inability of primary crushers to start under chokefeed conditions; inability of primary crusher crane to handle assemblies; inferior quality of apron feeders; low capacity of primary and secondary stockpiles etc. were also noticed.

2.61 In the case of apron feeders the detailed project report provided for 23 feeders, 4 being apron feeders and the rest vibrating feeders in the crushing and screening plant. The Consultants subsequently decided that all the feeders should be apron feeders. Though the company decided in November, 1971 to import these equipments from Japan, at the instance of the Government (in July, 1972), these equipments were ordered in September, 1972 and procured from MAMC, Durgapur (a public sector undertaking) at a total cost of Rs. 115 lakhs against the original estimate of Rs. 26 lakhs. These equipments manufactured for the first time in the country without any collaboration from reputed manufacturers proved to be of inferior quality resulting in frequent breakdown of apron links/pans. MAMC could not supply spares of superior quality for replacement.

2.62 Asked why no action was considered necessary against HEC and MAMC who were the suppliers of the defective equipment, the Company informed:—

> "NMDC could do nothing against these public sector companies except for holding the last payment. Assistance was also sought from Department of Steel and Department of Industry. Unfortu-

nately, nothing came out except for protracted correspondence. The expenditure involved in calling German experts was settled with HEC and MAMC as a part of package settlement."

2.63 When enquired by NMDC approached the West German firm direct for rectification of the defects, the Company informed in a written reply:—

"As HEC could not rectify the defects, perhaps, because of no prior experience in similar equipment and since HEC did not call the German experts for reasons best known to them, NMDC had no alternative but to get these defects rectified by calling German experts directly so as not to delay commissioning of project."

2.64 Regarding the amount paid to the West German firm by NMDC for rectifying the defects in the equipments and recovery of that amount from HEC, the Company stated in a written reply:—

"The amount paid to the West German firm by NMDC for rectifying the defects in the equipments was Rs. 2.85 lakhs for their visit in April, 1980. This expenditure was settled with HEC as a part of overall package settlement."

2.65 Asked why HEC was not asked to compensate for the loss suffered by the Company, the CMD stated during evidence:—

"We had to virtually pursue HEC to even complete the supplies what to talk of levying any penalty or holding money. In fact we had to feed them money of and on so as to complete the supplies."

2.66 When the Committee pointed out that normally equipments were purchased by a guarantee at certain performance level, the CMD stated:-

"They did not fulfil that guarantee clause. They did not have the expertise to set right the machine. That was why we had to call German expert."

2.67 The Committee also pointed out that because of delay in supply of equipments by these public undertakings there was time and cost escalation. Asked whether the matter was taken up by NMDC with HEC, the CMD stated:

"We wrote to them. But nothing came out as the money held by us was only 5%."

2.68 On an enquiry how these deficiencies affected the production of the project and whether these have been rectified once for all, the Company stated in a written reply:

"These defects adversely affected the production in Bailadila-5. The main reason for the lower capacity achievement in Bailadila-5 was the defects and deficiencies of the indigenous equipments supplied by HEC, MAMC etc. Inspite of lot of rectifications done on these equipments, they still do not perform satisfactorily at or near rated capacities. NMDC is continuously making efforts to rectify these defects / defciencies."

C. Donimalai Iron Ore Project

2.69 According to Audit the project was originally sanctioned in 1971 at an estimate of Rs. 1945.56 lakhs. The construction was commenced in May-August 1972 and the project was commissioned in 1977. The estimates were revised to Rs. 4118.87 lakhs in 1978.

2.70 The principal factors that contributed to the increase in the estimates were stated to be change in scope of work (Rs. 339.15 lakhs), increase in quantities and prices (Rs. 679.20 lakhs), increase in establishment expenses and interest on capital consequent on extension of time schedule (Rs. 531.63 lakhs), ite .ns not provided for in DPR including fine Ore Handling Plant (Rs. 603.44 lakhs) and others (Rs. 74.49 lakhs). Savings of Rs. 55.00 lakhs was estimated on some items. While the increase in the total cost of the project was about 112 per cent, increase in respect of establishment charges, Head Office expenses, interest on capital was about 288 per cent which was due to delay in completion of the project.

2.71 When the Committee enquired about the reasons for the change in the scope of work and also for not anticipating some of the related items in DPR *ab-initio,* the NMDC informed in a written reply:

> "The original DPR for Donimalai Iron Ore Project was sanctioned in 1971. During course of mechanised mining of iron ore, two products i.e. lump ore and fine ore are produced. In 1970-71 there was no demand for iron ore fines in India or abroad. As such the DPR did not provide for the facilities for transportation, handling and mechanical loading of iron ore fines. Subsequently, with change in technology in the steel industry, iron ore fines started being used in the steel in the industry after converting the same into pellets or sinters. Accordingly, the DPR was subsequently revised to include facilities for transportation, handling and mechanical loading of iron ore fine thus raising the project cost.
>
> Because of recession in the steel industry all over the world, the demand of iron ore came down MMTC was not able to find market for Donimalai ore. It is only in 1983 that MMTC was able to sign a long term contract with Japanese Steel Mills for export of part of production of Donimalai to Japan. The Japanese, however, insisted on stringent specifications. The Company had to modify its mining plans to meet the stringent specifications. This involved opening more number of benches to maintain quality and larger percentage of waste mining. This also led to increase in cost of the project."

2.72 In this connection, the Department of Steel informed in a written reply as under:

> "The Ministry and the PIB had gone into the reasons for the revised estimates including the change of scope of work. The Project which was originally sanctioned for an estimate of Rs. 21.91 crores was revised to Rs. 29.47 crores and it was approved by the PIB in 1975 and later, further revised to Rs. 41.5 crores. The main changes in the scope of the work related to—
>
> 1. Additional detailed exploration and quality control work including drilling prior to production stage.
> 2. Additional removal of over burden and waste for provision of benches.
> 3. Scheme for handling fine ore
> 4. Phase II township quarters.

When the Donimalai project was approved, it was anticipated that the entire output would be exported. During the course of the execution of the project, the markets for fine ore started picking up and in order to handle the fine ore project at Donimalai mines it was necessary to put up a fine ore handling scheme at an estimated cost of Rs. 2.5 crores. Likewise there were other aspects of the project which needed adjustment-modifications as the work on the project progressed."

2.73 Asked if the Company had any system of monitoring the progress of completion of the project and if so how the total cost of the project then increased by 112 per cent and its completion delayed, the NMDC informed in a written reply:

> "The comapany has a system of monitoring through (a) PERT/CPM/BAR Chart techniques; (b) review meetings at site with the contractors and follow up of the decisions in the review meetings; (c) review and monitoring at the level of Director (Planning) for keeping the time and cost schedule within the limit, and (d) review at Chairman level and Board of Directors level on the progress of construction project. Usual cost control measures were also part of the monitoring of the project so that cost overrun and time overrun is minimised."

2.74 Project mointoring at the Ministry level was also stated to be made through periodic performance review meetings in addition to regular reports on the status of the projects.

2.75 When asked about the reasons for not approving the revised estimates before the excess expenditure was actually incurred by the company and whether the Government was presented with a *fait accompli* leaving no scope for any worthwhile contribution, the Department of Steel informed in a written reply as under:—

> "The revised estimates for the Donimalai project were finally approved by the Cabinet in 1978. The increase in the project costs for various reasons, were in the knowledge of Government while the project was being implemented".

NMDC while carrying out their mid-term plan appraisal in November 1972 indicated the revised cost estimate of this project inclusive of the cost of the railway siding, Phase II township and facilities to be created for the pellet plant. The proposal for approval of the revised cost estimate was sent to Government in October 1972. These were referred to SAIL (the holding company) for scrutiny.

After SAIL approved the proposals and sent them to Government, the PIB in September 1975 considered the RCF for Rs. 29.81 crores and directed that the same be brought before the Cabinet.

However, before the Cabinet's approval was taken for the revised cost estimates, it became known that the completion schedule of the Project would be further delayed and this would result in further over-runs. SAIL was directed to submit revised estimates. On submission of revised estimates by SAIL in December 1976 the matter was placed before the PIB, after scrutiny by BPE, Planning Commission etc. in September, 1977, to accord approval to the revised cost estimates of Rs. 41.18 crores. Finally the CCEA on 12.1.78 approved the revised cost estimates."

2.76 The Committee on Public Undertakings (1972-73) while examining the performance of Bailadila Iron Ore Project-14 had noticed that there were two lines of crushers while a single line was sufficient to treat enough ore to produce 4 million tonnes of sized ore per annum. The Committee were informed during evidence by the then Chairman of the Company that there was over-designing in the crusher capacity and that the second line of crusher was a standby. After examining the whole matter the Committee on Public Undertakings had in their 60th Report (1974-75) reiterated their earlier recommendation made in their 37th Report (1972-73) that a single line of crusher could have handled the entire production of the mine and that the matter should be probed into and the responsibility for the lapse fixed. Even now the Company has admitted that one crusher could handle 5.5. to 6 million tonnes of iron ore per annum. The Government is stated to have asked the Steel Authority of India Ltd. (the then Holding Company) in March, 1976 to probe into the matter and submit a Report to the Government. According to Audit no such probe seemed to have been conducted by SAIL except for a decision taken in 1978 that one line of crusher should be shifted from BIOP-14 to Bailadila-11-C.

2.77 According to the Company's own admission the standby crusher was utilised 38% and the main crusher 58% of the available time. But

going by the information made available to the Committee for the years 1984-85 to 1989-90 it is seen that each crusher was utilised on an average only 27% of the available time which implies that each crusher remained unutilised for over 70% of the available time. Interestingly even one crusher was not utilised to its full capacity. It is rather surprising that despite such poor utilisation of the crushers no effort was made during the last 18 years by the Ministry to conduct the probe recommended by the Committee. On the contrary the Ministry has all along tried to justify the need for a second line of crusher on the ground that in Indian conditions a standby crusher line is essential and BIOP-14 being an export-oriented project an investment of Rs. 1.70 crores on the spare crusher was insignificant compared to the loss of foreign exchange in case spare line crusher had not been installed. During evidence also the Secretary, Deptt. of Steel stated "Based of facts available, the Government felt that this was really necessary.......In that light it appears a formal probe was initiated." He also stated that "If the Committee still feels that there was need for an enquiry, we will do that." It was only after NMDC was exchanged by this Committee that an enquiry Committee was constituted by the Government in March, 1991. In fact the purpose of recommending enquiry was to establish conclusively whether the second line of crusher was essential or not but the Government chose the extreme step of not conducting any enquiry which was a serious lapse on the part of the Government. It was really astonishing that without conducting any enquiry into the matter during all these 18 years, the Ministry came to the conclusion that the second line of crusher was essential.

2.78 The Committee regret and take strong exception to the lapse on the part of the Government is not implementing their recommendation in time. The Committee are constrained to convey their feeling of anguish the way their repeated recommendations were treated by the Government.

2.79 The Committee note that Bailadila-5 was sanctioned by Government in 1968 inspite of the full knowledge that it would remain a losing venture for all times to come. The principal aim to set up this project was stated to be to export its entire produce of iron ore to earn the vital foreign exchange for the country. Keeping this in view the Committee on Public Undertakings (1972-73) in their 37th Report had recommended that Government should carefully analyse the various components of cost and take concerted measures to ensure that the cost of production and transport charges do not exceed the sale price. Unfortunately the Company continued to incur losses upto 1980-81. After earning profits during 1981-82 to 1985-86 the Company again came in the red during the years 1986-87 to 1988-89 mainly due to the unremunerative prices paid to the Company by MMTC, their canalising agents. As the domestic demand of iron ore picked up and the Company entered into a commercial agreement with MMTC for 4 years it earned a profit of Rs. 15.60 crores in 1989-90. The Company hopes to earn profit from now onwards.

2.80 The Committee feel that since such commercial agreements are in the best interest of the company, NMDC should, in future, enter into such agreements. They also recommend that with the reduction in cost of production claimed to have been achieved by monitoring the budgeted targets/norms the NMDC should aim at maximising production in order to increase its profits.

2.81 The Committee are concerned to note that the cost estimates of Bailadila-5 originally assessed at Rs. 36.53 crores in April, 1970 were revised to Rs. 67.49 crores in February, 1978. Thus there was an increase of Rs. 30.96 crores which represents an increase of 85 percent over the original estimated cost. The project scheduled to be completed in January, 1974 was actually commissioned in January, 1977, after a delay of 3 years. According to Audit the main reasons for increase in the cost over the original estimates have been attributed to escalation in prices of plant and equipment (Rs. 15.53 crores), increase in costs consequent on increase in period of construction (Rs. 8.08 crores), increase in scope of work (Rs. 3.84 crores), increase in quantities (Rs. 3.32 crores) etc. According to the Company the principal reasons for time and cost overrun were Government's policy of maximum utilisation of indigenous manufacturing capacity and to entrust works to Public Sector organisations. The delays have largely been due to delays in execution of works by concerned Government agencies and supply of equipment by indigenous suppliers like HEC and MAMC.

2.82 The Bureau of Public Enterprises had observed in November, 1982 that "NMDC submitted the DPR much too early before the final concept of the project had been evolved after detailed investigations had been completed. NMDC had neither enough field data nor conceptual plan to estimate correctly the cost of the project and time of completion of various activities." The CMD had also admitted during evidence that their DPR was not upto the mark.

2.83 The above facts do not depict a pleasant picture about the formulation of the project. It is really amazing that with the experience already gained by the Company in developing mines like Kiriburu and Bailadila-14, the Company could not prepare a realistic DPR taking into consideration all the pitfalls which are generally associated with such projects. The Committee are inclined to agree with the observation of the BPE made in November, 1982 that if the project had been completed by the scheduled date of January, 1974 half of the total cost overrun of Rs. 31 crores could have been avoided. The Committee have no doubt that the formost reason for revision of cost estimates was nothing else but inadequate project formulation. The Committee are of the firm view that in the interest of expediting project implementation and keeping down the cost, the Ministry should have ensured preparation of realistic project estimates and effective monitoring through monthly or quarterly reports.

2.84 The Committee note that the Bailadila Project-5 scheduled to be completed in 1947 was completed and commissioned in 1977-78 at a much higher cost due to delays in supply of equipments by indigenous suppliers like HEC and MAMC and also because of the technological problems faced by National Projects and Construction Corporation in construction of a tunnel. The project was constructed with 80% indigenous equipment and machinery.

2.85 The Committee also note with concern that the structural works entrusted to Triveni Structural Limited (TSL) and Hindustan Steel Works Construction Ltd. (HSCL), both Public Sector Undertakings in January, 1971 and November, 1971 to be completed as per contract in September, 1973 and July, 1974 respectively were both actually completed in December 1976, after a delay of 29 months and 39 months respectively. It is very strange that despite such huge delays and increase in the project cost by Rs. 8.08 crores on account of overall increase in the period of construction the company did not levy any penalty/liquidated damages.

2.86 The Committee further note that the construction of a tunnel of 2.135 kms. length for the conveyor belt was entrusted to National Projects Construction Corporation (NPCC) in December, 1969 even though NMDC was stated to have reservations initially about the capability of the Company to undertake the work. As it was later on discovered that NPCC was not having the technical capability required for chemical grouting, the work had to be split up among NPCC and M/s. R.J. Shah Limited. The tunnel was completed in September, 1976 as against the scheduled date of April, 1973, after a delay of 3½ years and the cost also increased from Rs. 85.10 lakhs to Rs. 165.60 lakhs, *i.e.* an increase of 9.5 over the original estimated cost.

2.87 The Committee were apprised by the NMDC during evidence that the delay in construction of a tunnel and the consequent increase in the project cost was due to the inadequate expertise available with NPCC to undertake the job. According to them the construction work had to be entrusted to NPCC in accordance with the policy and directions of the Government to encourage indigenous public sector undertakings. From the facts placed before them, the Committee find that Government had approved the award of the contract to NPCC in December, 1969 only when NMDC informed them that the Board of Directors had on 12 November, 1969 taken the view that NPCC were technically competent to undertake the work and that they also had the equipment, machinery to enable them to complete the work in accordance with the schedule. Going by the evidence given by the Ministry, the Committee has come to the inescapable conclusion that NMDC itself is solely responsible for awarding the contract to NPCC and is now trying to find alibis with the Government to cover up their own lapse. The Committee have no doubt that much of the delay of 3½ years in completion of the work and the heavy increase of Rs. 80.50 lakh

on the cost of construction of the tunnel could have been avoided if NMDC had fully satisfied itself about the competence of NPCC to complete the job in time.

2.88 The Committee note that in November, 1968 Government had issued instructions to NMDC to place orders on Heavy Engineering Corporation (HEC) for the supply of machinery and in July, 1972 for placement of orders on the Mining and Allied Machinery for supply of equipment required for the Bailadila-5 project with a view to developing indigenous sources of supply. NMDC is stated to have cautioned the Government against it. The main reason for the Government's directions for placing orders on indigenous manufacturers was the necessity to keep the foreign exchange component to the minimum. But these companies failed to come up to the expectations of the Government as the indigenous companies viz. HEC and Tata Robins Frasers, Jamshedpur on whom the orders for supply of equipments were placed themselves went into collaboration with foreign countries. HEC went in to foreign collaboration with USSR for manufacturing crushers and with DEMAG of West Germany for manufacturing the reclaimer and the Wagon leader and Tata Robins Frasers with Robins Engineers and constructions Ltd. of USA for manufacturing the downhill conveyer system. This resulted in increase by about 76.5% over the original sanction towards the cost of plant and machinery. The foreign exchange component was increased by 255 per cent and the total foreign exchange incurred amounted to 46.84% of the total cost of plant and machinery against 23.25 per cent envisaged in the original estimate. The Committee find that the Govt. miserably failed in achieving their objective of encouraging the indigenous firms and in minimising outflow of foreign exchange.

2.89 Not only the indigenous firms failed to execute the jobs entrusted to them in time resulting thereby in abnormal time and cost overruns, but also there were inherent deficiencies/defects in equipments supplied by them. The reclaimer and wagon loader supplied by HEC were based on the design supplied by DEMAG of West Germany. As the defects in the equipments could not be rectified by HEC, NMDC had to call the German expert and paid them Rs. 2.85 lakhs for their visits. Similarly there were frequent breakdowns in the apron feeders procured from MAMC being of inferior quality and MAMC failed to supply spares of superior quality for replacement. The Committee were informed during evidence that the defects and deficiencies of the indigenous equipments supplied by HEC and MAMC adversely affected the production of the project. These equipments even now are not performing satisfactorily. The Committee have no doubt that the Government purely out of their zeal to save foreign exchange directed NMDC to place orders on indigenous firms without assessing their capability and technical competence to do the jobs entrusted to them and this definitely casts a poor reflection on the working of the Government.

2.90 Donimalai is another project of NMDC where project planning and execution machinery did not seem to exist. The Committee note with serious concern that the cost estimates of the project sanctioned in 1971 at Rs. 1945.56 lakhs were revised to Rs. 4118.47 lakhs in 1978. There was an alarming increase of Rs.2172.91 lakhs which represented 112 per cent over the original estimated cost. The main reasons which contributed to increase in cost are stated to be change in scope of work (Rs. 339.15 lakhs), increase in quantities and prices (Rs. 679.20 lakhs) increase in establishment expenses and interest on capital consequent upon extension of the Schedule (Rs. 531.63 lakhs), items not provided in DPR including fine ore Handling Plant (Rs.603.44 lakhs) etc. All these reasons have been repeated again and again. The Committee find that due to delay in completion of the project the increase in respect of establishment charges. Head Office expenses and interest on capital alone accounted for 288 per cent which by no standards is justifiable.

2.91 The Committee were informed that the Company had a system of monitoring the progress of construction of the project through PERT/CPM/BAR Chart techniques, review meetings at site, review and monitoring of the level of Director (Planning), review at the level of Chairman and Board of Directors and also periodic performance review meetings at the Ministry level to observe the time and cost schedules. In view of the exorbitant cost over-runs and inordinate delays in the execution of projects, the Committee are not hesitant to conclude that all these elaborate procedures remained on paper only and were followed more in breach than in observane in the instant case. They are of the firm view that there was complete breakdown in the monitoring machinery of the Company. They are also of the view that if the progress of implementation of the project had been closely followed much of the delay and cost overrun could be avoided. The Ministry also cannot absolve themselves of their responsibility because in the project cost was in the knowledge of the Government during its implementation but nothing was done to control the cost and check delay in completion of the project. The Committee desire that the Ministry should strengthen their monitoring machinery and watch implementation of projects closely through Board and performance review meetings with a view to ensuring that such heavy time and cost overruns are not allowed to occur in future.

CHAPTER III

PRODUCTION PERFORMANCE OF IRON ORE PROJECTS

A. *Bailadila Iron Ore Project-14*

3.1 The rated capacity of the mine was 4 million tonnes of sized ore per annum. The mine went into production in April, 1968. The Committee on Public Undertakings in Para 5.56 of their 37th Report (1972-73) had observed that production in Bailadila even after four years of commissioning of the plant had been below the original target of 4 million tonnes and the percentage of lump ore recovered did not exceed 65 per cent as compared to 75 per cent envisaged in the detailed Project Report. The Committee had, therefore, recommended that the Management should spare no pains to increase recovery of lump ore and enhance efficiency in production in order to improve the economics of the Project.

3.2 The Company had constituted different committees in June 1970, 1975 and May 1977 to study the achievable rated capacity and to suggest methods for achieving the rated capacity. On the recommendation of first Committee, certain mining equipments were purchased and dumper platform was strengthened at a cost of Rs. 171.48 lakhs but there was no improvement in the production performance as indicated below:—

	Production before implementation 1970-71	Production after implementation 1974-75
	(in lakh tonnes)	
Excavation	36.63	36.82
RCM	35.47	33.55
Lump Ore	22.20	19.96

3.3 The recommendations of Second Committee were considered by Board of Directors in April, 1976 and it was decided that further study should be made in the neighbouring ore bodies to optimise the utilisation of Bailadila-14 plant.

3.4 The Third Committee constituted in May, 1977 observed in April, 1978 that taking into consideration both geological and geometrical factors the maximum achievable capacity of the mine would be 20 lakh to 23 lakh tonnes of lump ore annually during the year 1978-79 to 1982-83.

3.5 The Bureau of Industrial Costs and Prices (BICP) which also conducted the detailed studies on payment of prices of Iron ore to NMDC

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determined (December 1981 and August 1984) the achievable capacity of mine as 23.70 lakh tonnes of lump ore annually during 1981-82 to 1983-84 and 19.0 lakh tonnes of lump ore annually during 1984-85 to 1986-87.

3.6 The production in Bailadila-14 did not improve in the later years also as the actual production of lump ore was 58 to 69 per cent during the years 1972-73 to 1989-90 as compared to 75% envisaged in the Detailed Project Report.

3.7 The Management/Ministry informed Audit in December, 1988 that the DPR projections based on limited tests/drillings were not sufficient for assessing the actual production in future years.

3.8 It has been seen that even after incurring an additional expenditure of Rs. 171.40 lakhs in augmenting the mining equipments, the recovery of lump ore instead of increasing came down from 22.20 lakh tonnes in 1970-71 to just 19.96 lakh tonnes in 1974-75. On being enquired about it, the company informed in a written reply as under:

> "It is a fact that Bailadila-14 could never reach the rated capacity because of problems associated with the iron ore deposit particularly because of encountering shale band in the mine and geological and geometrical features of the deposit. As regards lump recovery, this is a natural phenomenon and depends upon the type of ore in the mother earth. There is no way of improving the lump recovery. Even though the DPR indicated a lump recovery of 75% the lump recovery in actual practice is coming to 60-65%."

3.9 When asked about the steps taken by the Company to increase recovery of lump ore and enhance efficiency in production in order to improve the economics of the Project, the Company informed the Committee in a written reply :—

> "Bailadila Deposit-14 started production in 1968 and had a life of 20 years as per DPR. The deposit at Bailadila-14 have depleted. As per original plan, the mine production would have slowly come down so as to become zero in 1991-92. As such question of increasing production from Bailadila-14 does not arise. However, to improve the economics of the Project, NMDC has decided to continue mining at deeper levels of Bailadila-14 under Deeper Level Mining Scheme at a rate of 2 million tonnes per annum. This will enable production to continue at Bailadila-14 mine upto 1999-2000. NMDC has also opened another mine *i.e.* Bailadila 11/C mine to replace Bailadila-14 mine. Most of the infrastructure of Bailadila Deposit-14 are being used for the above. In fact Bailadila 11/C is a part of Bailadila-14. The new designed capacity of Bailadila-14 is 5.3 million tonnes of NOM per annum. These steps will improve the economics of this project. In fact the Project is already making profits.

B. Bailadila Iron Ore Project-5

3.10 Bailadila-5 Iron Ore Mine was designed to produce annually 6 million tonnes of run of mine (ROM) ore yielding 4 million tonnes of lump ore (at 66.7% recovery), 1.4 million tonnes of fines and the balance as slime waste. But the BICP taking into account the operating efficiency of plant and equipments and the manpower, determined (December 1981 and August 1984) the annual achievable capacity of lump ore as 35 lakh tonnes (62.5% of ROM of 56 lakh tonnes) for three years from 1981-82 to 1983-84 and 36 lakh tonnes (60% of ROM of 60 lakh tonnes) of lump ore for 1985-86 to 1986-87. According to Audit in actual operation the lump ore recovery ranged between 48 to 64 per cent since inception of the Project, except in the year 1981-82 when it was 70 per cent. The low recovery was stated by the company to be due to increase in generation of more fines which ranged between 26 to 38 per cent on account of ore body and the long conveying system existed in the project.

3.11 It has been stated that a Technical Committee appointed in June, 1984 by the Company to assess the realistic achievable capacity of the mine under existing conditions, also reported that at higher through-put and selective mining, lump ore production could be maintained around 30 lakh tonnes at recovery rate of 60 per cent of ROM for a few years although for smooth throughput the lump ore production could be around 28 lakh tonnes only at the recovery rate of 55 per cent of ROM.

3.12 The project designed for annual rated capacity of 40 lakh tonnes of lump ore at a total estimated cost of Rs. 67.49 crores had to settle down for a low capacity due to design deficiencies in mine, plant and equipments and inferior quality of plant equipments supplied by indigenous manufacturers/suppliers.

3.13 The Management/Ministry informed Audit in December, 1988 that due to limited drilling conducted at the time of DPR it could not assess the exact recovery rate of lump ore. Actual lump recovery was low as a large number of transfer points were involved due to long conveyor system.

3.14 Asked whether the Company was aware of these limitations at the time of finalisation of DPR and if so, what were the reasons for setting up the project without adequate and reliable data, the Company informed the Committee in a written reply as under:

> "No. DPR was based on the available geological data which at that point of time was considered to be sufficient. In a mining deposit, it is not possible to achieve 100% confidence in the geological results as the cost of drilling/investigation will be prohibitive in case one tries to achieve high degree of confidence."

3.15 When enquired about low recovery of lump ore, the Company informed the Committee in a note that as per DPR, the lump recovery was to be 66-67%. In actual practice the lump recovery had been 60% average. Since this is a natural phenomenon, nothing could be done to improve the lump recovery.

C. *Donimalai Iron Ore Project*

3.16 The production pattern envisaged in the detailed project report in September, 1968 of 17.5 lakh tonnes each for lump ore and fines was changed to 16 lakh tonnes of lump ore and 20 lakh tonnes of fines in 1975 to improve the economic viability of the project. The BICP in their reports (December, 1981 and August, 1984) taking into account the geological factors, plant equipment performance and infrastructure facilities, determined the achievable capacity as 15.58 lakh tonnes of lump ore and 15.95 lakh tonnes of fines for the years 1981-82 to 1983-84 and 18.80 lakh tonnes of lump ore and 16.20 lakh tonnes of fines for the years 1984-85 to 1986-87. The project was, however, stated to have never operated at rated capacity due to following reasons:

— No firm long term contracts for sale of iron ore were entered into before commissioning the mine.

— The ore produced was found to be containing higher percentage of alumina and phosphorous content compared to projections in DPR.

— Availability of rail movement to a capacity of 6 to 8 lakh tonnes only to this project from the Railways against rated capacity of 36 lakh tonnes of lump ore and fines of the project upto 1983-84 and available capacity to the extent of 25 lakh tonnes only, thereafter against enhanced capacity of 50 lakh tonnes provided by Railway authorities.

3.17 Audit has stated that due to absence of marketing tie-up and the matching infrastructure facilities, huge investment made in the project could not be economically made use of.

3.18 The Ministry informed Audit in December, 1988 that the international market position underwent a major change with a slump in the steel industry all over the world which was not anticipated. Production of ore in excess of or less would have not been feasible as there was no large stock piling capacity.

3.19 The Committee wanted to know why the Company took up the Project without any sale-tie-up and without considering the adequate availability of rail and port facilities and on what basis the Company considered that the plant would operate at the rated capacity in the absence of facilities. In a written reply, the NMDC informed the Committee as under:—

> "It is always not possible to take up the Project only after a sale tie-up. Projects are taken up on the basis of anticipated demand likely to come up in future. Unfortunately, there was world-wide recession in the steel industry when the project was completed as a

result of which MMTC could not arrange sale tie-up. The Company had also verified availability of rail and port facilities before taking up the Project. The very fact that both Railways and Port are presently handling ore of Donimalai prove this aspect."

3.20 NMDC had also stated in a note that this project could not be operated at the rated capacity due to lack of export orders. Due to poor demand for iron ore, MMTC was not able to tie up contracts for export of Donimalai Ore. As the demand for iron ore in the world has improved, the demand for Donimalai Ore has also improved. According to NMDC though the demand of Donimalai Ore in the initial years has been poor, it has been able to export the following quantities in the last four years:—

1986-87	25.05 lakh tonnes
1987-88	22.20 lakh tonnes
1988-89	23.48 lakh tonnes
1989-90	27.33 lakh tonnes

During the years 1988-89 and 1989-90 the project, however, made profit of Rs. 1.81 crore and Rs. 7 crores respectively.

3.21 Asked why the Government had sanctioned the project for producing iron ore containing higher percentage of alumina and phosphorous content, the Department of Steel stated in a written reply *inter-alia* as under:—

"It was held in the DPR that 'the analytical data clearly establishes that Donimalai deposits are not only characterised by low silica and alumina content but have also very favourable silica-alumina ratio being nearly 1:1. Phosphorous and sulphur are also very low and well within the acceptable metallurgical tolerances. The DPR was approved and the project sanctioned for producing a type of iron ore which was considered to be acceptable at that time for exports. However, later with the slump in the steel industry problems arose in marketing ores especially when the main customers put forth stringent quality specifications. The production from Donimalai mines had to be suitably modified to meet these quality specifications. In an intensely competitive market of iron ore trade, NMDC was left with no choice but to meet the specifications of the international customers so as to ensure sale of output.

The project was indeed approved at a time when there was no firm marketing tie-up. In fact when the investment decision was originally made, the project was estimated to lose Rs. 56 lakh per annum.

Regarding the availability of railway and port facilities both the agencies had confirmed their capacity to handle the shipment and transfer of the lump ore from the Donimalai mines by mid-1976."

3.22 When enquired how Government thought that the Plant would operate at the rated capacity in the absence of rail and port facilities, the Ministry stated:

> "The Government had some reasonable assumptions of the availability of infrastructural facilities especially ports, railways before sanctioning the project. The project was sanctioned for exports without prior commitment admittedly. However, MMTC indicated that in September, 1974 they would be able to arrange for the export of lump ore upto 5 MT from Bellary-Hospet from 1976-77 (including plant production from Donimalai mines)."

3.23 When asked about the present position, the Company informed that MMTC was able to enter into a long term contract with Japanese Steel Mills in December, 1983 for sale of about 1.5 million tonnes of Donimalai ore per annum *i.e.* nearly 50% of its capacity. Part of the production of Donimalai was sold by MMTC to other countries. As such Donimalai had been operating at a level of 25 to 26 lakh tonnes per annum.

3.24 Since the demand of iron ore in the international markets was stated to have improved and the demand for Donimalai ore was expected to pick up further in future, the Committee desired to know whether the Company hoped that production in this Project would reach the rated capacity of 35 lakh tonnes of lump ore in the near future. In their reply, the NMDC stated that because of stringent specifications in the contract between MMTC and Japanese Steel Mills, the rated capacity of Donimalai Project would be about 29 to 30 lakh tonnes per annum. NMDC was stated to have already offered to produce 30 lakh tonnes during the year 1990-91 to MMTC provided MMTC was able to export that quantity.

3.25 When the Committee enquired about the reasons for approving the DPRs of BIOP-14, BIOP-5 and DIOP without adequate reliable data, the Department of Steel informed in a written reply:—

> "The DPR projections are based on limited tests and release which are not sufficient for assessing the actual production in future years. Reasons for the low output in Bailadila-14 were studied by three technical committees and it was finally found out that the achievable capacity of the mine may be de-rated to 2.37 million tonnes. The actual production has been around 20 lakh tonnes per annum and on average, it compares reasonably with the technical estimate. In respect of Bailadila-5 the BICP in their report of March, 1987 have accepted the annual capacity of the project as 2.9 MT of lump and 1.1 MT of fines.
>
> Another factor to be appreciated in respect of both Bailadila-14 and Bailadila-5 is that the investment decisions were made primarily with a view to fulfil urgent export commitments. In fact in

respect of both projects advance work had begun prior to formal approval / sanction to the DPR.

In respect of Donimalai, the BICP have assessed the capacity of the mine at 1.75 million tonnes of lumps and fines on the shift basis taking into account the market constraints. The production had to be matched per export requirements.

Limited geological tests carried out at the time of preparing of DPR were perhaps not fully adequate to determine the actual achievable capacity of the mine."

3.26 The Committee on Public Undertakings (1972-73) after examination of the working of Bailadila Iron Ore Project-14 had observed that recovery of Lump ore from Bailadila had not exceeded 65 per cent of the targeted capacity of 4 million tonnes as compared to 75 per cent envisaged in DPR. The Committee had, therefore, recommended that the Management should strive to increase recovery of lump ore and enhance efficiency in production in order to improve the economics of the Project. The Committee note that NMDC appointed three Committees in 1970, 1975 and 1977 to study the achievable rated capacity of the mine. An expenditure of Rs. 171.48 lakhs on augmentation of mining equipment, as recommended by the first Committee, was also incurred. The Committee regret to observe that even after augmentation of mining equipment the actual production did not improve and ranged between 58 to 69 percent in later years upto 1989-90 and never reached the envisaged level of 75 percent. Thus an expenditure of Rs. 171.48 lakhs proved infructious as it failed to achieve the desired results.

3.27 The Committee note that the iron ore reserves of Bailadila-14 were depleting and the production was to reach zero level in 1991-92. To improve its economics the Company has taken a decision to continue mining under Deeper level Mining Scheme at the rate of 2 million tonnes per annum upto the year 2000 and also commissioned Bailadila-11-C mine as a part of Bailadila-14. The new designed capacity of the mine has been fixed at 5.3 million tonnes of ROM per annum. The Committee desire the Company to make all out efforts to achieve the designed capacity of the project.

3.28 Similarly Bailadila-5 which was designed to yield annually 4 million tonnes of lump ore at 66.7% rate of recovery had actually produced lump ore between 48 to 64 per cent since inception except in 1981-82 when the recovery was 70 per cent. The low recovery of lump ore has been attributed by the Company due to increase in generation of fines which ranged between 26 to 38 per cent. It is really very distressing that the project designed to produce 40 lakh tonnes to lump ore at a total estimated cost of Rs. 67.49 crores has failed to achieve its designed capacity due to design deficiencies in mine, plant and equipments and inferior quality of plant equipments supplied by indigenous manufacturers / suppliers. The Committee have no doubt in concluding that the project could not reach its designed

capacity because the DPR was not based on adequate and reliable data. The Committee desire the NMDC to make concerted efforts to improve the performance of the equipment by removing the deficiencies. They also desire that action be taken to replace inferior machines by machines with better designs in order to enhance production.

3.29 In the case of Donimalai Iron Ore Project, the Committee find that in order to improve the economic viability of the Project the DPR which envisaged a production of 17.5 lakh tonnes each of lump ore and fines in September, 1968 was changed to 16 lakh tonnes of lump ore and 20 lakh tonnes of fines in 1975. But the project was never operated at the rated capacity. According to Audit one of the reasons for not achieving the rated capacity was that no firm long term contracts for sale of iron ore were entered into before commissioning the mines. NMDC has stated that the Project could not be operated at rated capacity due to lack of export orders, world wide recession in steel industry and consequently MMTC having not been able to arrange sale tie-up. In fact the project was conceived and sanctioned without assessing the marketability of the iron ore to be produced. The Secretary, Department of Steel had very candidly admitted in his evidence that "the project was approved at a time when there was no firm marketing tie-up." He also stated "the project was sanctioned for exports without prior commitment admittedly." The Committee cannot but come to a definite conclusion that NMDC had no reasonable basis for assessing the demand for iron ore in the international market at the time when the project was commissioned. The Committee need hardly point out that proper assessment of demand of the product and its sale tie-up in the market, before commissioning of the project, is one of the essential pre-requisites for running any commercial enterprise prudently and by not having done so the Government has failed in safeguarding the commercial interest of NMDC.

3.30 The Committee note that now with the increase in demand of iron ore in the world market NMDC has improved its exports of iron ore from the Donimalai Project which at the end of 1989-90 was 27.33 lakh tonnes and the project could earn a profit of Rs. 7 crores during the same year. The Committee desire NMDC to take advantage of the changed world scenario and make concerted efforts to achieve the capacity envisaged in the DPR in order to further improve its financial position.

D. Future Plans

3.31 NMDC is at present the single major producer of iron ore producing around 10 million tonnes of iron ore per annum. The production is proposed to be enhanced to 14 million tonnes by 1995 and to 20 million tonnes by 2000 A.D. Earlier under a long term contract signed by MMTC for 10 years NMDC had been exporting iron ore to Japan. The contract was extended upto 1985. During evidence the CMD of NMDC informed the Committee that in October, 1990, NMDC has signed a Memorandum of Understanding for another 5 years (1991—1995) for export of iron ore to Japan. When asked how NMDC would meet the future domestic demand as well as the commitment made on the export front, the CMD stated that they were working on the expansion programme to meet both the domestic requirement as well as export.

3.32 When enquired about the future plan of NMDC to meet to domestic demand during the Eighth Five Year Plan and also for the exports, the Secretary stated during evidence:

> "Considering the gap in the demand and supply of Steel, a Working Group in the Department of Steel made a study on this aspect. This was in the context of formulation of 8th Plan proposals. This working Group has come with some estimates about the demand and supply of steel. The picture that emerges is, to meet the demand of steel, the production of steel will have to go up at the end of the 8th Plan and to meet that there will be higher demand of iron ore in the country. Our expectation is that with the present level of production of NMDC it will not be possible to meet our export commitments because domestic demand will have to be, in any case, met. There are two or three alternatives to augment the production of iron ore at NMDC. One is, we provide the budgetary support for expansion of new mines. Second is, if the budgetary support is not available, then to go in for a joint sector production. And the third is to have some foreign tie up. These are the various alternatives. But the fact remains that there has to be an increase in the production of iron ore of NMDC."

3.33 When asked about the total domestic demand of iron ore, the witness stated:

> "NMDC would be meeting a demand of about million tonnes, Vizag steel plant would need about 4.6 million tonnes and others would need about 1.4 million tonnes. We are aiming to produce 14 million tonnes by the end of 8th Five Year Plan."

3.34 When asked to explain how the Company would be able to increase its production from 10 million tonnes at present to 14 million tonnes by 1995, the CMD stated in evidence *inter alia* as under:

> "That was prepared before MMTC signed MOU (with Japan) for export on the long-term basis. We planned to have 14 million tonnes to meet the requirements of the domestic steel industry and some quantity for export from Donimalai Project. The decision to export ore on long-term contract has been taken by the Government only in August, 1990. Our Steel Ministry has been opposing export of Iron ore from Bailadila to Japan. But ultimately the CCPA took a decision that the export must continue for the reasons best known to the Government last month that has been

finalised. Now we are working out a plan to increase production to 18 million tonnes. We would export 8 million tonnes.

3.35 Asked about the present share of the Company in the production of various minerals, and its future plans to increase its share of total production for each mineral, the Company stated in a written reply as under:

"Presently, NMDC is engaged in mining of iron ore and diamonds. NMDC's share in the production of iron ore is about 25% of the country's production. In case of diamonds, it is 100%. NMDC has plans to nearly double its production in the next five years. However, this depends upon allocation of funds by Planning Commission. As per present indications, Planning Commission has expressed inability to make available enough funds for NMDC."

3.36 When the Committee enquired how the Company would mobilise resources to achieve their target of 18 million tonnes, the CMD informed that the total quantum of investment required would be of the order of Rs. 600 crores. The Planning Commission was not able to give the required funds. The Committee were, however, informed that out of Rs. 600 crores, foreign exchange component would be Rs. 70 crores. NMDC itself would be generating Rs. 250 crores and would also raise funds from the financial institutions, like IDBI etc.

3.37 When the Committee enquired from the Ministry about the possibility of allocation of funds by the Planning Commission for the purpose, the Secretary stated in his evidence:

"The first choice was to have the expansion of NMDC on its own. For that, it would need budgetary support in the 8th Plan, and part of it would be met by its own resources and part by raising loans. We are still pressing with the Planning Commission to get adequate funds for this purpose so that NMDC can expand production on its own. In other sectors, we are not yet sure what fund allocation will be made by the Planning Commission."

In this connection, he also added:

"We are still pursuing it. And until last week, I was having discussions with the Planning Secretary to persuade him to give us some money for this purpose. This is our first choice. If it does not succeed, then we would like to have production in the joint sector by involving some of the users of iron ore."

The witness further stated:

"We have worked out an action plan depending on the production that is expected. Our requirement for capital will be nearly Rs. 600 crores. It is very huge amount. I hope, the Planning Commission would readily agree for this."

3.38 The Committee find that in order to meet the requirements of domestic steel industry and to fulfil export commitments on a long term basis, the Company is formulating an expansion scheme to increase production of iron ore from 10 million tonnes in 1989-90 to 18 million tonnes by the end of the Eighth Five Year Plan. According to NMDC the total expenditure involved in implementing the scheme would be Rs. 600 crores. The Company proposes to finance the scheme through budgetary support from the Government, generation of internal resources and also by raising funds from the financial institutions. The Committee also find that Government are making efforts to get necessary funds for NMDC from the Planning Commission to finance the scheme but the Planning Commission with the resources at their command are finding it difficult to meet their requirement to the desired extent. The Committee desire NMDC to make concerted efforts in order to achieve a target of 18 million tonnes of iron-ore by the end of 8th Five Year Plan so that they are able to cater fully to the domestic demand. In view of the fact that Company has earned sizeable profit during 1989-90 and has bright prospects in the future it must try to generate maximum financial resources of its own with minimum dependence on the Planning Commission to finance the scheme. The Committee need hardly emphasise that the expansion scheme should be implemented within the monetary limit of Rs. 600 crores so that the cost and time overruns are avoided.

CHAPTER IV

LABOUR UTILISATION

4.1 The actual manpower employed in Bailadila Iron Ore-14 was 1918 by the end of March, 1988 for about 20 lakh tonnes of production against the staff strength of 1000 envisaged in the Detailed Project Report for 40 lakh tonnes of production. The actual manpower employed in this project in 1988-89 and 1989-90 was 1983 and 1972 respectively.

4.2 Similarly in Bailadila-5 the actual manpower strength for about 31 lakh tonnes production was 1950 by the end of March, 1988 against the strength of 1400 envisaged in DPR for a production level of 40 lakh tonnes. The manpower strength in 1988-89 and 1989-90 was, however, 1936 and 1920 respectively.

4.3 In Donimalai Project also the staff strength was 1511 by the end of March, 1988 against 1200 persons contemplated in DPR. The actual strength in 1988-89 and 1989-90 was, however, 1495 and 1500 respectively.

4.4 The Company had informed Audit in June, 1987 that the staff strength in mechanised mine could not come down with reduced production.

4.5 Asked whether any studies were conducted by Industrial Engineering Department of the Company or some outside agency to determine the actual requirement of manpower, the Company stated that the manpower requirement for each project was always studied and assessed by the Industrial Engineering Department of the Company. Sanctioning of manpower was done on the basis of Industrial Engineering studies only.

4.6 When the Committee enquired whether the Company had taken any corrective steps to adjust the excess manpower, the CMD stated during evidence:

> "I do not think we can reduce the manpower, but the solution lies in increasing production, which we are attempting to do, so that output per manshift goes up. In the expansion we are taking up, the manpower increase will not be proportional, because we are optimising the existing utilisation."

4.7 Since the actual manpower strength in the three projects was far in excess of what was envisaged in the DPRs, the Committee desired to know whether this matter was ever discussed in the Board meetings where Ministry's representatives were also there or in any of the performance review meetings held by the Ministry. In a written reply, the Department of Steel informed as under:—

> "all the project, *i.e.* Bailadila 14, 5 and Donimalai underwent some change in scope during implementation necessitating more labour than what was originally estimated. NMDC had to increase manpower at the operating stage of the mines to cater to additional infrastructural requirements such as hospitals, schools, etc. as also meet certain statutory requirements such as maintenance of fire fighting force, Hindi Cell, Vigilance Cell, etc. The sanctions for additional staff were brought before the Board of Directors from time to time. Justification for additional staff was fully examined.
>
> The estimates in the DPR were tentative and to some extent an upward revision was inevitable as the implementation of the project progressed and certain necessary additions/modifications were made. However, the Board has been monitoring the staff strength position from time to time from the point of view of productivity and output per man year, etc."

4.8 When the Committee asked during evidence whether additional facilities like Canteen, Hospital etc. were not provided for in the DPR, the Secretary, Department of Steel stated:

> "No, because there was additional work which was more than what was there in DPR because of the scope of work. The increase took place during the course of constructions. There was an addition to the new project which had 380 employees which was not envisaged in the earlier B-14. A new work came up *i.e.* Fine Ore Handling System. That was not envisaged earlier. But the work was extended during the process of implementation of this project. 179 additional employees are there in fine ore handling system. In Donimalai also we have fine ore handling system and it had nearly 45 employees. These were due to the addition of the work. Later it was found that was* creating trouble. Some items like canteen, hospital and school had not been thought of in B-14 in the DPR earlier. 68 percent came in school, 38 percent in canteen, Sanita-tion and health came 37 percent. They were not in DPR.
>
> Even with this increased number of employees in these three mines, the Corporation tried to economise on the working and my information is that the production per person overall has been going up. For example, in 1987-88 it was 1598 tonnes per man shift per year, this increased to 1634 tonnes in 1988-89 and that further increased to 1826 in 1989-90. It shows that the utilisation rate is

increasing but the fact remains that their employees were larger than the DPR and some of the reasons explained mostly account for that."

4.9 When the Committee enquired whether non-provision of canteen, hospital and other such essential facilities in the DPR was not a serious deficiency, the witness stated "I think DPR should mention all this."

4.10 According to Audit the Company had not analysed the man hour utilisation in the project to control the excess manpower and to improve the optimum economical utilisation of manpower deployed in the project.

4.11 On being enquired why the Company has not analysed the man hour utilisation in projects/units to exercise control and improve the optimum economical utilisation of manpower deployed, the Company in a written reply stated as under:—

> "NMDC assesses its manpower requirements of various projects based on the equipment in position and operating requirement of the plant; taking into account the requirement of service and administrative personnel. The manpower requirement for other infrastructural facilities like schools, hospital, township maintenance, transport facilities etc. also gets decided based on the extent of these facilities. The variations from the DPR strength are due to changes in the operating conditions not envisaged in DPR. The increase is also due to other statutory or social requirements, like (i) Hindi Cell, (ii) Training & Safety Cell, (iii) Environment Cell, (iv) Medical Facilities due to remoteness of the projects. The company regularly monitored output per man day."

4.12 Asked whether there was any manpower planning in the Company, the Secretary stated "Not to my knowledge."

4.13 When further asked whether the company had done any manpower planning or not for the better utilisation of labour, the witness stated:

> "That is a continuous process. Steps are taken in this regard and the result is that there has been an increase in the manpower utilisation but I don't think that the overall manpower planning of the whole company as such has been done."

4.14 Keeping in view the expansion of mining activities of the Company, the Committee desired to know whether there should not be manpower planning to utilise the surplus manpower in the Company. In his reply, the Secretary informed the Committee:

> "We can have it done. Utilisation of manpower on the planned basis can be helpful. Once we go in for the expansion of our work, this surplus manpower can be utilised there."

The witness further added:

"We can suggests to the Corporation that they should go into the overall manpower planning which will help them when they are expanding, if there is any surplus those surpluses can be utilised."

Incidence of payment and benefit to Labour

4.15 The Audit has pointed out that the incidence of payment and benefit to labour per tonne of production at different project exceeded the norms fixed by BICP. For instance in the case of Bailadila Iron Ore Project-14 during the period 1981-82 to 1987-88 the incidence of payment and benefit per tonne of production increased from Rs. 7.68 to Rs. 20.38 against BICP norm of Rs. 5.18 (1981-82) to Rs. 12.37 (1987-88). In the case of Bailadila Iron Project-5 these increased from Rs. 8.90 (1980-81) to Rs. 19.88 (1987-88) against the BICP norm of Rs. 5.62 in 1980-81 to Rs. 7.64 in 1987-88. Likewise in the case of Donimalai Iron Project these range from Rs. 13.51 in 1981-82 to Rs. 26.28 in 1987-88 against BICP norm of Rs. 5.55 in 1981-82 to Rs. 7.91 in 1987-88.

4.16 When enquired about the reasons for not making any concerted efforts to achieve the norms fixed by BICP, the Company stated that the main reason for variation was on account of an approach adopted by BICP which was different from NMDC's accounting procedure. It was also stated that during this period, NMDC calculated cost of production based mainly of lump ore as fines were not saleable. BICP considered both fines and lumps as products for working cost of production under different heads. BICP also did not take into account incidence of payment and benefit to increases in D.A. (due to increased cost of living index), wage revisions, increments and normal promotions etc.

Productivity

4.17 The Committee noticed from the Annual Report (1989-90) of the Company that the overall annual output of iron ore per employee had increased from 1598 tonnes in 1987-88 to 1826 tonnes in 1989-90, the productivity of iron ore per man year in Bailadila-5 and Donimalai was decreasing as would be seen from the following table:

Project	Year	Production (Lakh Tonnes)	Productivity Iron Ore per man Year (Tonnes)	Turn over per man year (Rs. Lakhs)
IRON ORE (Lump + Fines)				
Bailadila-14	1987-88	29.44	1616	1.30
	1988-89	35.22	1992	1.33
	1989-90	41.77	2106	2.73

Project	Year	Production (Lakh Tonnes)	Productivity Iron Ore per man Year (Tonnes)	Turn over per man per year (Rs. Lakhs)
Bailadila-5	1987-88	43.76	2598	1.13
	1988-89	38.78	2157	1.22
	1989-90	33.81	1746	2.65
Donimalai	1987-88	29.05	1903	1.08
	1988-89	24.14	1739	1.47
	1989-90	24.39	1631	1.71

4.18 It is seen that in Bailadila-5 the productivity of iron ore per man year had come down from 2598 tonnes in 1987-88 to 1746 tonnes in 1989-90. Similarly in Donimalai it had come down from 1903 tonnes in 1987-88 to 1631 tonnes in 1989-90. When enquired about it, the Secretary, Department of Steel stated:

> "In Bailadila-14 there is a big rise though in Bailadila 5, there is a decline. In Donimalai also there is a decline. This is reflective of fixed number of people in employment and sometimes reduction of the output based on the reduction of export."

4.19 The Committee are concerned to note that the manpower strength in all the iron ore projects of the company was far in excess of the strength envisaged in the DPRs. In Bailadila-14 against 1000 persons provided for in the DPR for 40 lakh tonnes of production the actual number was 1918 in 1987-88 for about 20 lakh tonnes. During the same year in Bailadila-5 against 1400 envisaged in DPR for 40 lakh tonnes there were actually as many as 1950 persons for about 31 lakh tonnes and likewise in Donimalai as against 1200 the actual staff in position was 1511 men. In other words against 3600 men envisaged in the DPRs the actual strength in the three projects put together was 5379 in 1987-88. In 1988-89 the number rose to 5414 but there was a small decrease in 1989-90 when the actual strength stood at 5392. Though the Company claims that its Industrial Engineering Department always studied and assessed the manpower requirement of the Company yet it seems that the system of study of this unit was not realistic as otherwise the manpower strength would not have increased so much beyond the DPRs prepared by the Company itself.

4.20 Justifying the increase of manpower, the Secretary, Department of Steel informed the Committee during evidence that all the Project — Bailadila-14, Bailadila-5 and Donimalai — had undergone some change in the scope during implementation of the projects necessitating more men than originally estimated. The increase was also attributed to the facilities provided like Hospitals, Schools, canteen etc. which were not provided for in the DPRs. But the Secretary admitted during evidence that "DPR should mention all this." The Committee have no doubt that the Detailed Project Reports prepared by the Company were not realistic and left much to be desired as the fields of increase in staff mentioned by NMDC were not such which could not have been foreseen by the Company, except of course Fine Ore Handling System which was a later addition. Since the Company has already gained sufficient experience in the development of iron ore projects during the last 30 years, the Committee desire that in setting up all future projects, such like deficiencies in the preparation of DPRs be taken due care of.

4.21 The Committee take a serious note of the fact that there is no manpower planning in the Company. During evidence they were informed that "utilisation of manpower on the planned basis can be helpful." The Committee desire the Company to make a scientific study of the manpower planning and assess the actual requirement in various fields in order to enable them to identify surplus manpower which could be gainfully utilised where they are most needed.

4.22 The Company find that the incidence of payment and benefit to labour per tonne of production exceeded the norms fixed by BICP in respect of all the iron ore projects. In Bailadial-14, against the BICP norm of Rs. 5.18 in 1981-82 and Rs. 12.37 in 1987-88 the incidence of payment and benefit to labour per tonne of production was Rs. 7.68 and Rs. 20.38 during the same years. Similarly in Bailadila-5 it increased from Rs. 8.90 in 1980-81 to Rs. 19.88 in 1987-88 as against the BICP norm of Rs. 5.62 and Rs. 7.64 respectively. Likewise in the case of Donimalai it ranged from Rs. 13.51 in 1981-82 to Rs. 26.28 in 1987-88 against the BICP norm of Rs. 5.55 and Rs. 7.91 during the same years. The Company has contested the norms fixed by BICP on the ground that BICP took both fines and lumps as products for working cost of production whereas NMDC calculated cost of production based mainly on lumps ore as fines were not saleable. The Committee are not convinced with this explanation. They are of the view that if the norms were not acceptable to them, NMDC should have represented against them when these were being fixed by BICP. Now that the Company has been able to find a good domestic market for sale of fines, the Committee desire that concerted efforts be made now to observe the BICP norms as otherwise it would badly affect the financial health of the Company.

4.23 The Committee feel concerned to note that though the overall annual output per employee had increased from 1958 tonnes in 1987-88 to 1826 tonnes in 1989-90 the productivity of iron ore per man year had decreased from 2598 tonnes in 1987-88 to 1746 tonnes in 1989-90 in Bailadila-5 and from 1903 tonnes in 1987-88 to 1631 tonnes in 1989-90 in Donimalai except in Bailadila-14 where it had increased from 1616 tonnes in 1987-88 to 2106 tonnes in 1989-90. The Committee desire that all out efforts be made to improve productivity of iron ore per man year in order to maximise production.

CHAPTER V

DIAMOND MINING PROJECT, PANNA

5.1 Government assigned in December 1959 the Diamond Mining Project, Panna to NMDC for development with a tentative production target of 90,000 carats of diamond per annum during Third Five Year Plan. The final revised scheme envisaging revival of diamond deposits at Ramkheria and Majhgawan for exploitation with production capacity of 11,250 carats and 12,000 carats at a capital investment of Rs. 68.0 lakhs and Rs. 105.0 lakhs respectively was approved by Government in December, 1967. The mines were commissioned in 1968-69 at a total capital cost of Rs. 183.28 lakhs.

A. Ramkheria Mine

5.2 The Committee on Public Undertakings which examined the various aspects relating to the project on Ramkheria Mine observed in para 7.21 of their 37th Report (1972-73) as follows:—

> "The Committee takes a serious view of the undue haste with which the mine was taken up for exploitation without a through and careful techno-economic study of the Project resulting in an infructuous expenditure.
>
> The Committee strongly recommended that the entire matter should be thoroughly investigated by the Government as to the quantum of the loss and the responsibility for such costly lapses be also fixed."

5.3 As no action was taken by Government on the above lines, the Committee on Public Undertakings in para 38 of their 60 Report (1974-75) reiterated that the entire matter be thoroughly investigated and the responsibility for the loss fixed.

5.4 The Company finally closed the mine from June, 1980 and suffered loss of Rs. 158.87 lakhs between 1973-74 to 1980-81 due to delay in taking decision to close the mine.

5.5 During the above period the actual production was markedly poor as shown below against the designed capacity of 11,250 carats per year.

Year	Actual Production (Carats)
1973-74	1613
1974-75	2032

Year	Actual Production (Carats)
1975-76	2344
1976-77	1762
1977-78	2230
1978-79	1894
1979-80	711
1980-81	38

5.6 Though the Ramkheria mine was closed in June, 1980 the mine and its township were kept under care and maintenance upto July, 1985 incurring an expenditure of Rs. 41.23 lakhs from July, 1980 to 31st March, 1985.

5.7 When enquired whether in pursuance of the recommendation made by the Committee on Public Undertakings (1972-73) and reiterated in their 60th Report (1974-75) any investigation was made and responsibility fixed by the Company in the case of Ramkheria Mines, the CMD stated in evidence:

> "Not to my knowledge. It was to be taken by the Government."
>
> The witness also added:
>
> "I am not aware. I do not think that there is any record about any enquiry or investigation..............to the best of my knowledge this has not been done."

5.8 In this connection, the Secretary, Department of Steel informed the Committee during evidence:

> "This is another bad case where a formal enquiry was not instituted as far as I know. This mine was undertaken in consultation with foreign consultants. NMDC had prepared a project Report in 1961 on the basis of the data collected. The expectations did not materialise. However, no enquiry has been initiated."

5.9 He further added:

> "Unfortunately, these files are not available with us now. These are old files and in the process of destruction which takes place once in a while, these too appear to have been destroyed."

5.10 When enquired about the procedure followed by the Government in dealing with the recommendatons of a Parliamentary Committee, the Secretary (Steel) stated:

> "The matter remains on a regular reviewing list for implementation and after completion of the work, the replies are sent to the Parliamentary Committees. These replies are invariably shown to the Secretary. And if there are any further policy and parliamentary implications, the replies are shown to the

Minister also. If a case arises where the Government finds it difficult to go by the recommendations, it will invariably go to the Minister."

5.11 After the evidence, the Department of Steel stated in a note that they had constituted an Enquiry Committee on 11 March, 1991 to go into the entire matter relating to the haste in exploitation of Ramkheria Diamond Mines by National Mineral Development Corporation (NMDC) That Committee had been directed to submit its report within two months from the issue of the order.

5.12 The Enquiry Committee in its report submitted to the Government in July, 1991 is stated to have observed as follows:—

"The Enquiry Committee has concluded that undue haste was displayed in the setting up of the project right from the inception and to some extent this had to be attributed to the pressure from the Govt. directing NMDC that the prospecting work should be completed by March 1961 and the commercial exploitation started by June 1963. NMDC's response to the Govt. directions was mechanical and without realising the implications. This lead to infructuous and un-economical investments on prospecting and mining in Ramkheria leading to the premature closure of the mine on 1.7.79."

5.13 As regards fixing of responsibility for the lapse, the Enquiry Committee is stated to have observed:

"The Committee was of the view that all along the major decisions appeared to be collective decisions and could not be attributed to any single individual. Moreover, as the matter was very old it would require a detailed examination of old records, papers, files etc. which, at this stage, is very difficult."

5.14 Expressing their views on the findings of the Enquiry Committee, the Ministry have stated:

"The Government have examined the report submitted by the Enquiry Committee and agree with the conclusions arrived at therein. While it is unfortunate that responsibility for the infructuous expenditure on the Ramkheria Diamond Mining project cannot be fixed, due to that lapse of time, the findings and conclusions of the Committee will be noted for future guidance. However, it may be added that at that time the procedures for scrutiny of projects was not perhaps that well developed. The PSUs as well as Government have not become more responsive to the problems and have developed appropriate mechanisms for proper appraisal of investment decisions."

5.15 In reply to a question why the decision was taken to close down the Ramkheria mine the CMD stated in his evidence that:—

> "It was becoming uneconomic to mine. For some time it was making profit in between. The profit depends upon the incidence of diamonds. When we found that it was losing, we recommended to the Steel Authority of India to close it down. Then due to social reasons, nobody gave the permission to close it down and to retrench the labour. The labour had to be shifted to other mines. The mine was continuously in operation. The only thing was that it was a losing to mine."

5.16 The Committee pointed out that the company had taken about seven years (upto June, 1980) to close the mining operations and another 5 years (upto July, 1985) to wind up the care and maintenance of the mine and township by which time the total loss amounted to Rs. 200.10 lakhs (Rs. 158.87 lakhs as loss on the project operations and Rs. 41.23 lakhs towards expenditure on maintenance). Asked why a decision could not be expected which would have minimised the loss, the Ministry informed in a written reply *inter alia* as under:—

> "Ramkheria mine was producing diamonds in the range around 1600 to 2300 carats per annum during 1973 to 1979. Around 1980, the production started dwindling and the cost of operation was going up, resulting in losses and became economically unviable. Due to shortage of accommodation at Majhgawan, the Ramkheria camp had to continue till 1985. NMDC had certain fixed infrastructure at Ramkheria, it had to provide necessary supervision till these infrastructure were handed over to State Government.
>
> Although the proposal to close the mine was submitted as early as 1973, due to the large work force at the mine and the resultant social and industrial relations problems inherent in such decision, the ultimate closure decision got extended by a few years. Subsequently on the decision of the Board of Directors a voluntary retirement scheme was introduced and 327 workmen opted for voluntary retirement scheme. Some workmen were shifted to the Majhgawan mines. All these rehabilitative steps which are inevitable in any decision to close a unit with a large labour force naturally took time and therefore losses were inevitable."

Losses

5.17 The following table shows the loss incurred by the Diamond Mining Project, Panna during the year 1984-85 to 1989-90;

Year	Loss (Rs. in crores)
1984-85	1.62
1985-86	1.91
1986-87	1.69

1987-88	1.35
1988-89	0.94
1989-90	1.20

5.18 As against installed capacity of 15000 carats per annum, the production during 1989-90 was 16,071 carats i.e. 107% capacity utilisation. In spite of utilisation of capacity in excess of the installed capacity, the Company had incurred a loss of Rs. 1.20 crores. The Committee desired to know why the Company suffered a loss in 1989-90 despite increased production. In reply to this, the CMD stated during evidence *inter-alia* as under:

> "We have done 16,000 this year and in 1990-91 we hope to cross 17,000 carats and we shall do it.
>
> In diamond mining, the most important thing is the incidence of diamond in the mother earth. The general incidence of diamond is about 30 carats per hundred tonnes in the African Continent. They do not touch a deposit for mining if the incidence is less than 30 carats per hundred tonne. The same is the case in respect of Australia. There they get 40 carats per hundred tonne. The incidence of Panna is only 10 carats per hundred tonne. So, the incidence of diamond in Panna is one-third. This is one of the reasons. The second reason is that the price of diamond is very illusory. The entire pricing of diamond is controlled by one company, Debeers, throughout the world. The price fluctuates. In the year 1979, the price of diamond was Rs. 18000 per carat. Then it came down to Rs. 1200 in 1985. Last year, our average was about Rs. 3600 per carat. This year, we have just made an auction and it comes to Rs. 4,000 per carat. So, the price goes on fluctuating. The third point is that our cost of production goes on increasing. We have concluded our wage agreement with the workers. The wage component is going up. But we are able to survive in spite of the fact of one-third incidence compared to the international mining sector. It is because of the quality of diamond that we are getting in Panna. It is of a very high quality. Therefore, we are able to survive.
>
> Another very important factor which has taken place is that out of every hundred rupee we realise by sale, Rs. 30 /- is taken away by the State Government as royalty and Cess. Nowhere in the world the Royalty and Cess are of that magnitude. It used to be five percent. Then the Government went on increasing Royalty to 15 per cent. It is a Central Subject. Since the Central Government did not increase the royalty further, the State Government levied cess on royalty. They thought that it is a State Subject. This is about Madhya Pradesh. They levied cess on royalty at a rate equal to royalty rate and are getting more revenue. Of course, we have

challanged it in the High Court. We have won in the High Court. It has again gone to the Supreme Court. It is pending there. I think it is likely to be struck down. These are the few reasons. I think this year we hope to break even if not making a profit."

5.19 In a note furnished to the Committee after the evidence the reasons for increase in loss in 1989-90 as compared to 1988-89 inspite in production and the sales realisation in 1989-90 were explained by the Company as under:

"The loss in 1988-89 and 1989-90 in respect of Panna Diamond Mining Project is as follows:

1988-89	Rs. 93.71 lakhs
1989-90	Rs. 119.87 lakhs
Increase in Loss	Rs. 26.16 lakhs

The increase in loss in 1989-90 is, to a great extent, due to the write-off of tuff, which had low incidence of diamonds, lying unprocessed over the years. The normal incidence of diamond is 10 carats per 100 tonnes of tuff treated. Since some of the tuff mined in the earlier period was having 2 to 3 carats of incidence only per 100 tonnes and processing of the same was considered uneconomical, a conscious decision was taken by NMDC Board to write them off in the books. The value of such write-off was Rs. 50.92 lakhs.

During the year 1989-90 we had a wage settlement resulting in additional payments inclusive of payments for the past periods. The extra burden on this account was Rs. 31.84 lakhs. For the first time, the Corporation made a provision for accumulated leave in the books at the end of the year. This has resulted in an additional provision of Rs. 23.41 lakhs. There were increase in other expenses as well due to normal inflation: However, due to better sales realisation, NMDC was able to get Rs. 42.73 lakhs (net of royalty and cess over 1988-89).

The net effect of the above mainly increased the loss by Rs. 26.16 lakhs over 1988-89 inspite of increase in production and better sales realisation."

5.20 Asked if it was advantageous under economic consideration to look for indigenous source of diamond the CMD stated:—

"I think it is necessary for India to increase the production of diamonds because we are, at the moment depending on the import of diamond to the extent of rupees three thousand crores per annum to sustain (i) about three hundred thousand people who are working there and (ii) to have value addition. India should have diamond because the first ever diamond came from India. Unfortunately the National Diamond Mining Scheme which was administered by GSI over the last five or six years could not locate the diamond in Krishna River etc., But, again the efforts are being revived by the Government of India because exploration is the area of jurisdiction of the GSI. I think India must increase its production of diamond."

B. Labour Utilisation

5.21 The diamond mining revival scheme (December 1967) did not provide for the actual requirement of manpower in both the mines at Ramkheria and Majhgawan. Consequent upon the decision to close the Ramkheria Mine the study conducted on December, 1978 by the Industrial Engineering Unit of the Company showed that Majhawan Mine and Panna Office required only 607 employees against the actual strength of 780 employees. Accordingly the company introduced a voluntary retirement scheme with effect from 15th May, 1979 and kept it open upto 31st March, 1980, 327 daily workers opted for voluntary retirement.

5.22 Due to transfer of employees from Ramkheria Mine to Majhgawan Mine/Panna Office and the employees kept at Ramkheria Mine for care and maintenance, the actual men-in-position in the project were much more than the requirement of Majhgawan Mine and Panna Office.

5.23 The table below gives the details of actual men-in-position in the project vis-a-vis the requirements and incidence of payments and benefits to surplus staff during the seven years ended 31st March, 1990:—

	Details	1984	1985	1986	1987	1988	1989	1990
(i)	Total men-in-position	787	759	756	753	671	657+62* =719	653+60* =713
(ii)	Actual requirements as per industrial engineering unit recommendations.	607	607	607	607	607	607	607
(iii)	Surplus men-in-position (Col. (i)—(ii))	180	152	149	146	128	112	106
(iv)	Total payments and benefits to employees (Rs. in lakhs) (Excluding over-time)	130.99	147.06	165.30	179.79	210.19	225.63	280.07
(v)	Incidence of payments per employees (Col. iv—i)	16644	19375	21843	23876	28597	31381	39280
(vi)	Incidence of payments to Surplus staff (Rs. in Lakhs) (Col. iii×v)	29.96	29.45	32.55	34.86	36.60	35.14	41.63

*MR Workers — Total Rs. 240.19 lakhs

5.24 NMDC has informed that the higher incidence of payments per employee is due to wage revision implemented in 1989-90 w.e.f. 1-1-1989.

5.25 The Company informed Audit in June, 1987 that the Majhgawan Mine and Panna required additional manpower to the extent of 60 persons from 1983 for which no extra sanction was obtained and the requirement was met from the surplus staff.

5.26 According to Audit the project did not expand its activities from 983 onwards and the expansion scheme (completed in November 1982) contemplated procurement of one loader, who tippers and one water tanker and construction of water treatment plant. These facilities did not require additional manpower to the extent of 60 persons.

5.27 A revised voluntary retirement scheme providing for additional compensation over the earlier scheme to induce more number of employees to opt for voluntary retirement was introduced from 17th July, 1984 and was kept open upto 31st December, 1984. Only 25 employees opted for retirement and company paid compensation amounting to Rs. 5.59 lakhs. The Company introduced another voluntary retirement scheme for muster roll employees from 28th September, 1987 and kept it open upto 15th December, 1987.

5.28 The Committee desired to know the reasons for the manpower being far in excess of the requirement during the above years despite introduction of voluntary retirement schemes by the Company. In a written reply, the NMDC informed that even though management offered a good Voluntary Retirement Scheme, all the surplus staff did not opt. They went to court seeking regularisation thus stopping further action by NMDC.

5.29 When asked about the efforts so far made by the company to gainfully utilise the surplus labour which was eating away a sizable sum of the company every year, the Department of Steel stated in a written reply:

> "Company again reintroduced voluntary retirement scheme and tried to induce the personnel to take to voluntary retirement scheme. However, only few employees availed of the Scheme. The Company is also simultaneously taking up small expansion programme at Majhgawan mine. It may be possible to utilise some of the surplus staff in the expansion scheme."

5.30 In reply to question whether the Industrial Engineering Unit of the Company had reviewed the manpower requirement of Panna after December, 1978 and what suggestions had been made by the Unit to keep the manpower strength within the required level, the Department of Steel informed:

> "Yes. Series of studies were undertaken in 1979, 1980, 1982, 1985, 1986 and in 1987. In fact a Committee went into this aspect in 1985 and 1986. Efforts are being made to transfer some of the surplus staff to other units of NMDC, whenever possible and permissible. Some workers have been absorbed in R&D Labs at Hyderabad."

5.31 Although the Company had introduced voluntary retirement schemes to reduce surplus manpower, still there were surplus persons. Asked how the Company proposed to utilise the surplus manpower, the CMD stated in evidence:

> "We intend to follow three-pronged strategy. First is, the number is not very large now. Originally when the Ramkheria project was closed, the number was about 500. The surplus manpower is about 70 now. We will again introduce voluntary retirement scheme and try to convince some people to avail that.
>
> The possibility of transfer to other projects is remote. If we take people from Panna to Bailadila, then the tribals of the areas object and create problems. But what we are doing now is we are having a small expansion programme in Panna to increase Production from 17,000 to 20,000 carats. This will be completed in 18 months time. In the next 1½ years, partly we will be able to liquidate by voluntary retirement and partly we will be able to absorb in the expansion scheme."

5.32 When asked about the details of the expansion programme, the CMD stated:

> "This programme is not exactly an expansion programme. It is a question of optimisation. In this regard, we had some expert advice from some people. We have to break the big boulder by crushing. We crush that. Finally the grinding is done in a rotating ball mill. The feeling is that the diamonds are getting broken in that mill. The value of the diamond increases depending upon the size.
>
> Therefore, we are going to have some additional equipment, where we can recover this big diamonds before the material is put in the rotating ball mill. The process is called de-bottlenecking. We exprct that by increasing the incidence of bigger diamonds our realisation will improve. In terms of caratage we may be able to get 17000 carats per annum."

5.33 During the course of evidence the Committee enquired why so many employees were initially recruited by the Company. In his reply the CMD stated:

> "There are two mines. One is Ramkheria and the other is Majhgawan. Ramkheria was closed down because it was found uneconomical and the incidence of diamond was less. We could not retrench the labour of that mine. They were brought to this other mine and we introduced a voluntary retirement scheme. Out of 500 practically 400 have availed of the voluntary retirement scheme in the last ten years. Still 70 people are left"

5.34 Panna Diamond Mining Project comprised of two main mines, *viz.* Ramkheria and Majhgawan. The scheme envisaging revival of diamond deposits at Ramkheria and Majhgawan for exploitation with production capacity at 11.250 carats and 12,000 carats at a capital investment of Rs. 68 lakhs and Rs. 105 lakhs respectively was approved by Government in December, 1967. The mines were commissioned in 1968-69 at a total capital cost of Rs. 183.28 lakhs. In para 7.12 of their 37th Report (1972-73) the Committee on Public Undertakings took note of the undue haste with which the Ramkheria mine was taken up for exploitation without a thorough and careful techno-economic study of the project resulting in an infructuous expenditure and recommended that the entire matter should be thoroughly investigated by the Government and the responsibility for the loss fixed. This recommendation was reiterated by the Committee in their 60th Report (1974-75). Surprisingly, NMDC closed the mine in June, 1980 because of its unviability but no such enquiry has been conducted by the Government during the last 18 years. The Secretary (Steel) had admitted during evidence that "This is another bad case where a formal enquiry was not instituted."

5.35 The Committee note that after their examination of the Ministry, an Enquiry Committee was set up in March, 1991 to investigate the whole matter and that Committee's Report was received by Government in July, 1991. The Enquiry Committee is stated to have expressed their inability to fix the responsibility for the lapse because that involved examination of very old records. The Committee take a serious view of non-implementation of their such an important recommendation in time. They, therefore, desire that Government should evolve some foolproof procedure and ensure its strict observance so that such grave lapses are not repeated in future.

5.36 The Committee find that there is an established procedure in the Ministry that till the implementation of the recommendation is intimated to the Parliamentary Committee concerned the matter remains on a regular reviewing list and in cases where Government finds it difficult to implement the recommendation the matter invariably goes to the Minister. The relevant files are stated by the Ministry to have been destroyed but it is not clear whether or not the extant procedure was followed in the instant case. The Committee cannot but deprecate the casual approach on the part of the

Ministry in destroying such important files without intimating to the Committee the final action taken in the matter.

5.37 The proposal to close the Ramkheria mine, being uneconomical, was moted in 1973. Even though the actual production in the mine ranged between 1600 carats and 2300 carats per annum from 1973-74 to 1978-79 as compared to the designed capacity of 11250 carats per year the mine was finally closed in June, 1980 i.e. after 7 years and during this period the Company incurred a loss of Rs. 158.87 lakhs on account of delay in taking the decision and another Rs. 41.23 lakhs during July, 1980 to March, 1985 due to maintenance of mine and township. The reasons advanced by the Government in defence of these costly delays are hardly convincing. The Committee have no doubt that the loss of Rs. 200 lakhs in all suffered by the Company from 1973 to 1985 could have been avoided if the Government had moved quickly in the matter. The Committee cannot help deprecating the unnecessary and avoidable delay on the part of the Government in deciding the closure of the mine which was already proving a drag on the scarce financial resources of the Company.

5.38 The Committee note that despite increase in production of diamonds from 13209 carats in 1988-89 to 16071 carats in 1989-90, the Company incurred a loss of Rs. 1.20 crore in 1989-90 as compared to Rs. 0.94 lakh in 1988-89. According to the Company, the main reasons for increase in loss in 1989-90 as compared to 1988-89 were write off of tuff, additional payments on account of wage settlement, increase in expenses due to inflation etc. NMDC hoped to reach break-even in 1990-91. The Committee trust that the company would achieve its aim. They recommend that the Company should make all out efforts to maximise production and reduce their cost of production in order to improve their profitability.

5.39 The Committee note with concern that the requirement of manpower in Ramkheria and Majhgawan mines was not provided for in the diamond mining revival scheme of 1967. A study conducted in 1978 by the Industrial Engineering Unit of NMDC revealed that as against the requirement of 607 employees in Majhgawan Mine and Panna Office the actual strength was 780 employees. The Company introduced voluntary retirement scheme and 327 daily workers opted for it upto March, 1980. Consequent upon closure of Ramkheria mine and transfer of its employees to Majhgawan Mine/Panna Office the actual strength was far in excess of the requirement during the years 1984-85 to 1989-90 and the total incidence of payments to surplus staff as at the end of 1989-90 was Rs. 240.19 lakhs. The Committee were informed that there were only 70 surplus employees now in Ramkheria Mine and the Company hope to utilise this manpower in their expansion programme currently being implemented. Strangely, a number of studies were conducted by the Industrial Engineering Unit of the Company to review the manpower requirement of Panna between 1979 and 1987 but the unit seems to have not been able to prescribe the actual manpower requirement of Panna Diamond Mine. The Committee desire that an expert

independent agency may be engaged to scientifically assess the manpower requirement of the mine and some procedure may be devised to ensure that the strength does not exceed the prescribed limits in future.

CHAPTER VI

EXPANSION AND MODIFICATION SCHEMES

A. Bailadila-14 (Expansion and Modification)

6.1 As the Bailadila Iron Ore Deposit-14 was depleting in May, 1978 a scheme was prepared at an estimated cost of Rs. 9.90 crores to develop an adjoining Deposit-11/C with an initial production of 3.3 million tonnes of ROM to be stepped up to about 5 million tonnes in the second phase as a supplementary/replacement of Deposit-14.

6.2 The estimated cost of the project finally revised to Rs. 29.52 crores was approved by the Government in October, 1986 against which an expenditure of Rs. 30.89 crores was incurred upto March, 1988. This did not include Rs. 403.64 lakhs being the expenditure incurred on installing second crusher line.

6.3 There were delays in execution of different items of works, ranging from 12 months to 45 months.

6.4 According to Audit the tender scrutiny committee constituted on 8th September 1981 recommended the acceptance of the lowest offer of Aluminium Industries (Private) Limited, Hyderabad (ALIND) for Rs. 729.93 lakhs for mechanical and electrical portions. In regard to civil and structural works, the Committee suggested delinking of civil works from their quotation. The Chairman suggested negotiations with Hindustan Steel Construction Limited (HSCL), a Government of India Undertaking, who evinced interest in this work although they did not submit any tender. Accordingly, a committee negotiated (February, 1982) with HSCL and recommended entrusting of the civil works portion of both the works at cost of Rs. 5.11 crores subject to the price payable to them being restricted to 10 per cent above the lowest acceptable quotations i.e. Rs. 5.11 crores excluding the proposed escalations on POL and minimum wages. Since the award of work at this cost was expected to result in the total cost of the project sanctioned by the Government of India, it was decided in March, 1982 to refer the matter to the Government for approval. The Government asked the Company in March, 1983 to examine the proposal afresh. In pursuance of the directives of the Government, negotiations were held with HSCL who finally confirmed (April, 1983) their acceptance of work at Rs. 5.11 crores plus escalations for POL and labour from Ist January, 1982 onwards. Thus (i) delinking the civil works with mechanical works in two tenders and inducting HSCL in Fabruary, 1982 and (ii) obtaining the

Government's approval in March, 1983 for increase in project cost due to award of work to HSCL resulted not only in delay in execution of the project, but also in increase in project cost by Rs. 93 lakhs in addition to the escalations on account of POL and Labour to an extent of Rs. 43.66 lakhs.

6.5 The progress of work done by HSCL upto the end of November, 1988 was as follows:—

Items	Total Quantity	Quantity actually completed
Concreting (M^3)	28,445	29,092
Structural fabrication (T)	3,370	3,249
Structural erection (T)	3,370	2,687

6.6 The total quantity of earthwork and concreting were revised on receipt of construction drawings from HSCL. The poor progress was stated to be mainly due to shortage of manpower employed and inadequate construction equipment. The matter had been taken up (March, 1986) with HSCL and a joint programme was drawn up for completion of civil/ structural works by July, 1986. Inspite of progress on the erection front, discussions were held with HSCL who agreed to give up the erection work in certain sectors so as to complete the work in time (June, 1986). Even upto June, 1986, the work was delayed by 24 months out of which 12 months delay was attributed to inadequate arrangements of HSCL and the Company did not impose any penalties/liquidated damages.

6.7 The civil works portion of primary crushing, building and a dumper platform were entrusted to Hindustan Steel Construction Ltd., even though they did not submit any tender, when the Company invited quotations for works in March, 1981. The delayed completion of works by HSCL was also one of the reasons for the overall delay. HSCL had earlier done some works in Bailadila-5.

6.8 The Company had informed Audit in June, 1987 that preference was given to HSCL on account of their technical competence. Asked why the decision to entrust the works to HSCL was taken after a delay of over one year then, NMDC stated in a written reply that HSCL wanted very high rates. The rates had to be negotiated.

6.9 On being enquired whether HSCL's earlier performance had been considered before entrusting the civil works in Bailadila Expansion to them, NMDC stated in a written reply:

> "NMDC invited tenders for civil and structural works for 11C. The contractors who quoted were not considered to be competent to complete this type of job. Good and experienced contractors did not quote perhaps due to
>
> (i) Contract value being small.
> (ii) Bailadila being in remote location.
>
> Even now, it is difficult to entrust good contractors for jobs in Bailadila. Under the circumstances, NMDC management requested HSCL to take up this work. HSCL is a big public sector company in civil and structural field. While there is no doubt on their technical competence, they have been known to delay mainly due to management system. Under the circumstances, NMDC had no choice but to engage M/s. HSCL."

6.10 When enquired whether the company had imposed any penalties/ liquidated damages on Hindustan Steel Construction Ltd. (HSCL) in regard to delay in execution of civil and structural works entrusted to them, the Company informed that NMDC had raised claims including penalties. HSCL raised claims for escalation in rates to the tune of Rs. 4.91* crores against at amount of about Rs. 30.98* crores counter claims raised by NMDC. The matter was before an Arbitrator.

6.11 In respect of tenders for the work of downhill conveyor system (electrical) and mechanical system the work was entrusted (April 1983) to ALIND at Rs. 714.61 lakhs. It was agreed that:

(a) ALIND would be given 10 percent interest free advance on the total value of the contract;

(b) another 10 percent advance at 12½ percent; and

(c) interest bearing advance will be adjusted first followed by the interest free advance.

6.12 The additional facilities were to compensate the delay in awarding the contract, the offer having expired on 31st January, 1983. On the interest free advance of Rs. 71.45 lakhs interest per annum works out to Rs. 8.93 lakhs till the same is adjusted. The Ministry stated (December, 1988) that since escalation would have cost much more the Company agreeing to a 10 per cent interest free advance was less expensive alternative.

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* At the time of factual verification NMDC has stated *vide* their letter No. MS/91-92/247 dated 4 March, 1992 that "HSCL raised claims for escalation in rates to the tune of Rs. 4.92 crores against an amount of about Rs. 6.98 crores Counter Claims raised by NMDC."

6.13 There were delays in obtaining import licence by ALIND. As against the original expected date of receipt of licence in January, 1984, the licence was received in June, 1985, resulting in a delay of 18 months. Due to financial problems, the firm was not able to speed up the supplies. A revised schedule of supplies of equipment was drawn up according to which ALIND was expected to complete the supplies by December, 1980 failing which penalty was to be levied. The supplies were, however, completed by February, 1988 and erection by March, 1988. No penalties were levied by the Company.

6.14 To a query why no penalties were imposed on ALIND for failure to complete the supplies of equipment in time, the Company informed that the final bills have not yet been settled. NMDC has raised claims against M/s. ALIND including penalties. M/s. ALIND has raised counter claims against NMDC. The matter was referred by the Company for arbitration on 25.7.1989. Arbitration proceedings are still going on.

6.15 When asked about the amount of claims raised by ALIND against NMDC and *vice-versa,* the Company stated that as against ALIND claims of Rs. 3.04 crores, NMDC had made a counter claim of Rs. 3.17 crores.

6.16 Asked why the experience and expertise developed in commissioning the earlier projects, the company could not project reasonable and realistic schedule in case of expansion schemes. NMDC informed in a written reply that since Bailadila-14 was depleting and was scheduled to close down by 1991-92, Bailadila Deposit 11C was taken up for development and commissioning to replace Bailadila Deposit-14. The Project was completed and commissioned in October, 1987. There had been delay in completion of this Project. The reasons for the delay have been investigated by a Committee appointed by Govenrment of India and according to that Committee the delays have been mainly on account of the following:

(a) Delay of 24 months in completion of civil and structural works by HSCL (A Government of India Undertaking). Out of this 24 months delay by HSCL, 11 months are attributable to design problems arising out of blue dust pockets in that ore, which was not foreseen earlier.

(b) Delay in supply of equipment by M/s. ALIND.

6.17 Explaining further, the Company stated:

> "M/s. ALIND had quoted for this work in August, 1981. The contract did not have any escalation clause. As a result of delay in completion of civil and structural works and heavy increase in the cost of equipment and other raw materials required for manufacturing equipment. M/s. ALIND was unable to supply equipment as per schedule. The Company had to persuade M/s. ALIND to continue and complete supplies. Had M/s. ALIND refused to supply the equipment on account of increase in costs, the Project

would have not been completed even by now. There have also been delays by Govenrment in giving clearances for import of imported equipment. While NMDC does have experience and expertise of construction and commissioning of new projects, the procedure, delays in clearances by Government etc. contribute a great deal to these delays."

6.18 On their attention being drawn to the delay on the part of the Government in giving clearances for import of equipment, the Department of Steel stated in a written reply as under:—

"NMDC has been suggesting that the case by case approach for Foreign Exchange clearances may be dispensed and a bulk ceiling may be placed at the disposal of NMDC at the beginning of the year. However, it is to be kept in view that clearances for Foreign Exchange involves the concurrence of several agencies such as DGTD, CCIE etc. The import of equipment can only be cleared when the proposed equipment is not manufactured indigenously for which DGTD has to give the clearance upon which an import licence is issued by the CCIE."

6.19 When enquired whether the Government propose to bring any changes in the existing procedure, the Secretary, Department of Steel stated during evidence:

"In the course of an enquiry, it was found that there was delay in the process of getting Foreign Exchange clearance. In the Government, there is a procedure for getting foreign exchange. So some of the problems were there. In the case of NMDC, we have tried to relax the procedure. We have moved the Ministry of Economic Affairs for giving bulk allocation of foreign exchange to them so that every time they do not have to wait to get the final clearance to buy some of the parts. This will clear a lot of bottleneck.

6.20 On an enquiry whether the Ministry had prescribed any set procedures and time limits for clearances of projects at various stages and if so, why these are not being scrupulously followed to avoid unnecessary delays, the Department of Steel stated in a written reply as under:

"After the in principle decision for a project is taken in the administrative ministry, a pre-PIB meeting is convened wherein representative from Planning Commission, Ministry of Finance and Department of Environment etc. are also invited. Approval for starting preliminary work including preparation of Detailed Project Report (DPR) is given. The time allowed for preparing the DPR varies from case to case. A note for consideration of Public Investment Board (PIB) is then submitted within a period of 60 days, after the DPR is available. After the PIB has considered and recommended the proposal, the proposal for the Cabinet is to be submitted within 90 days of the PIB recommendations for approving investment. In cases, where the PIB recommendations are conditional, the time limit of 90 days is not likely to be strictly adhered to, and the delay is got condoned by PIB before taking the proposal to the Cabinet. All attempts are made to adhere to these time limits."

6.21 As against the designed capacity of 33 lakh tonnes of R.O.M. per annum, the actual production was 15.64 lakh tonnes of R.O.M. in 1988-89 and 23.49 lakh tonnes during 1989-90. The project was taken up to make the Bailadila-14 Sector viable with an estimated cost of production of Bailadila-14 and 11/C at Rs. 30.85 per tonne. But the combined cost of production was Rs. 91.82 per tonne.

6.22 When asked about the reasons for large variations between estimates and actuals, NMDC informed in a written reply as under:

> "The project was completed in October, 1987. Quality of iron ore on the top benches was poor. As a result, the same could be mixed with the ore from Bailadila Deposit-14 only to a limited extent so as to maintain the overall grade within contractual specifications with the Japanese Steel Mills. Secondly, the production had to be limited as the Visakhapatnam Steel Plant had not come up as scheduled.
>
> The estimated cost of production at Rs. 30.85 per tonne was worked out in July, 1980 (for the production in the year 1989-90) when the capital estimates of Bailadila 11/C were Rs. 11.78 crores. This cost did not include royalty. Since the capital cost of the Project increased, revised estimates were put up for P.I.B. in March, 1986 at a cost of Rs. 29.52 crores. The cost of production estimated in the revised estimates was estimated to be Rs. 70.77 per tonne (excluding royalty). The actual cost of production in the year 1987-88 was Rs. 91.82 per tonne including royalty and Rs. 87.56 per tonne excluding royalty. As such the actual cost was Rs. 87.56 per tonne against estimated cost of Rs. 70.77 worked out in March, 1986. The increase has been due to increase in (i) salaries and wages as a result of wage revision (ii) cost of power due to steep hike in power rates, and (iii) high interest component during the year."

6.23 The Ministry informed Audit in December, 1988 that the whole question of proper execution of Bailadila 11/C was enquired into by the Department of Steel and the delays were noted by the Government. The Committee desired to know the findings of the Enquiry Committee and the action taken by the Government as a result of the enquiry. The Department of Steel informed in a written reply that while recommending the revised cost estimates for the development of Bailadila 11(C) Iron Ore Mines of NMDC, Public Investment Board desired that the Department of Steel should appoint a committee to go into the reasons for unsatisfactory planning, preparation and implementation of the project as also time and cost over-runs, and the fixation of responsibility for the lapses that had occurred. Accordingly, in 1986, Department of Steel constituted a Committee consisting of representatives of the Department of Steel and Expenditure and CMD, NMDC to go into the matter. The Committee submitted its report in August, 1987. The reasons for delay in the implementation were, according to the Committee due to:—

(a) Inability of Management to finalise tenders quickly for awarding civil works;

(b) Decision to bring in the public sector company, HSCL, by direct negotiating;

(c) Delay in processing and finalising tender for mechanical handling equipment due to inadequte preparatory work;

(d) Time taken for seeking Government approval for the main tender as during examination by Government several problems came up which prolonged the decision on the approval;

(e) Poor and slow execution of work by the main contractors, especially HSCL, where the delay was almost 2 years. In respect of ALIND (Second contractor) their performance was slow and complicated by the fact that the company ran into severe financial problems;

(f) Engagement of a large number of sub-contractors.

6.24 The Department of Steel have further informed that having regard to the causes of delay, the Committee's views on the responsibility factors were as follows:—

> "The prime responsibility for the overall delay was to be with the CMD of NMDC. The Committee concluded that it is primarily at his instance that a decision to delink the civil work from the mechanical works in the second tender was taken. The selection of contractor for the mechanical work as well as the decision to bring HSCL were attributed to the CMD."

The Committee also felt that the Director (Planning) and the General Manager (Planning and Engineering) should share the blame for the inadequate preparatory work as a result of which several modifications had to be incorporated in the project. Yet the Committee noted some of the special conditions and circumstances which contributed to the delays for which the project management could not be held entirely responsible. These included:—

(a) The remote location of the project and difficult terrain which made the construction work complex and difficult;

(b) Adverse soil conditions due to the presence of pockets of blue dust which created foundation problems;

(c) Delay in obtaining clearance from the Government both to the tenders and the permission for import of equipment.

6.25 The Enquiry Committee had made some important observations about factors which contributed to cost and time over-runs. Some of the factors identified in this regard were:—

1. The Committee system of taking decisions in which the attempt is to arrive at a consensus and there is visible reluctance for any dissenting view to be over ruled.
2. The practice of acceptance of lowest tender has drawbacks in that there is always a risk that the lowest party may not have the required capability to complete the work on schedule.
3. Inadequate project preparation and more particularly inadequate anticipation of speical conditions of the project site which leads to drawing up of over-ambitious schedules for completion.
4. The inability of contractors to adhere to schedules based on an unwritten understanding that ultimately all delays will be condoned.
5. Under-estimating costs at the initial stage with a view to getting the project sanctioned and funds committed.

6.26 The Government reviewed the report of the Enquiry Committee and concluded that there were some special circumstances in this case which the project team faced and that they are not entirely to be blamed for the inordinate slippages. By and large they were in agreement with the findings of the Committee. Moreover as all the officers identified as being responsible had retired, it was decided not to follow up with any disciplinary action proceedings. The Government also observed that the primary purpose of such enquiries is to identify the cause so as to prevent further occurrances of the same type. The review of Government on the findings of the Enquiry Committee were brought to the notice of the CCEA on 1.9.88 which was noted.

6.27 In view of the drawbacks pointed out by the Enquiry Committee in the practice of acceptance of lowest tender etc. the Committee desired to know whether any guidelines were issued by the Government in this regard. In his reply, the Secretary stated *inter-alia* as under:—

> "Some of these observations are such which can be noted, but may be difficult to follow. The Committee system of taking decision has disadvantages. It has also some advantages. So it will be difficult to give up the Committee system. The advantage is that it avoids a lot of work in each of the offices. It is very difficult to give up the lowest tender system, particularly in the Government Undertakings etc."

6.28 The Committee were informed during evidence that Government had not issued any specific guidelines in the matter. The Secretary, Department of Steel, however, submitted before the Committee that in this case guidelines could be issued.

6.29 The Committee note that a scheme to develop a deposit adjoining Bailadila-14 *viz.* **Bailadila 11-C was prepared in May, 1978 at an estimated cost of Rs. 9.90 crores with an initial production of 33 lakh tonnes of ROM per annum. The cost of the project as finally revised to Rs. 29.52 crores was approved by Government in October, 1986 against which an expenditure of Rs. 30.89 crores was incurred upto March, 1988. Thus there was a huge increase of Rs. 21 crores, representing more than 200 per cent increase over the original estimated cost of Rs. 9.90 crores. It is regrettable that the Bailadila 11-C which was conceived in May, 1978 was completed only in October, 1987, after a period of more than 10 years.**

6.30 According to Audit the overall delay in completion of work was expected to be 41 months out of which 15 months was due to delay in award of the work order and 26 months was due to delay in supply of the equipment by the contractor. The Committee have no doubt that 15 months delay could have been avoided if the management had been alert in taking timely action to award the work order.

6.31 The Committee note that the Department of Steel had set up an Enquiry Committee in 1986 to go into the reasons for unsatisfactory planning, preparation and implementation of the project as also time and cost overruns and that Committee found the various reasons for delay in the implementation of the project.

6.32 The enquiry Committee is also stated to have identified some of the factors which contributed to cost and time over-runs. Since deficiencies in the system of formulation and implementation of the Project have been identified, the Committee desire the Government to lay down detailed guidelines for the future to avoid such pitfalls. They also desire that the monitoring machinery be adequately strengthened to ensure strict observance of the time schedules in completion and commissioning of the project in future and to avoid repeated revision in cost of the projects.

6.33 The Committee find that even though Hindustan Steel Construction Limited had delayed structural work by 2 years upto June, 1986 and Aluminium Industries (Private) Limited which were to complete supplies by December, 1986 completed the same by February, 1988 but no penalty was levied by NMDC against either of the companies. NMDC and the firms are stated to have filed claims/counter claims against each other and the matter is before the arbitrator. The Committee desire NMDC to make serious efforts to expedite the award of the arbitrators.

B. Fine Ore Handling Scheme (FOH) at Bailadila Deposit-5

6.34 Anticipating high demand for iron ore fines in the wake of new trends in the steel manufacturing technology, the Company formulated in July, 1980 a scheme for handling the fines at Bailadila Deposit-5 at an estimated cost of Rs. 18.86 crores (revised to Rs. 25.94 crores in January, 1982), which was approved by the Government in September, 1982. These were further revised to Rs. 30.77 crores and approved by Government in March, 1987. It was anticipated that the Japanese Steel Mills would take 6.0 million tonnes of Iron Ore per annum and the Visakhapatnam Steel Plant will take 0.11 million tonnes of lump and 0.28 million tonnes of fine ore during 1984-85 and it would increase to 1.90 million tonnes of lump ore and 3.39 million tonnes of fines by 1989.

6.35 The scheme was expected to improve the profitability of the BIOP-5 over a period of 10 years. The estimated loss of Rs. 3,400.80 lakhs considering lump ore only as saleable was expected to be reduced to Rs. 202.20 lakhs which has been revised to Rs. 322.60 lakhs as per the latest revised estimates.

6.36 The work on the project started in September, 1982 which was originally expected to be completed by September, 1985 but was actually completed in December, 1986. The delay in completion of different items of work ranged from 4 months to 27 months.

6.37 As against the sanctioned estimated cost of Rs. 30.77 crores, an amount of Rs. 25.20 crores has already been spent upto March, 1989-90.

6.38 The scheme was commissioned in July, 1987. According to NMDC against the designed handling capacity of 28 lakh tonnes of fine ore the system could be made use of for handling only 4.76 lakh tonnes of fine ore during 1987-88, 9.26 lakh tonnes during 1988-89 and 11.48 lakh tonnes in 1989-90. Though a substantial reduction in the loss of the project was envisaged on commissioning the scheme, the actual loss suffered by Bailadila-5 in 1987-88 and 1988-89 was Rs. 1120.24 lakhs and Rs. 913.11 lakhs respectively. However, during 1989-90 the project earned a profit of Rs. 1560.20 lakhs.

6.39 When enquired why the projections made in this scheme could not be realised and the reasons for the company not making full use of the facilities created, NMDC stated in a written reply :

> "Fine Ore Handling Scheme (FOHS) was installed at Bailadila-5 mainly to handle fine ore despatches to Visakhapatnam Steel Plant (VSP). Iron ore fines were not considered as a saleable product earlier and these were dumped in a valley. With technological advancement, fines are becoming saleable product. Accordingly FOHS was taken up at Bailadila-5. Even though current generation of fines from Bailadila-5 Project was to be maximum of 1.8 million tonnes per annum at full rated capacity, the facility was

designed to handle 2.8 million tonnes per annum to take care of future expansions. The scheme was commissioned in July, 1987. However, in next two years, the quantity handled was small as (i) VSP had not been commissioned, and (ii) export demand had not picked up. The demand is now increasing. It has handled 11.48 lakh tonnes in 1989-90. This quantity will go up in the coming years. Thus depending upon the offtake by VSP and export demand, more fines will be despatched through FOHS of Bailadila-5. Bailadila-5 combined with FOHS scheme made a total net profit of Rs. 15.60 crores during 1989-90."

6.40 The Committee find that iron ore fines produced in Biladila-5 were dumped in a valley as these were not a saleable product. Anticipating high demand of iron ore fines after the commissioning of Visakhapatnam Steel Plant, NMDC formulated a Fine Ore Handling Scheme (FOHS) in July, 1980 for handling fine ore at Bailadila-5. The Committee note with concern that the cost estimates of FOHS originally assessed at Rs. 13.86 crores in July, 1980 were initially revised to Rs. 25.94 crores in January, 1982 i.e. the cost doubled in just 16 months and were finally revised to Rs. 30.77 crores and approved by the Government in March, 1987. It is surprising that the scheme which was started in September, 1982 and was expected to be completed in September, 1985 was actually completed in December, 1986 and commissioned in July, 1987. This shows that there was no control either at NMDC's level or at the level of the Ministry to see that the scheme is complete within the stipulated time schedule. In Committee's view this is yet another bad case of faulty planning and implementation of scheme by NMDC.

6.41 The Committee note that as against its full rated annual handling capacity of 1.8 million tonnes of fine ore the system could handle only 4.76 lakh tonnes in 1987-88 and 9.26 lakh tonnes in 1988-89. Thus NMDC has not been able to achieve the installed capacity of this scheme since commissioning. According to the company the reasons for less handling of fines during the above years was non-commissioning of Visakhapatnam Steel Plant for which FOHS had been mainly installed, and lack of demand for export. The Company handled 11.48 lakh tonnes of fine ore in 1989-90 and hope that the demand would increase in the coming years. Since the Company foresee good marketability of fine ore from Bailadila-5 in future, the Committee desire that the scheme be geared up properly so that it can achieve its installed capacity without further loss of time. They also desire that new area both in domestic and foreign fields be explored to market the projects fully.

CHAPTER VII

COST OF PRODUCTION

A. Iron Ore Mines

7.1 The Company had not introduced the system of standard costing as recommended by the Committee on Public Undertakings in this 15th Report (1967-68). The various processes involved in production were categorised in main responsibility centres and sub-divided in detailed cost centres. The actuals were being compared with the budgetted targets.

7.2 The BICP which undertook a study of the operation of the three Iron Ore Projects determined the estimated cost per tonne for the years 1981-82 to 1986-87. The following are the comparative details of the BICP estimates and actuals for the years 1983-84 to 1988-89 for the three iron ore projects.

Project/ Year	As estimated by BICP without escalation December 1981/August, 1984	As per revised report of BICP of March, 1987 (Rs. per MT)	Actuals	Average sales realisation per MT.
1	2	3	4	5
BICP-14				
1983-84	38.35	—	63.29	86.83
1984-85	57.68	65.13	65.09	81.51
1985-86	57.68	68.70	65.42	86.76
1986-87	57.68	67.95	63.61	67.95
1987-88	—	67.95	91.82	69.57
1988-89	—	—	106.39	70.14
BIOP-5				
1983-84	59.46	—	87.72	90.75
1984-85	70.18	62.42	77.50	89.83
1985-86	70.18	65.42	91.45	102.33
1986-87	70.18	64.12	79.28	64.12
1987-88	—	64.12(.)	101.13	65.95
1988-89	—	—	101.93	66.21
BIOP				
1983-84	53.99	—	102.48	51.76
1984-85	62.66	62.66	74.14	47.54
1985-86	62.66	62.66	74.18	53.45
1986-87	62.66	70.06	65.93	70.06

1	2	3	4	5
1987-88	—	70.06(.)	70.10	71.43
1988-89	—	—	87.49	84.54

(.) In the absence of separate figure, figures of 1986-87 were adopted.

7.3 It is seen that compared to the costs estimated by BICP in 1981/1984 the actual cost of production in all the projects were high in all the years.

7.4 Even compared with the revised report of March, 1987 the actual cost of production was high in BIOP-5 and PIOP in all the years except in DIOP in 1986-87. In 1987-88 and 1988-89 the actual cost in BIOP-14 was also more than the BICP estimates of 1987.

7.5 The Ministry informed Audit in December, 1988 that the standard costs determined by BIOP were based on fairly stringent efficiency norms and the company had largely been able to perform satisfactorily in respect of the norms adopted and standard costs calculated by BICP.

7.6 When asked about the reasons for not introducing the system of standard costing as recommended by the Committee on Public Undertakings in their 15th Report (1967-68), NMDC stated that NMDC adopted costing system in accordance with the uniform costing system decided to be adopted by a Committee consisting of various iron ore mining companies in the country like HSL (now SAIL), TISCO etc. The Company also prepared budgeted cost of production under various heads each year taking into consideration the cost of inputs and Projected output. The actual cost is regularly reviewed vis-a-vis the budgeted cost of production.

7.7 In paragraph 6.32 of their 37th Report (1972-73) the Committee on Public Undertakings had recommended that Government should carefully analyse the various components of cost and take concerted measures to ensure that the cost of production did not exceed the sales price.

7.8 When enquired about the action taken by Government on the recommendation of the Committee and the steps taken to reduce the cost of production, the Department of Steel informed in a written reply as under :

> "The export of iron ore has not been commensurate with the cost involved in production, despatch and sale. This has been acknowledged by the BICP in their report as far back as 1981 and they had proposed that the difference between the cost and sales realization be reimbursed in the form of a subsidy from Government. Therefore, unless there was exceptionally good sales realization, it was difficult to keep the costs within the sale price.
>
> Notwithstanding this, the company has taken steps to reduce costs through better process control and these are being reviewed."

7.9 In reply to a question whether the Ministry had analysed the reasons for sharp increase in cost of production during 1987-88 as compared to 1986-87 and if so, what were these and what remedial measures were suggested by Government, the Department of Steel stated in a written reply :

> "BICP had fixed the standard cost for 1986-87 in Bailadila-14 based on certain norms of utilisation. They had also provided a formula for escalation through 1987-88 and 1988-89. However, the Secretary (Expenditure)'s award was that the prices fixed by BICP for 1986-87 was to be paid for 1987-88 and 1988-89. While the company was able to contain its costs within the standard cost in 1986-87 and thereby earn a small profit for the year, the costs rose in 1987-88 due to (a) escalation in cost of inputs and wages (b) higher financing charges as a result of additional capital injection, in the Bailadila-5 as well as Bailadila-14 due to commissioning of FOHS & Bailadila 11/C Mine.
>
> There was also lesser off-take by MMTC during 1987-88 as compared to previous years."

7.10 When asked about the reasons for not achieving BICP norms till 1987-88, the Department stated in a written reply as under :

> "The norms adopted by BICP in calculating the standard cost in 1984 were very stringent and the department took up several issues with BICP for reconsideration such as pricing of fines, payment of Fe Bonus, cost of production at Donimalai, Slime loss, achievable capacity at Bailadila-5 etc.
>
> Finally with BICP agreeing on certain issues, the matter was again taken up with the Committee of Secretaries for consideration. However, no decision emerged in the Committee of Secretaries (COS) meeting held on 14.11.1985. Instead BICP was directed to rework the standard costs based on the direct costs (other than capital related costs) of the different agencies based on 1983-84 data.
>
> The BICP gave further recommendations in 1987 which were considered by the Secretary (Expenditure) in his award."

B. Diamond Mining Project, Panna

7.11 The details showing the average cost of production, realisation and the loss per carat for the seven year ending with 31st March, 1989 are given below :

		1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
1	2	3	4	5	6	7	8	9
1.	Production (in carates)	13416	14978	15819	15190	15824	13209	16071

1	2	3	4	5	6	7	8	9
2.	Cost per carat (Rupees)	2452.15	2615.82	2642.58	2919.06	3062.68	4174.61	4131.51
3.	Average realisation* per carat (Rupees)	1159.22	1506.14	1322.05	1751.33	2078.00	2978.00	3721.00
4.	Difference (Rupees)	1292.93	1109.68	1320.51	1167.73	984.68	1196.68	410.51

*Based on quantities auctioned but not delivered.

7.12 A study made by the Company in November, 1984 and November, 1986 to ascertain the reasons for the steep increase in cost of production revealed that the same was due to increase in costs in respect of consumption of stores and spares, power and electricity, salary and wages, imposition of mineral area development cess by Madhya Pradesh Government, the lower production due to equipment/plant deficiencies breakdowns and increase in depreciation due to expansion, replacements and additions. As a result the project would continue to incur losses in future also.

7.13 The Ministry informed Audit in 1989 that the Panna Diamond Project has not been viable in the normal financial terms because of surplus labour, low incidence of diamonds and heavy statutory levies.

7.14 When enquired about the steps taken by the Company to control the costs and improve the financial viability of this Project, the Company stated in a written reply:

> "Panna Diamond Mines made profit till 1980-81. Thereafter due to recession in the world economy, diamond prices went down. On the other hand, the cost of production went on increasing because of (i) increase in cost of inputs (ii) increase in salaries and wages, and (iii) low incidence of diamonds.
>
> The diamond prices in the world market have improved. The sale realisation is therefore improving. During the year 1989-90, the loss in Panna was Rs. 1.20 crores. This is after taking into account Rs. 74.44 lakhs on account of cess equal to royalty levied by Government of Madhya Pradesh. The Madhya Pradesh High Court has struck down this levy as illegal. The matter is in the Supreme Court. In case the provision 'cess on royalty' is excluded, the loss in Panna during 1989-90 would be only Rs. 46 lakhs. Steps are being taken to increase production at Panna including marginal expansion programme. It is expected that the loss in Panna will come down, if not vanish altogether."

7.15 In this connection, the Department of Steel informed in a written reply as under:

"The performance of Panna Diamond Mines was evaluated sometime ago and the main causes of the losses were indentified as:

a) increases in costs due to
   i) wage revision
   ii) rising costs of inputs
   iii) high statutory levies (royalty and cess)

b) The low incidence of diamond (10-11 carats per 100 tonnes) as compared to the world average of 20-30 carats per 100 tonnes.

c) Inadequate sales realisation owing to the reason that the sales of diamonds is controlled by a close knit international cartel and the total inability of the organisation in influencing the prices.

NMDC is planning to improve and modernise the process plant at the diamond mining project Panna so as to optimise its production and improve the grinding process. By this modification/improvement, there is likelihood of improved recovery of large diamonds which are presently broken in the grinding process to some extent. By this improvement, NMDC is likely to recover bigger diamonds, fetching higher sales realisation per carat."

7.16 When asked about the action plan of the Government to make the project viable, the Department of Steel stated:

"Department of Steel will watch the steps taken by NMDC to improve the incidence of diamonds extraction and also optimise production. We are hopeful that losses will be reduced. If no significant progress is noticed, the matter will be reviewed and an appropriate decision will be taken."

7.17 The Committee find that during the years 1983-84 to 1988-89, the cost per tonne in BIOP-5 and DIOP iron ore projects had been considerably higher than the BICP estimates of March, 1987 except of course in 1986-87 when it was less than the BICP estimate in DIOP. In the case of BIOP-14, though the actual cost was less than that of BICP estimates during 1984-85, 1985-86 and 1986-87, it was much higher than the BICP estimate during the years 1987-88 and 1988-89. Undoubtedly, the efficiency of the management lies in reducing the cost of production and achieving optimum results with minimum use of resources. The Committee desire NMDC to make concerted efforts to bring down the cost of production to the standard fixed by BICP. They also recommend that NMDC must identify the areas where is scope for controlling the costs and take appropriate action to minimise the costs in these areas.

7.18 The Committee further note that, as acknowledged by BICP in 1981, the price realised by NMDC by exporting iron ore has not been commensurate with the cost involved in production, despatch and sale of iron ore. The desire that in case of exports Government should examine the feasibility of reimbursing to NMDC the difference between the cost and sales realisation, in the form of subsidy, as suggested by BICP.

7.19 The Committee find that during the years 1983-84 to 1988-89 the cost of production per carat of diamond in the Diamond Mining Project, Panna was much more as compared to the sales realisation. Consequently the projects had been incurring losses year after year. According to the Company the reasons mainly responsible for loss have been high cost of production due to increase in cost of inputs, increase in salaries and wages, surplus staff and low incidence of diamonds. The Committee note that with the increase in production from 13209 carats in 1988-89 to 16071 carats in 1989-90, the Panna Diamonds Project has been able to reduce the loss from Rs. 1196 per carat to Rs. 410 per carat during the same years. The Committee are, therefore, convinced that the Company can over-come these factors which attribute to losses by increased production and proper utilisation of available resources in the project.

7.20 NMDC is also stated to be planning to modernise the process plant to optimise production and improve the grinding process to recover larger diamonds fetching higher sales realisation per carat. The Committee desire that in order to make the project viable, the Company must frame some time-bound programme to maximise production and reduce the cost of production by effecting economy in the sectors identified to be chiefly responsible for increase in the cost of production. The Company should also explore the possibility by purposeful utilisation of the surplus staff or in the alternative offer them Voluntary Retirement Schemes to shed the extra burden on the Company, otherwise by continuously incurring losses in this project, the Company would find it difficult to justify the continuance of this project as the country cannot afford to fritter away its hard earned money on such losing ventures.

7.21 The Committee also desire the Government to keep a watch on the progress of implementation of the plan chalked out by the Company to optimise production and to improve the incidence of diamonds extraction and take appropriate corrective measures to ensure that the project becomes financially viable soon.

CHAPTER VIII

FINANCIAL AND OTHER MATTERS

A. Working Results

8.1 Inspite of the fact that NMDC was established in 1958, the Company instead of giving any return on capital was incurring heavy losses. According to NMDC the low price paid for the iron ore was the main cause for the poor performance of the Company in the past. Audit has stated that while during the six years ending 31 March, 1987 the Company earned profits of Rs. 2844.62 lakhs, it suffered heavy losses during the years 1987-88 and 1988-89. After NMDC negotiated a commercial price with MMTC, VSP, etc. there has been substantial improvement in the financial performance of the Company. In the year 1989-90 the Company made a profit of Rs. 38.84 crores and as a result the accumulated loss of Rs. 32.97 crores as on 31-3-1989 stood wiped out.

8.2 The working results of different projects of the Company for the last five years ending March, 1990 were as under:—

(Rs. in lakhs)

Year ending 31st March	BIOP-14	BIOP-5	DIOP	Panna	Diamond Exploration Scheme	Head Office (Comml.)	Total
1986	819.34	351.25	(-) 428.78	(-) 191.47	(-) 2.83	20.53	532.64
1987	551.22	(-) 531.70	(+) 211.37	(-) 168.56	(+) 6.13	(-) 2.94	65.52
1988	(-) 561.03	(-) 1120.23	(+) 33.27	(-) 134.67	(+) 1.41	(-) 2.33	(-) 1783.58
1989	(-) 946.45	(-) 913.11	(+) 181.27	(-) 93.72	-	(+) 2.73	(-) 1769.28
1990	(+) 1726.28	(+) 1560.25	(+) 701.05	(-) 119.87	-	(+) 16.80	(+) 3884.51

8.3 It would be seen that the company made a profit of Rs. 65.52 lakhs in 1986-87 but incurred heavy lesses of Rs. 1783.58 lakhs and Rs. 1769.28 lakhs in 1987-88 and 1988-89. However in 1989-90, the Company made a profit of Rs. 3884.51 lakhs.

8.4 When enquired about the reasons for the company incurring heavy losses in 1987-88 and 1988-89 when it had made a profit in 1986-87, NMDC informed in a written reply:—

> "BICP fixed prices based on standard cost for 1986-87 without any return on investment. Though the standard cost of 1986-87 was based on stringent norms the company could still make a small profit. Subsequently, R.R. Gupta Committee which went into the question of a fair price for agencies involved in the export of iron ore recommended for the years 1987-88 and 1988-89 also the same

price as of 1986-87 inspite of increase in cost due to inflation. NMDC was, therefore, paid standard cost only as worked out by BICP for 1986-87 also for 1987-88 and 1988-89 without any escalation and return on investment even though there had been increase in the cost of inputs during these years. Consequently, NMDC incurred heavy losses during 1987-88 and 1988-89."

8.5 When the Committee asked the Company to explain the reasons for their continued dismal performance, NMDC informed in a written reply:

"The huge losses incurred by NMDC (inspite of its efficient operation as mentioned by BICP) was due to the policy adopted by MMTC and the Government of India. In 1989-90 due to its R&D efforts and marketing strategy's NMDC was able to get better sale prices resulting in all time high profits. In the year 1989-90, a Memorandum of Understanding was signed with MMTC (in November, 1989) for supply of iron ore for export on commercial prices mutually agreed by NMDC and MMTC. NMDC also started selling iron ore to VSP at mutually agreed prices. As a result of this, the NMDC made a profit of Rs. 38.85 crores during the year 1989-90 the cumulative loss of Rs. 32.97 crores upto 1988-89 stand wiped out (before provision for investment allowance)."

8.6 When enquired about the secret of making profit during 1989-90, the C&MD stated in evidence:—

"The secret is very simple. Earlier there was residual price taking place. Both Railways and MMTC were taking full money and NMDC having residual price. But today we are charging the real price of iron ore. We have agreements with Steel Plants and with MMTC. That is how we were able to make profit."

8.7 The Committee desired to know whether Government had conducted any study of find out if unremunerative prices were the only reason for losses suffered by NMDC and if not, what other factors were affecting the profitability and the extent to which each of the factors contributed to the loss suffered by the Company. In a written reply, the Department of Steel informed as follows:—

"There is no doubt that unremunerative prices was, by and large, the major cause of the losses suffered by the Corporation from its inception. Added to this were the uncertainties of offtake from the mines which was a direct consequence of the conditions prevailing in the international market for steel. The world production of iron ore and steel reached its peak in 1974, following which there was a recession in the international steel industry with occasional periods of short-lived buoyancy. The countries in the European Economic Community and Japan account for the major portion of the world trade in iron ore with Japan alone importing over 30%. Iron ore being in a buyer's market, these countries are in a position to dictate the prices and terms of supply. Although the price offered by Japanese Steel Mills for NMDC's iron ore has increased in terms of rupees over the years, this increase in negligible compared to the escalations that have taken place in the same period in steel prices and the costs of production and export. Thus the adverse situation in NMDC resulting in losses for an extended period was the consequence of:

(a) Total dependence on export market for revenues.
(b) High internal export cost.
(c) Low export realisation.

A related factor which contributed to the high internal cost was the multiplicity of agencies involved in the export of iron ore, i.e. NMDC, the railways, the port authorities and finally, the MMTC, which is canalising agency of export of iron ore. Because of this, the apportionment of export realisation become a complicated issue. Virtually all the major iron ore producers in the world such as Brazil, Australia have vertically integrate operations with mining operators, rail or road transport, port handling and even final shipping of the ore coming under the control of a single corporate authority.

The question of how to protect NMDC from its continuing losses inspite of its fairly efficient standards of operation (this having been agreed to even by BICP), was under the consideration of Government for some time. The Government constituted a Group to work out an equitable sharing of export realisation and its reports were submitted in May, 1980. The Group's recommendation regarding payment of standard cost to NMDC during the years 1977-78 to 1979-80 could not be implemented. Thereafter, the BICP studies were instituted and the BICP gave report in 1981, 1984 and 1987. The question of according a fair price to NMDC based on standard cost was a subject of examination and discussion until the matter was finally decided with the award of the Secretary (Expenditure) in his report in 1988. Even this award had its problems in implementation is that MMTC took an unusually long time to pay the standard cost worked out by the BICP on the ground that the Railways which had to refund large amounts to MMTC had not paid the same. Nevertheless with this award one phase in the pricing history came to close. With effect from 1989-90 the Company i.e. NMDC had entered into an independent, agreement with MMTC, according to which the pricing is based on certain agreed principles for a period of 4 years (1989-90 to 1992-93).

Other factors affecting the profitability of the export operations have been the low off-take in certain years due to slump in the international market resulting in the mines not being worked to capacity and slowing down of production which had its consequence on revenue realisation.

Of course, leaving aside cost of operations ande related questions like mining efficiency, machine efficiency and manpower efficiency, about which the conclusion of the BICP is that the performance of NMDC has overall been quite efficient and better than mines operated by SAIL/TISCO, there has been the problem of projects taken up by the Corporation which have suffered heavy time and cost over-runs during the period of execution, which in turn, have had an adverse impact on the cost structure.

It is expected that the situation will improve in the coming years as the domestic demand for the Bailadila ore has picked up and consequently NMDC will have some leverage on pricing and overall, will be in a position to off-set its losses on the export side with its domestic sales, particularly to the VSP and the Sponge Iron units."

8.8 One of the objectives of the Company is to ensure a reasonable return of not less than 15 per cent on the invested capital and to generate internal resources to finance the growth of the company. Asked when the company expected to achieve the objective of at least 15% return on invested capital, the Company informd that NMDC made a profit of Rs. 38.85 crores in 1989-90 on capital employed of Rs. 169.95 crores. The return worked out to 21.86%. NMDC envisaged a return of not less than 15% on capital employed in future also if its 8th Plan Projects are approved by Government of India.

B. Pricing Policy

8.9 The Iron ore produced in Bailadila Mines is exported through MMTC, the canalising agent. The sale price demanded received by NMDC in respect of these exports has been a subject matter of dispute and dialogues over a number of years between MMTC and NMDC.

8.10 The matter regarding payment of price by MMTC for NMDC's iron ore during the recent years was considered by committee of secretaries chaired by Cabinet Secretary in April, 1983. The Committee *inter alia* decided that MMTC would pay to NMDC, the cost of production as determined by BICP from 1983-84.

8.11 NMDC however, continued to receive the residual price. The committee of secretaries in their meeting held in March, 1986 reiterated that NMDC should be paid by MMTC, for the iron ore supplies, at standard cost worked out by BICP. With effect from June, 1986 MMTC started paying NMDC on basis of standard cost worked out by BICP for the year 1983-84. In March, 1987, BICP submitted a report indicating standard cost in respect of Bailadila for the years 1984-85, 1985-86 and 1986-87 and also the escalation for the year 1986-87 in respect of Donimalai taking the standard cost worked out by them for the year 1983-84 as the base. Based on the report submitted by BICP, Secretary (Ex-penditure) recommended (February, 1988) that (i) all agencies engaged in iron ore export should be given a fair price, (ii) all the agencies may be paid the standard cost without return on investment worked out by BICP for the year 1986-87, during the period April 1986 to March, 1989.

8.12 Audit has stated that the annual report of the Company stated (September, 1988) that these recommendations were also not implemented by MMTC and NMDC continued receiving the standard cost fixed in 1983-84.

8.13 The Board of Directors was informed in December, 1988 that MMTC had started paying the price at the revised rates recommended by BICP with effect from 1.11.1988. For earlier period, the matter was stated to be under discussion.

8.14 NMDC has now informed the Committee that in respect of the arrears for the period from 1.4.1986 to 31.10.1988 MMTC released interest free advances from time to time in the years 1988-89 and 1989-90. The arrears due from MMTC were settled in 1989-90 on the basis of R.R. Gupta Committee Report on the standard cost/price.

8.15 The Committee were informed that due to the pricing policy adopted by MMTC, the Company incurred heavy losses in the past years. When asked to spell out that Policy, the CMD stated in evidence:

> "Bailadila and Donimalai Projects were export oriented units and from the very beginning when the project were sanctioned, they were approved by Government of India knowing that there will be a loss in these projects but they sanctioned it and went ahead with it because they wanted to earn foreign exchange. The total money which MMTC was getting from Japan was not sufficient to meet the cost of port, the cost of railways, the cost of MMTC and the cost of NMDC. It was falling short of the cost of all these agencies. The question was who should bear this loss. One is that all the four agencies share this shortfall. This was going on right from 1973 and it never got solved Railways said that they are not willing to share the loss because they have to pay returns to the exchequer. MMTC said that they are only a Commission agent, therefore, it is only the NMDC which got the residual price. All the shortfall came to use and this we objected."

8.16 According to NMDC decisions taken by the Committee of Secretaries were flouted or dishonoured by one or the other agency i.e. MMTC or Railways leaving NMDC in a losing position. When the Committee enquired about the role played by the Ministry in ensuring that NMDC got remunerative prices, the Secretary, Department of Steel stated during evidence:

> "When this case was pressed from the Department of Steel which was responsible for NMDC, this matter was taken up by the Cabinet Secretary because four parties were involved. It is true that on several occasions the Committee of Secretaries took certain decisions. In May, 1980 the Committee of Secretaries decided that MMTC is to pay NMDC at a certain rate. But MMTC did not implement it. It took the plea that it was losing on iron-ore export and if it pays to NMDC at the recommended rate it will lose further. This was again taken up by the Committee of Secretaries. In April 1983, the Committee again decided to have a certain rate. Again MMTC came up with the same problem. Third time in March, 1986 the Committee of Secretaries again took a decision. This time Department of Steel protested saying that certain elements have not been taken into account in this particular decision of the Committee of Secretaries. So this was again not implemented. Finally in October, 1987, the Committee of Secretaries met. There it was decided that this way it would not get settled. So the Secretary (Expenditure) who was connected with none, was requested to go into it and give a final verdict which it was thought, will be respected by all. This Secretary gave his report in February, 1988. Everybody hoped that now the matter would be settled. Then came the Railways, They said that it would not be possible to implement it because in that process they will have to make some refunds. So it got bogged down. MMTC withheld payments. In the meantime based on the guidelines evolved by Secretary (Expenditure) MMTC and NMDC almost settled the matter. Now this matter has finally been settled in February, 1988. Now we hope that the matter is finally settled. At least now it is in operation till 1992-93."

8.17 Elaborating further, the witness stated *inter-alia* as under:

> "There are instances when the Committee of Secretaries is unable to take a decision. This Committee (COS) has met four times and come to a uniform judgement every time and yet loophole has been found. The real problem lies, to my mind, elsewhere, that is, in settling the dispute between MMTC and NMDC as a loss was suffered. Normal procedure of settling disputes should be adopted. If Government finds it justified, the Government may give the cash compensatory support. In this case NMDC found that it was not getting enough and it was incurring a recurring loss. NMDC was not meeting its cost of production. If

Government thinks it important, it can provide a subsidy for this loss. So, the basic problem was that instead of giving the money through the budgetary resources the losses were distributed among the various agencies who were involved in it. To my mind it may not be correct. If it had been tackled in the form of a subsidy and they insisted on that, that would have been a more rational way of approaching the subject.

8.18 In view of the fact that the recommendations of the Committee of Secretaries were not being complied with by different agencies involved in the deal, the Committee desired to know whether the Ministry of Steel and Mines had thought of going to a higher authority for settling the dispute. To this the Secretary stated in his evidence:

> "When the Committee of Secretaries took a decision at a particular stage, then some representation was made against that and the Committee of Secretaries instead of finally asserting that whatever they said on the earlier occasions was right and must be implemented, they sent it to BICP again. So, somehow the matter was kept open. The Ministry was hoping that this matter will be settled and it was intensely a technical matter at that level. Again after 1987 when difficulties arose, the Department did decide to approach the higher levels, but in the meantime the matter got settled between MMTC and NMDC."

8.19 To a question if the Ministry were satisfied with the agreement reached between MMTC and NMDC regarding apportionment of the export realisation among the two Corporations, the Secretary of the Ministry informed the Committee that "the new agreement that has been reached is not only in respect of cost of production but it is also a cost of production plus..........We have found that NMDC and MMTC are quite satisfied with it."

8.20 When the Committee enquired how the price of iron ore was determined, the CMD stated during evidence:

> "The new price came into being a year back and it is based on the price at which the private sector is selling it to steel plants elsewhere. It depends on the cost of production of commodities also. Moreover, we reached an agreement with MMTC on price and that is, irrespective of the price they get from abroad. If international price goes up, they get good money. If international price came down, then, of course they may incur loss. Therefore, the thirty year old position is no longer prevailing there. We made profits last year and I think we will continue to make profits."

8.21 When asked about the reasons for not setting up suitable organisation within the company for both internal market as well as for exports instead of depending upon MMTC, NMDC stated in a written reply:

> "As per the existing policy of Government iron ore exports have to be canalised through MMTC. During 1989-90, Government of India gave permission for direct export of 2.5 lakh tonnes of calibrated ore by NMDC on a trial basis to establish a market for this special product. NMDC exported 0.56 lakh tonnes of calibrated ore to Carribean Ispat and 0.38 lakh tonnes to Malaysia making sizeable profits. NMDC has also made sustained efforts to find markets for its products within the country. As a result of efforts made by NMDC, it has been possible to sell calibrated ore from Bailadila to sponge iron manufacturers like Sponge Iron India Limited, M/s ESSAR Gujarat, M/s Sunflag etc. NMDC will be supplying the entire requirements of iron ore of Vizag Steel Plant from Bailadila sector. NMDC will be able to successfully market its iron ore abroad at better prices if permitted to do so by the Government of Inida."

C. Exports

8.22 Iron ore produced in Bailadila Mines had all along been exported to Japan. Indigenous demand of iron ore is now growing. The C&MD informed the Committee during evidence that the Steel Ministry had been opposing export of iron ore from Bailadila to Japan but Government decided in August, 1990 that the export must continue for the reasons best known to the Government.

8.23 When enquired whether NMDC would have incurred loss if it had been allowed to supply iron ore to domestic steel plants, the CMD stated "In fact it is better for us to supply it to domestic plants because we get a good price. But we would have lost the foreign exchange."

8.24 When asked about the reason for continuing the export of high quality iron ore from Bailadila to Japan, the Department of Steel stated:

> "In August, 1990, Government took a decision to continue export of iron ore to Japan for the next five years, in the interest of earning foreign exchange. Pursuant to this decision, NMDC has been trying to ensure that its production of iron ore is available both for meeting the export commitment to Japan as well as the requirement of the domestic users.
>
> In order to implement the decision of Government regarding continuance of exports and simultaneously to ensure that domestic demand does not suffer, the Department of Steel has indicated to Planning Commission its additional requirement of funds for expending the existing mines and opening of new mines in the Bailadila sector."

8.25 When the Committee expressed their apprehension that exports of iron ore for a long time would result in depletion of total iron ore reserves of the country, the Secretary, Department of Steel stated:

> "This has been under very serious consideration of the Government. There is a projection made on the demand and supply in respect of domestic needs. We do apprehend that in about four years' time the domestic demand will rise quite high. At that time, to cater both to domestic demand and export, we will have to have expansion of iron ore mines. The production capacity of NMDC will also have to be expanded."

8.26 The Committee desired to know if NMDC had the capability of exporting iron ore directly, the Secretary stated in his evidence:

> "The point in favour of NMDC is that it is the producer and the point against is that MMTC is an expert in foreign trade. It has with it the market intelligence. It has also contacts with other iron ore exporters in the world. So, it is a question of manufacturer on one side and exporter on the other. If the NMDC, like some other producers, develops a marketing expertise, then it can certainly come in the export field."

8.27 In this connection, he further stated:

> "Personally I do agree with this suggestion that NMDC should also be allowed to export directly because it is an advantage. The only handicap that it has is that right now it has no expertise for export. But if it is entrusted with this task with its capacity, I am sure it would do well—It is for the Commerce Ministry to see to it."

8.28 The Committee desired to know if it would be advisable to allow NMDC to export iron ore directly, the Secretary stated.

> "NMDC primarily is producing for export and it will facilitate if it exports also. I am reasonably confident that it may develop its export capability in the organisation which at the moment it does not have."

8.29 The Committee regret to note that NMDC has been incurring losses since its inception in 1958. In 1986-87 the Company, however, made a profit of Rs. 65.62 lakhs but incurred huge losses of Rs. 1783.58 lakhs and Rs. 1769.28 lakhs in 1987-88 and 1988-89. The accumulated losses of the company as on 31.3.1989 were of the order of Rs. 32.97 crores. According to the Company the major causes for the losses suffered by it in the past were the unremunerative prices paid by MMTC for the iron ore, the policy of the Government to export iron ore to earn foreign exchange and the uncertain market conditions. Since the company entered into an independent commercial agreement with MMTC in 1989-90 for four years from 1989-90 to 1992-93 for supply of iron ore for export and had also started supplying iron ore to Visakhapatnam Steel Plant at mutually agreed prices,

NMDC turned the corner and made a profit of Rs. 38.85 crores in 1989-90 and wiped out the accumulated losses of Rs. 32.97 crores as on 31.3.1989. As the domestic demand for iron ore has picked up with the coming up of VSP and sponge iron units and there is stability on the price front due to the agreement with the MMTC, the Committee hope that the company will further improve and maintain its trend of earning profits in future.

8.30 The Committee find that the profit of Rs. 38.85 crores made by the Company during 1989-90 reportedly works out to about 22 per cent return on investment of Rs. 169.95 crores. The Company is stated to have received a sizeable amount from MMTC in 1989-90 as arrears due from MMTC on account of settlement of claims pertaining to the years 1986-87 and 1987-88. The overall profit shown by the Company during the year 1989-90, therefore, does not reflect a true picture of operating performance of the Company. The Committee would like to be informed about the operating profit during 1989-90 and the return on investment worked out in relation to operating profit. The Committee feel that if the figures so worked out reveal a steep decline in return on investment, it would call for a new strategy to be evolved to accelerate the profitability of the Company. As the Company envisages to achieve a return of not less than 15% on the capital employed in future also, the Committee trust that NMDC will make earnest efforts to achieve their objective.

8.31 The Committee note that Bailadila and Donimalai Projects were sanctioned by the Government with the prime objective of export of iron ore to earn foreign exchange for the country. Iron ore produced in Bailadila and Donimalai mines is exported by NMDC through MMTC, their canalising agent. Besides NMDC, MMTC, Railways and Ports are also engaged in the export of iron ore. The Committee also note that the sale price demanded and received by NMDC in respect of iron ore exports has been a matter of dispute between MMTC and NMDC for a number of years. MMTC, Railways and Ports got their full share of post whereas NMDC received only the residual price which was not enough even to cover their cost of production. As consequence, NMDC continued incurring heavy losses.

8.32 The Committee further note that the matter regarding payment of price by MMTC for NMDC's iron ore during the recent years was considered by the Committee of Secretaries chaired by the Cabinet Secretary in April, 1983 and a decision was taken that MMTC would pay NMDC the cost of production as determined by BICP from 1983-84. Regrettably NMDC continued received the residual price. The Committee of Secretaries again met in 1983, 1986 and 1987 but no tangible solution to the vexed problem was found as their decisions were not honoured by one of the other agency leaving NMDC perpetually in a losing position. It is very surprising that the matter defied solution even at the hands of Secretary (Expenditure) to whom it was referred for giving his final verdict, being an officer not connected with any of the agencies. Surprisingly the recommenda-

tions made by him in February, 1988 [that (i) all agencies engaged in iron ore export should be given a far price and (ii) all agencies may be paid the standard cost without return investment worked out by BICP for the year 1986-87, during April, 1986 to March, 1989] were not implemented by MMTC. It is regrettable that the decisions of such high powered Committee of Secretaries were not implemented defeating the very purpose for which these were appointed from time to time and the whole matter remained unresolved for a considerably long time resulting into loss to NMDC for no fault of theirs. From the facts placed before them, the Committee have come to an inescapable conclusion that the apportionment of price of iron ore between MMTC and NMDC was not handled with due seriousness and expedition. In the Committee's opinion if the problem was beyond the capacity of the Committee of Secretaries to resolve, the matter should have been taken to the highest authority of the Government. The Committee are of the opinion that since iron ore was being exported by NMDC at the instance of Government who were mainly interested in earning foreign exchange, Government should have adequately compensated NMDC by way of subsidy and helped them to tide over their financial difficulties.

8.33 The Committee find that on permission being granted by Government, NMDC exported 0.56 and 0.38 lakh tonnes of calibrated ore, on trial basis, to Carribean Ispat and Malaysia respectively in 1989-90 and made sizeable profits. The Secretary of the Ministry informed the Committee during evidence that he was confident that if NMDC was allowed to export directly, it would do well. However, it is for the Commerce Ministry to see. Since NMDC has made a small beginning in export of iron ore directly to some countries and has met with some success, the Committee feel that given an opportunity it can develop its own marketing expertise, which it lacks at present, and can make profits at the export front also. The Committee, therefore, desire the Government to examine the feasibility of entrusting NMDC with the responsibility of exporting its products directly instead of through MMTC so that it may improve its financial position and also earn valuable foreign exchange for the country.

NEW DELHI;
April 3, 1992
Chaitra 14, 1914(S)

A.R. Antulay,
Chairman
Committee on Public Undertakings

APPENDIX

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

S. No.	Reference to Para No. in the Report	Conclusion/Recommendation
1	2	3
1.	1.15	In terms of BPE's guidelines issued in 1979 and 1984 each public undertaking was required to formulate with the specific approval of the administrative Ministry, a statement of micro objectives consistent with the broad objectives spelt out in Industrial Policy statement of December, 1977 to facilitate realistic and meaningful evalution of the enterprise by Parliament and the Government. The National Mineral Development Corporation is stated to have framed its Long Term Corporate objectives and submitted the same to the Steel Authority of India Limited (the then Holding Company) and the Government in 1979 for approval but were not approved by them all these years. The Secretary, Ministry of Steel & Mines (Department of Steel) clarified in evidence that Government had examined the objectives and returned the same to the Company suggesting their revision. The revised objectives were resubmitted by NMDC for approval of Government in October, 1990 i.e. after a gap of 11 years but these were again returned to them for making them more specific. The delay of 11 years in submission of the objectives to Government has been attributed by the Company to the frequent changes in their controlling agencies between 1973 and 1977 and non-settlement by Government of apportionment of sale proceeds of iron ore between MMTC and NMDC. The Company's contention that frequent change of their masters was the inhibiting factor in framing their long term objectives does not hold good because since 1978 NMDC has been continuously under the control of the Department of Steel. It is surprising that neither the Ministry sent any

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		reminder to NMDC nor the NMDC pursued the matter with Ministry for 11 long years. It is also very strange that the objectives were not even discussed in the Board Meetings during this period. The Secretary, Department of Steel had stated during evidence, "I do entirely agree that 11 years' time is certainly a very long time for reviewing the long term objectives which had been sent earlier." The Committee are not able to understand how in the absence of long term objectives the performance of the Company was being evaluated by the Government. The Committee cannot but strongly deprecate the lackadaisical manner in which both NMDC and the Ministry have handled this matter.
2.	1.16	The Committee have now been informed that the long term objectives of the Company have been approved by Government in April, 1991. The Committee desire the Government to now strengthen its monitoring machinery with a view to keeping constant rapport with NMDC to ensure that concerted efforts are made by the Company to achieve the objectives laid down after such a long time and are not allowed to remain tall claims on paper only.
3.	2.76	The Committee on Public Undertakings (1972-73) while examining the performance of Bailadila Iron ore Project-14 had noticed that there were two lines of crushers while a single line was sufficient to treat enough ore to produce 4 million tonnes of sized ore per annum. The Committee were informed during evidence by the then Chairman of the Company that there was over-designing in the crusher capacity and that the second line of crusher was a standby. After examining the whole matter the Committee on Public Undertakings had in their 60th Report (1974-75) reiterated their earlier recommendation made in their 37th Report (1972-73) that a single line of crusher could have handled the entire production of the mine and that the matter should be probed into and the responsibility for the lapse fixed. Even now the Company has admitted that one crusher could handle 5.5 to 6 million tonnes of iron ore per annum. The Government is stated to have asked the Steel Authority of India Ltd. (the then Holding Company) in March, 1976 to probe into the

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		matter and submit a Report to the Government. According to Audit no such probe seemed to have been conducted by SAIL except for a decision taken in 1978 that one line of crusher should be shifted from BIOP-14 to Bailadila-11-C. According to the Company's own admission the standby crusher was utilised 38% and the main crusher 58% of the available time. But going by the information made available to the Committee for the years 1984-85 to 1989-90 it is seen that each crusher was utilised on an average only 27% of the available time which implies that each crusher remained unutilised for over 70% of the available time. Interestingly even one crusher was not utilised to its full capacity. It is rather surprising that despite such poor utilisation of the crushers no effort was made during the last 18 years by the Ministry to conduct the probe recommended by the Committee. On the contrary the Ministry has all along tried to justify the need for a second line of crusher on the ground that in Indian conditions a standby crusher line is essential and BIOP-14 being an export-oriented project in investment of Rs. 1.70 crores on the spare crusher was insignificant compared to the loss of foreign exchange in case spare line crusher had not been installed. During evidence also the Secretary, Deptt. of Steel stated "Based on facts available, the Government felt that this was really necessary........In that light it appears a formal probe was not initiated." He also stated that "If the Committee still feels that there was need for an enquiry, we will do that." It was only after NMDC was examined by this Committee that an enquiry Committee was constituted by the Government in March, 1991. In fact the purpose of recommending enquiry was to establish conclusively whether the second line crusher was essential or not but the Government chose the extreme step of not conducting any enquiry which was a serious lapse on the part of the Government. It was really astonishing that without conducting any enquiry into the matter during all these 18 years, the Ministry came to the conclusion that the second line of crusher was essential. The Committee regret and take strong exception to the lapse on the part of the Government in not

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		implementing their recommendation in time. The Committee are constrained to convey their feeling of anguish the way their repeated recommendations were treated by the Government.
4.	2.79	The Committee note that Bailadila-5 was sanctioned by Government in 1968 inspite of the full knowledge that it would remain a losing venture for all times to come. The principal aim to set up this project was stated to be to export its entire produce of iron ore to earn the vital foreign exchange for the country. Keeping this in view the Committee on Public Undertakings (1972-73) in their 37th Report had recommended that Government should carefully analyse the various components of cost and take concerted measures to ensure that the cost of production and transport charges do not exceed the sale price. Unfortunately the Company continued to incur losses upto 1980-81. After earning profits during 1981-82 to 1985-86 the Company again came in the red during the years 1986-87 to 1988-89 mainly due to the unremunerative prices paid to the Company by MMTC, their canalising agents. As the domestic demand of iron ore picked up and the Company entered into a commercial agreement with MMTC for 4 years it earned a profit of Rs. 15.60 crores in 1989-90. The Company hopes to earn profit from now onwards. The Committee feel that since such commercial agreements are in the best interest of the company, NMDC should, in future, enter into such agreements. They also recommend that with the reduction in cost of production claimed to have been achieved by monitoring the budgeted targets/norms the NMDC should aim at maximising production in order to increase its profits.
5.	2.81	The Committee are concerned to note that the cost estimates of Bailadila-5 originally assessed at Rs. 36.53 crores in April, 1970 were revised to Rs. 67.49 crores in February, 1978. Thus there was an increase of Rs. 30.96 crores which represents an increase of 85 percent over the original estimated cost. The project scheduled to be completed in January, 1974 was actually commissioned in January, 1977, after a delay of 3 years. According to Audit the main reasons for increase in the

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		cost over the original estimates have been attributed to escalation in prices of plant and equipment (Rs. 15.53 crores), increase in costs consequent on increase in period of construction (Rs. 8.08 crores), increase in scope of work (Rs. 3.84 crores), increase in quantities (Rs. 3.32 crores) etc. According to the Company the principal reasons for time and cost overrun were Government's policy of maximum utilisation of indigenous manufacturing capacity and to entrust works to Public Sector organisations. The delays have largely been due to delays in execution of works by concerned Government agencies and supply of equipment by indigenous suppliers like HEC and MAMC.
		The Bureau of Public Enterprises had observed in November, 1982 that "NMDC submitted the DPR much too early before the final concept of the Project had been evolved after detailed investigations had been completed. NMDC had neither enough field data nor conceptual plan to estimate correctly the cost of the Project and time of completion of various activities." The CMD had also admitted during evidence that their DPR was not upto the mark.
		The above facts do not depict a pleasant picture about the formulation of the Project. It is really amazing that with the experience already gained by the Company in developing mines like Kiriburu and Bailadila-14, the Company could not prepare a realistic DPR taking into consideration all the pitfalls which are generally associated with such projects. The Committee are inclined to agree with the observation of the BPE made in November, 1982 that if the project had been completed by the scheduled date of January, 1974 half of the total cost overrun of Rs. 31 crores could have been avoided. The Committee have no doubt that the foremost reason for revision of cost estimates was nothing else but inadequate project formulation. The Committee are of the firm view that in the interest of expediting project implementation and keeping down the cost, the Ministry should have ensured preparation of realistic project estimates and effective monitoring through monthly or quarterly reports.
6.	2.84	The Committee note that the Bailadila Project-5 scheduled to be completed in 1974 was completed and commissioned in 1977-78 at a much higher cost due

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		to delays in supply of equipments by indigenous suppliers like HEC and MAMC and also because of the technological problems faced by National Projects and Construction Corporation in construction of a tunnel. The project was constructed with 80% indigenous equipment and machinery. The Committee also note with concern that the structural works entrusted to Triveni Structural Limited (TSL) and Hindustan Steel Works Construction Ltd. (HSCL), both Public Sector Undertakings in January, 1971 and November, 1971 to be completed as per contract in September, 1973 and July, 1974 respectively were both actually completed in December 1976, after a delay of 29 months and 39 months respectively. It is very strange that despite such huge delays and increase in the project cost by Rs. 8.08 crores on account of overall increase in the period of construction the company did not levy any penalty/liquidated damages.
7.	2.86 & 2.87	The Committee further note that the construction of a tunnel of 2.135 kms. length for the conveyor belt was entrusted to National Projects Construction Corporation (NPCC) in December, 1969 even though NMDC was stated to have reservations initially about the capability of the Company to undertake the work. As it was later on discovered that NPCC was not having the technical capability required for chemical grouting, the work had to be split up among NPCC and M/s. R.J. Shah Limited. The tunnel was completed in September, 1976 as against the scheduled date of April, 1973, after a delay of 3½ years and the cost also increased from Rs. 85.10 lakhs to Rs. 165.60 lakhs, i.e. an increase of 95% over the original estimated cost. The Committee were apprised by the NMDC during evidence that the delay in construction of a tunnel and the consequent increase in the project cost was due to the inadequate expertise available with NPCC to undertake the job. According to them the construction work had to be entrusted to NPCC in accordance with the policy and directions of the Government to encourage indigenous public sector undertakings. From the facts placed before them, the Committee find that Government had approved the award of the contract of NPCC

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		in December, 1969 only when NMDC informed them that the Board of Directors had on 12 November, 1969 taken the view that NPCC were technically competent to undertake the work and that they also had the equipment, machinery to enable them to complete the work in accordance with the schedule. Going by the evidence given by the Ministry, the Committee has come to the inescapable conclusion that NMDC itself is solely responsible for awarding the contract to NPCC and is now trying to find *alibis* with the Government to cover up their own lapse. The Committee have no doubt that much of the delay of 3½ years in completion of the work and the heavy increase of Rs. 80.50 lakh on the cost of construction of the tunnel could have been avoided if NMDC had fully satisfied itself about the competence of NPCC to complete the job in time.
	2.88	The Committee note that in November, 1968 Government had issued instructions to NMDC to place orders on Heavy Engineering Corporation (HEC) for the supply of machinery and in July, 1972 for placement of orders on the Mining and Allied Machinery for supply of equipment required for the Bailadila-5 project with a view to developing indigenous sources of supply. NMDC is stated to have cautioned the Government against it. The main reason for the Government's directions for placing orders on indigenous manufacturers was the necessity to keep the foreign exchange component to the minimum. But these companies failed to come up to the expectations of the Government as the indigenous companies viz. HEC and Tata Robins Frasers, Jamshedpur on whom the orders for supply of equipments were placed themselves went into collaboration with USSR for manufacturing crushers and with DEMAG of West Germany for manufacturing the reclaimer and the Wagon loader and Tata Robins Frasers with Robins Engineers and Constructions Ltd. of USA for manufacturing the downhill system. This resulted in increase by about 76.5% over their original sanction towards the cost of plant and machinery. The foreign exchange component was increased by 255 percent and the total foreign exchange incurred amounted to 46.84% of the total cost of plant and

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		machinery against 23.25 percent envisaged in the original estimate. The Committee find that the government miserably failed in achieving their objective of encouraging the indigenous firms and in minimising outflow of foreign exchange.
9.	2.89	Not only the indigenous firms failed to execute the jobs entrusted to them in time resulting thereby in abnormal time and cost overruns, but also there were inherent deficiencies/defects in equipments supplied by them. The reclaimer and wagon loader supplied by HEC were based on the design supplied by DEMAG of West Germany. As the defects in the equipments could not be rectified by HEC, NMDC had to call the German experts and paid them Rs. 2.85 lakhs for their visits. Similarly there were frequent breakdowns in the apron feeders procured from MAMC being of inferior quality and MAMC failed to supply spares of superior quality for replacement. The Committee were informed during evidence that the defects and deficiencies of the indigenous equipments supplied by HEC and MAMC adversely affected the production of the project. These equipments even now are not performing satisfactorily. The Committee have no doubt that the Government purely out of their zeal to save foreign exchange directed NMDC to place orders on indigenous firms without assessing their capability and technical competence to do the jobs entrusted to them and this definitely casts a poor reflection on the working of the Government.
10.	2.90	Donimalai is another project of NMDC where project planning and execution machinery did not seem to exit. The Committee note with serious concern that the cost estimates of the project sanctioned in 1971 at Rs. 1945.56 lakhs were revised to Rs. 4118.47 lakhs in 1978. There was an alarming increase of Rs. 2172.91 lakhs which represented 112 per cent over the original estimated cost. The main reasons which contributed to increase in cost are stated to be changed in scope of work (Rs. 339.15 lakhs), increase in quantities and prices (Rs. 679.20 lakhs) increase in establishment expenses and interest on capital consequent upon extension of the Schedule (Rs. 531.63), items not provided in

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		DPR including fine ore Handling Plant (Rs. 603.44 lakhs) etc. All these reasons have been repeated again and again. The Committee find that due to delay in completion of the project the increase in respect of establishment charges, Head Office expenses and interest on capital alone accounted for 288 percent which by no standards is justifiable. The Committee were informed that the Company had a system of monitoring the progress of construction of the project through PERT / CPM / BAR Chart techniques, review meetings at site, review and monitoring of the level of Director (Planning), review at the level of Chairman and Board of Directors and also periodic performance review meeting at the Ministry level to observe the time and cost schedules. In view of the exorbitant cost over-runs and inordinate delays in the execution of projects, the Committee are not hesitant to conclude that all these elaborate procedures remained on paper only and were followed more in breach than in observance in the instant case. They are of the firm view that there was complete breakdown in the monitoring machinery of the Company. They are also of the view that if the progress of implementation of the project had been closely followed much of the delay and cost overrun could be avoided. The Ministry also cannot absolve themselves of their responsibility because increase in the project cost was in the knowledge of the Government during its implementation but nothing was done to control the cost and check delay in completion of the project. The Committee desire that the Ministry should strengthen their monitoring machinery and watch implementation of projects closely through Board and performance review meetings with a view to ensuring that such heavy time and cost overruns are not allowed to occur in future.
11.	3.26 & 3.27	The Committee on Public Undertakings (1972-73) after examination of the working of Bailadila Iron Ore Project-14 had observed that recovery of Lump ore from Bailadila had not exceeded 65 per cent of the targetted capacity of 4 million tonnes as compared to 75 percent envisaged in DPR. The Committee had, therefore, recommended that the Management should strive

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		to increase recovery of lump ore and enhance efficiency in production in order to improve the economics of the Project. The Committee note that NMDC appointed three Committees in 1970, 1975 and 1977 to study the achievable rated capacity of the mine. An expenditure of Rs. 171.48 lakhs on augmentation of mining equipment, as recommended by the first Committee, was also incurred. The Committee regret to observe that even after augmentation of mining equipment the actual production did not improve and ranged between 58 to 69 percent in later years upto 1989-90 and never reached the envisaged level of 75 percent. Thus an expenditure of Rs. 171.48 lakhs proved infructuous as it failed to achieve the desired results.
		The Committee note that the iron ore reserves of Bailadila-14 were depleting and the production was to reach zero level in 1991-92. To improve its economics the Company has taken a decision to continue mining under Deeper Level Mining Scheme at the rate of 2 million tonnes per annum upto the year 2000 and also commissioned Bailadila 11-C mine as a part of Bailadila-14. The new designed capacity of the mine has been fixed at 5.3 million tonnes of ROM per annum. The Committee desire the Company to make all out efforts to achieve the designed capacity of the project.
12.	3.28	Similarly Bailadila-5 which was designed to yield annually 4 million tonnes of lump ore at 66.7% rate of recovery had actually produced lump ore between 48 to 64 percent since inception except in 1981-82 when the recovery was 70 percent. The low recovery of lump ore has been attributed by the Company due to increase in generation of fines which ranged between 26 to 38 percent. It is really very distressing that the project designed to produce 40 lakh tonnes of lump ore at a total estimated cost of Rs. 67.49 crores has failed to achieve its designed capacity due to design deficiencies in mine, plant and equipments and inferior quality of plant equipments supplied by indigenous manufacturers/suppliers. The Committee have no doubt in concluding that the project could not reach its designed capacity because the DPR was not based on adequate and reliable data. The Committee desire the NMDC to

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		make concerted efforts to improve the performance of the equipment by removing the deficiencies. They also desire that action be taken to replace inferior machines by machines with better designs in order to enhance production.
13.	3.29 & 3.30	In the case of Donimalai Iron Ore Project, the Committee find that in order to improve the economic viability of the Project the DPR which envisaged a production of 17.5 lakh tonnes each of lump ore and fines in September, 1968 was changed to 16 lakh tonnes of lump ore and 20 lakh tonnes of fines in 1975. But the project was never operated at the rated capacity. According to Audit one of the reasons for not achieving the rated capacity was that no firm long term contracts for sale of iron ore were entered into before commissioning the mines. NMDC has stated that the Project could not be operated at rated capacity due to lack of export orders, world wide recession in steel industry and consequently MMTC having not been able to arrange sale tie-up. In fact the project was conceived and sanctioned without assessing the marketability of the iron ore to be produced. The Secretary, Department of Steel had very candidly admitted in his evidence that "the project was approved at a time when there was no firm marketing tie up." He also stated "the project was sanctioned for exports without prior commitment admittedly." The Committee cannot but come to a definite conclusion that NMDC had no reasonable basis for assessing the demand for iron ore in the international market at the time when the project was commissioned. The Committee need hardly point out that proper assessment of demand of the product and its sale tie-up in the market, before commissioning of the project, is one of the essential pre-requisites for running any commercial enterprise prudently, and by not having done so the Government has failed in safeguarding the commercial interest of NMDC.
		The Committee not that now with the increase in demand of iron ore in the world market NMDC has improved its exports of iron ore from the Donimalai Project which at the end of 1989-90 was 27.33 lakh tonnes and the project could earn a profit of Rs. 7

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		crores during the same year. The Committee desire NMDC to take advantage of the changed world scenario and make concerted efforts to achieve the capacity envisaged in the DPR in order to further improve its financial position.
14.	3.38	The Committee find that in order to meet the requirement of domestic steel industry and to fulfil export commitments on a long term basis, the Company is formulating an expansion scheme to increase production of iron ore from 10 million tonnes in 1989-90 to 18 million tonnes by the end of the Eighth Five Year Plan. According to NMDC the total expenditure involved in implementing the scheme would be Rs. 600 crores. The Company proposes to finance the scheme through budgetary support from the Government, generation of internal resources and also by raising funds from the financial institutions. The Committee also find that Government are making efforts to get necessary funds for NMDC from the Planning Commission to finance the scheme but the Planning Commission with the resources at their command are finding it difficult to meet their requirement to the desired extent. The Committee desire NMDC to make concerted efforts in order to achieve a target of 18 million tonnes of iron-ore by the end of 8th Five Year Plan so that they are able to cater fully to the domestic demand. In view of the fact that Company has earned sizeable profit during 1989-90 and has bright prospects in the future it must try to generate maximum financial resources of its own with minimum dependence on the Planning Commission to finance the scheme. The Committee need hardly emphasise that the expansion scheme should be implemented within the monetary limit of Rs. 600 crores so that the cost and time overruns are avoided.
15.	4.19 & 4.20	The Committee are concerned to note that the manpower strength in all the iron ore projects of the company was far in excess of the strength envisaged in the DPRs. In Bailadila-14 against 1000 persons provided for in the DPR for 40 lakh tonnes of production the actual number was 1918 in 1987-88 for about 20 lakh tonnes. During the same year in Bailadila-5 against

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		1400 envisaged in DPR for 40 lakh tonnes there were actually as many as 1950 persons for about 31 lakh tonnes and likewise in Donimalai as against 1200 the actual staff in position was 1511 men. In other words against 3600 men envisaged in the DPRs the actual strength in the three projects put together was 5379 in 1987-88. In 1988-89 the number rose to 5414 but there was a small decrease in 1989-90 when the actual strength stood at 5392. Though the Company claims that its Industrial Engineering Department always studied and assessed the manpower requirement of the Company yet it seems that the system of study of this unit was not realistic as otherwise the manpower strength would not have increased so much beyond the DPRs prepared by the Company itself.
		Justifying the increase of manpower, the Secretary, Department of Steel informed the Committee during evidence that all the Projects—Bailadila-14, Bailadila-5 and Donimalai-had undergone some change in the scope during implementation of the projects necessitating more men than originally estimated. The increase was also attributed to the facilities provided like Hospitals, Schools, Canteens etc. which were not provided for in the DPRs. But the Secretary admitted during evidence that "DPR should mention all this." The Committee have no doubt that the Detailed Project Reports prepared by the Company were not realistic and left much to be desired as the fields of increase in staff mentioned by NMDC were not such which could not have been foreseen by the Company, except of course Fine Ore Handling System which was a later addition. Since the Company has already gained sufficient experience in the development of iron ore projects during the last 30 years, the Committee desire that in setting up all future projects, such like deficiencies in the preparation of DPRs be taken due care of.
16.	4.21	The Committee take a serious note of the fact that there is no manpower planning in the Company. During evidence they were informed that "utilisation of manpower on the planned basis can be helpful." The Committee desire that Company to make a scientific study of the manpower planning and assess the actual

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		requirement in various fields in order to enable them to identify surplus manpower which could be gainfully utilised where they are most needed.
17.	4.22	The Committee find that the incidence of payment and benefit to labour per tonne of production exceeded the norms fixed by BICP in respect of all the iron ore projects. In Bailadila-14, against the BICP norm of Rs. 5.18 in 1981-82 and Rs. 12.37 in 1987-88 the incidence of payment and benefit to labour per tonne of production was Rs. 7.68 and Rs. 20.38 during the same years. Similarly in Bailadila-5 it increased from Rs. 8.90 in 1980-81 to Rs. 19.88 in 1987-88 as against the BICP norm of Rs. 5.62 and Rs. 7.64 respectively. Likewise in the case of Donimalai it ranged from Rs. 13.51 in 1981-82 to Rs. 26.28 in 1987-88 against the BICP norm of Rs. 5.55 and Rs. 7.91 during the same years. The Company has contested the norms fixed by BICP on the ground that BICP took both fines and lumps as products for working cost of production whereas NMDC calculated cost of production based mainly on lumps ore as fines were not saleable. The Committee are not convinced with this explanation. They are of the view that if the norms were not acceptable to them, NMDC should have represented against them when these were being fixed by BICP. Now that the Company has been able to find a good domestic market for sale of fines, the Committee desire that concerted efforts be made now to observe the BICP norms as otherwise it would badly affect the financial health of the Company.
18.	4.23	The Committee feel concerned to note that though the overall annual output per employee had increased from 1598 tonnes in 1987-88 to 1826 tonnes in 1989-90 the productivity of iron ore per man year had decreased from 2598 tonnes in 1987-88 to 1746 tonnes in 1989-90 in Bailadila-5 and from 1903 tonnes in 1987-88 to 1631 tonnes in 1989-90 in Donimalai, except in Bailadila-14 where it had increased from 1616 tonnes in 1987-88 to 2106 tonnes in 1989-90. The Committee desire that all out efforts be made to improve productivity of iron ore per man year in order to maximise production.

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19.	5.34 & 5.35	Panna Diamond Mining Project comprised of two main mines, viz., Ramkheria and Majhgawan. The scheme envisaging revival of diamond deposits at Ramkheria and Majhgawan for exploitation with production capacity at 11,250 carats and 12,000 carats at a capital investment of Rs. 68 lakhs and Rs. 105 lakhs respectively was approved by Government in December, 1967. The mines were commissioned in 1968-69 at total capital cost of Rs. 183.28 lakhs. In para 7.12 of their 37th Report (1972-73) the Committee on Public Undertakings took note of the undue haste with which the Ramkheria mine was taken up for exploitaion without a thorough and careful techno-economic study of the project resulting in an infructuous expenditure and recommended that the entire matter should be thoroughly investigated by the Government and the responsibility for the loss fixed. This recommendation was reiterated by the Committee in their 60th Report (1974-75). Surprisingly, NMDC closed the mine in June, 1980 because of its unviability but no such enquiry has been conducted by the Government during the last 18 years. The Secretary (Steel) had admitted during evidence that "This is another bad case where a formal enquiry was not instituted."
		The Committee note that after their examination of the Ministry, an Enquiry Committee was set up in March 1991 to investigate the whole matter and that Committee's Report was received by Government in July, 1991. The Enquiry Committee is stated to have expressd their inability to fix the responsibility for the lapse because that involved examination of very old records. The Committee take a serious view of non-implementation of their such an important recommendation in time. They, therefore, desire that Government should evolve some fool proof procedure and ensure its strict observance so that such grave lapses are not repeated in future.
20.	5.36	The Committee find that there is an established procedure in the Ministry that till the implementation of the recommendation is intimated to the Parliamentary Committee concerned the matter remains on a regular reviewing list and in cases where Govern-

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		ment finds it difficult to implement the recommendation the matter invariable goes to the Minister. The relevant files are stated by the Ministry to have been destroyed by it is not clear whether or not the extant procedure was followed in the instant case. The Committee cannot but deprecate the casual approach on the part of the Ministry in destroying such important files without intimating to the Committee the final action taken in the matter.
21	5.37	The proposal to close the Ramkheria mine, being uneconomical, was mooted in 1973. Even though the actual production in the mine ranged between 1600 carats and 2300 carats per annum from 1973-74 to 1978-79 as compared to the designed capacity of 11,250 carats per year the mine was finally closed in June, 1980 i.e. after 7 years and during this period the Company incurred a loss of Rs. 158.87 lakhs on account of delay in taking the decision and another Rs. 41.23 lakhs during July, 1980 to March, 1985 due to maintenance of mine and township. The reasons advanced by the Government in defence of these costly delays are hardly convincing. The Committee have no doubt that the loss of Rs. 200 lakhs in all suffered by the Company from 1973 to 1985 could have been avoided if the Government had moved quickly in the matter. The Committee cannot help deprecating the unnecessary and avoidable delay on the part of the Government in deciding the closure of the mine which was already proving a drag on the scarce financial resources of the Company.
22	5.38	The Committee note that despite increase in production of diamonds from 13209 carats in 1988-89 to 16071 carats in 1989-90, the Company incurred a loss of Rs. 1.20 crore in 1989-90 as compared to Rs. 0.94 lakhs in 1988-89. According to the Company, the main reasons for increase in loss in 1989-90 as compared to 1988-89 were write off of tuff, additional payments on account of wage settlement, increase in expenses due to inflation etc. NMDC hoped to reach break-even in 1990-91. The Committee trust that the company would achieve its aim. They recommend that the Company should make all out efforts to maximise production and reduce their cost of production in order to improve their profitability.

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23	5.39	The Committee note with concern that the requirement of manpower in Ramkheria and Majhgawan mines was not provided for in the diamond mining revival scheme of 1967. A study conducted in 1978 by the Industrial Engineering Unit of NMDC revealed that as against the requirement of 607 employees in Majhgawan mine and Panna Office the actual strength was 780 employees. The Company introduced voluntary retirement scheme and 327 daily workers opted for it upto March, 1980. Consequent upon closure of Ramkheria mine and transfer of its employees to Majhgawan mine/Panna Office the actual strength was far in excess of the requirement during the years 1984-85 to 1989-90 and the total incidence of payments to surplus staff as at the end of 1989-90 was Rs. 240.19 lakhs. The Committee were informed that there were only 70 surplus employees now in Ramkheria mine and the Company hope to utilise this manpower in their expansion programme currently being implemented. Strangely, a number of studies were conducted by the Industrial Engineering Unit of the Company to review the manpower requirement of Panna between 1979 and 1987 but the unit seems to have not been able to prescribe the actual manpower requirement of Panna Diamond mine. The Committee desire that an expert independent agency may be engaged to scientifically assess the manpower requirement of the mine and some procedure may be devised to ensure that the strength does not exceed the prescribed limits in future.
24	6.29 & 6.30	The Committee note that a scheme to develop a deposit adjoining Bailadila-14 viz. Bailadila 11-C was prepared in May, 1978 at an estimated cost of Rs. 9.90 crores with an initial production of 33 lakh tonnes of ROM per annum. The cost of the project as finally revised to Rs. 29.52 crores was approved by Government in October, 1986 against which an expenditure of Rs. 30.89 crores was incurred upto March, 1988. Thus there was a huge increase of Rs. 21 crores, representing more than 200 per cent increase over the original estimated cost of Rs. 9.90 crores. It is regret-

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		table that the Bailadila 11-C which was conceived in May, 1978 was completed only in October, 1987, after a period of more than 10 years.
		According to Audit the overall dealy in completion of work was expected to be 41 months out of which 15 months was due to delay in award of the work order and 26 months was due to delay in supply of the equipment by the contractor. The Committee have no doubt that 15 months delay could have been avoided if the management had been alert in taking timely action to award the work order.
25	6. 31 & 6.32	The Committee note that the Department of Steel had set up an Enquiry Committee in 1986 to go into the reasons for unsatisfactory planning, preparation and implementation of the project as also time and cost overruns and that Committee found the various reasons for delay in the implementation of the project.
		The enquiry Committee is also stated to have identified some of the factors which contributed to cost and time over-runs. Since deficiencies in the system of formulation and implementation of the project have been identified, the Committee desire the Government to lay down detailed guidelines for the future to avoid such pitfalls. They also desire that the monitoring machinery be adequately strengthened to ensure strict observance of the time schedules in completion and commissioning of the project in future and to avoid repeated revision in cost of the projects.
26	6.33	The Committee find that even though Hindustan Steel Construction Limited had delayed structural work by 2 years upto June, 1986 and Aluminium Industries (Private) Limited which were to complete supplies by December, 1986 completed the same by February, 1988 but no penalty was levied by NMDC against either of the companies. NMDC and the firms are stated to have filed claims/counter claims against each other and the matter is before the arbitrator. The Committee desire NMDC to make serious efforts to expedite the award of the arbitrators.

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27	6.40	The Committee find that iron ore fines produced in Bailadila-5 were dumped in a valley as these were not a saleable product. Anticipating high demand of iron ore fines after the commissioning of Visakhapatnam Steel Plant, NMDC formulated a Fine Ore Handling Scheme (FOHS) in July, 1980 for handling fine ore at Bailadila-5. The Committee note with concern that the cost estimates of FOHS originally assessed at Rs. 13.86 crores in July, 1980 were initially revised to Rs. 25.94 crores in January 1982 i.e. the cost doubled in just 16 months and were finally revised to Rs. 30.77 crores and approved by the Government in March, 1987. It is surprising that the scheme which was started in September, 1982 and was expected to be completed in September, 1985 was actually completed in December, 1986 and commissioned in July, 1987. This shows that there was no control either at NMDC's level or at the level of the Ministry to see that the scheme is completed within the stipulated time schedule. In Committee's view this is yet another bad case of faulty planning and implementation of scheme by NMDC.
28	6.41	The Committee note that as against its full rated annual handling capacity of 1.8 million tonnes of fine ore the system could handle only 4.76 lakh tonnes in 1987-88 and 9.26 lakh tonnes in 1988-89. Thus NMDC had not been able to achieve the installed capacity of this scheme since commissioning. According to the company the reasons for less handling of fines during the above years was non-commissioning of Visakhapatnam Steel Plant, for which FOHS had been mainly installed, and lack of demand for export. The Company handled 11.48 lakh tonnes of fine ore in 1989-90 and hope that the demand would increase in the coming years. Since the Company foresees good marketability of fine ore from Bailadila-5 in future, the Committee desire that the scheme be geared up proparly so that it can achieve its installed capacity without further loss of time. They also desire that new areas both in domestic and foreign fields be explored to market the products fully.

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29	7.17	The Committee find that during the years 1983-84 to 1988-89, the cost per tonne in BIOP-5 and DIOP iron ore projects had been considerably higher than the BICP estimates of March, 1987, except of course in 1986-87 when it was less than the BICP estimate in DIOP. In the case of BIOP-14, though the actual cost was less than that of BICP estimates during 1984-85, 1985-86 and 1986-87, it was much higher than the BICP estimate during the years 1987-88 and 1988-89. Undoubtedly, the efficiency of the management lies in reducing the cost of production and achieving optimum results with minimum use of resources. The Committee desire NMDC to make concerted efforts to bring down the cost of production to the standard fixed by BICP. They also recommend that NMDC must identify the areas where there is scope for controlling the costs and take appropriate action to minimise the costs in these areas.
30	7.18	The Committee further note that, as acknowledged by BICP in 1981, the price realised by NMDC by exporting iron ore has not been commensurate with the cost involved in production, despatch and sale of iron ore. They desire that in case of exports Government should examine the feasibility of reimbursing to NMDC the difference between the cost and sales realisation, in the form of subsidy, as suggested by BICP.
31	7.19	The Committee find that during the years 1983-84 to 1988-89 the cost of production per carat of diamond in the Diamond Mining Project, Panna was much more as compared to the sales realisation. Consequently the project had been incurring losses year after year. According to the Company the reasons mainly responsible for loss have been high cost of production due to increase in cost of inputs, increase in salaries and wages, surplus staff and low incidence of diamonds. The Committee note that with the increase in production from 13209 carats in 1988-89 to 16071 carats in 1989-90, the Panna Diamonds Project has been able to reduce the loss from Rs. 1196 per carat to Rs. 410 per carat during the same years. The Committee are, therefore, convinced that the Company can over-come these factors which attribute to losses by increased production and proper utilisation of available resources in the project.

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32	7.20	NMDC is also stated to be planning to modernise the process plant to optimise production and improve the grinding process to recover larger diamonds fetching higher sales realisation per carat. The Committee desire that in order to make the project viable, the Company must frame some time-bound programme to maximise production and reduce the cost of production by effecting economy in the sectors identified to be chiefly responsible for increase in the cost of production. The Company should also explore the possibility of purposeful utilisation of the surplus staff or in the alternative offer them Voluntary Retirement Schemes to shed the extra burden on the Company, otherwise by continuoulsy incurring losses in this project, the Company would find it difficult to justify the continuance of this project as the country cannot afford to fritter away its hard earned money on such losing ventures.
33	7.21	The Committee also desire the Government to keep a watch on the progress of implementation of the plan chalked out by the Company to optimise production and to improve the incidence of diamonds extraction and take appropriate corrective measures to ensure that the project becomes financially viable soon.
34	8.29	The Committee regret to note that NMDC has been incurring losses since its inception in 1958. In 1986-87 the Company, however, made a profit of Rs. 65.62 lakhs but incurred huge losses of Rs. 1783.58 lakhs and Rs. 1769.28 lakhs in 1987-88 and 1988-89. The accumulated losses of the company as on 31.3.1989 were of the order of Rs. 32.97 crores. According to the Company the major causes for the losses suffered by it in the past were the unremunerative prices paid by MMTC for the iron ore, the policy of the Government to export iron ore to earn foreign exchange and the uncertain market conditions. Since the company entered into an independent commercial agreement with MMTC in 1989-90 for four years from 1989-90 to 1992-93 for supply of iron ore for export and had also started supplying iron ore to Visakhapatnam Steel Plant at mutually agreed prices, NMDC turned the corner and made a profit of Rs. 38.85 crores in 1989-90 and wiped

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		out the accumulated losses of Rs. 32.97 crores as on 31.3.1989. As the domestic demand for iron ore has picked up with the coming up of VSP and sponge iron units and there is stability on the price front due to the agreement with the MMTC, the Committee hope that the company will further improve and maintain its trend of earning profits in future.
35	8.30	The Committee find that profit of Rs. 38.85 crores made by the Company during 1989-90 reportedly works out to about 22 percent return on investment of Rs. 169.95 crores. The Company is stated to have received a sizeable amount from MMTC in 1989-90 as arrears due from MMTC on account of settlement of claims pertaining to the years 1986-87 and 1987-88. The overall profit shown by the Company during the year 1989-90, therefore, does not reflect a true picture of operating perfermance of the Company. The Committee would like to be informed about the operating profit during 1989-90 and the return on investment worked out in relation to operating profit. The Committee feel that if the figures so worked out reveal a steep decline in return on investment, it would call for a new strategy to be evolved to accelerate the profitability of the Company. As the Company envisages to achieve a return of not less than 15% on the capital employed in future also, the committee trust that NMDC will make earnest efferts to achieve their objective.
36	8.31 & 8.32	The Committee note that Bailadila and Donimalai Projects were sanctioned by the Government with the prime objective of export of iron ore to earn foreign exchange for the country. Iron ore produced in Bailadila and Donimalai mines is exported by NMDC through MMTC, their canalising agent. Besides NMDC, MMTC, Railways and Ports are also engaged in the export of iron ore. The Committee also note that the sale price demanded and received by NMDC in respect of iron ore exports has been a matter of dispute between MMTC and NMDC for a number of years. MMTC, Railways and Ports got their full share of cost whereas NMDC received only the residual price which was not enough even to cover their cost of production. As a consequence, NMDC continued incurring heavy losses.

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		The Committee further note that the matter regarding payment of price by MMTC for NMDC's iron ore during the recent years was considered by the Committee of Secretaries chaired by the Cabinet Secretary in April, 1983 and a decision was taken that MMTC would pay NMDC the cost of production as determined by BICP from 1983-84. Regrettably NMDC continued receiving the residual price. The Committee of Secretaries again met in 1983, 1986 and 1987 but no tangible solution to the vexed problem was found as their decisions were not honoured by one or the other agency leaving NMDC perpetually in a losing position. It is very surprising that the matter defied solution even at the hands of Secretary (Expenditure) to whom it was referred for giving his final verdict, being an officer not connected with any of the agencies. Surprisingly the recommendations made by him in February, 1988 [that (i) all agencies engaged in iron ore export should be given a fair price and (ii) all agencies may be paid the standard cost without return on investment worked out by BICP for the year 1986-87, during April, 1986 to March, 1989] were not implemented by MMTC. It is regrettable that the decisions of such high powered Committees of Secretaries were not implemented defeating the very purpose for which these were appointed from time to time and the whole matter remained unresolved for a considerably long time resulting into loss to NMDC for no fault of theirs. Form the facts placed before them, the Committee have come to an inescapable conclusion that the apportionment of price of iron ore between MMTC and NMDC was not handled with due seriousness and expedition. In the Committee's opinion if the problem was beyond the capacity of the Committee of Secretaries to resolve, the matter should have been taken to the highest authority of the Government. The Committee are of the opinion that since iron ore was being exported by NMDC at the instance of Government who were mainly interested in earning foreign exchange, Government should have adequately compensated NMDC by way of subsidy and helped them to tide over their financial difficulties.

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37	8.33	The Committee find that on permission being granted by Government, NMDC exported 0.56 and 0.38 lakh tonnes of calibrated ore, on trial basis, to Carribean Ispat and Malaysia respectively in 1989-90 and made sizeable profits. The Secretary of the Ministry informed the Committee during evidence that he was confident that if NMDC was allowed to export directly, it would do well. However, it is for the Commerce Ministry to see. Since NMDC had made a small beginning in export of iron ore directly to some countries and has met with some success, the Committee feel that given an opportunity it can develop its own marketing expertise, which it lacks at present, and can make profits at the export front also. The Committee, therefore, desire the Government to examine the feasibility of entrusting NMDC with the responsibility of exporting its products directly instead of through MMTC so that it may improve its financial position and also earn valuable foreign exchange for the country.

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